

Cityscape

*A Journal of Policy
Development and Research*

DOUBLE ISSUE

PLANNING LIVABLE COMMUNITIES

THE FAMILY OPTIONS STUDY

VOLUME 19 NUMBER 3 • 2017



PD&R



Managing Editor: Mark D. Shroder
Associate Editor: Michelle P. Matuga

Advisory Board

Dolores Acevedo-Garcia
Brandeis University

Ira Goldstein
The Reinvestment Fund

Richard K. Green
University of Southern California

Mark Joseph
Case Western Reserve University

Matthew E. Kahn
University of California, Los Angeles

C. Theodore Koebel
Virginia Tech

Jens Ludwig
University of Chicago

Mary Pattillo
Northwestern University

Carolina Reid
University of California

Patrick Sharkey
New York University



PD&R

Cityscape

*A Journal of Policy
Development and Research*

DOUBLE ISSUE

PLANNING LIVABLE COMMUNITIES

THE FAMILY OPTIONS STUDY

VOLUME 19 NUMBER 3 • 2017

U.S. Department of Housing and Urban Development
Office of Policy Development and Research

The goal of *Cityscape* is to bring high-quality original research on housing and community development issues to scholars, government officials, and practitioners. *Cityscape* is open to all relevant disciplines, including architecture, consumer research, demography, economics, engineering, ethnography, finance, geography, law, planning, political science, public policy, regional science, sociology, statistics, and urban studies.

Cityscape is published three times a year by the Office of Policy Development and Research (PD&R) of the U.S. Department of Housing and Urban Development (HUD). Subscriptions are available at no charge and single copies at a nominal fee. The journal is also available on line at huduser.gov/periodicals/cityscape.html.

PD&R welcomes submissions to the Refereed Papers section of the journal. Our referee process is double blind and timely, and our referees are highly qualified. The managing editor will also respond to authors who submit outlines of proposed papers regarding the suitability of those proposals for inclusion in *Cityscape*. Send manuscripts or outlines to cityscape@hud.gov.

Opinions expressed in the articles are those of the authors and do not necessarily reflect the views and policies of HUD or the U.S. government.

Visit PD&R's website, huduser.gov, to find this report and others sponsored by PD&R. Other services of HUD USER, PD&R's Research and Information Service, include listservs, special interest and bimonthly publications (best practices, significant studies from other sources), access to public use databases, and a hotline (1-800-245-2691) for help with accessing the information you need.

Contents

Symposium

<i>Planning Livable Communities</i>	1
---	---

Guest Editors: Denise G. Fairchild and Patrick J. Revord

Guest Editors' Introduction

Planning Livable Communities: Findings From HUD's Regional Planning and Community Challenge Grant Programs.....	3
---	---

HUD's Sustainable Communities Initiative: An Emerging Model of Place-Based Federal Policy and Collaborative Capacity Building.....	9
--	---

by Lauren C. Heberle, Brandon McReynolds, Steve Sizemore, and Joseph Schilling

Impacts of the Sustainable Communities Initiative on Regional Collaboration, Equity, and Planning: Results of a Survey of Grantee Regions.....	39
--	----

by Elizabeth Mattiuzzi

Civic Infrastructure and Sustainable Regional Planning: Insights From the Sustainable Communities Initiative Regional Planning Grantees.....	63
--	----

by Elizabeth A. Walsh, William J. Becker, Alexandra Judelsohn, and Enjoli Hall

The Impacts of the Sustainable Communities Initiative Regional Planning Grants on Planning and Equity in Three Metropolitan Regions.....	93
--	----

by Juan Sebastian Arias, Sara Draper-Zivetz, and Amy Martin

The Impact of the Sustainable Communities Initiative on Engagement and Collaboration in Planning: Experiences From Four U.S. Regions.....	115
---	-----

by Meghan Z. Gough and Jason Reece

Planning Without Agency: Vibrant NEO 2040.....	135
--	-----

by Kathryn Wertheim Hexter and Sanda Kaufman

Epistemic Communities or Forced Marriages? Evaluating Collaboration Among Sustainable Communities Initiative Regional Planning Grant Recipients.....	163
--	-----

by Karen Chapple, Grace Streltsov, Mariana Blondet, and Cristina Nape

Symposium

<i>The Family Options Study</i>	189
---------------------------------------	-----

Guest Editors: Anne Fletcher and Michelle Wood

Guest Editors' Introduction

Next Steps for the Family Options Study.....	191
--	-----

International Commentary: Family Options Study Observations From the Periphery of Europe.....	203
---	-----

by Eoin O'Sullivan

International Commentary: The Implications of the Family Options Study for Family Homelessness in Australia..... 211
by Guy Johnson and Juliet Watson

International Commentary: Eliminating Family Homelessness and the Family Options Study 219
by Geoffrey Nelson

U.S. Commentary: The Family Options Study and Family Well-Being Outcomes 229
by Marah A. Curtis

U.S. Commentary: The Family Options Study and Food Insecurity 235
by Elaine Waxman

U.S. Commentary: Insights From the Family Options Study Regarding Housing and Intimate Partner Violence 245
by Nicole E. Allen

U.S. Commentary: Implications From the Family Options Study for Homeless and Child Welfare Services..... 255
by Patrick J. Fowler

U.S. Commentary: Effects of Housing Subsidies on the Well-Being of Children and Their Families in the Family Options Study..... 265
by Aletha C. Huston

Lessons for Conducting Experimental Evaluations in Complex Field Studies: Family Options Study 271
by Michelle Wood and Anne Fletcher

Mismatch Between Homeless Families and the Homelessness Service System..... 293
by Marybeth Shinn, Scott R. Brown, Brooke E. Spellman, Michelle Wood, Daniel Gubits, and Jill Khadduri

Risk Models for Returns to Housing Instability Among Families Experiencing Homelessness 309
by Zachary Glendening and Marybeth Shinn

Families' Experiences of Doubling Up After Homelessness..... 331
by Hannah Bush and Marybeth Shinn

Family Options Study: Effects on Family Living Situation 357
by Daniel Gubits, Tom McCall, and Michelle Wood

Family Options Study: How Homeless Families Use Housing Choice Vouchers..... 387
by Claudia D. Solari and Jill Khadduri

Departments	413
Data Shop	
Residential Demographic Multipliers: Using Public Use Microdata Sample Records To Estimate Housing Development Impacts	415
by Sidney Wong, Daniel Miles, Gabrielle Connor, Brooke Queenan, and Alison Shott	
Graphic Detail	
Visualizing Residential Vacancy by Length of Vacancy	429
by Alexander Din	
Impact	
Instituting Smoke-Free Public Housing: An Economic Analysis	435
by Alastair McFarlane, Yves Djoko, and Alex Woodward	
Policy Briefs	
HOPE and Choice for HUD-Assisted Households	449
by Paul Joice	
Evaluation Tradecraft	
Real Estate Analysis as a Tool for Program Evaluation	475
by Jaime Bordenave and Dennis Stout	
Affordable Design	
2017 Innovation in Affordable Housing Student Design and Planning Competition: Woodhill Homes, Cleveland, Ohio	487
compiled by Regina Gray	
Request for Proposals	
Competition To Conduct Analysis of HUD's Randomized Evaluation Data	497
Correction	
Bridging the Gap to Scalable Community Reinvestment Lending Programs	499
by Roberto G. Quercia and Sarah Riley	
Correction	
Community Reinvestment Act and Local Governance Contexts: Advancing the Future of Community Reinvestment?	499
by Colleen Casey, Joseph Farhat, and Gregory Cartwright	
Correction	
The HECM Program in a Snapshot	500
by George R. Carter III and Joshua J. Miller	

Symposium

Planning Livable Communities

Guest Editors: Denise G. Fairchild and Patrick J. Revord

Guest Editors' Introduction

Planning Livable Communities: Findings From HUD's Regional Planning and Community Challenge Grant Programs

Denise G. Fairchild
Emerald Cities Collaborative

Patrick J. Revord
Oak Ridge Institute for Science and Education

The views expressed in this introduction are those of the guest editors and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. government.

High-quality places to work, play, and raise children are well defined. They provide access to affordable housing, good employment, education, recreation, shopping, and other basic needs and community amenities. They are safe from crime, floods, pollution, and the insecurities of natural and man-made disasters. They are fortified by resilient infrastructure that reliably moves goods, people, water, and energy to homes and businesses. They radiate feelings of belonging and mutual interdependence.

Envisioning livable communities is easier than planning and developing them. Many communities must overcome legacies of rural and inner-city poverty, economic displacement, racial discrimination, and decades of disinvestment. Fostering a strong local economy and improving quality of life for all residents demands a commitment to equitable development to overcome deeply entrenched social and economic divisions.

Unfortunately, our 20th-century planning practices and governing institutions are ill suited for these 21st-century livability challenges. Our current planning and regulatory structures often produce short-term, local, single-purpose solutions derived through top-down planning processes. True livability solutions require both hindsight and long-term foresight that are not limited by economic sectors, political or administrative jurisdictions, or sources of expertise. Most of all,

livable communities require a strong and engaged regional civic infrastructure to solve complicated interconnected problems and to convert legacies of mistrust into mutual interdependence and cooperation.

This *Cityscape* symposium explores the importance and complexities of planning livable communities by examining various facets of the Sustainable Communities Initiative (SCI), an innovative place-based planning initiative funded by the U.S. Department of Housing and Urban Development (HUD). SCI tested new ways to think about, organize, plan, and invest in communities. Principles of equitable economic development were married with integrated, regional, and collaborative planning processes.

The Sustainable Communities Initiative

In June 2009, recognizing the national need to build economically competitive, affordable, and long-lasting communities, HUD, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency resolved to try something new; they formally joined together to form the interagency Partnership for Sustainable Communities (PSC). Guided by a shared set of six livability principles, the three agencies aligned federal housing, transportation, and environmental programs and resources, and they reduced barriers to creating healthy, equitable, and economically vibrant communities (PSC, 2010). Such an interagency partnership was unprecedented, and the alignment of federal policies across three agencies signified an innovation in the way in which the federal government worked with communities.

In the wake of the collaborative creation of PSC, Congress appropriated \$150 million to HUD, establishing SCI. SCI is considered one of the country's largest and boldest planning experiments to confront the full range of challenges—demographic, land use, economic, environmental, housing, and transportation—facing communities. Through 2 years of congressional funding and 6 years of grant management, SCI allocated a total of \$250 million into two grant programs: the Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) program and the Sustainable Communities Initiative Community Challenge Planning (SCI-CCP) grant program. SCI-RPG supported multisectoral, multijurisdictional, and multistakeholder regional planning activities. SCI-CCP grants focused on improving local building and land use plans and projects that met the livability principles. In total, these two programs awarded 143 grants, conducted planning efforts impacting 40 percent of the U.S. population, and leveraged an additional \$175 million of additional public and private funds dedicated to livable and equitable communities.

The SCI experiment required grantees to create new linkages across government agencies and jurisdictional levels; among public, private, and community organizations; between rural, suburban, and urban communities; across stakeholders with different interests and ideologies; and across multiple sectors of the economy. Federal staff and specially identified capacity-building partners worked closely with communities to understand their needs, encourage aspirational and innovative grantmaking, and reduce federal barriers to accomplishing local goals.

Staff and partners met with challenges, however. Communities frequently struggled to address meaningful ways to improve racial equity. They also had trouble breaking through parochial jurisdictional interests to advance regional plans and when moving from planning to implementation.

This symposium investigates the efficacy of SCI in fulfilling its mission of planning livable communities.

Articles in the Symposium

The articles in this *Cityscape* symposium document what was learned from SCI.

Lauren Heberle, Brandon McReynolds, Steve Sizemore, and Joseph Schilling provide a thorough overview of the initiative's architecture. After highlighting the historical context and rationale for the initiative, they describe the roles, functions, and structure of the boundary-crossing work undertaken by the three federal agencies. They provide details about the two SCI grant programs and about the additional \$10 million grant program providing capacity-building assistance to grantees. They conclude by identifying the unique contributions SCI has made to the field of urban and regional planning; namely, the creation of a robust cohort of communities and practitioners newly adept in regional and inclusionary planning, the use of data and equity standards in the planning process, and the advancement of place-based policies and interagency collaboration to the federal policy landscape (Heberle et al., 2017).

Elizabeth Mattiuzzi's study uses an opinion survey to garner views of the lead agencies from 56 of the 74 SCI-RPG recipient regions regarding the program's effectiveness in two major areas: increased coordination and partnerships, and social and economic equity. Favorable responses were reported with respect to collaboration across different levels of government and the likelihood of continued collaboration. Respondents also noted the importance of data tools for planning. Most communities improved the participation of underrepresented groups. They also enhanced equity outcomes from numerous vantage points, including procedural equity (outreach), outcome equity (institutionalized policies), place-based equity (transportation and housing), and people-based equity (education and jobs) outcomes. However, Mattiuzzi finds that the shift from planning to implementation is dependent on nongovernmental partners to overcome the lack of money, inertia, and political conflict in the public sector. She also cites difficulty attracting community voices and finding a shared definition for equity as common challenges (Mattiuzzi, 2017).

The article from Elizabeth A. Walsh, William J. Becker, Alexandra Judelsohn, and Enjoli Hall takes a deeper dive into the different approaches used to spur transformative relationships in the planning process. The authors hypothesize a direct correlation between civic engagement activities and the culmination of a shared regional vision. They review the civic engagement strategies of 74 communities, categorizing them using the International Association for Public Participation typology of participation, which includes informing, educating, consulting, involving, and empowering. This classification is supplemented by an in-depth study of Buffalo, New York, considered an exemplar in community engagement practice. The authors conclude that an integrated, all-in approach is needed to build a strong civic infrastructure that captures the needs and capacities of various stakeholders. They also note, however, that sustained civic engagement is an ongoing process that works best when long-standing capacities and assets are leveraged (Walsh et al., 2017).

Using case studies of SCI grantees in San Francisco, California, Seattle, Washington, and Minneapolis-St. Paul, Minnesota, Juan-Sebastian Arias, Sara Draper-Zivetz, and Amy Martin seek to understand the impacts of equity outcomes, stakeholder engagement, and jurisdictional dynamics on the regional planning process and culture. Two out of three grantees succeeded in institutionalizing equity into the planning process. They overcame longstanding community mistrust by deliberately defining equity, devolving decisionmaking authority to locals, and addressing equity early in the planning process. The authors find that these three grantees were less successful overcoming jurisdictional competition and fostering collaboration. In one instance, an innovative “submarket strategy” was used to overcome parochial interests and the lack of governing authority at the regional level (Arias, Draper-Zivetz, and Martin, 2017).

Meghan Z. Gough and Jason Reece survey 110 consortia members from regions representing a range of urban, rural, and ideological viewpoints to assess SCI program outcomes. The results are consistent with other findings, including improved community engagement and increased inter-jurisdictional, cross-sector, and nontraditional collaboration. The authors find that barriers to civic engagement include the time horizon of planning exercises, plan relevance, and trust. They also surface ideological barriers regarding regional versus local control and the perception that planning is at odds with individual property rights (Gough and Reece, 2017).

Kathryn W. Hexter and Sanda Kaufman provide a well-constructed case study of the Northeast Ohio Sustainability Communities Consortium. The Northeast Ohio grant was one of most ambitious SCI-RPG projects, involving 12 counties, 5 metropolitan planning organizations, and one-third of Ohio’s population. The authors posit that the use of data and scenario building tools helped to frame the region’s challenges and possible solutions, but a high diversity of needs, interests, and political ideologies complicated deliberations. The region’s efforts were further complicated by lack of prior collaborative history and the absence of committed participation by business sectors (Hexter and Kaufman, 2017).

Finally, Karen Chapple, Grace Streltsov, Mariana Blondet, and Cristina Nape offer a subtle prognosis about the long-term viability of SCI efforts. They suggest that the sum of SCI is greater than its parts. They introduce the concept of “epistemic communities” to the symposium. They argue that merely participating in meetings and in interagency and cross-sector collaboration does not result in the formation of a collective regional consciousness. Rather, forming epistemic communities requires finding shared values, respecting differences, engaging in hard conversations, and sharing boundary-crossing experiences to overcome longstanding political divides and inequality. The authors present three case studies and find that, together, regional affluence and more horizontal (rather than hierarchical) governance structures serve as predictors of epistemic communities that are more likely to adopt plans developed under the grant (Chapple et al., 2017).

Conclusion

The United States is facing increasing challenges of housing affordability, economic disparity, and increasing urbanism. Addressing these burgeoning issues requires a multifaceted approach. By using the strategies of advancing local priorities with federal support, deeply engaging a wide range of stakeholders, and focusing on equitable development, communities can begin to bridge historic

divides and collaborate regionally to enhance citizens' quality of life. Despite the complexity and challenges of aligning these approaches, all the researchers conclude that federal grant programs like SCI help catalyze and institutionalize regional collaboration and further the creation of livable communities.

Acknowledgments

The guest editors thank the present and former U.S. Department of Housing and Urban Development staff members who provided invaluable context, data, and support for this symposium, including Danielle Arigoni, Kevin Bush, Kathryn Dykgraaf, Naomi Friedman, Josh Geyer, Regina Gray, Dwayne Marsh, Sunaree Marshall, and Steven Shepherd.

Guest Editors

Denise G. Fairchild is President of Emerald Cities Collaborative, a senior fellow at the Massachusetts Institute of Technology and the University of California, Los Angeles, and was recently awarded a Rockefeller Foundation Bellagio Fellowship.

Patrick J. Revord is a research fellow sponsored by the Oak Ridge Institute for Science and Education and stationed at the U.S. Department of Housing and Urban Development.

References

- Arias, Juan Sebastian, Sara Draper-Zivetz, and Amy Martin. 2017. "The Impacts of the Sustainable Communities Initiative Regional Planning Grants on Planning and Equity in Three Metropolitan Regions," *Cityscape* 19 (3): 93–114.
- Chapple, Karen, Grace Streltsov, Mariana Blondet, and Cristina Nape. 2017. "Epistemic Communities or Forced Marriages? Evaluating Collaboration Among Sustainable Communities Initiative Regional Planning Grant Recipients," *Cityscape* 19 (3): 163–187.
- Gough, Meghan Z., and Jason Reece. 2017. "The Impact of the Sustainable Communities Initiative on Engagement and Collaboration in Planning: Experiences From Four U.S. Regions," *Cityscape* 19 (3): 115–134.
- Heberle, Lauren C., Brandon McReynolds, Steve Sizemore, and Joseph Schilling. 2017. "HUD's Sustainable Communities Initiative: An Emerging Model of Place-Based Federal Policy and Collaborative Capacity Building," *Cityscape* 19 (3): 9–37.
- Hexter, Kathryn Wertheim, and Sanda Kaufman. 2017. "Planning Without Agency: Vibrant NEO 2040," *Cityscape* 19 (3): 135–161.
- Mattiuzzi, Elizabeth. 2017. "Impacts of the Sustainable Communities Initiative on Regional Collaboration, Equity, and Planning: Results of a Survey of Grantee Regions," *Cityscape* 19 (3): 39–62.

Partnership for Sustainable Communities (PSC). 2010. "Partnership in Action (April)." https://www.sustainablecommunities.gov/sites/sustainablecommunities.gov/files/docs/2010_0407_partnership-in-action.pdf.

Walsh, Elizabeth A., William J. Becker, Alexandra Judelsohn, and Enjoli Hall. 2017. "Civic Infrastructure and Sustainable Regional Planning: Insights From the Sustainable Communities Initiative Regional Planning Grantees," *Cityscape* 19 (3): 63–92.

HUD's Sustainable Communities Initiative: An Emerging Model of Place-Based Federal Policy and Collaborative Capacity Building

Lauren C. Heberle
Brandon McReynolds
Steve Sizemore
University of Louisville

Joseph Schilling
Urban Institute

Abstract

The U.S. government generally operates under specialized policy and program silos, making it a challenge to holistically address complex policy issues across agencies and departments. With the launch of the Partnership for Sustainable Communities (PSC) in 2009, an interagency initiative involving the U.S. Department of Housing and Urban Development (HUD), U.S. Department of Transportation, and U.S. Environmental Protection Agency, the federal government sought to promote and infuse principles and practices of sustainable community development, through new levels of federal interagency collaboration and a portfolio of planning grants and capacity-building assistance for regional and local governments. HUD's Office of Sustainable Housing and Communities served as the hub for the interagency collaboration with its signature Sustainable Communities Initiative (SCI).

This article chronicles the development, evolution, and legacy of the SCI by focusing on three of its signature components: (1) the Regional Planning Grant program, (2) the Community Challenge Planning grant program, and (3) the network of Capacity Building Intermediary organizations that provided technical assistance. The most enduring legacy of PSC and SCI is the ensemble, coordination, and alignment of agency leadership, engaged staff, wide distribution of grant programs, and substantial investments in capacity-building interventions. This article uncovers the insights and lessons from this innovative approach for future federal and state government agencies, sustainability organizations, local government officials, and community and philanthropic leaders.

Methodology

This article blends participatory reflection, program document review, and semistructured background interviews of key Sustainable Communities Initiative (SCI) leaders and staff with basic principles of policy and program analysis. The authors' participatory reflections are based on direct and indirect involvement with SCI activities and personnel from 2010 to 2016. This case study incorporates many of their insights and reflections on Partnership for Sustainable Communities (PSC, or "the Partnership") and SCI activities and situates the effort within the broader context of urban sustainability policy and planning.

The Sustainable Communities Initiative's Policy and Program Architecture—Its History, Evolution, and Policy Context

The Partnership for Sustainable Communities

In June 2009, the U.S. Department of Transportation (DOT), Environmental Protection Agency (EPA), and U.S. Department of Housing and Urban Development (HUD) announced the launch of a unique effort to facilitate cooperation and coordination across federal agencies to address issues related to sustainable community development. The formation of PSC was described by those involved as a response to the executive branch's call to invest in policy initiatives that relied on local solutions to create jobs and boost economic recovery (Marsh, 2014). The PSC encouraged each partner agency to align their policies, programs, and funding to address affordable housing, transportation, and environmental issues together, while advancing social equity—the core foundation for creating sustainable communities. This new level of federal interagency collaboration would help breakdown policy silos taking place among federal, state, and local agencies, thereby promoting a more efficient government that targets federal resources in response to local priorities (EPA, 2010).

Critical to its eventual success was the collegial relationships among PSC's leadership. Early engagements with then Transportation Secretary Ray LaHood, then HUD Secretary Shaun Donovan, and then EPA Administrator Lisa Jackson set the tone for collaboration across their agencies and among their staff. Under the Partnership's broad umbrella, each of the three principal federal departments and agencies (DOT, EPA, and HUD) designated one office to lead their respective sustainability program and policy activities. For EPA, it was the Smart Growth Program under John Frece; for HUD, it was the Office of Sustainable Housing and Communities (OSHC) directed by Shelly Poticha; and, for DOT, Beth Osborne led the "Livability Initiative" that was established in 1998 (Fischer, 2000; DOT, 2017). Frece, Poticha, and Osborne had existing relationships, having already operated within the same professional urban planning networks. These prior relationships and a common set of policy values helped them forge and infuse the Partnership's commitment to collaboration and coordination across the policies and programs of their respective departments and agencies.

Each department embraced the principles and used them to guide their decisions and program activities. The principles reinforced the executive branch's efforts to consider new policy and program approaches that would spawn economic recovery and community stability in response to the

country's then dire economic conditions. A more coordinated, collaborative federal government could better leverage its investments and align them more closely with local priorities (Marsh, 2014). A set of livability principles also illustrated the interdependence of affordable housing, neighborhood revitalization, transportation, and social equity. The principles were based on core characteristics of sustainable communities that HUD further refined in its fiscal year (FY) 2010 Notice of Funding Availability (NOFA). The 2010 NOFA called for a broad yet more particular meaning of sustainability (HUD, 2010a). As part of an interim assessment, Chapple and Mattiuzzi (2013) noted that a somewhat flexible definition of sustainability provided flexibility to localities on how they could implement and prioritize the principles, yet few of the grantees expressed or applied a particular interpretation of sustainability. This behavior illustrates that, as important as the term is to communities, it was and remains a complex and contested concept in the United States.

PSC (2013) defines the livability principles as follows.

- **Provide more transportation choices.**
Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- **Promote equitable, affordable housing.**
Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.
- **Enhance economic competitiveness.**
Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.
- **Support existing communities.**
Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.
- **Coordinate and leverage federal policies and investment.**
Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.
- **Value communities and neighborhoods.**
Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

Each office played important roles in this collaboration and administered a suite of programs and elements of the Partnership. HUD's OSHC, through its SCI, served as the Partnership's hub and coordinator. DOT integrated the signature Transportation Investment Generating Economic Recovery (TIGER) grants of the American Recovery and Reinvestment Act (ARRA) into the partnership. Taking

a slightly different approach, EPA's Smart Growth Program recalibrated several of its technical assistance grant programs under the sustainable communities' policy brand (that is, Smart Growth Implementation Assistance, Greening America's Capitals, Building Blocks, Local Foods Local Places, and Livable Communities in Appalachia). Significantly, the EPA's Brownfields Area Wide Planning Program and its early pilot grants were also linked to the Partnership. Substantively, for DOT and EPA, this meant funding contributions. Later, through its collaborative Rural Working Group, the U.S. Department of Agriculture participated in Partnership activities and provided the rural perspective (PSC and USDA, 2011); it did not, however, launch or manage a special program or contribute financial resources to the SCI suite of programs.

SCI's Policy and Planning Context

The SCI legacy emerged in the context of a longer history of sustainability planning and policy in the U.S. The U.S. Smart Growth movement of the 1990s set the stage for SCI and its livability principles (Goetz, 2005). Several U.S. cities were already considering and implementing a variety of urban sustainability plans, projects, and programs with support and guidance from dozens of national and professional associations, led in part by the Smart Growth Network, of which EPA was a prominent member. During this time, Smart Growth served as the U.S. brand of urban sustainability. In 1996, the Clinton administration convened a multisector advisory group called the President's Council on Sustainable Development, and in 1999, former Vice President Al Gore began his presidential aspirations with the administration's Livability Institute. During the George W. Bush administration, various federal programs, such as Smart Growth and Brownfields, continued but with little connection to or explicit mention of urban sustainability. At that point, local governments led urban sustainability in the United States, along with their network of associations, such as the U.S. Conference of Mayors and the American Planning Association, as well as environmental nongovernmental organizations, such as the Natural Resources Defense Council and Smart Growth America.

The election of Barack Obama served as a catalyst to the strategic policy convergence of sustainability, regional planning, and economic recovery. With the U.S. economy in a tailspin when President Obama took office in early 2009, Congress and the White House responded with American Recovery and Reinvestment Act (ARRA), which appropriated billions of dollars in federal assistance and investments to stimulate the economy and foster its recovery. ARRA spawned numerous policy and program initiatives that leveraged federal environmental priorities, with climate change and renewable energy as vehicles for reviving the economy; thus, the convergence of these contemporary political and economic events generated the necessary political and policy momentum for an ambitious push on regional and urban sustainability that was manifested in HUD's SCI.

The SCI sought to address two contemporary policy and planning challenges—sustainability and regional planning. Furthermore, the SCI program specifically included equity as a framework or lens through which all the projects should be planned, implemented, and judged. Equitable economic development, land use planning, participatory consortia, transit options, and just environmental outcomes were all to be connected to each other and, more importantly, connected to affordable housing.

Over the years, scholars, policymakers, and communities have studied and experimented with different models of metropolitan governance and regional planning with limited success (Barbour

and Teitz, 2006; Berke and Conroy, 2000; Chapple and Mattiuzzi, 2013; Innes and Rongerude, 2013; Wheeler, 2002). Experts note three waves of regional planning in the U.S.: (1) the early 20th century, when the planning power rested with central cities and extended outward; (2) the 1960s and 1970s, when federal and state policies pushed regional planning and collaboration down; and (3) the 1990s through the present, when regional planning evolved from cross-sector coalitions and multi-jurisdiction efforts (HUD, 2015a). One of the challenges is the inherent mismatch in the United States between the regional scale of pressing problems, such as transportation and environmental quality, with the forms of government and governance (Foster, 2011). Another challenge is the power of and fragmentation across U.S. municipal governments and special purpose districts when it comes to land development, housing, and economic development policies. Outside of the traditional advisory roles of regional councils of government and metropolitan planning organizations (MPOs) with respect to transportation investments, only a handful of communities, such as Indianapolis, Indiana; Louisville, Kentucky; Minneapolis, Minnesota; and Portland, Oregon, have much experience with regional governance or enacting and running regional governments (Foster and Barnes, 2012). Traditionally, regional governments have little power or authority to compel local governments and other actors in their region to follow their plans and analysis (HUD, 2015b). Within different urban policy and academic circles, organizations and institutions, such as the MacArthur Foundation's Building Resilient Regions, National Association of Regional Councils, Brookings Institution's Metropolitan Policy Program, and the University of Southern California's (USC's) Program for Environmental and Regional Equity (PERE), have launched initiatives to examine the economic power of metropolitan regions and promote cross-sector regional partnerships and collaborations. Currently, in the United States, however, regional planning remains a weak link in the intergovernmental landscape (HUD, 2015a).

New federal initiatives and their associated offices often must overcome strong political opposition at various levels of government, as was true for OSHC and its SCI. For much of its existence, the SCI functioned within a national and regional political climate often opposed to sustainability. One longstanding OSHC staffer noted that, although program evaluation was par for the course to document effectiveness, it was difficult to implement an innovative program and simultaneously and continually justify its value to Congress in the face of limited staffing and support and strong partisan opposition (HUD Staff Interviews, 2016–2017). The executive branch and senior department officials sought congressional authorization and budget approval of OSHC and its grant programs several times but could never muster enough political support. When the Republicans took control of the House during the November 2010 mid-term elections, they sent the Senate several budgets that proposed restrictions on funding OSHC and their grant programs. Some of the opposition spilled over to other related PSC and SCI initiatives.

A driving force for this opposition in certain regions of the country was the emergence of the Tea Party and other political coalitions, which ran media campaigns that characterized the sustainability grants and programs as part of an organized United Nations plot (referred to as "Agenda 21") to undermine U.S. citizens' property rights and other perceived freedoms. An additional factor fueling anti-Agenda 21 sentiments was the coalitions' concern about accepting predetermined, sustainability-based policies with little local input in the process (Berry and Portney, 2016; Flint, 2011; Trapenberg Frick, Weinzimmer, and Waddell, 2015). As such, several grantee activities and public planning

meetings were disrupted by Tea Party-aligned coalitions following tactics outlined on a variety of Tea Party-supportive web sites.¹ These disruptions sent a chilling effect throughout PSC and SCI, making it difficult to expand and garner state and local support.

HUD's Regional and Community Challenge Planning Grant Programs: Catalyzing Metropolitan, Urban, and Rural Sustainability

Although the PSC and the SCI offer many innovative and intriguing lessons about federal place-based policy, HUD's Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) program and Sustainable Communities Initiative Community Challenge Planning (SCI-CCP) grant program stand out as the key initiatives, due to their scale and scope. From 2010 to 2012, HUD awarded a total of \$250 million in competitive grants to 143 regions and communities to explore the planning dimensions of metropolitan and urban sustainability. HUD invested an additional \$10 million in grantee technical assistance and capacity building. Within the context of federal housing and environmental policy, it is difficult to find a more comprehensive investment in urban and regional sustainability planning.²

SCI housed three interrelated programs:³

- SCI-RPG provided grants to consortiums of regional agencies to design, develop, and implement regional sustainability plans.
- SCI-CCP offered grants for smaller-scale sustainability projects with state and local governments, U.S. territories, tribes, transit agencies, port authorities, planning organizations, sub-state or local government agencies, and multistate or jurisdictional consortia eligible to apply.
- The Capacity Building Intermediaries (CBI) program developed a network of sustainability technical assistance experts to support the grantees.

SCI's suite of programs relied on coordination across the programs, integration of the livability principles across all elements of the initiative, and close alignment with PSC partner programs.

¹ See, for example, http://ccta.camp8.org/Resources/Documents/Agenda_21_in_Calaveras_Count_Booklet_draft_15.pdf and <http://priscillaking.blogspot.com/2013/03/tea-party-confronts-morgan-griffith.html>. HUD responded to these events by offering support through Peer Exchanges and expert panels during the Annual Grantee Convenings under subjects such as "Responding to the Critics: Sustainable Communities Messaging" and "Best Practices for Managing Public Meetings."

² Over the years, HUD and EPA have launched a handful of programs and initiatives with a specific focus on urban planning, but many programs lasted only a few years. In 1954, HUD's Section 701 provided grants to urban and rural areas to develop comprehensive plans. The Urban Development Action Grant program focused on the jobs and economic development projects in helping revitalize distressed cities as part of the Carter administration's national urban policy. EPA's Section 202 Clean Water Act planning provisions called for the development of local and regional water quality management plans, but Congress did not fund the agency to implement this planning program. A good comparison with SCI is with EPA's Brownfields program, especially its Showcase Communities Initiatives in the 1990s, however, most of those grants were for projects and programs and not for planning. The Brownfields Area Wide planning program, in some ways, was born from and eventually connected with the PSC. Our comment and comparison here does not include DOT's longstanding transportation planning investments through Intermodal Surface Transportation Efficiency Act (ISTEA) and its successors.

³ With the shift in name and in leadership from OSHC to the Office of Economic Resilience (OER) in 2014, the revised OER administered a series of specialized grants around resilience and a national resilience competition using remaining resources from federal assistance for Hurricane Sandy.

In May 2013, the Harvard Institute for Government Innovation acknowledged these pioneering efforts by awarding SCI with a place on its list of top 25 most innovative government programs for 2013 (Kolawole, 2013).

Grant Programs' Goals and Structure

PSC's livability principles were embedded in HUD's SCI NOFA for the SCI-RPG and SCI-CCP grants. The NOFA called for applications that could improve access to economic opportunities and affordable housing, increase transportation options, and lower transportation costs while protecting the environment. Applications for the SCI-RPG grants could not exceed \$5 million, and the SCI-CCP grants were limited to \$3 million. The NOFA further stressed important policy and planning goals, such as multijurisdictional and cross-sector partnerships, regional collaboration, public engagements, and elevating social justice. The principles would serve as the foundation for other federal place-based policy initiatives during this time.

Furthermore, to encourage grantees to link various planning strategies with efforts to expand equitable affordable housing options, HUD used the program to pilot new regulatory guidance that would be officially launched in 2015.⁴ The Fair Housing and Equity Assessment (FHEA) and the Regional Assessment of Impediments (RAIs) pilot would become the Assessment of Fair Housing under the Affirmatively Furthering Fair Housing (AFFH) rule. This required a new method of analysis, especially new for SCI-RPG grantees, who may have never been required to consider access to affordable housing on a regional scale. They were asked to examine the distribution of affordable housing by race or ethnicity and income levels within their region, assess the impediments to accessing affordable housing, and develop an action plan to address those impediments (Zapata and Bates, 2016). These new frameworks meant that grantees had to include subjurisdictions in their consortia in discussions to address the fact that affordable and subsidized housing was unevenly distributed and often concentrated in census tracts HUD defined as racially and ethnically concentrated areas of poverty or R/ECAPs.

SCI funded two rounds of SCI-RPG grants in federal FY 2010 and 2011. HUD received 363 applications seeking \$674 million in regional sustainability assistance but could only award \$165.1 million to the regional grantees. Coalitions of regional councils, MPOs, local governments, and universities applied for one of two grant categories. Category 1 grants supported regional planning for sustainable development where such plans did not exist. Category 2 grants supported the implementation of existing regional sustainability plans. In 2010, 45 regional grantees were awarded \$98 million, and in 2011, 29 regional grantees were awarded \$70 million (exhibit 1).

The SCI-CCP grants were designed to support planning activities led by individual jurisdictions with additional public sector and nonprofit partners to address barriers to affordability, economic well-being, and sustainability (HUD and DOT, 2010). SCI announced \$28 million in grants in 2010, awarded to 42 communities, 14 of which had combined SCI-CCP and DOT TIGER II funds. An additional \$30 million was awarded to 27 communities under SCI-CCP in 2011. Similar to the regional grant program, the demand greatly exceeded available funds, as the NOFAs elicited close to 900 applications for 2010 and 2011, with a requested application total of \$1.708 billion (exhibit 1).

⁴ Affirmatively Furthering Fair Housing. Final rule. 20 CFR Parts 5, 91, 92, 570, 574, 576, and 903. *Federal Register* 80 (136) July 16, 2015.

Exhibit 1

SCI-RPG and SCI-CCP Grant Program Funding

	FY 2010		FY 2011		Total	
	n	Amount (\$ millions)	n	Amount (\$ millions)	n	Amount (\$ millions)
SCI-RPG applicants/requests	223	450	140	—	363	674
SCI-RPG grantees/awards	45	98	29	67.1	74	168
Category 1	28	—	25	—	53	—
Category 2	17	—	4	—	21	—
SCI-CCP applicants/requests	627	1,200	252	500	879	1,708
SCI-CCP grantees/awards	42	28	—	30	—	58
CCP	28	—	27	—	55	—
CCP/TIGER II	14	—	—	—	14	—

SCI-RPG = Sustainable Communities Initiative Regional Planning Grant. SCI-CCP = Sustainable Communities Initiative Community Challenge Planning. TIGER II = Transportation Investment Generating Economic Recovery.
 Sources: <https://portal.hud.gov/hudportal/documents/huddoc?id=2011RegAwardPSSApplicants.pdf>;
<https://portal.hud.gov/hudportal/documents/huddoc?id=OSHCY10RegAppllist.pdf>;
<https://portal.hud.gov/hudportal/documents/huddoc?id=2011ChalAwardPSSApplicants.pdf>;
<https://portal.hud.gov/hudportal/documents/huddoc?id=listComChalapplic.pdf>;
<https://www.sustainablecommunities.gov/sites/sustainablecommunities.gov/files/docs/partnership-accomplishments-report-2014-reduced-size.pdf>; <https://portal.hud.gov/hudportal/documents/huddoc?id=FY11RegNOFAWebcast1.pdf>

SCI-CCP grants were smaller in scale and scope than SCI-RPG grants. The goal in 2010 was to help communities revise and expand existing plans (land use, redevelopment, corridor, neighborhood, and so on) and codes (zoning, building, and so on) to better link housing and transportation projects with planning efforts on a local level. To facilitate that, HUD and DOT merged the 2010 application process for both HUD and DOT TIGER II planning programs into one site to reduce redundancy and facilitate a joint funding process. Requirements were similar to SCI-RPG in that they highlighted the livability principles, increased the transportation and affordable housing choices, supported economic development, and were community focused. In addition, community engagement was a key feature for these awards (HUD and DOT, 2010). To ensure that rural areas also received attention, the 2010 NOFA required that \$140 million of the TIGER funds, including the TIGER II grant, would be awarded to areas that were not in a Census-defined Urban Area. Targeting HUD SCI-CCP funds for rural areas was not mentioned until the 2011 SCI-CCP NOFA, which set aside at least \$3 million for areas with populations under 50,000 (HUD, 2011b).

Scope of Grantee Plans and Projects

SCI pushed the boundaries of urban and regional sustainability in the United States by funding a wide range of communities, each with different levels of experience with and approaches about sustainability.⁵ Among the regional grantees, more experienced metropolitan organizations—such as Boston, Massachusetts, and Chicago, Illinois—could focus their grant activities by helping their local jurisdictions revise and infuse sustainability principles and actions into local comprehensive land use plans and building and zoning codes. Part of this natural experiment also supported sustainability efforts in regions suffering from decades of economic decline, as well as the boom and bust metros of the Sun Belt. Northeast Ohio’s consortium of more than six counties and five

⁵ Given limitations of time and space, we could not explore in depth the number of examples from the 143 grantees selected.

local governments, four MPOs, three housing authorities, several civic organizations, and Cleveland State University, perhaps one of the more ambitious regional grantees, sought to facilitate regional dialogues and introduce sustainability through the lens of economic resilience (NEOSCC, n.d.). FY 2010 regional grantee New River Valley Regional commission, in southwest Virginia, was one of several grantees testing sustainability planning in rural communities. As part of the FY 2010 SCI-RPG cohort, the Thunder Valley Community Development Corporation and the Oglala Sioux Tribe consortium adapted the concepts of sustainability in their plan for better coordination across agencies working with the Pine Ridge Reservation in South Dakota. In accordance with the NOFA's emphasis for collaboration across sectors and across jurisdictions, several of the regional grantees included large multicounty and some multistate coalitions, such as the South Florida Regional Planning Council (claiming more than 125 agency partners) and Centralina Council of Governments (coordinating across North and South Carolina). Universities and state governments were also prominent leads and partners in several applications, either serving to coordinate across partners or providing institutional or fiscal capacity with which to manage the grant (exhibit 2).

For the SCI-CCP grantees, the applications and awards varied from municipality wide efforts down to development sites. Communities updated, revised, and developed master plans, land use development codes, zoning ordinances, corridor plans, mobility and transportation plans, small district revitalization plans, transit-oriented development projects, affordable housing strategies, and the development of funding mechanisms for implementation (HUD, 2010b). Although the SCI-CCP focus was certainly on single jurisdictions, as opposed to the SCI-RPG program, some grantees brought together multijurisdictional projects on focused topics, such as the South Suburban Mayors and Managers Association's rail corridor redevelopment plan focused on job growth along the freight rail network and housing along existing transit. Even as the SCI-CCP grantees worked on local projects, such as site-based development projects, they needed support from a wide variety of jurisdictions, city, county, state, and regional planning organizations (HUD, 2010b). Most importantly, these efforts represent emerging models for leveraging resources needed to address current and future challenges, such as changing demographics, climate change, and growing regional inequities (Tregoning, 2015).

Exhibit 2

SCI Grantee Organizational Type

Organizational Type	SCI-CCP	SCI-RPG
City or city agency	49	4
COG/regional organization	3	33
County or county agency	6	6
MPO	6	24
State or state agency	2	1
Tribe	2	—
University	—	3

COG = council of governments. MPO = metropolitan planning organization. SCI = Sustainable Communities Initiative. SCI-RPG = SCI Regional Planning Grant. SCI-CCP = SCI Community Challenge Planning.

Program Management and Implementation

OSHC administered the SCI-RPG and SCI-CCP grant programs under the initial leadership of Director Shelly Poticha, a longstanding leader of new urbanism and smart growth. During the

first 2 to 3 years of OSHC, Poticha and her deputy director Mariia Zimmerman simultaneously launched the SCI grant program. Support staff included a blend of those with longstanding federal service with HUD and EPA, and junior staff that included Presidential Management Fellows. Innovative program design, flexibility in management and oversight, elevation of equity and justice throughout, and modifications to traditional evaluation and assessment were key features of the program.

1. Collaborative grant program design. The SCI grant programs were part of an emerging federal place-based policy model that were completely different from longstanding, traditional HUD program grants such as the Community Development Block Grant program. SCI grants were competitive, not formula grant awards. Successful applicants were expected to spend serious time and resources to recruit their partners and develop their collaborative approach. Because HUD was introducing a focus on sustainable communities connected to affordable housing at the time (2010), SCI leaders vetted their preliminary grant framework through early stakeholder meetings and issued an Advanced Notice of Funding Availability with requests for comment prior to releasing the NOFA. They integrated many of the ideas and insights from these meetings and conversations into the final NOFA (Marsh, 2014). In addition, one of SCI's more unique practices was to vet the grant applications with representatives from DOT and EPA. Based on these preliminary practices, joint agency review of grants did continue as part of the later resilience grant competition.⁶ Even as recently as 2016, federal agency staff continue their collaborations by informally sharing and discussing cross-program awards and projects (HUD Staff Interviews, 2016–2017).
2. Grants management and oversight. Within federal contracting practice, the SCI grants were cooperative agreements that gave the sponsor more influence on the direction and activities of the project compared with a contract where the sponsor has less input in project implementation. Cooperative agreements establish more of an informal partnership between the department and the grantee. From a grants management perspective, a cooperative agreement often means more site visits, more time, and more engagement for HUD staff. Staff experience within the department was one project manager (government technical representative [GTR]) for every five to six grants. After the grant programs were in process, HUD's Grants Office observed that OSHC had a much lower ratio of staff GTRs to grants than other HUD offices, with some OSHC GTRs managing on average 15 to 16 grants each and several GTRs managing more than 29 grants (HUD Staff Focus Group, December 2016 and HUD SCI Grantee Information Table 2017). GTRs were responsible for ensuring the SCI-RPG and SCI-CCP grantees followed the standard HUD grant program and reporting requirements, while also providing strategic guidance on the substantive issues around each of the grantee's sustainability planning activities—the real heart of SCI's programs.

OSHC designated a sustainability officer in each of HUD's 10 regional offices to engage with the grantees. Some of these regional sustainability officers fully embraced their roles and offered critical local insights and guidance to the OSHC staff and the grantees. The regional offices

⁶ <https://portal.hud.gov/hudportal/documents/huddoc?id=NDRCFactSheetFINAL.pdf>; <https://www.hudexchange.info/programs/cdbg-dr/resilient-recovery/>.

did not get separate funding for these OSHC responsibilities, so the sustainability officers had to manage this assignment alongside their primary regional duties. Thus, their capacity and commitment varied widely.

3. Program evaluation and assessment. HUD's traditional grant administration practices and procedures to track and measure program and grantee results did not fit well for SCI's suite of grant programs. HUD's grant infrastructure typically tracks short term, concrete outputs from traditional formula grant programs. The outputs from the SCI grants were primarily planning products, such as a regional plans, revised codes, and charrettes. These outputs influenced long-term changes to the built environment. Collectively, these outputs were projected to generate certain socioeconomic and environmental outcomes that improve the livability of a community. Because plans may be carried out during the course of decades, the outcomes of planning actions and processes are inherently difficult to identify, track, and measure over time. Recognizing these challenges, OSHC staff attempted to tailor HUD's standard reporting forms, but without enough time to obtain Paperwork Reduction Act approval, grantees were forced to use standard HUD grant reporting forms. Due to the resulting data gap, it was difficult to quantify the direct socioeconomic benefits of the sustainability plans across the entire program. Thus, HUD relied on case studies to demonstrate outcomes.

Capacity-Building and Technical Assistance Activities

The FY 2011 CBI NOFA declared that the program would provide technical assistance as well as build a “national coalition and leadership network of the Sustainable Communities Grantees” (HUD, 2011a: 2). This program represented a shift from traditional technical assistance delivered by one provider, or assistance that covered only one narrow area of expertise or focused solely on successful compliance, to a program that touched on a very broad range of topics with a long-term goal of building capacity of the grantee and changing institutional practices. The delivery of federally funded capacity building at this scale, using such a complex but coordinated network of providers to reach all SCI grantee communities along with all the other eligible PSC grantee communities, was a new and bold proposition.

Overview and Implementation Process

The CBI program had two funding phases. Under Phase One, launched in August of 2011, HUD selected eight technical assistance and capacity-building organizations through a competitive grant process to assist grantee communities in fulfilling grant obligations and to address gaps in knowledge and capacity under seven subject areas (HUD, 2011a). The subject areas included—

- Implementation strategies for economic development and local and regional planning.
- Advancement of social equity.
- Sustainability practices for tribes, small towns, and rural places.
- Establishment of a national learning community or network.
- Targeted assistance with scenario planning.
- Incorporation of water infrastructure planning and investments.
- Planning in slow economies.

The lead entities chosen to provide the assistance were—

- The Institute for Sustainable Communities (ISC), tasked with creating the national Sustainability Learning Network (SLN) and provide leadership training.
- The University of Louisville, which focused on assisting with integrating water infrastructure planning and investments into the grantees' planning efforts.
- Envision Utah, which assisted grantees with scenario planning.
- Reconnecting America, which assisted with implementation strategies for economic development focusing on transportation issues.
- PolicyLink and Place Matters, which incorporated a social equity lens in all aspects of the program.
- National Association of Development Organizations, along with the Minnesota Housing Partnership (MHP), which focused on the needs of tribes, small towns, and rural places.

Substantively, each capacity-building organization had different expertise and unique approaches to technical assistance. Several were nonprofit policy think tanks with deep ties to various federal agencies. Some had deep experience with sustainable community development efforts in international contexts, whereas others excelled in U.S. national, state, regional, local, and neighborhood contexts. In addition, each CBI issued subawards to additional organizations that provided substantive assistance expanding grantee access to around 33 technical assistance providers.

Funding for Phase One of the capacity-building aspect of the initiative came from HUD (\$5 million) and EPA (\$650,000), with in-kind support from DOT in the form of meeting space for the annual grantee convenings. Phase Two, launched in 2013, collapsed the technical assistance funding into one award of \$4.5 million to the ISC, which led the consortium comprised of the previous capacity builders. Phase Two expanded topic areas of assistance offered to the grantee communities with a heavy focus on implementation strategies. This phase reflected the desire of the agencies that the grantees' plans should not remain sitting on shelves (HUD, 2013). Because of this focus on implementation HUD GTRs assigned to CBI oversight would only oversee one CBI tasked with coordinating the CBI network of providers.

Under both phases of the capacity-building grants, eligible communities included HUD SCI-RPG and SCI-CCP grantees, communities with grants from the EPA Brownfields Area Wide Planning grant program, and the EPA Sustainable Community Technical Assistance programs: Greening America's Capitals, Building Blocks, Local Foods Local Places, and Appalachian Livable Communities. This very broad eligibility reflected the financial collaboration between HUD and EPA as well as an opportunity to further dismantle federal departmental policy silos (HUD, 2011a).

Capacity and Policy Diffusion

The language in the original CBI program NOFA highlighted the agency's desire to build grantee capacity and commitment to sustainability planning by developing a "national coalition and leadership network of the Sustainable Communities Grantees" (HUD, 2011a). The capacity-building program was broadly defined and flexible because the grantees had uneven experience with even basic planning—much less, sustainable community planning that addressed all the key components required by HUD. Several aspects of the capacity-building grant program—financial, procedural or structural—and substantive content are worth highlighting for future federal or state programs that provide support for regional and local planning.

Financial

Financially, the extent of support in terms of funding and breadth of content was unprecedented in HUD as well as any other federal agencies. CBI budget and work plans were flexible enough to enable unique interactions with grantees and to respond to grantee needs as they arose. Usually capacity-building and technical assistance funding is very limited and defined by the funder rather than the grantee. In this situation, many efforts were made to allow for enough flexibility in the CBI budgets to meet unique community need. This shift meant that portions of the budgets for technical assistance spread across technical assistance categories based on the needs expressed by the grantees. The scale of outreach and eligibility to receive technical assistance, participate in capacity-building training, or both was enormous. All SCI grantee communities (69 SCI-CCP grantees and 74 SCI-RPG grantees) were eligible to benefit from the various levels of technical assistance and capacity-building activities. In addition, communities who applied for and were highly ranked but did not receive grant funding were designated Preferred Sustainability Status (PSS) that made them eligible for certain types of low-cost technical assistance and capacity building activities. Finally, communities funded under several EPA grant programs were given access to resources, and some were specifically invited to in-person trainings. Capacity builders were also sent to EPA-hosted trainings, such as the 2013 EPA Area-Wide Brownfield Planning grantee convening.

Procedural

All capacity builders were required to work closely with HUD and EPA staff to ensure the support offered and deployed met community needs and priorities. The CBIs met via phone every 2 weeks to develop collaborative strategies for reaching as many grantees as possible and provide concurrent assistance. HUD staff leaders asked CBIs to make sure that they did not develop conflicting events, did not “over webinar” the grantees, and called on each other if, through interaction with a grantee, they uncovered a need they knew another CBI was better suited to address. The intensity of interaction with HUD and EPA staff is not a common feature for federal technical assistance programs. Often consultants are left to their own devices, working solely with the recipient of the technical assistance. This regular contact and interaction helped HUD staff keep track of the technical assistance being delivered beyond the usual quarterly reporting structures and helped each of the CBIs learn more about how each technical assistance provider delivered assistance and training.

The required regular communication with HUD staff and the other CBIs also facilitated partnerships across CBIs in delivering technical assistance. Over time, individuals in the CBI organizations became more familiar with the expertise each provider brought to the table. Technical assistance delivery teams would often include multiple CBIs. In the end, this communication contributed to the establishment of the learning community that included SCI grantee interactions as well as a dialectic with and between the CBIs.

Content Delivery Method

The CBIs offered a portfolio of well-established strategies and tools in community building, capacity building, and community-based planning that gained a national platform. The CBIs had deep experience in approaches such as scenario planning; leadership “boot camps”; inclusion and diversity trainings; and intensive, onsite, one-on-one assistance in plan development and grant management, affordable housing assessments, communication, and community data analysis using a geographic

information system (GIS) and other data-analysis platforms. CBIs relied on their individual practices and content expertise that were also identified in the capacity-building NOFA. However, the method of delivery and the content of support were primarily grantee driven, with input from the HUD GTRs and, to a lesser extent, HUD regional staff. The intent was to be responsive to grantee needs and interests because the projects were unique, and each came to the planning effort with significantly varying capacity and expertise.

CBIs offered and prioritized assistance that varied by scope of outreach: all grantees; smaller grantee groups characterized by grant type, region or location, and community size, or topic; and one-on-one direct assistance. Grantee communities could find affinity with each other under a variety of different characteristics through interactions facilitated by the CBIs. The platforms for delivering the assistance included grantee in-person annual gatherings hosted by HUD, with a variety of traditional conference panels and hands-on interactive workshops facilitated by the CBIs but often led by grantees; webinars for large and smaller groups; smaller in-person grantee topic-based workshops; in-person one-on-one multiday site visits or work sessions; large and small group conference calls on narrow topics; office hours, when CBIs were available for one-on-one teleconference consultations; and technical reports and toolkits crafted for specific grantee-defined issues. The flexibility in delivery platforms meant that CBIs could respond to specific needs as they arose. Grantees were also not tied to one technical assistance provider and could benefit from the network of eight providers and their associated partners.

The HUD staff and the CBIs wanted to ensure that capacity and knowledge would have a broad reach beyond the life of the grant. To that end, the capacity-building efforts specifically targeted local agencies and organizations that were members of grantee consortia, not paid consultants. Common practice in local and regional planning efforts is to hire a consultant to produce a plan for a community, especially if the community does not have an internal planning department. The entire CBI program challenged the practice of relying solely on outside consultants for plan development. Grantees were expected to send staff from consortia member partners to participate in the in-person technical assistance efforts. For example, in preparing for ISC's leadership training "boot camps," CBIs would interview grantees who asked to participate or those whom CBIs identified as potential participants. They would be asked to put together a team of decisionmakers and stakeholders from their consortia partners and, if needed, offered assistance in identifying other members of the consortia who would benefit from attending. PolicyLink would offer to help identify consortia members who had a history of marginalization and exclusion from decisionmaking. The ideal team included elected officials, community-based organization leaders, and planning staff. This combination would allow them to work together closely and bring stronger team members back to share their knowledge and move toward implementation of their plans.

Peer-to-peer learning was a key element in much of the capacity-building program. A stated outcome of the CBI effort was to facilitate the creation of a national learning community centered on sustainable community planning. The effort to provide platforms for that to occur can be seen in the agendas for in-person workshops and convenings. Grantees facilitated sessions and presented their projects to and with each other in a majority of the in-person capacity-building events and in many of the virtual forums. Grantees frankly discussed obstacles and mistakes they made along the way during some sessions. Each in-person event intentionally left space for informal

grantee interactions so that networks could be established and information shared in those spaces. Importantly, CBIs tried to provide an online platform to support the emerging learning community using a website that was initially password protected but later opened and made more widely available. The intent was to provide a protected platform in which grantees could share draft plans with each other, engage in information exchanges, house links to resources and helpful documents, serve as a protected discussion platform among grantees, as well as provide information about upcoming technical assistance opportunities. Grantees, however, did not use the space for sharing plan drafts as initially expected, nor did they use it as a significant discussion forum. Eventually, access was granted to anyone who requested it, but the use of the site never became pervasive. Although it is not possible to systematically document the establishment of a functioning “learning community,” the efforts to support peer-to-peer learning and networks of grantee communities were an important feature of this capacity-building program. Policy diffusion often happens in peer-to-peer interactions and the effort to provide forums for local leaders and practitioners to share and learn from each other (Wolman and Page, 2002); these were successful ingredients for peer learning among the SCI grantees and supported and cultivated by the CBIs.

Equity, inclusion, and collaboration framed the capacity-building efforts. PolicyLink was tasked with assisting not only the grantees in executing their projects, using equity to frame their efforts and outcomes, but also with offering assistance to other capacity builders to ensure that they approached their work with equity in mind. The regular communication among the CBIs meant that PolicyLink could easily identify gaps in the capacity of CBIs to address equity issues and provide feedback for improvement. For instance, PolicyLink staff provided constructive assessments of in-person training events that may not have included participants who were representative of the racial and ethnic makeup of the communities involved. The focus on equity across all elements of the program meant that the approach could have a broader impact beyond the program boundaries. The MHP, along with PolicyLink, worked with grantees who needed assistance with completing FHEAs and RAIs and their associated action plans. Completing the equity assessments and the identification of impediments and connecting them to the regional plans were crucial to getting regions and cities to recognize the connections between affordable housing, transportation, economic development, and any of a number of land use decisions that affect equity outcomes. Because this type of assessment was new to many of the grantees, capacity builders had to walk several of the grantees step by step through building their capacity to do this type of analysis on their own.

The timing of the capacity-building program implementation created some problems for engaging grantees in some of the subject areas offered by the technical assistance providers. The CBIs did not establish work plans until 2011, well after the 2010 grantees were into their projects. Because grantees were accustomed to adhering strictly to their proposed plans and fulfilling HUD's reporting requirements, they were not ready to consider any approach beyond what they may have proposed or the minimum that HUD required of them. Some of the topics for assistance, such as integrating water infrastructure, were not specified in the original NOFA, and grantees were permitted and encouraged to define their own sustainability and criteria for success. Combined, these elements, along with the imperative for grantee-driven assistance, created a challenging environment in which to deliver grantee assistance.

The CBIs kept detailed track of their interactions with grantees throughout the grant program. This reporting enabled HUD staff, as well as the CBIs, to see where, what type of technical assistance was being delivered, and which platforms were being used. Using this knowledge, the CBIs could coordinate and understand where gaps existed. Even so, it remained difficult to reach all eligible grantees the SCI and eligible EPA programs. The SCI-CCP grantees took less advantage of capacity-building opportunities than the SCI-RPG grantees. During the final year of the technical assistance program, CBIs identified 40 grantees who took least advantage of the technical assistance. Of those 40, 85 percent were SCI-CCP grantees, 19 from 2010 and 15 from 2011. Of the remaining 6, 4 were 2010 SCI-RPG grantees and 2 were 2011 SCI-RPG grantees.⁷ This disparity of attention between the grant types was due to the SCI-RPG grantees' areas of need more closely aligning with the offerings of the CBIs. Furthermore, the SCI-CCP grantees had smaller grant awards, limiting their financial ability to take advantage of technical assistance, due to the staff time or travel funds required to take advantage of the assistance. Finally, many of the first-round grantees had spent most of their budget by the time the second round of capacity-building support became available in 2013. This finding was true of many of the 2010 SCI-RPG grantees as well. Although grantees who completed their grants remained eligible for assistance, many did not have resources needed to use the assistance.

HUD and the CBIs struggled with documenting the value of the capacity-building efforts. Although internal event evaluations showed grantees found CBI assistance to be valuable, grantees were unable to document the difference the assistance made in creating or implementing their plan. This critique however is true of many technical assistance or capacity-building efforts related to community planning. The outcomes of such interactions often cannot be seen in any immediate product of the interaction; this area would benefit from further study and inclusion in future federal planning programs.

The Program and Policy Lessons of the Sustainable Communities Initiative

The SCI represented a substantial commitment to build new capacities in regional and local planning and expand understanding about the contemporary challenges of resilience and sustainability. The roots of SCI's planning focus can be found in other HUD programs, such as Section 701 Comprehensive Planning Assistance Grants and the Urban Development Action Grant Program (Tregoning, 2015). SCI was launched during the middle of national economic crisis and had to continuously adapt to ever shifting political winds.⁸

As is to be expected in any effort to institutionalize new practices and programs through a new initiative, SCI staff ran into obstacles within HUD's traditional framework and culture. In response,

⁷ These data are based on an internal CBI review of tracking records of grantee assistance performed in September 2014 near the end of the CBI program.

⁸ During interviews to confirm specific program details, SCI leaders and staff conveyed a sense of enthusiasm and accomplishment for being part of a creative and entrepreneurial office and initiative despite the obstacles they faced. The authors' perspectives as outsiders with inside knowledge enabled us to see that SCI, especially during the first 2 to 3 years, spent lots of energy to align its people, grantees, and sustainability policies, and organize them under a cohesive program.

the program and its people evolved and adapted to changing leadership, a tough political climate, and the inevitable shift in federal priorities. The OSHC experienced changes in leadership and staffing on a regular basis. Four different individuals filled the office director position during the life of the initiative (2009 to 2015), and the GTRs and grant officers assigned to the grantees shifted under each program. The results of the 2010 mid-term election and the subsequent rise of the Tea Party created substantive political obstacles to getting SCI authorized by Congress. This development also posed barriers—in some cases temporary and in others long term—to achieving state, regional, and local buy-in to grantee efforts toward implementing sustainable development plans (Berry and Portney, 2016). In response to leadership changes, political challenges, and shifts in priorities over time—common occurrences at all levels of government—OSHC changed names, becoming the Office of Economic Resilience in February 2014 and then the Office of Economic Development in November 2016. These names changes reflect the political realities of the time that placed more emphasis on economic development rather than sustainability.

In the following sections, we distill, in more depth, these and other important policy and program insights that are relevant for any capacity-building initiative involving regional and urban sustainability.

Contributions to Fields of Urban and Regional Planning

Expanding the Practice of Regional and Urban Sustainability Policy and Planning

Although SCI administered only two rounds of its regional and community challenge grant programs, it represented a significant federal investment in regional and urban planning. SCI's model offered metropolitan agencies and local government funds to develop new or implement existing plans and codes. Furthermore, it established a cohort of communities and practitioners among its regional grantees that has potential to further hone their initial activities and contribute substantively to an emerging community of practice around regional sustainability planning in the United States.

SCI's signature grant programs put a spotlight on the intersection of transportation, housing, and land use planning as essential policies for becoming a sustainable community. This is not a new framework. Throughout the years, many urban planning scholars have studied this nexus (Barbour and Teitz, 2006; Beatley and Manning, 1997; Berke and Conroy, 2000; Duany and Talen, 2002; Wheeler, 2013). In addition, for more than 20 years, EPA's Smart Growth Network promoted these core principles of housing affordability, transportation choice, and sound land use planning through its publications, convenings, and technical assistance. What was new was that a federal initiative, SCI, put these practices, principles, and research into action by funding such a wide array of plans, programs, and projects at diverse scales and geography. These sustainability planning efforts required, at times, new approaches to coordinate local and regional agencies that did not have a history of coordinating and collaborating, so they could for example, integrate water infrastructure planning into the work supported through the grants.

Inclusion and Equity

SCI put equity front and center as a policy priority, connecting it to sustainability planning activities supported by the grants (Tregoning, 2015). Most definitions of sustainability include some notion of social equity. However, many local policies, plans, and programs do not explicitly make equity

a community goal. Moreover, local government attitudes toward sustainability and equity vary tremendously (Svara, Watt, and Takai, 2015). Through its grant and capacity-building activities, SCI stressed the importance of how regional and urban planning have the ability to address racial and economic inequities by establishing stronger connections between transportation and housing. SCI's requirement for its regional planning grantees to conduct an FHEA or RAI helped fulfill its legal obligations under the Fair Housing Act. More importantly, these analyses gave grantees and their partners important data and insights about concentrations of poverty, gaps in access to critical social services, and transportation barriers that impinged on the mobility of low-income families. The process also gave grantees the opportunity to have difficult conversations about race and, in some cases like Baltimore, allowed them to explicitly reference structural racism as an obstacle to employment opportunities in their plans (Opportunity Collaborative, 2015).

Use of New Planning Tools

During the course of the SCI, technological development in data collection, mapping, and communication expanded dramatically. Grantees and CBIs made use of these advancements by developing and augmenting planning tools. In many cases, these tools were new to the field or used new technology that made certain accepted practices easier, increased public access, and facilitated the use of a wider variety of information and data. Many of the tools opened new methods of engaging the public in the planning process. Some grantees simply lacked capacity to use certain tools, and the grant provided resources to augment that capacity. Notable tools that were supported and, in some cases, required in the SCI programs included scenario planning (specifically, Envision Utah and Place Matters), equity assessments (PolicyLink, PERE, and Kerwin Institute), GIS mapping of community and regional attributes and projections (Place Matters and HUD's eventual AFFH tool), and web-based social media applications.

Chakraborty et al. (2011) remarked that the HUD FY 2010 NOFA for regional plans required grantees to engage in scenario planning but left the details for the grantees to determine. The subsequent 2011 NOFA for capacity building specified technical assistance in scenario planning. Envision Utah, also a grantee, built on existing scenario-planning tools, augmenting them and making them available to other regional grantees such as Austin, Texas, and Kansas City, Missouri (Minner, 2015). This scenario-planning tool, Envision Tomorrow⁹ continues to be marketed, adapted, and used in a variety of planning efforts.

The Equity Profiles produced by PolicyLink with grantees and partners from PERE at USC provided regional summaries of demographic and economic baselines and projections that could then be used for some scenario-planning work. The presentation to local decisionmakers of the demographic shifts in age, race, income, education, and employment in a regional context highlighted how communities are interdependent and was intended to facilitate collaborative approaches to equitable planning that would lead to more equitable outcomes. PolicyLink and PERE continue to produce detailed equity profiles and have since launched a public database, Equity Atlas,¹⁰ for communities to use on their own.

⁹ <http://www.envisiontomorrow.org/et-intro/>.

¹⁰ <http://www.nationalequityatlas.org/>.

GIS and other mapping tools to collect and analyze community data also gained more traction as communities built capacity to produce their own maps through their grants. The Housing and Transportation Affordability Index from the Center for Neighborhood Technology (a CBI subawardee) was used by grantees and eventually integrated into HUD's analysis of housing affordability. Place Matters and their team of experts provided extensive assistance to grantees in assessing their technological capacity to use mapping and other tools for analysis and community engagement.

Federal and State Policy and Program Lessons

Previous administrations over the years have experimented with similar types of interdepartmental collaborations, such as the Bush administration's Cooperative Conservation initiative or the Clinton administration's Brownfields Showcase Communities program. Perhaps SCI's major contribution to this space is how it served as a hub for the PSC interagency collaboration and how collaboration permeated virtually all their activities in their two signature grant programs. Federal urban policy traditionally involves awarding cities categorical grants for specific types of socioeconomic problems or regulating the actions of local governments, such as prohibitions against discrimination or discharges of pollution. SCI represented a different approach to local governments.

A primary focus and major highlight of the SCI experiences were cross-agency collaborations and capacity building within and across the different levels of government. Collaboration arose in a variety of settings—within and across the federal agencies guided by PSC and within and across regional and local governments, actors, organizations, and institutions. Capacity building also occurred at different levels, at different dimensions of the grant program and across the spectrum of urban and regional sustainability planning. Within the policy and public management literature, the definitions and focus of federal intergovernmental capacity-building approaches have been and will continue to be shaped and directed by past and present presidential administrations and policy movements. In the following sections, we situate the SCI experiences within the public administration or public policy literature and extract a few important lessons for current and future policymakers, program managers, and partners.

Characteristics of Place-Based Urban Policy

SCI represents one of several place-based urban policy initiatives launched during the Obama administration. Important characteristics of these initiatives include geographic targeting of resources and actions, interdisciplinary approaches, coordination of agencies and sectors, data-driven decisions and results, and flexibility and creativity that can adapt to local context and rapidly changing environments. Through the White House Domestic Policy Council's interagency Neighborhood Revitalization Initiative, place-based policies became a priority across a variety of housing, community, economic, and environmental programs, such as Choice Neighborhood, Promise Neighborhoods, Byrne Criminal Justice Innovations, Brownfields Area Wide Grants, Strong Cities, Strong Communities Initiative, and the special Federal—Local Partnership in Detroit (Swanstrom, 2015). SCI exemplified this emerging model of place-based urban policy by facilitating collaboration with and among regional and local grantees and exploring how public policy problems play out in different and diverse communities and settings. Moreover, SCI's comprehensive capacity building activities set the pace among these other federal place based urban initiatives.

Impact and Influence of SCI's Program Design

SCI's program design as a competitive grant process enabled HUD and its partners to select SCI-RPG and SCI-CCP grantees at different scales, from different parts of the country, and at different stages of sustainability planning. For example, SCI grantees included diverse rural regions with a range of capacity and challenges, such as New River Valley Planning District Commission in southwestern Virginia, Thunder Valley Community Development Corporation in South Dakota, Heart of Texas Council of Governments in central Texas, and Northern Maine Development Commission for two counties in northern Maine that leveraged their HUD grants with local public and private investment dollars. Within metropolitan regions, SCI grantees represented those with strong economic and population growth (for example, Boston, Chicago, and New York City), as well as those combating years of economic distress and dramatic demographic change (for example, Fresno, California, and Cleveland and Akron, Ohio). SCI's two-tiered program structure supported the implementation of existing regional plans already in place (Category 1) and those that focused their grant on the design and engagement to develop and adopt a region's first sustainability blueprint plan (Category 2).

The community engagement program requirements also drove grantee applications, approaches, and results. OSHC recognized that collaboration would be critical to ensure eventual implementation of the sustainable plans or projects and the longer-term impacts would be sustained, achieved (HUD Staff Interviews 2016–2017). The NOFA established upfront that grantees had to engage a wide range of partners and collaborators, such as local governments, nonprofit organizations, and universities. Although the level of actual input and contributions from each of these partners varied from region to region, SCI's program design elevated the importance of cross-sector collaboration as a critical component in sustainability planning that touches so many different socioeconomic and environmental issues. SCI's program design and structure enabled HUD and its partners to stretch the dimensions, reach, and practice of urban and regional sustainability planning.

Collaboration

Effective collaborations among multiple organizations, agencies, and departments, and those across sectors (public, private, and nonprofit) exhibit certain characteristics, core competencies, and processes. Based on an extensive literature synthesis, (Foster-Fishman et al. 2001) developed a model that suggests four critical levels of collaborative capacity for fostering systems change by coalitions (1) within their members, (2) within their relationship, (3) within their organizational structure, and (4) within the programs they sponsor. Each of the four capacities has different degrees of interdependence. They also observed that community context will greatly influence the impact and influence of such collaborative capacities.

SCI's leadership, staffs, grantees, partners, and capacity builders exhibited various aspects of the Foster-Fishman's four collaborative competencies. Collaboration was heightened within each partner's membership; for example, within HUD, SCI led to the appointment of sustainability officers across HUD's regions to facilitate collaboration from headquarters to the regions and their respective grantees. Within EPA, the Smart Growth Program worked closely with the Brownfields programs and the Office of Water to make the most of EPA's financial commitments to capacity building. At times organizational structures had to be shifted to allow for financial commitments from EPA to be transferred to HUD. Essentially, EPA had to figure out how to write a check to HUD and establish the financial relationship to permit that level of collaboration.

Relationships across PSC members were strengthened through inclusion in grant review and during implementation, in which all the PSC members contributed staff time to efforts, such as the grantee convenings and other in-person capacity-building efforts. These interagency collaborations resulted in programs recognizing that their grantees had overlap and should benefit formally for leveraging those grant dollars and resources. Thus, the recognition of the PSC for points on future grant applications in other departments or agencies served to strengthen collaboration across programs. Within program collaboration in innumerable ways, the grantees replicated federal collaboration in the creation of their regional planning consortia, building on longstanding partnerships and bringing new partnerships to their efforts.

SCI was primarily a federal government initiative designed to facilitate collaboration on two levels—across and within federal agencies and among regional and local governments and their partners. By requiring collaboration at each level, SCI would lead to higher levels of cooperation among and between agency staff and grantees; that would result in stronger policy and program coordination, breaking down strict federal policy silos, which, in turn, would streamline program and service delivery and lead to federal programs that were more responsive to regional and local priorities.

At the federal level, a 2013 strategic assessment of the Partnership found preliminary success (2009 to 2012) in helping federal agencies (primarily DOT, EPA, and HUD) break down policy and program silos based on—

- Shared commitment to an important set of implementable policy goals.
- High level of commitment from the top leadership of each agency.
- Substantial concern with, and responsiveness to, the input as well as fears of some stakeholders.
- Significant focus on choosing only applicants that took the program requirements seriously.
- Tremendous thought given by HUD to the design and execution of grant requirements.

(Pendall et al., 2013: 1)

SCI's most visible collaborations arose during the design of the grant program requirements and the cross-agency selection of grantees. Cooperation arose through use of the right processes, such as regular interagency conversations and meetings, and having the right people in the right places who were developing and following the same script. For example, DOT created their transportation planning and projects grants (TIGER II) that parallel HUD's SCI-RPG and the later SCI-CCP grants; this action ultimately led to the jointly issued DOT and HUD NOFA and jointly evaluating the applications for all three grant programs (Pendall et al., 2013).

The program also encouraged de-siloing at the regional and local levels in the very structure of the NOFA requirements. The NOFAs required demonstration of committed consortia with the inclusion of stakeholders and organizations that were traditionally not included in planning decisions, and collaboration across agencies that may not have had the structural capacity or a history of regular communication, let alone collaboration. For instance, housing authorities across a region would be included in discussions about transportation plans, green infrastructure, or water infrastructure improvements. The federal levels were engaged in better collaboration, and de-siloing facilitated cooperation across local agencies that often relied on different federal grant resources for implementation that had different and sometimes conflicting requirements.

Concrete examples of federal de-siloing that resulted in regional and local de-siloing include the creation of the PSS that garnered points on applications to other federal grant programs; the acceptance of grantees' completed FHEAs for the soon-to-be launched AFFH rule; and the willingness of the U.S. Economic Development Administration (EDA) to regard some of the regional plans as equivalent or alternatives for a community's Comprehensive Economic Development Strategy, making them eligible for EDA funds.

Intergovernmental Capacity Building

Another high policy priority for SCI was to build intergovernmental planning capacity with coalitions of regional and local governments and their local partners. At a 1981 symposium on local government capacity building, then Director of the Federal Executive Institute, Chester A. Newland, offered a classic definition and rationale: "Capacity building—increasing the ability of people and institutions to do what is required of them—is a term that grew out of the recognition that governments must augment their capabilities if they to meet daily operating requirements and changing needs" (Newland, 1981: 1).

Beginning with the advent of Lyndon Johnson's Great Society, the federal government has a long history of investing in capacity-building and technical assistance programs as part of its portfolio of urban programs and policies designed to help communities address a myriad of social, economic, and environmental issues. These federal government programs would fail unless state and local governments had the capacity and competency to administer and implement them (Hansen, 1981). Administrations brought different approaches to capacity building over time. During the Nixon era, an Office of Management and Budget report offered the guidance that intergovernmental capacity building should encourage federal, state, and local governments to cooperate in developing the necessary skills for planning, management, and evaluation. Plus, the federal government should promote research, experimentation, and innovation at all levels of government to encourage more effective and responsive practices (Burgess, 1975). Under the Reagan administration's increased emphasis on devolving greater responsibilities to the state and local governments, capacity-building efforts focused on improving state and local abilities to take on the management of federal government programs. Starting in 2011, the Obama administration launched a series of place-based initiatives (Promise Neighborhoods, Choice Neighborhoods, PSC, and the Strong Cities, Strong Communities Initiative) that not only sought to break down federal policy silos but also develop local capacities that foster cross-sector collaboration (Swanstrom, 2015). Building on these longstanding intergovernmental dynamics, SCI offers intriguing lessons for future federal and state programs designed to build the planning capacity of regional and local governments and communities.

When it comes to the design and administration of local government capacity-building programs, three challenges seem to remain constant throughout the decades. First is the sheer number and diversity of governments, special districts, and interplay with local politics (Hansen, 1981). Second is the multiplicity of federal government capacity building and technical assistance activities across dozens of domestic agencies (Burgess, 1975). Third is how changes in presidential administrations and contemporary policy issues impact intergovernmental relationships and, thus, the design and implementation of intergovernmental capacity-building programs had to operate within this

context by acknowledging these intergovernmental complexities, resisting the internal dynamics of doing capacity building as it had always been done in HUD and other federal agencies and, at the same time, pilot testing a new place-based urban policy model for facilitating stronger interagency coordination and intergovernmental collaboration on urban and regional sustainability planning.

These emerging place-based urban policy models also imposed additional pressures on this foundation of intergovernmental complexity. For example, they relied on regional systems of governance that place heavy demands on voluntary collaboration among actors from fragmented local governments; thus, it required patience and time to transform such informal collaborations into a set of shared values and, ultimately, build the requisite level of trust. Beyond the organizational capacity limits of distressed cities and smaller, suburban cities to implement federal urban grants, Swanstrom argues that their lack of civic capacity to collaborate across sectors, governments, and silos posed the greatest challenge to this new suite of place-based urban policy. Although SCI grant program resources, requirements for enhance partnerships and community engagement, and technical assistance programs were a “step in the right direction,” Swanstrom noted that capacity building also requires thoughtful approaches to the problem of urban strategy, justice, and fairness (Swanstrom, 2015).

Important program lessons for current and future intergovernmental capacity-building efforts from SCI's experience include—

- Bifurcating the federal grant program administration responsibilities and process from technical assistance or capacity-building efforts on urban and regional sustainability planning.
- Having access to a strong expansive network of national nonprofits and academic institutions, with expertise in urban and regional planning and sustainability, to provide technical assistance or substantive capacity-building activities across governance bodies.
- Developing a collaborative, intergovernmental network or a “learning community” of grantees around urban and regional sustainability.

Partnerships With Philanthropy

An often overlooked outcome of SCI was the impact and knowledge gained by regional partnerships and philanthropic groups. By bringing philanthropic stakeholders to the table, communities could utilize these groups as conveners, advocates, network weavers, narrators, capacity builders, and above all, thought partners. SCI regions, through philanthropic partnerships, could enhance trust with additional community stakeholders. During the grant process, the use of creative citizen engagement enabled a more holistic approach to the regions' problems (Geevarghese and Tregoning, 2016). The philanthropic community perceived the public-private partnerships that were established and strengthened as part of SCI as accelerants to the community change in which they were already engaged. SCI was thus a catalyst in holistically strengthening community collaboration.

Additionally, the partnerships between SCI regions, HUD, philanthropic organizations, along with other stakeholders further assisted in the use of indepth data by all groups to enhance community decisionmaking. From a more macro policy perspective, SCI helped to create a new norm within HUD where working with philanthropy moved from feeling “uncomfortable and risky” to an asset

to HUD program offices (Geevarghese and Tregoning, 2016). This cultural change shifted how HUD approaches, and asks their grantees to engage with, philanthropic groups. Communities that succeeded in the creation of strong public-private partnerships were catalyzed further beyond the grant process, due to the development and identification of shared goals and methods across a regional network of philanthropic and public stakeholders (Geevarghese and Tregoning, 2016). Going forward, HUD sees philanthropic partnerships as a best practice; grantees need to create and nurture philanthropic engagement early on. SCI showed how public-private partnerships both engage and create a broad level of trust between grantees, HUD, and philanthropy. Thus, SCI leaves a lasting impact on the importance of philanthropy in broad stakeholder collaboration.

Evaluation of Planning and Capacity-Building Components

SCI was a difficult and complex program for HUD to evaluate and assess, especially within the established time horizons. HUD's grant administration office establishes a consistent process for grantees to report certain performance data in a standardized spreadsheet. This reporting and tracking process covers HUD's categorical and development grants to local governments with some variations or tailoring for specific grant programs. These generic department reporting requirements and formats did not fit SCI's focus on urban and regional planning and sustainability. SCI's Category 2 regional grantees used their grants on activities to implement existing regional sustainability plans, whereas Category 1 grantees were engaged in the process of creating and adopting a plan. Within the planning literature, while the theory and practice of evaluating comprehensive land use plans continues to improve, the methods remain more art than science (Baer, 1997; Berke and Godschalk, 2009; Berke and Conroy, 2000; Hoch, 2002). Moreover, for Category 2 grantees engaged in creating a plan, it would be hard to track anything more than process outputs—the number of meetings and attendees—with some qualitative analysis of shifts in attitudes, perceptions, and opinions. In SCI's competitive policy and political environment, policymakers were looking for data that could directly link HUD's grant investments with jobs and other economic indicators. Without such data about SCI's economic impact, it became a never-ending quest for SCI's leaders and staff to devise new ways of calculating and communicating SCI's value to Congress and other policymakers (HUD Staff Interviews, 2016–2017).

SCI's focus on the design and development of regional sustainability plans also posed challenges for doing a more formal and comprehensive program evaluation as the long-term impacts or outcomes from adopted plans might not surface until years later. Plus, HUD funding rules prohibit HUD from contacting and demanding data after the grant expires. The important lesson here is effective program evaluation should be integrated from the outside, and HUD and other federal agencies should make the resources available for independent, third-party program evaluations.

Conclusions—What Is the Legacy of the Sustainable Communities Initiative?

In reflecting on SCI's contributions to intergovernmental capacity building, regional planning, and the constant ebb and flow of urban sustainability, what stands out today, more than 5 years since its peak, is SCI's ambitious agenda to infuse livability principles and policies through the vehicle of regional planning. SCI's policy agenda and suite of capacity-building activities sought to test the

range and scale of sustainability planning in diverse metropolitan and rural regions of the country. Moreover, in their efforts to bridge the polarization of urban and rural communities, SCI and its grantees confronted some of the difficult political realities and policy limitations in the United States.

For state and federal government leaders involved with designing and developing intergovernmental capacity-building initiatives around urban and regional planning, SCI's holistic program design offers an intriguing model. SCI's breadth supported a wide range of grantees from different regions of the country, at different scales and at different stages in their planning experiences. SCI also provided its national capacity-building network with the resources and flexibility to effectively build a grantee cohort and expand their technical planning capabilities. These and other components could be adapted for other intergovernmental capacity-building efforts at the federal or even state government level. One recommendation to strengthen the SCI model is to develop upfront a set of meaningful indicators that grantees and program officers can easily use to track progress and impact over time along with sufficient resources for independent program evaluation.

Considering the dramatic shifts in the national and local political and policy landscapes, SCI had to constantly adjust and adapt, whether it was renaming the office three times, changing directorship four times, or recalibrating the policy focus from sustainability planning grants to resilience competition. These are also important tactics and insights for any entity (for example, nonprofit, public, or private) that works in the sustainability space in the United States. These are perhaps even more critical lessons for federal or state agencies, in which the layers of longstanding bureaucratic rules make it more difficult to host innovative initiatives that require more receptive organizational cultures. Even with its flexibility and continual policy adjustments, the SCI experience illustrates the skepticism that remains in many parts of the United States around the role of the federal government and the issues associated with urban and regional sustainability. The recent U.S. withdrawal from the Paris Climate Agreement reconfirms and reinforces these sentiments. From our interviews, this constant state of flux did take a toll on SCI leaders and staff and made it difficult to concentrate their energies and resources on the core mission of building intergovernmental capacity.

Another way of reflecting on SCI's legacy is to consider the wide range of future research that could uncover its ripple effects. For example, researchers should explore the long-term impacts from this large number of grantee applicants. Although it represents a huge interest and commitment at that time, how many of grantees leveraged the relationships and insights from their applications to launch a sustainability planning process or project without SCI resources? What research could be started now to identify and track the ripple effect of the SCI-RPG grantees' planning activities over time? Did these planning processes create a stronger community culture around collaboration and perhaps a more supportive political climate for sustainability? Did the SCI-supported activities lead to other changes in policies, codes, and programs? What impact did the emphasis on social justice and equitable development have on the grantees' organizations and communities? What economic impact can be traced from SCI supported activities? Did the grantees test and expand their new regional and urban planning tools, techniques, and capacities to other issues or to other communities? Did SCI cultivate an alumni network of grantees, staff, capacity builders, and leaders that are silently continuing about their work to build more sustainable communities and preparing for a day when future generations can reap the benefits from the seeds that were sown under the auspices of SCI? Such research would not only confirm SCI's policy legacy, but test the effectiveness of these place-based, capacity building initiatives.

Acknowledgments

The authors thank the HUD staff members who took the time to share their insights and deep knowledge of the program during the interviews and focus group session.

Authors

Lauren C. Heberle is associate professor of sociology and Director of the Center for Environmental Policy and Management at the University of Louisville.

Brandon McReynolds is a Ph.D. candidate in sociology who works for the Center for Environmental Policy and Management at the University of Louisville.

Steven Sizemore is a Ph.D. candidate in urban and public affairs who works for the Center for Environmental Policy and Management at the University of Louisville.

Joseph Schilling is a senior research associate at the Urban Institute and former professor of practice in the Urban Affairs and Planning Program at Virginia Tech (Alexandria Campus).

References

- Baer, William C. 1997. "General Plan Evaluation Criteria: An Approach to Making Better Plans," *Journal of the American Planning Association* 63 (3): 329–344.
- Barbour, Elisa, and Michael B. Teitz. 2006. "Blueprint Planning in California: Forging Consensus on Metropolitan Growth and Development." Public Policy Institute of California. http://web.ppic.org/content/pubs/op/OP_606EBOP.pdf.
- Beatley, Timothy, and Kristy Manning. 1997. *The Ecology of Place: Planning for Environment, Economy, and Community*. Washington, DC: Island Press.
- Berke, Philip R., and Maria Manta Conroy. 2000. "Are We Planning for Sustainable Development?" *Journal of the American Planning Association* 66 (1): 21–33.
- Berke, Philip R., and David Godschalk. 2009. "Searching for the Good Plan: A Meta-Analysis of Plan Quality Studies," *Journal of Planning Literature* 23 (3): 227–240.
- Berry, Jeffrey M., and Kent E. Portney. 2016. "The Tea Party Versus Agenda 21: Local Groups and Sustainability Policies in U.S. Cities," *Environmental Politics* 26 (1): 118–137.
- Burgess, Phillip. 1975. "Capacity Building and the Elements of Public Management," *Public Administration Review* 35 (special issue): 705–716.
- Chakraborty, Arnab, Nikhil Kaza, Gerrit-Jan Knaap, and Brian Deal. 2011. "Robust Plans and Contingent Plans," *Journal of American Planning Association* 77 (3): 251–266.
- Chapple, Karen, and Elizabeth Mattiuzzi. 2013. "Planting the Seeds for a Sustainable Future: HUD's Sustainable Communities Initiative, Regional Planning Grant Program." The Center for Community Innovation, University of California-Berkeley. <http://communityinnovation.berkeley.edu>.

Duany, Andrés, and Emily Talen. 2002. "Transect Planning," *Journal of the American Planning Association* 68 (3): 245–266.

Fischer, Elizabeth. 2000. "The Federal Transportation Livability Initiative-Building Livable Communities for the 21st Century," *Public Roads* 63 (6). <https://www.fhwa.dot.gov/publications/publicroads/00mayjun/liability.cfm>.

Flint, Anthony. 2011. "How the Tea Party Is Upending Urban Planning," *CityLab*. The Atlantic Monthly Group. <https://www.citylab.com/equity/2011/12/how-tea-party-upending-urban-planning/718/>.

Foster, Kathryn A. 2011. "A Region of One's Own." In *Regional Planning in America: Practice and Prospect*, edited by Ethan Seltzer and Armando Carbonell. Cambridge, MA: Lincoln Institute of Land Policy: 55–82.

Foster, Kathryn A., and William R. Barnes. 2012. "Reframing Regional Governance for Research and Practice," *Urban Affairs Review* 48 (2): 273–284.

Foster-Fishman, Pennie G., Shelby L. Berkowitz, David W. Lounsbury, Stephanie Jacobson, and Nicole A. Allen. 2001. "Building Collaborative Capacity in Community Coalitions: A Review and Integrative Framework," *American Journal of Community Psychology* 29 (2): 241–261.

Geevarghese, Salin, and Harriet Tregoning. 2016. "Scaling Solutions: Strategies for Building Effective Philanthropy Partnerships." <http://blog.hud.gov/index.php/2016/09/30/scaling-solutions-strategies-for-building-effective-philanthropy-partnerships/>.

Goetz, Edward. 2005. "The Big Tent of Growth Management: Smart Growth as a Movement." In *Policies for Managing Urban Growth and Landscape Change: A Key to Conservation in the 21st Century*, by David N. Bengston, technical editor. General Technical Report NC-265. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station.

Gray, Regina C. 2015. "Building a Research Agenda for Creating Sustainable and Inclusive Communities for All," *Cityscape* 17 (2): 3–12.

Hansen, Michael. 1981. "Possibilities and Limitations of Federal Government Promotion of Capacity Building Among State and Local Governments," *Journal of Urban Affairs* 3: 13–22.

Hoch, Charles J. 2002. "Evaluating Plans Pragmatically," *Planning Theory* 1 (1): 53–75.

Innes, Judith E., and Jane Rongerude. 2013. "Civic Networks for Sustainable Regions—Innovative Practices and Emergent Theory," *Planning Theory & Practice* 14 (1): 75–100.

Kolawole, Emi. 2013. "Harvard's Ash Center Announces Top 25 Innovations in Government." https://www.washingtonpost.com/news/innovations/wp/2013/05/01/harvards-ash-center-announces-top-25-innovations-in-government/?utm_term=.41cedc279109.

Marsh, Dwayne S. 2014. "The Sustainable Communities Initiative: Collective Impact in Practice," *Community Investments* 26 (1): 30–36.

Minner, J.S. 2015. "Recoding Embedded Assumptions: Adaptation of an Open Source Tool To Support Sustainability, Transparency and Participatory Governance." In *Planning Support Systems and Smart Cities*, edited by Stan Geertman, Robert Goodspeed, Joseph Ferreira, and John Stillwell. New York: Springer International Publishing: 409–425.

Newland, Chester A. 2008. "Local Government Capacity Building," *Journal of Urban Affairs* 3 (1): iv-v.

Northeast Ohio Sustainable Communities Consortium (NEOSCC). n.d. "Vibrant NEO 2040." <http://vibrantneo.org/neoscc/history/>.

Opportunity Collaborative. 2015. "Baltimore Regional Plan for Sustainable Development." Baltimore Metropolitan Council. http://baltometro.org/phocadownload/Publications/OpportunityCollaborative/170508_Baltimore_Regional_Plan_for_Sustainable_Development-June_2015.pdf.

Partnership for Sustainable Communities (PSC). 2013. "Livability Principles." <https://www.sustainablecommunities.gov/mission/livability-principles>.

Partnership for Sustainable Communities (PSC) and U.S. Department of Agriculture (USDA). 2011. "Supporting Sustainable Rural Communities." <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EOVC.PDF?Dockkey=P100EOVC.PDF>.

Pendall, Rolf, Sandra Rosenbloom, Diane Levy, Elizabeth Oo, Gerrit Knaap, Jason Sartori, and Arnab Chakraborty. 2013. "Can Federal Efforts Advance Federal and Local De-Siloing? Lessons From the HUD-EPA-DOT Partnership for Sustainable Communities." Report prepared for *Living Cities* April 2013. UI No. 08752-000-00. Washington, DC: Urban Institute. <http://www.jstor.org/stable/10.5403/j.abcd12347>.

Svara, James, Tanya Watt, and Katherine Takai. 2015. "Advancing Social Equity as an Integral Dimension of Sustainability in Local Communities," *Cityscape* 17 (2): 139–166.

Swanstrom, Todd. 2015. "Capacity, Capacity, Capacity: The Challenge of Urban Policy in the Age of Obama," *Journal of Urban Affairs* 37 (1): 70–74.

Trapenberg Frick, Karen, David Weinzimmer, and Paul Waddell. 2015. "The Politics of Sustainable Development Opposition: State Legislative Efforts To Stop the United Nation's Agenda 21 in the United States," *Urban Studies* 52 (2): 209–232.

Tregoning, Harriet. 2015. "Coming Full Circle: The Innovation of HUD's Sustainable Communities Initiative," *Cityscape* 17 (2): 189–195.

U.S. Department of Housing and Development (HUD). 2017 "Sustainable Communities Initiative: Grantee Information Table." <https://archives.huduser.gov/sci/>.

———. 2015a. "Strategies for Regional Collaboration," *Evidence Matters* Summer/Fall 2015 Newsletter. <https://www.huduser.gov/portal/periodicals/em/fall15/highlight2.html>.

———. 2015b. "Partnerships and Planning for Impact," *Evidence Matters* Summer/Fall 2015 Newsletter. <https://www.huduser.gov/portal/periodicals/em/fall15/highlight1.html>.

———. 2013. “HUD’s Fiscal Years 2013 Capacity Building for Sustainable Communities Program: Notice of Funding Availability.” Docket No. FR-5700-N-27. <https://portal.hud.gov/hudportal/documents/huddoc?id=2013cbcs-nofa.pdf>.

———. 2011a. “HUD’s Fiscal Years 2010–11 Capacity Building for Sustainable Communities Program: Notice of Funding Availability,” *77 Federal Register* 34 (February 21, 2012): 9955–9956. <https://portal.hud.gov/hudportal/documents/huddoc?id=capbldgscnofa.pdf>.

———. 2011b. “Notice of Funding Availability for the Department of Housing and Urban Development’s Fiscal Year 2011 Community Challenge Planning Grant Program,” *77 Federal Register* 34 (February 21, 2012): 9955–9956. <https://www.gpo.gov/fdsys/pkg/FR-2012-02-21/html/2012-3947.htm>.

———. 2010a. “Notice of HUD’s Fiscal Year (FY) 2010 Notice of Funding Availability (NOFA) Policy Requirements and General Section to HUD’s FY2010 NOFAs for Discretionary Programs.” Docket No. FR-5415-N-01. <https://archives.hud.gov/funding/2010/gensec.pdf>.

———. 2010b. “HUD FY2010 Community Challenge Planning Grants Summaries.” https://portal.hud.gov/hudportal/documents/huddoc?id=FY10_ComChallPlanGrantSum.pdf.

U.S. Department of Housing and Urban Development (HUD) and U.S. Department of Transportation (DOT). 2010. “Department of Housing and Urban Development and Department of Transportation: Notice of Funding Availability for the Department of Housing and Urban Development’s Community Challenge Planning Grants and the Department of Transportation’s TIGER II Planning Grants.” Docket No. FR-5415-N-12. https://portal.hud.gov/hudportal/documents/huddoc?id=DOC_35389.pdf.

U.S. Department of Transportation (DOT). 2017. *Livable and Sustainable Communities*. Washington, DC: U.S. Department of Transportation. <https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/livable-sustainable-communities/livable-and>.

U.S. Environmental Protection Agency (EPA). 2014. “Partnership for Sustainable Communities: Five Years of Learning From Communities and Coordinating Federal Investments.” <https://www.epa.gov/sites/production/files/2014-08/documents/partnership-accomplishments-report-2014-reduced-size.pdf>.

———. 2010. *Partnership for Sustainable Communities: A Year of Progress for American Communities*. Washington, DC: U.S. Environmental Protection Agency.

Wheeler, Stephen M. 2013. *Planning for Sustainability: Creating Livable, Equitable and Ecological Communities*. New York: Routledge.

Wolman, Harold, and Ed Page. 2002. “Policy Transfer Among Local Governments: An Information–Theory Approach,” *Governance* 15 (4): 577–601.

Zapata, Marisa A., and Lisa K. Bates. 2016. “Equity Planning or Equitable Opportunities? The Construction of Equity in the HUD Sustainable Communities Regional Planning Grants,” *Journal of Planning Education and Research*. DOI: <https://doi.org/10.1177/0739456X16657874>.

Impacts of the Sustainable Communities Initiative on Regional Collaboration, Equity, and Planning: Results of a Survey of Grantee Regions

Elizabeth Mattiuzzi

University of California, Berkeley

Abstract

This paper presents the results of a survey of lead agency representatives from the 74 grantee regions for the HUD Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) from 2010-2011. Previous work suggests that different understandings of sustainability and equity existed across the country prior to the grant period, and that the impacts of SCI-RPG in these two areas occurred through indirect as well as direct means (Chapple and Mattiuzzi 2013; Frick et al. 2015). Conducted in July-August 2016 by Virginia Commonwealth University and UC Berkeley, the survey reached 76 percent of grantee regions (56 responses). The results provide insights into how a federal incentive grant for regional sustainability planning helped spur new relationships between regional actors and new approaches to engagement with the public. Respondents clarified how they incorporated social equity into planning processes through new approaches to planning, new data sources, and other means. The survey asked about the SCI-RPG planning process itself and its ongoing impact on regional plans after the completion of the grant period. Consortium leaders reported on how the grant impacted specific policy areas, such as fair housing, as well as its broad impact on capacity and continued investment in the region. Grantees reflected on how SCI-RPG impacted regional collaboration and governance, what the barriers and areas of opportunity are for implementing the regional plans developed under SCI-RPG, and how future grant programs can be improved. The paper uses these results to give a high-level analysis of what worked about SCI-RPG across the nation and what barriers remain to implementation.

Introduction

The livability of a metropolitan region does not fit neatly under one heading. Economic and environmental sustainability, inclusiveness, and affordability—these issues cut across policy silos and jurisdictional boundaries. Barriers to collaboration often arise, however, between the people, organizations, and government agencies that have the resources and the skills to improve livability in regions. The research presented in this article examined those barriers and how federal agencies and regional actors are addressing them.

The U.S. Department of Housing and Urban Development (HUD), U.S. Department of Transportation (DOT), and U.S. Environmental Protection Agency (EPA) all have an impact on planning and the built environment in cities, suburbs, and rural areas. Historically, however, their structures have not always enabled these agencies to collaborate or foster cooperation among the communities, businesses, and the local agencies that are either responsible for implementing or are impacted by the resulting programs and policies.

In 2009, the Secretaries of HUD, DOT, and EPA jointly formed the Partnership for Sustainable Communities (PSC) to help create a more efficient and effective federal presence in regions. To find common ground between these agencies and to better serve the needs of metropolitan regions, HUD developed six livability principles that encompassed economic sustainability and growth; social equity and the inclusion of traditionally marginalized groups in governance and the economy; environmental sustainability; and the convergence of these three areas through investment in location-efficient land use, transportation, and housing development.

PSC spurred policy experiments such as the Sustainable Communities Initiative (SCI) at HUD. SCI consisted of two planning grants that supported the livability principles: the Community Challenge Planning grant, which targeted individual cities, and the Regional Planning Grant (SCI-RPG) program, which targeted regions. SCI-RPG was especially unique and exciting because it was the first modern instance of federal interest in comprehensive planning in metropolitan regions in the United States (Chapple, 2015).¹

SCI-RPG awarded \$165 million to 74 metropolitan regions across the United States for regional planning (Geevarghese and Tregoning, 2016). It also funded \$10 million worth of capacity building and technical assistance by national nonprofits in regions.

In order to be truly regional in scope, the SCI-RPG required applicants to form a consortium that cut across sectors and geographic areas. To encourage city-suburb cooperation, each consortium had to include the region's principal city and jurisdictions representing at least one-half of the region's population. The SCI-RPG also required consortia to include a regional agency—such as a metropolitan planning organization (MPO), a council of governments (COG), a regional planning organization, or an economic development district—and a philanthropic, nonprofit, or university partner.²

¹ A metropolitan region can be primarily urban or rural, usually includes multiple counties, and sometimes crosses state lines. It is often defined according to the area that a metropolitan planning organization (MPO) serves. Any area with more than 50,000 people must have an MPO to plan for federal transportation spending.

² A regional agency (such as an MPO, COG, regional development commission, or planning district) or a county led most consortia, although a university, nonprofit, or city led a few.

In addition to the required leadership organizations, many regional consortia also included partners from the business and nonprofit communities who could help strengthen regional collaboration. Of the 74 SCI-RPG regional consortia, 33 distributed subgrants to consortium members, such as community-based organizations, to help them and their members become more involved in regional planning.³ These subgrants often helped build capacity among organizations and individuals who could bring diverse perspectives to the consortium but did not traditionally have the resources to participate in regional planning and governance.

The two main outputs that consortia developed through the grant process were a regional sustainability plan and a fair housing assessment. The design and focus of the regional sustainability plans varied by region, but each region had to analyze data on poverty and access to housing in their region for a Fair Housing and Equity Assessment (FHEA). The FHEA served as a trial run for the HUD Affirmatively Furthering Fair Housing (AFFH) rule,⁴ which went into effect in 2016.

SCI-RPG supported regional governance and helped break down silos between policy areas that touch urban and rural planning. The idea was that greater coordination of federal activities could increase the impact of federal dollars in regions. In other words, the left hand should know what the right hand is doing, which requires planning and communication. This has been called a “place-based” approach, which means focusing on the bottom-up, stated needs of regions. It involves shifting the role of federal agencies, which have traditionally focused on compliance, to serving regional interests in a way that makes sense on the ground, while still accomplishing federal goals.

This research examines the role of the SCI-RPG in promoting collaboration in regions to support sustainability and equity. Through a survey of grantee regions, it explores the impact of grant activities on partnerships and equity in regions. The results suggest that new partnerships and improved community engagement were key outcomes of the grant, as well as strengthened regional leadership. Challenges include sustaining the momentum of the consortia after the grant award and identifying funding for implementation. Grantee regions started with different levels of capacity; in general, they now have better shared definitions of equity and better data on housing and other disparities.

Methodology

This article presents results from an indepth survey of the lead organization of consortia in regions that received an SCI-RPG. The purpose of the survey was to learn how the regional sustainability planning process varied in different regions, examine what the prospects are for implementation of the regional plans, and gather feedback that could improve future programs. Research for this article also included interviews with 17 current and former federal officials with knowledge of SCI and PSC in the fall of 2016.

³ An additional three consortia paid member organizations to participate.

⁴ “Affirmatively Furthering Fair Housing.” Final rule. 20 CFR Parts 5, 91, 92, 570, 574, 576, and 903. *Federal Register* 80 (136) July 16, 2015.

The survey examined how the SCI-RPG may have helped local, regional, and state officials and their partners improve cooperation in their region and increase public participation and social equity in their planning processes, policies, and outcomes. It asked consortium leaders about their experience forming and sustaining partnerships across sectors to develop and implement a regional plan; the strategies their organization used to engage underrepresented populations; and the impact their planning activities have had on social equity in the region.⁵ Lead agencies from 56 out of 74 SCI-RPG consortia responded to the survey, for a 76-percent response rate.⁶

This survey is the first comprehensive look at all grantees during the 3-year grant period during which engagement, capacity building, and regional planning occurred. Past research explored how the SCI-RPG application process brought different players in regions together to grapple with the issues of equity and sustainability (Chapple and Mattiuizi, 2013; Frick et al., 2015). Researchers have also studied grantees' approaches to applying sustainability planning and the federal livability principles in a local context (Gough, 2015), and how PSC has increased cross-agency cooperation at the federal level (Pendall et al., 2013).

The survey responses point to lessons from the SCI-RPG for future programs and implementation efforts. Grantees described how they brought in a wide spectrum of voices in their planning process, what aspects of their plans they have been able to implement, where they have leveraged other sources of funding, and what the gaps and challenges are going forward. They also provided feedback on the program design.

Regional Sustainability Planning, Governance, and Implementation

Historically, regional planning has not been the norm in the United States. Progressive-era reformers sought to dilute the power of political machines that dominated state government by devolving planning powers to the local level (Weir, 2000). To counter the inefficiencies of fragmented planning decisions during rapid postwar growth, the federal government encouraged the formation of regional governing bodies in the 1950s and 1960s (Weir, 2000).

Federal grant funding for regional planning dates to 1965, when Congress expanded eligibility under Section 701 of the Housing Act of 1954 to include regional agencies (Meck, Retzlaff, and Schwab, 2003).⁷ From 1968 to 1981, HUD was responsible for promoting metropolitan and rural planning through the Section 701 grants to regional planning agencies for activities such as coordinating housing and transportation needs (HUD, 2015).

The SCI-RPG experimented with creating an incentive for governance and planning for regional sustainability. Governance is formal or informal cooperation among different actors, such as

⁵ The survey asked closed-ended questions coupled with open-ended questions in order to elicit more detailed responses. Some of the open-ended responses fell into categories that our team coded, while other responses captured general feedback.

⁶ The survey was conducted in the summer of 2016. Our team made multiple attempts to reach consortium leaders by email and phone (Dillman, Smyth, and Christian, 2008).

⁷ Previously, only cities and counties could use federal funds for planning.

government, business, and philanthropy, without a requirement to do so (Ansell and Gash, 2008). Sustainability refers to the idea of promoting long-term economic growth in ways that are beneficial to the environment and people (Wheeler, 2000). Regional sustainability is the idea of reducing geographic disparities in metropolitan regions by increasing individual access to opportunity through increasing cooperation between different sectors and jurisdictions with a shared interest in a vibrant and resilient region (Chapple, 2015).

This research explores whether SCI-RPG helped regional leaders increase coordination on the interrelated issues of land use, housing, transportation, and economic development that contribute to sustainability. A lack of regional coordination often creates competition between jurisdictions, which can hurt the region as a whole in terms of infrastructure spending, inequality, and job creation (Dreier, Swanstrom, and Mollenkopf, 2000).

Our team sought to understand whether the SCI-RPG helped to advance social and economic equity as one component of regional sustainability. Equity is the idea of reducing institutionalized barriers to equal opportunity for people of different socioeconomic levels and racial and ethnic groups. These barriers often manifest in geographic patterns of investment and disinvestment in everything from schools and housing to transit, roads, and other basic infrastructure. Regions with lower levels of income inequality and racial segregation tend to experience greater economic growth (Benner and Pastor, 2015).

Building equitable regions involves both outcomes and processes, and it can involve investing in both places and people (Chapple, 2015). Outcome-based equity might include new or altered plans and policies and actual projects in the community. Procedural equity might include changes that regional agencies made to the processes they use to make plans or engage the public and consortium partners across different sectors. In terms of possible outcomes, place-based equity strategies involve investing in a specific geographic area within a region. This investment could include targeting low-income areas for job creation, or it could involve increasing housing accessibility by building or preserving affordable housing near jobs. People-based equity approaches include investing in individuals through education and workforce training to increase their earning potential or providing vouchers for housing or transportation (Sanchez and Schweitzer, 2008; Briggs, 2010).

As many SCI-RPG lead agencies were MPOs, many regions employed people- and place-based approaches to transportation mobility as a way to address equity. For example, people-based mobility could include helping individuals afford different transportation options. Place-based mobility strategies might include improving public transportation facilities and service in targeted areas.

The SCI-RPG tested the idea that a federal incentive for metropolitan cooperation and governance could encourage cities and suburbs and their different interests to find common ground on sustainability and equity. Identifying a common problem—and having a structure and a motivation for cooperation that is provided by a mandate or an incentive from a higher level of government—greatly facilitates bringing together actors with different interests to address regional disparities (Lester and Reckhow, 2012; Weir, Rongerude, and Ansell, 2009). However, past research suggests that prior to SCI-RPG, few cities engaged in planning activities that coordinated environmental, economic, and equity issues (Saha and Paterson, 2008).

Results

Impacts of the SCI-RPG on Relationships and Governance

The survey measured regional governance among SCI-RPG grantees in terms of the quantity, quality, substance, and endurance of the relationships that the associated planning process impacted or generated among players in different sectors in regions. Most survey respondents (96 percent), representing MPOs or other regional agencies, said that their organization’s relationships with local governments improved as a result of the SCI planning process (exhibit 1).

Exhibit 1

Improvement of Relationships Due to SCI-RPG

Result of SCI-RPG Planning Process	Percent of Respondents
Small improvement (already strong)	33
Large improvement (already strong)	22
Large improvement (not strong previously)	22
Small improvement (not strong previously)	20
No improvement (already strong)	2
No improvement (not strong previously)	2

SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

Note: N = 46.

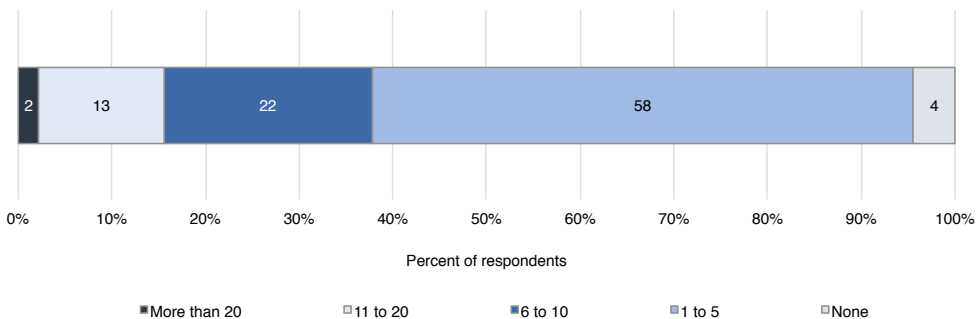
Source: SCI-RPG recipient survey, Question 4: “To what extent have relationships (communication, partnerships, initiatives) with local governments (e.g., cities, counties and townships) in your region improved as a result of the SCI process?”

New Collaborations Arising Out of the SCI-RPG Process

Of respondents, 95 percent said that one or more new collaborations had arisen between organizations in their region with a specific focus on implementation (exhibit 2). A couple of comments indicated a negative impact on relationships, mostly due to players feeling left out of the process, such as officials from suburban county governments who were not part of the consortium.

Exhibit 2

Number of New Collaborations Focused on Plan Implementation



Note: N = 45.

Source: Sustainable Communities Initiative Regional Planning Grant recipient survey, question 7: “Approximately how many new collaborations focused on regional plan implementation has your organization established as a result of relationships you made through the SCI Program?”

Types of New Collaborations Developed Through the SCI-RPG Process

A goal of regional governance is to encourage local municipalities to work more closely with regional agencies and also to provide a structure for them to communicate and cooperate more closely with one another (Mattiuzzi, 2016). Respondents listed and commented on the types of new partnerships local governments formed during the process of developing the regional sustainability plan.⁸

Often a regional agency, such as an MPO, will only interact with a local jurisdiction's planning department, although the work of other departments might touch on urban form and sustainability. One west coast survey respondent said that the SCI-RPG gave their organization an opportunity to interact with a greater variety of city departments: "...in the past, relationships were with other planning staff, now they are with transportation, emergency services, housing, parks, and health staff." This suggests that the SCI-RPG helped break down issue silos between different scales of government that could lead to more effective regional spending and planning.

The improvement went both ways—in addition to regional agencies broadening their interaction with city staff, the SCI-RPG helped increase the engagement of cities with regional agencies. A midwestern respondent said, "The relevance that we have demonstrated, thanks to the HUD grant, helped us to make the case that our regional organization does provide value locally," and a regional agency in the South reported increasing its membership from roughly one-half to nearly all local jurisdictions after SCI-RPG.

SCI-RPG helped deepen local engagement in regional planning beyond applying for funding to collaborating on different issues. One west coast respondent said, "We have new relationships specifically focused on equitable infill development improving health in our disadvantaged communities." Others noted that their new collaborations focused on economic development, environmental quality, housing, transportation, and neighborhood revitalization. One northeastern respondent noted that several municipalities in their region had coordinated the timing of the update of their local comprehensive plan with the SCI-RPG planning process. Coordination of local and regional planning horizons is key to achieving regional goals (Mattiuzzi, 2016).

In addition to the mix of required consortium members, many survey respondents said that their organization had begun new partnerships with other health, economic development, and private sector organizations (exhibit 3). Few formed new relationships with state agencies, although these may already have been in place. Although a few consortia included state government, they were not required partners.

⁸ Question 5: "Please provide an example that illustrates a change in your relationship with local governments in your region."

Exhibit 3

Types of Organizations With Which Consortium Leads Formed New Partnerships

Partner Type	Rate of New Partnerships (%)
University	54
Local government	43
Single-issue interest groups	41
Affordable housing developer	36
Private sector	36
Hospital/health organization	34
Community foundation	32
Community development corporation	29
Workforce development organization	29
State/regional government	4

Note: N = 56.

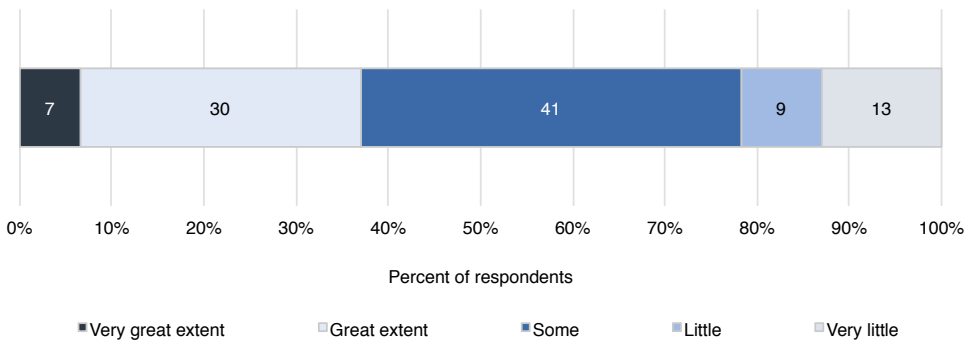
Source: Sustainable Communities Initiative (SCI) Regional Planning Grant recipient survey, question 6: "With which of the following organizations have you formed new partnerships as a result of the SCI process? Check all that apply."

Post-Grant Impacts of SCI-RPG

The persistence of relationships beyond the grant period suggests that consortium partners and other organizations had more than token involvement in regional planning and implementation. Nearly four-fifths (78 percent) of respondents said that the relationships that their organization had forged during the SCI-RPG planning process had continued beyond the grant period to a medium or large degree (exhibit 4).⁹

Exhibit 4

Degree to Which Relationships Persisted After SCI Process



SCI = Sustainable Communities Initiative.

Note: N = 46.

Source: SCI Regional Planning Grant recipient survey, question 9: "To what extent has your relationship (communication, partnerships, initiatives) with SCI consortium members persisted after the completion of the SCI planning process?"

⁹ This estimate includes the three highest rankings: "Some," "Great extent," and "Very great extent," out of five possible choices.

Some regions have incorporated partnership activities into business as usual. A typical example of an ongoing consortium activity was a regional agency continuing to offering funding and leadership for place-based sustainability planning. One northeastern respondent described their organization's implementation efforts as "...continuing our communication functions, capacity building, outreach and stakeholder convening functions." A west coast respondent said, "We have a new standing committee comprised of the former consortium members that meets quarterly to continue collaboration, information sharing, and work on implementation of issues related to equitable TOD [transit-oriented development]."

Respondents characterized both new and continuing relationships as being focused primarily on economic development and grant applications.¹⁰ A few respondents said that they had formed new partnerships during the SCI-RPG process specifically for the purpose of preparing their FHEA, which was a condition of the SCI-RPG and helped prepare regions to meet HUD's new AFFH rule. Said one northeastern respondent, "We...anticipate that the regional FHEA will provide a basis for HUD grantee compliance with the AFFH rule."

Economic development was a key theme of new and persistent partnerships. For example, in one southern region, a "small town revitalization roundtable" now meets quarterly. In a northeastern region, new partnerships focused on "integrating workforce development with economic development."

Some new economic development-focused partnerships specifically broke down policy silos. Federal officials interviewed said that one goal of PSC was to break down barriers between how different sources of federal funding impact regions, particularly in terms of planning coordination. One regional survey respondent in the Northeast said that public workshops with agricultural and private sector participants, held as part of their SCI-RPG planning process, resulted in changes to their new Comprehensive Economic Development Strategy (CEDS). Having a CEDS makes their region eligible for funding and technical assistance from the U.S. Economic Development Administration (EDA). Although EDA was not officially part of PSC, they work on regional economic development, a theme that is included in PSC's livability principles and is integral to regional sustainability.

Regions Pursuing Further Sustainability Funding

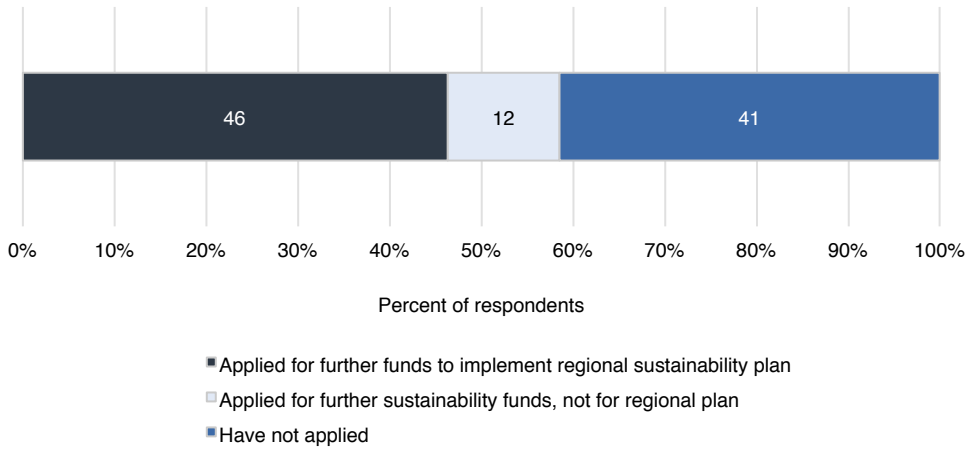
Grantmaking and writing grant applications were frequently mentioned as outcomes of SCI-RPG-generated relationships. Of respondents, 46 percent said their organization had applied for further funds specifically to implement their regional sustainability plans, and another 12 percent had applied for other sustainability grants (exhibit 5).

Several respondents said that grantmaking had occurred within the region in support of implementing their regional sustainability plan. The source of the funding was either the lead agency or partner agencies from the consortium, including philanthropic organizations and community foundations. SCI-RPG helped align priorities and build trust between different organizations in a way that encouraged philanthropies and others to fund projects that they might not have otherwise.

¹⁰ Question 8: "Please provide an example of a new collaboration" and Question 9a: "If possible, please provide an example of a continuing relationship."

Exhibit 5

Degree to Which Regions Are Pursuing Further Sustainability Funding



Note: N = 41.

Source: Sustainable Communities Initiative Regional Planning Grant recipient survey, question 24: "Has your organization applied for additional funds for sustainable development implementation?"

A number of respondents noted that they continue to collaborate with partners on grantwriting. For example, one respondent said that they were working with their consortium partners to apply for grants to "implement a regional watershed protection program." Another cited ongoing relationships with a city's mayor, staff, and law enforcement involving grant-writing and other implementation efforts.

Equity Impacts of the SCI-RPG

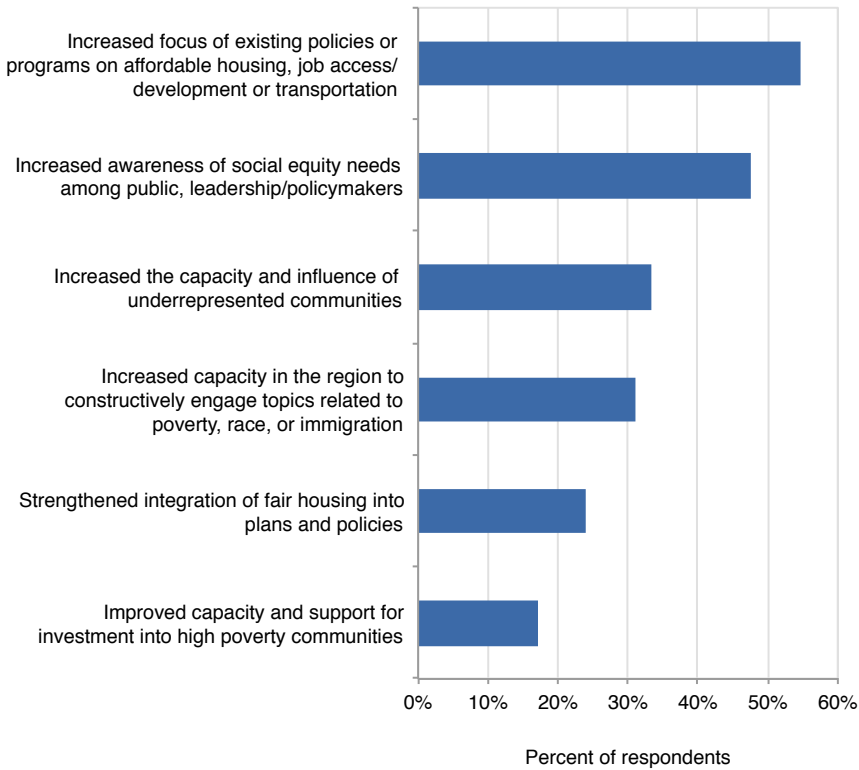
Survey responses revealed different approaches to equity. For outcome-based equity, the responses were split between implementation projects that focused on place-based and people-based strategies. In terms of procedural equity, the responses reflected a changing approach to community engagement by regional agencies in the planning process through the SCI-RPG. Transportation mobility and housing accessibility were also frequent themes.

Equity Outcomes of the SCI-RPG

Respondents were asked to identify the effect of the equity impacts of SCI-RPG funding. They reported that the greatest impact had been the incorporation of equity into existing policies and programs, rather than the creation of new ones (exhibit 6). This could be a positive sign for incorporating equity into business-as-usual, rather than siloing it. However, it could also suggest a reluctance to address equity issues head-on. "Awareness of social equity" ranked highly as an impact, suggesting a possible increase in shared definitions of equity, or at least an increase in conversations about equity in regions where these discussions may have been rare or nonexistent at the time that the region applied for their SCI-RPG.

Exhibit 6

SCI Impact on Equity in Planning in Grantee Regions



SCI = Sustainable Communities Initiative.

Note: N = 42.

Source: SCI Regional Planning Grant recipient survey, question 16: "How, if at all, did the SCI planning process strengthen analysis and integration of social equity concerns in the planning process?"; the bar chart shows the combined top three (3, 4, and 5) responses out of five: "Completely" (5), "Very much" (4), "Moderately" (3), "Slightly" (2), "Not at all" (1)

Respondents described in detail how they incorporated equity into their regional sustainability plan.¹¹ Several respondents commented on equity and transportation mobility. For example, one southern respondent said, "We focused a lot of our discussion on the transportation needs of workers and their struggles to use transit to get to jobs outside the City. Our state transit agency is currently redesigning our bus system and has adopted many of our talking and data points." In one northeastern region, a respondent said, "The MPO has adopted/retooled several programs to improve access to work opportunities through transportation policy and investment." A few respondents said that measuring access to opportunity had become a standard part of the way their MPO prepares its regional transportation plan as a result of SCI-RPG.

¹¹ Question 17: "Please share an example of successful integration of social equity into your region's process or plan."

Housing accessibility was also a goal of regional sustainability plans. One midwestern respondent said, “Our local housing authority has pursued an effort to de-concentrate public housing and locate housing in areas that offer more opportunity.”

In some regions, SCI-RPG and the FHEA supported data collection that shed light on equity issues that had not previously been made visible at the regional level, if at all. In one northeastern region, it gave planners a new conceptualization of the lack of transportation and housing choices in their region and impacted their final plan. As one respondent said,

Transportation and housing location is a big problem in our region. The affordable housing is pushed out to surrounding towns (from the main job centers), so that’s where a lot of the lower-income folks wind up. [The] lack of private and public transportation is a real problem. We were shocked to learn how many people have no transportation, which means very little access to jobs if they’re living outside the main job centers... The [HUD Housing and Transportation] H & T portal... really opened [regional leaders’] eyes to how much people, if they even have access to transportation, are spending on it.¹² We also are severely lacking affordable housing near jobs, [and awareness of] that was supported by our Housing Needs Analysis. Lack of housing was discussed at length and strongly considered in the final plan.

This region focused on transportation mobility (“how do people get to jobs?”) and housing accessibility (building housing near jobs). However, in many regions, real estate near existing job centers is expensive, which could potentially limit how great an impact public investment in new housing could have in those areas (Chapple, 2015).

Place-based approaches to equity focused primarily on affordable housing and public safety. One regional agency in the Midwest said, “Our process for selecting local projects [through SCI-RPG] considered community need, with lower-income communities more likely to receive assistance. We have also included social equity as a major theme in our new long-range plan (currently under development).” Another midwestern respondent said that their organization “conducted a Housing Seminar that provided resources and information to local elected officials and staff to better understand how to implement affordable housing options in their communities.” Investing in low-income communities calls for thoughtful approaches to making sure benefits accrue locally without causing displacement (Zuk and Chapple, 2016).

Education and workforce development were the main people-based equity strategies cited. For example, one respondent said that, through the regional sustainability planning process, they had “Increased [the] focus on education and workforce skills, housing, transportation and affordable housing and livable wages” in their region. Another MPO was working to “reduce [the] educational achievement gap” in their region. A third respondent said that their regional planning process resulted in an “expansion of early-childhood education in low opportunity areas with [a] Pay for Success initiative.”

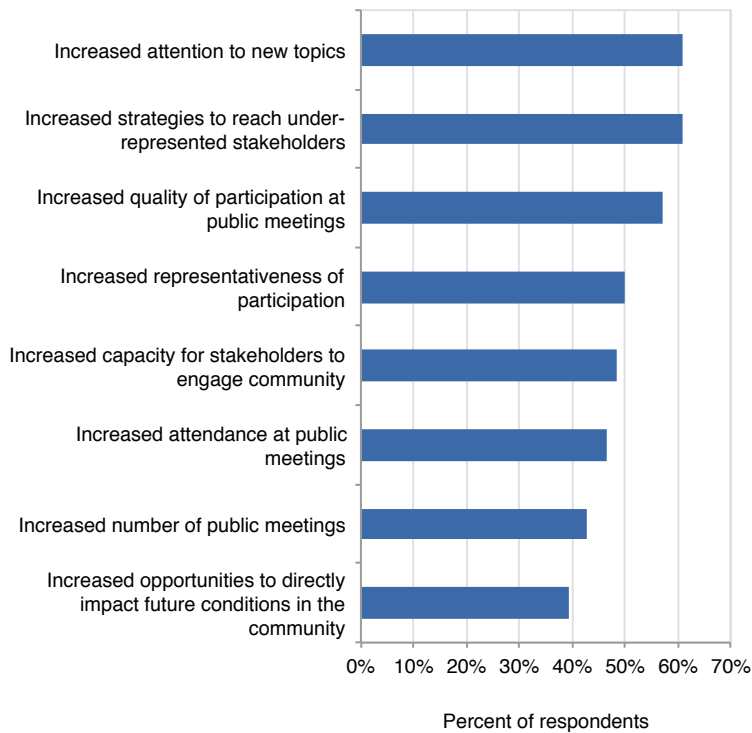
¹² The HUD Location Affordability Portal has a calculator for determining the combined cost of housing and transportation for a given household location at [locationaffordability.info](https://www.hud.gov/locationaffordability).

Procedural Equity in the SCI-RPG Planning Process

SCI-RPG specifically required grantees to fund public engagement throughout the planning. In a sample of applicants to SCI-RPG, only one-third of regional consortia had plans to build local capacity for participation (Chapple and Mattiuzzi, 2013). However, larger shares of consortia represented in this survey reported improving engagement (exhibit 7). Lead agencies reported finding new ways to reach underrepresented stakeholders (61 percent of respondents), increasing the quality of participation at public meetings (57 percent), and expanding the diversity of participants (61 percent) and topics covered at those meetings (50 percent).

Exhibit 7

Impacts of Engagement Strategies During SCI Process



SCI = Sustainable Communities Initiative.

Note: N = 56.

Source: SCI Regional Planning Grant recipient survey, question 13: "Which were the most significant impacts of the community engagement strategies that you employed during the SCI planning process? (Check all that apply)."

Increasing Planning Participation by Underrepresented Groups Through SCI-RPG

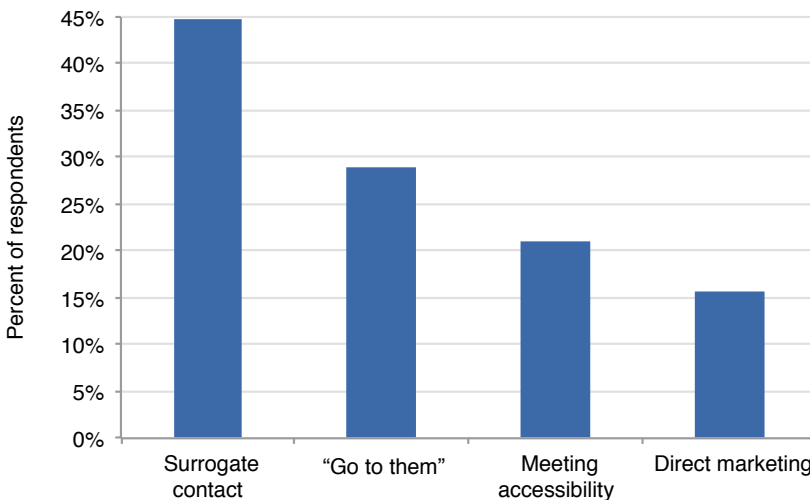
Participants described various strategies for increasing engagement by underrepresented communities in regional sustainability planning (exhibit 8). A common theme was working with partners that already had a level of familiarity with communities. Of respondents, 45 percent said that they provided funding for a surrogate contact, such as a faith organization, a food bank, or another community group to do engagement work.

A common engagement strategy was “going to them,” that is, attending regularly scheduled meetings held by community groups or holding meetings in a community setting that was more convenient or less intimidating for community members than an MPO hearing room might be (29 percent of respondents). Examples of making regional agency meetings more accessible (21 percent of respondents) included holding meetings in the evenings when more people would likely be able to attend, providing translation services, and providing food. Finally, several planners reported direct marketing or direct contact efforts that increased participation, including a mail survey (16 percent of respondents).

Some evidence indicates that these participation and outreach efforts are having an equity impact after SCI-RPG. One southern respondent representing a COG said that their organization is in “...one of the more extremely racially divided communities in the region. Because of the neutrality that the COG provided in community discussions [on regional sustainability planning] a charter review committee has been established to rewrite the city charter to provide for greater diversity within the city government.” In this case, the requirements of the grant gave the COG a mandate to lead on an issue that may not have been discussed previously.

Exhibit 8

Strategies for Increasing Participation by Underrepresented Groups in Regional Sustainability Planning



Note: N = 38.

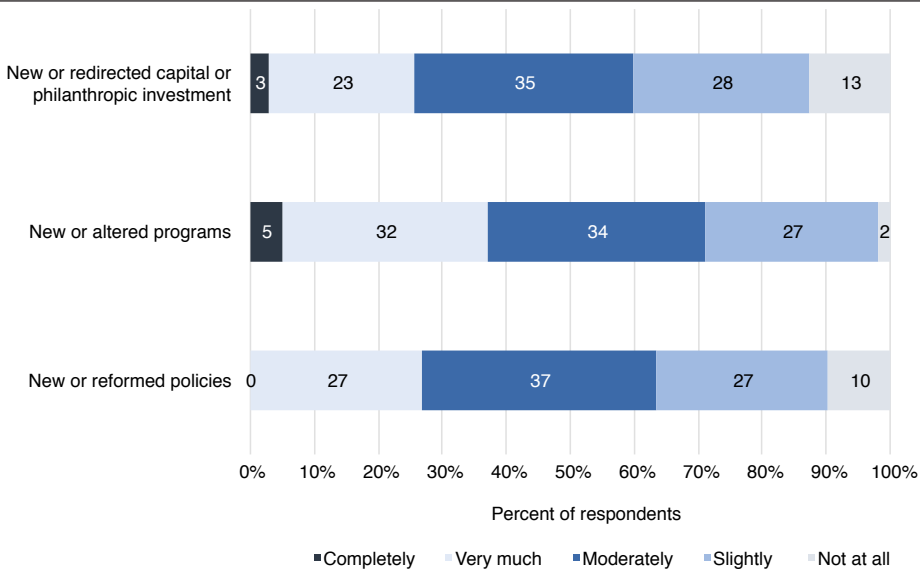
Source: Sustainable Communities Initiative (SCI) Regional Planning Grant recipient survey, question 15: “What Strategies did you find most effective at specifically increasing participation of underrepresented populations in the SCI planning process?”; the study team coded the responses into the four categories shown in the exhibit

Implementation of the Regional Sustainability Plans

Most respondents reported that their regional sustainability plan had led to changes in policies, programs, and capital or philanthropic investment in their region (exhibit 9). The concrete ways in which the regional sustainability plan had been implemented were varied, but comments centered mainly on land use, economic development, and the ways in which regions were leveraging other sources of funding for implementation.¹³

Exhibit 9

Impact of the SCI-RPG Since the End of the Grant Period



SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

Note: N = 41.

Source: SCI-RPG recipient survey, question 19: “Since the end of the SCI Grant, to what degree has the regional planning for sustainable development impacted policy, programming, or investments?”

What Does Implementation of Regional Sustainability Plans Look Like?

Notable examples of policies, programs, or investments that have been implemented from the regional plans developed through SCI-RPG include TOD, affordable housing, and workforce development. A west coast regional agency that said they were adopting their regional sustainability plan in the fall of 2017 is “reviewing various staff proposals for increasing the production and preservation of affordable housing near transit, [to] mitigate displacement risk for low-income households and small businesses, create mixed-income communities, and grow middle-wage jobs.”

One respondent said the regional plan was translating into local development: “We worked on a number of TOD station area plans that municipalities have passed, updated zoning ordinances, and now are seeing new mixed-income, mixed-use development projects being built.” A

¹³ Question 20: “Please share a notable example of a policy, program or investment outlined in your regional plan for sustainable development that was implemented.”

northeastern region developed a “community based housing strategy.” Working on “clearing dilapidated properties in residential areas” was a priority for regional plan implementation in a southern region.

Although place-based housing strategies were more frequently mentioned, policies to increase the ability of individuals to access housing in high-opportunity areas also came out of SCI-RPG. One respondent said that as part of implementing their regional sustainability plan, their regional agency has “...just undertaken a HUD funded pilot program to develop a regional project-based voucher program. All the housing authorities in the region are involved.”

Regional plan implementation has also involved carrying out economic development strategies. One northeastern region is now undertaking workforce development and training for the “renewable energy economy.” A midwestern respondent reported, “The regional economic development council has launched new programs related to promoting the region, workforce development, rural economic development, and startup ecosystems.” A southern respondent said that their regional plan’s recommendation to create a new municipal broadband service had been implemented.

Leveraging Funds for Implementation

A handful of respondents reported that implementation of their regional sustainability plan involved leveraging other sources of federal, state, private sector, and philanthropic funding. One respondent in a western state attributed their subsequent DOT Transportation Investment Generating Economic Recovery (TIGER) grant award to their regional sustainability planning efforts, stating that their regional plan implementation efforts included “active transportation [and] coordinated countywide planning, leading to the latest TIGER award.” Although it is not possible to draw a causal connection between SCI-RPG and other grants that regions have received, one study provides some context for this statement, showing a greater increase in TIGER grants awarded in SCI-RPG regions than non-SCI-RPG regions, before and after the grant. The SCI-RPG regions that applied for DOT TIGER funds after SCI-RPG doubled their application success rate, compared with a 38-percent increase among non-SCI-RPG regions, comparing the 2009-to-2010 application cycle with the 2014-to-2015 application cycle (Montejo, Ross, and St-Louis, 2016: 2–3). Of the 30 SCI-RPG regions that were TIGER recipients in the 2014-to-2015 cycle, 10 had not previously applied for a TIGER grant (Montejo, Ross, and St-Louis, 2016), suggesting that SCI-RPG may have helped increase their capacity for or interest in applying for other funding sources.¹⁴

SCI-RPG recipients worked to coordinate between their regional sustainability plans and other potential funding sources for economic development. One northeastern respondent noted that “Some policies in the plan were incorporated into our CEDS, this provides access to EDA matching funds for planning implementation.” Regions also leveraged private sector funds for economic development. One western respondent said that their implementation efforts involved “the creation of a regional economic development corporation that [administers] a small business local [capital] pool and is working to advance the [economic development] ED initiatives identified in [their regional plan].”

¹⁴ Out of the 74 SCI-RPG grantee regions, 30 applied and received a TIGER grant in the 2014-to-2015 cycle, 30 applied unsuccessfully, and 14 did not apply.

Philanthropic involvement in regional plan implementation varied across regions. However, one midwestern survey respondent said, “A number of local philanthropic groups have revised their funding guidelines to support efforts that are consistent with the region’s long-range plan.” In regions where the regional sustainability planning process had strong philanthropic involvement, plan implementation and local funding goals now have a natural alignment. At the national level, a group of funders is supporting implementation in six regions in 2017.¹⁵

Barriers to Equity and Implementation

Barriers to Equity in Regional Sustainability Planning

Respondents described different barriers to incorporating equity into their regional plans.¹⁶ These barriers may also impact implementation and future regional sustainability planning. When asked about implementing regional equity goals, many respondents said that political authority over relevant policies still rests at the local level, or that they lacked local data. A typical comment across regions, one southern respondent noted, “Local zoning approval and traditional local politics are still barriers to the development of affordable housing in high opportunity communities.” On the regional level, some grantees found it challenging to bring in new voices to a complex process like updating their regional transportation plan.

Respondents often stated that the SCI regional planning process started conversations about inequality and race. Some conversations were new, some conversations were productive, and some conversations exposed existing divisions in regions. One midwestern respondent said,

Topics related to poverty and race remain very difficult to discuss in the region, and the local housing authority’s effort to locate public housing in areas that offer more opportunity has generated strong resistance. This planning process introduced new concepts (such as access to opportunity) to the region, but I don’t think a single planning process can change how we address issues like this. A long-term, intentional, willing effort is needed.

Respondents said that it was difficult to discuss and educate the public about equity and affordable housing, although the SCI process gave them a forum and a reason for doing so.

Coming to a common definition of equity was a frequent challenge. One southern respondent said, “Defining what is meant by social equity was a barrier, as it can become a very politicized discussion which sidetracks the conversations.” A northeastern respondent said that, even after their SCI planning process, “there’s still a lack of understanding of what social equity is and how it can actually empower a locale.” Future support for regional planning efforts could help prepare planners to have these difficult conversations and to see them as part of the process and part of their job. Future regional planning grants or programs could include helping planners build on conversations about equity that occurred through the SCI and translate them into actions that can be taken on the local level.

¹⁵ See <http://www.sparchub.org>.

¹⁶ Question 18: “Please share an example of a barrier to integration of social equity into your region’s process or plan.”

Perceptions about resource scarcity and potential loss of local control arose during discussions of equity through the SCI-RPG process. One respondent from a west coast region reported, “Many local jurisdictions...have been wary of what are perceived as new affordable housing requirements. This was particularly acute in the latter part of the recovery from the great recession.” Parochialism can be difficult to overcome, and regional consortium members had to try to make the case for jobs, housing, and transportation “not simply being local or single town issues,” as one southern respondent put it.

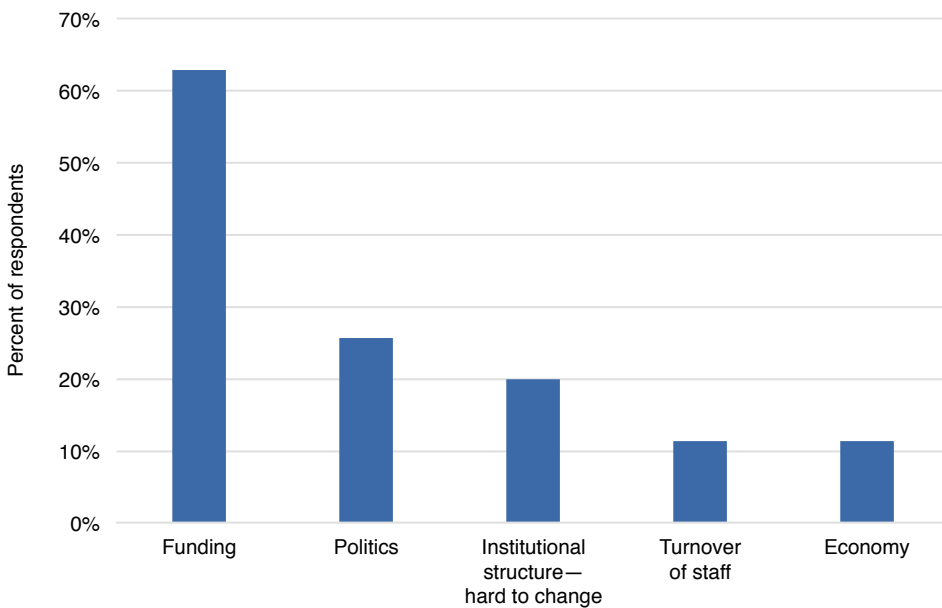
Even when regional sustainability plans incorporated shared understandings of equity, regional leaders did not always have the resources to put them into action. One respondent from the South said that a barrier to equity was the “lack of funding to facilitate a regional structure to fund implementation of strategies to address fair housing impediments.” Others cited a lack of available data to support arguments for equity. For example, according to a west coast respondent, “Our inability to forecast future low income populations hampers our ability to communicate the need for more affordable housing with our policy makers.” Although, overall, SCI-RPG improved capacity for data collection, additional funding would help municipalities and regional agencies better understand and address racial, class, and geographic disparities in access to housing, transportation, and jobs.

Barriers to Implementing Regional Sustainability Plans

General barriers to implementation fell into a few categories (exhibit 10). The most common obstacle that respondents reported (63 percent) was related to insufficient funding for implementation:

Exhibit 10

Challenges for Implementing Sustainability Plans



N = 35.

Source: Sustainable Communities Initiative Regional Planning Grant recipient survey, question 23: “What do you see as the continuing challenges to implementation of your regional plan for sustainable development?”

whether for staff, capital projects, or building capacity at partner organizations. The second most common response was related to bureaucratic inertia (31 percent). Respondents discussed the difficulty of propelling change within existing institutions, or conversely, the loss of institutional memory and stalling of momentum for implementing their regional plan when staff turns over. One interviewee said that the “brain drain,” or loss of staff, after a capacity-building exercise like SCI-RPG is particularly acute for small or rural regions.

Politics came up frequently as an obstacle to implementation (26 percent), and the economy was also a concern (11 percent). Most of the respondents who cited political barriers referred to competing local priorities in their region, whereas a few referenced general opposition to regional sustainability planning. Political obstacles also include lack of buy-in from players that were not directly involved in the SCI planning process. One respondent said, “We never had strong buy-in from elected officials or upper-level local government management. This was always an effort spearheaded by mid-level planners, who had difficulty selling the message upward.” One post-SCI challenge for regions wishing to continue regional sustainability efforts will be to encourage deeper involvement from nongovernment players, something that regional and national foundations can potentially encourage.

Although only a small percentage of regions reported general opposition to regional sustainability planning as a major barrier in their SCI-RPG process, it was a serious factor in a few regions. In a small number of regions, activists seeking to disrupt the SCI-RPG planning process stymied prospects for implementation. One survey respondent reported that,

In a community with very few resources that it can task for implementation, no one will take on the challenge to pursue SCI-related goals when it means that the project automatically comes with the added burden of a motivated anti-planning constituency that is going to fight against it no matter what. . . Just partnering with the Federal government on the SCI efforts has resulted in a new anti-planning faction in the community that opposes everything related to planning regardless of intent or origin. From that vantage point, SCI was a net loss to our community.

However, in other regions, strong voices against regional planning prompted dialogue that strengthened the planning process. Indeed, a few regions that prioritized grassroots participation had a successful regional planning process that included oppositional perspectives. These regions prioritized openness and local experience in developing the framing of their regional sustainability plans in a way that strengthened them in the long run against claims that they promoted one-size-fits-all planning. They arrived at the same place as the HUD livability principles while making their plan locally relevant.

Feedback for Future Regional Sustainability Programs

The main criticism that respondents expressed about the SCI-RPG program concerned funding for implementation, and the main positive feedback they had was for the consistent support they received from HUD staff. Many respondents felt that the peer learning events—held as part of SCI-RPG—to meet and learn from their counterparts in other regions were highly valuable. Respondents commented on the need for more support in the areas of connecting different

funding sources, building and retaining capacity in their region, and support tailored to rural areas. Grantees experienced well-coordinated efforts between federal agencies and some instances for improvement in this area.

Many respondents reported a need for dedicated funding for implementation of the regional plans or suggested that HUD tie other funding sources to implementation. One respondent said that not having implementation funds "...makes it very difficult for communities and actually sets folks up for failure if they don't have the resources to be able to work to secure their own funding." Another suggested, "Even if it required a match, HUD could have tied future funding for other programs to the continuation of the effort." A third respondent said, "A move away from the formula allocations by jurisdiction size on HUD's formula funding would provide us flexibility to encourage our members to pool funding for better outcomes."

SCI-RPG was part of a growing trend at HUD to incorporate peer learning into grant programs. This trend typically involves organizing events where grantees can interact, supported by national non-profits that help organize the events and bring experts to speak on topics relevant to the grantees. The opportunity to share ideas across regions was a highlight of the program for many grantees, although one respondent called for more funding for peer learning so that HUD can "increase the effective sharing opportunities to learn from other regions with similar issues or great ideas."

Grantees had positive and constructive feedback about the capacity-building initiatives that were part of SCI-RPG. One midwestern respondent said, "Through [the] PolicyLink Regional Equity Profile we highlighted disparities and economic impact." Another respondent called for more local input and coordination on the content of capacity building being provided by HUD-funded consultants to local organizations in future grant programs.

Retaining capacity within their regions was an issue for grantees. One respondent said that a future program could place a greater emphasis on requiring more capacity to be built locally, such as through "a long-term sustainability plan...required...early in the process...[and] an endowment for a full-time regional planner" to ensure that knowledge built through the grant was retained. In some regions, the point person on the grant at the regional agency left for another region after the grant period ended, sometimes for lack of continued funding for their position. Several regions that are successfully pursuing implementation have found funding for an ongoing dedicated regional sustainability role from a consortium member such as a foundation, community foundation, or chamber of commerce.

One possible area for greater support by HUD to regional agencies would be on communicating the connection between different sources of funding. One respondent called for "Better communication on the PSS [Preferred Sustainability Status]-eligible grants.¹⁷ I would have liked to have sent out email blasts to my board and other contacts every time a grant was available that we had extra points [on]. It would have helped show the value of the program to our leadership."

Rural grantees wanted more specific guidance, particularly on FHEA and AFFH, but also on planning and economic development generally. One federal official interviewed said that, although

¹⁷ PSS is a certification of consistency with SCI-RPG goals, "which provides two (2) preference points on select HUD discretionary grant program applications for entities within the project geography... PSS Communities may also write letters of support for other government agency discretionary grant programs (primarily at EPA, DOT, USDA [U.S. Department of Agriculture], and EDA) to strengthen their applications" (HUD-OER, 2016).

economically distressed regions, particularly ones that are primarily rural, attract federal funding that is designed to address these issues, they sometimes lack the capacity to manage and spend this funding. Furthermore, the various federal agencies providing rural development funding historically have not always coordinated well with each other. SCI-RPG was a step in the direction of coordinated regional planning. Typically, federal funding to regions for community development, such as funding from the U.S. Department of Agriculture, does not come with any planning requirements or support for planning. As a result, even large funding sources can have very different or even unintended spatial impacts in different regions.

Many grantees experienced well-coordinated efforts between different federal agencies in their region as part of SCI-RPG, although some noted room for improvement in this area. One western respondent said, “If the program had been run out of the regional or state offices, rather than out of HUD headquarters, the entire process would have been smoother. More importantly, the ability of the SCI program to comprehend, adapt to, and support local needs and conditions would have been tremendously improved.” As one southern respondent suggested, “The most beneficial part of the grant was the cooperation of multiple federal agencies, [and] I would encourage HUD to build upon these relationships. While the coordination at the national level was exceptional, I believe that our grant could have benefitted by better collaboration of these federal agencies at the local level (this is not to say there was none, only that looking back it could have been better and helped build relationships at the local level as well).”

A few comments focused on bureaucratic hurdles, such as the difficulty of carrying out SCI-RPG’s requirement to incorporate scenario planning, and the difficulty of using the reporting tool provided by HUD. As one respondent said, “Many of our subgrantees were not familiar with federal contracting standards, so there was a big learning curve for many. The reporting/logic model was not helpful and very time consuming.”

A Future for Equitable and Sustainable Regions?

SCI-RPG sought to increase collaboration among regional agencies, communities, and their partners, in order to improve sustainability for people, the economy, and the environment. SCI-RPG gave regional leaders the opportunity to break down some of their existing silos and develop new relationships. Many regional agencies expanded their leadership role in a way that has continued beyond the grant period, but have found some difficulty maintaining the momentum of the grant process with limited resources for implementation.

SCI-RPG gave regional agencies a unique opportunity to reach out to jurisdictions and organizations with which they might not have previously had a direct reason to collaborate. The survey results suggested that the regional agencies that participated in the SCI-RPG program developed new relationships, that these relationships have often lasted beyond the grant period, and that in many cases, the consortium partners are working on implementation. Relationships improved between regional agencies and local jurisdictions, and new relationships formed across sectors that were focused on implementation. After the end of the grant process, many regional agencies have continued working with these partners and sought funding to continue their work.

SCI-RPG helped regional agencies break down issue siloes that contribute to sustainability and equity. Consortium leaders reported in the survey that SCI-RPG helped increase the focus of existing policies and programs on equity issues, such as affordable housing, job access, and transportation mobility across their region. SCI-RPG helped regional agencies and their partners see these issues as interrelated and work on them collaboratively. The grant also helped regional agencies gather and use data in new ways, and it prompted them to diversify their strategies for reaching the public.

The SCI-RPG consortia made progress on regional sustainability planning, but support is needed for implementation. Some regions have found ongoing funding, but for many regions, implementation funding remains an obstacle. Additionally, regional leaders are now more aware of impediments to fair housing, but many lack the resources to address them. Tying future federal funding sources to sustainability would help regional agencies meet the expectations they have generated and maintain the trust they have built with communities and partner organizations through the SCI-RPG process.

Acknowledgments

This research was directed by Karen Chapple at the University of California, Berkeley (UC Berkeley) and supported by grants from the Surdna Foundation and the Ford Foundation. The survey was developed by Chapple, Meghan Gough at Virginia Commonwealth University, the students of Chapple's spring 2016 research studio at UC Berkeley, and the author. Gough administered the survey. Kristine Williams at UC Berkeley provided support on reaching respondents.

Author

Elizabeth Mattiuzzi is a postdoctoral researcher at the Center for Community Innovation at the University of California, Berkeley.

References

- Ansell, Chris, and Alison Gash. 2008. "Collaborative Governance in Theory and Practice," *Journal of Public Administration Research and Theory* 18 (4): 543–571. DOI: 10.1093/jopart/mum032.
- Benner, Chris, and Manuel Pastor. 2015. *Equity, Growth, and Community: What the Nation Can Learn From America's Metro Areas*. Oakland, CA: University of California Press. <http://www.luminosoa.org/site/books/10.1525/luminos.6/>.
- Briggs, Xavier de Souza. 2010. *Moving to Opportunity: The Story of an American Experiment To Fight Ghetto Poverty*. Oxford, United Kingdom: Oxford University Press.
- Chapple, Karen. 2015. *Planning Sustainable Cities and Regions: Towards More Equitable Development*. 1st ed. New York: Routledge.

Chapple, Karen, and Elizabeth Mattiuzzi. 2013. "Planting the Seeds for a Sustainable Future: HUD's Sustainable Communities Initiative Regional Planning Grant Program." University of California Berkeley, Center for Community Innovation. <http://www.planningsustainableregions.org/sustainable-communities-initiative-research#738>.

Dillman, Don A., Jolene D. Smyth, and Leah Melani Christian. 2008. *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. Hoboken, NJ: John Wiley & Sons.

Dreier, Peter, Todd Swannstrom, and John H. Mollenkopf. 2000. *Place Matters: Metropolitcs for the Twenty-First Century*. 2nd revised ed. Lawrence: University Press of Kansas.

Frick, Karen, Karen Chapple, Elizabeth Mattiuzzi, and Miriam Zuk. 2015. "Collaboration and Equity in Regional Sustainability Planning in the U.S. and California: Challenges in Implementation," *California Journal of Politics and Policy* 7 (4): 1–25. <https://escholarship.org/uc/item/9502t3w9>.

Geevarghese, Salin, and Harriet Tregoning. 2016. "Scaling Solutions: Strategies for Building Effective Philanthropy Partnerships," *The HUDdle* blog, September 30. <http://blog.hud.gov/index.php/2016/09/30/scaling-solutions-strategies-for-building-effective-philanthropy-partnerships/>.

Gough, Meghan Z. 2015. "Reconciling Livability and Sustainability Conceptual and Practical Implications for Planning," *Journal of Planning Education and Research* 35 (2): 145–160. DOI: 10.1177/0739456X15570320.

Lester, T. William, and Sarah Reckhow. 2012. "Network Governance and Regional Equity: Shared Agendas or Problematic Partners?" *Planning Theory* 12 (2): 1–24. DOI: 10.1177/1473095212455189.

Mattiuzzi, Elizabeth. 2016. "Local Capacity for Implementing a State Climate Planning Mandate: The Politics of Cooperation and Regional Governance in California." Ph.D. diss., Department of City and Regional Planning, University of California, Berkeley. <http://www.planningsustainableregions.org/other-regional-planning-research#734>.

Meck, Stuart, Rebecca Retzlaff, and James Schwab. 2003. "Regional Approaches to Affordable Housing." American Planning Association. huduser.gov/portal/periodicals/em/fall15/highlight1.html.

Montejo, Nicole, Angel Ross, and Evelyne St-Louis. 2016. "Sustainable Communities Initiative: Leveraging the Partnership 2.0: Exploring How Sustainable Communities Initiative Regional Grantees Leveraged Federal Funding Following the End of the Program." Berkeley, CA: University of California, Berkley. <http://www.planningsustainableregions.org/sustainable-communities-initiative-research#731>.

Pendall, Rolf, Sandra Rosenbloom, Diane Levy, Elizabeth Oo, Gerrit Knaap, Jason Sartori, and Arnab Chakraborty. 2013. "Can Federal Efforts Advance Federal and Local De-Siloing? Lessons From the HUD-EPA-DOT Partnership for Sustainable Communities." Washington, DC: Urban Institute. Research report prepared for Living Cities.

Saha, Devashree, and Robert G. Paterson. 2008. "Local Government Efforts To Promote the 'Three Es' of Sustainable Development Survey in Medium to Large Cities in the United States," *Journal of Planning Education and Research* 28 (1): 21–37. DOI: 10.1177/0739456X08321803.

Sanchez, Thomas W., and Lisa Schweitzer. 2008. "Assessing Federal Employment Accessibility Policy: An Analysis of the JARC Program." Washington, DC: Brookings Institution Metropolitan Policy Program. Report prepared for the Transportation Reform Series. https://www.brookings.edu/wp-content/uploads/2016/06/0221_transportation_sanchez.pdf.

U.S. Department of Housing and Urban Development (HUD). 2015. "Partnerships and Planning for Impact," *Evidence Matters*. huduser.gov/portal/periodicals/em/fall15/highlight1.html.

U.S. Department of Housing and Urban Development, Office of Economic Resilience (HUD-OER). 2016. "Preferred Sustainability Status Program Guidance." <https://portal.hud.gov/hudportal/documents/huddoc?id=PPGOEPSStatus.pdf>.

Weir, Margaret. 2000. "Planning, Environmentalism, and Urban Poverty." In *The American Planning Tradition: Culture and Policy*, edited by Robert Fishman. Washington, DC: Woodrow Wilson Center Press.

Weir, Margaret, Jane Rongerude, and Christopher K. Ansell. 2009. "Collaboration Is Not Enough: Virtuous Cycles of Reform in Transportation Policy," *Urban Affairs Review* 44 (4): 455–489. DOI: 10.1177/1078087408322590.

Wheeler, Stephen M. 2000. "Planning for Metropolitan Sustainability," *Journal of Planning Education and Research* 20 (2): 133–145. DOI: 10.1177/0739456X0002000201.

Zuk, Miriam, and Karen Chapple. 2016. *Housing Production, Filtering and Displacement: Untangling the Relationships*. Berkeley, CA: Institute of Governmental Studies. http://www.urbandisplacement.org/sites/default/files/images/udp_research_brief_052316.pdf.

Civic Infrastructure and Sustainable Regional Planning: Insights From the Sustainable Communities Initiative Regional Planning Grantees

Elizabeth A. Walsh
William J. Becker
Alexandra Judelsohn
Enjoli Hall
University at Buffalo

Abstract

This article explores the potential of the federal government to support equitable, sustainable regional planning through coupled investments in civic infrastructure and infrastructure for transportation, housing, and environmental protection. Civic infrastructure is defined as “the invisible structures and processes through which the social contract is written and rewritten in communities” (Parr, 1993: 93). Civic engagement activities are the building blocks of civic infrastructure. If such activities are artfully designed and integrated into a larger process, they can build the capacity of diverse communities to self-organize, learn, and act in support of a shared regional vision. Drawing on the history of regional planning and the evolution of civic engagement, we make a case for the importance of investment in civic infrastructure to support socially just and sustainable regional planning. This article explores the current state of innovation in civic infrastructure, using data from the U.S. Department of Housing and Urban Development’s Sustainable Communities Initiative (SCI). This study classifies the civic engagement activities employed by all 74 SCI Regional Planning Grant recipients along the International Association for Public Participation spectrum of public participation. The breadth of this analysis is coupled with an indepth case study of the Buffalo-Niagara, New York region’s civic engagement process. Together, the analysis and case study reveal a wealth of innovative civic engagement strategies and provide a framework for implementing an inclusive regional civic engagement process. The study concludes that regional planning can couple investments in civic infrastructure with physical infrastructure to support more equitable and sustainable regional development.

Introduction

Across the United States, regional communities contend with a host of social and ecological challenges, resulting from a regional planning paradigm that privileged suburban, automobile-oriented development and established spatially segregated regions with significant opportunity disparities. The emergence of the Smart Growth movement has called for a paradigm focused on transit-oriented regional development and reinvestment in urban centers where infrastructure investments are more cost efficient. As regional planners move forward on this path, how might they design civic engagement processes in ways that build community capacity to collaboratively establish equitable, sustainable communities of opportunity?

This article explores this overarching question through a literature review of civic engagement in regional planning and a two-part case study of civic engagement practices used by 74 regional communities that received grants from the federal Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) program of the U.S. Department of Housing and Urban Development (HUD). SCI was a product of the Partnership for Sustainable Communities, an interdepartmental federal effort by HUD, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency to coordinate regional investments in transportation, housing, and environmental protection. The two-part study includes—

1. A broad assessment of the civic engagement strategies of all 74 HUD SCI-RPG recipients.
2. A deep case study of Buffalo-Niagara, New York, an SCI grantee that has been nationally recognized for its civic engagement approach.

The study reveals opportunities and challenges in developing civic engagement strategies that strengthen civic infrastructure and build capacity for regional development of equitable, sustainable communities of opportunity.

Overview: Civic Engagement and Regional Planning

Since the foundation of regional planning at the turn of the 20th century, under the leadership of Sir Patrick Geddes, civic engagement has been recognized for its potential to “release the creative responses of individuals toward solving modern urban problems” (Meller, 2005: 1). However, by the 1970s, the legitimacy of urban and regional planning was called into question, both for its failure to solve complex social and ecological problems and for its failure to uphold democratic ideals for participation in planning processes (Arnstein, 1969; Davidoff, 1965; Jacobs, 1961; Rittel and Webber, 1973). In response to the exclusion of people of color and low-income communities in public decisionmaking in the urban renewal era, movements for advocacy planning and community-based development emphasized that meaningful citizen participation and empowerment of marginalized communities is essential to legitimate planning practice (Arnstein, 1969; Checkoway, 1994; Davidoff, 2007; Jacobs, 1961). Top-down planning processes were called into question, and a participatory, communicative paradigm emerged in the planning field, asserting that good process is a precondition for good outcomes (Forester, 1999; Healey, 1992; Innes and Booher, 2010). Moreover, meaningful citizen involvement has been shown to strengthen the quality of plans

and increase the likelihood of their implementation (Beierle and Konisky, 2001; Burby, 2003). Although contemporary planners have debated the merits of top-down versus bottom-up planning processes, during the course of time, planners developed innovative approaches to public process design that integrate “expert” and “local” knowledge in diverse communities to build their capacity to address complex challenges (Innes and Booher, 2010). As sustainability scientist Donella Meadows emphasized, building the capacity for self-organization is one of the most powerful ways to intervene in the complex system of, for example, a region (Meadows, 1997). Since the turn of the 21st century, planners have been increasingly recognizing cities and regions as complex adaptive systems where strong civic networks and engagement processes are essential to planning for sustainability and resilience (Innes and Booher, 2010; Innes, Booher, and Di Vittorio, 2011; Innes and Rongerude, 2013).

Today, planning scholars and practitioners generally concur that meaningful public participation is needed to create equitable, informed, and transparent decisions with desirable social and ecological outcomes (Chapple and Mattiuzzi, 2013). Despite this general consensus, further research is needed to address the challenges of meaningful public participation in regional planning. Most literature has focused on civic engagement in planning processes led by individual municipalities or agencies. Less research has focused on the special challenges of civic engagement in regional planning involving diverse institutional decisionmakers and a wide array of stakeholders and communities in spatially segregated regions. Furthermore, although well-designed civic engagement activities can have positive outcomes, ad hoc, individual activities are not enough to support regional communities in creatively solving complex social and ecological challenges. Moreover, significant obstacles to meaningful participation persist. These obstacles include a lack of trust that participation makes a difference, a lack of social cohesion among diverse and economically stratified communities, and a basic lack of understanding of issues, policies, and decisionmaking processes among many citizens (Mandarano, 2015).

To support the meaningful participation of diverse stakeholders required for effective, adaptive governance, regions could invest in civic infrastructure to sustain meaningful civic engagement over time. For the purposes of this article, we build on Parr’s (1993: 93) general definition of civic infrastructure as “the invisible structures and processes through which the social contract is written and rewritten in communities.” This conception of civic infrastructure emphasizes an ongoing struggle, through formal and informal processes, to identify common goals and establish plans and agreements intended to meet individual and community needs and aspirations. These are the invisible structures and processes that build the capacity of communities to self-organize, learn, and adapt, drawing on the diversity of knowledge and experience within them. Moreover, successful communities recognize the interdependence among business, government, nonprofit organizations, and individual citizens (Parr, 2008).

Although Parr’s definition emphasizes the invisibility of these social structures and processes, civic infrastructure can be designed to serve social needs just like other infrastructure. Key building blocks of civic infrastructure are civic engagement activities. Although a single civic engagement activity like an open house meeting may not significantly support adaptive management, when initiated as part of a holistically designed process, these activities build social capital (Larsen et al., 2004) and strengthen civic infrastructure that supports democratic governance and collective,

creative problemsolving. The concept of civic infrastructure also emphasizes the importance of cross-sector partnerships for community problem solving. Recently, many scholars have explored multisectoral collaboration across jurisdictional boundaries through related concepts of collaborative governance and collective impact (Innes and Booher, 2010; Innes, Booher, and Di Vittorio, 2011; Innes and Rongerude, 2013; Kania and Kramer, 2011, 2013).

Unfortunately, federal investments in regional planning in the urban renewal era damaged existing civic infrastructure instead of strengthening it. Investments in transportation and housing infrastructure initiated a coupled process of clearing “blighted” neighborhoods and expanding single-family, sprawling suburban developments. This process eroded the social fabric of existing urban neighborhoods, impeded social capital formation in suburbia, and established spatially segregated metropolitan regions that exaggerated social inequality and ecological degradation (Bullard, 2007; Jacobs, 1961; Parr, 2008; Putnam, 2000).

Reflecting on this history, what is the potential for the federal government to couple investments in civic infrastructure and physical infrastructure to support equitable, sustainable regional planning? Can federal investments from the top support meaningful engagement of diverse regional stakeholders and historically marginalized communities in civic engagement processes? How can regional planners design their civic engagement strategies to inform, consult, involve, collaborate with, and empower diverse stakeholders to collectively advance an equitable, sustainable future?

Research Questions and Overview of Approach

Given the opportunities and challenges involved in meaningful civic engagement and regional planning, we conducted a study of civic engagement activities used in regional planning efforts of the 74 regional communities that received federal planning grants from SCI. The study investigates the core question: how can regional planners design their civic engagement strategies to inform, consult, involve, collaborate with, and empower diverse stakeholders to collectively advance an equitable, sustainable future? This section presents—

- A justification for selection of the 74 HUD SCI-RPG recipients (regional grantees) for the case study.
- An overview of the two-part research design.
- A summary of the assessment framework used to structure the analysis.

Justification of Selection of 74 SCI Regional Grantees for Study

The 74 regions supported by SCI are ideal for study because SCI represents efforts by the federal government to take a comprehensive approach to regional planning that integrates top-down and bottom-up processes and couples investments in physical infrastructure with civic infrastructure.

SCI actively supported grantees in developing comprehensive participation strategies by providing funding for inclusive public processes and technical support in civic engagement. Supported by the federal Partnership for Sustainable Communities, the Sustainable Communities Learning

Network's workshops and resource library helped grantees develop their capacity to design innovative processes to engage community members from all sectors, especially traditionally marginalized and underrepresented communities.¹ Moreover, HUD required that a minimum of 10 percent of grant budgets be committed to increase the engagement of historically marginalized communities.²

The technical assistance provided to SCI regional grantees directly addresses the challenges of designing civic engagement for regional planning to advance equitable, sustainable communities of opportunity. Bergstrom et al. (2012: 2) revealed the special emphasis the federal initiative placed on civic engagement and equity.

Community engagement is the foundation of the Sustainable Communities Initiative. Community engagement fosters the transformative relationships and increased ownership necessary to build sustainable communities of opportunity. Community engagement deepens the innovative, silo-busting partnerships that are signatures of the program by connecting the concerns of communities to the decisions that allocate local and regional public investment dollars. Engagement brings meaning and relevance to sustainability goals across a broad spectrum of players; and it encourages local innovations in sustainable development through creative problem solving. (Bergstrom et al., 2012: 2)

The emphasis on transformative relationships and sustainable communities of opportunity reflects SCI's intent to overcome the legacy of past institutional practices of segregation, racial exclusion, urban disinvestment, and regional housing and transportation investments that established segregated, sprawling regions. Recognizing the geographically dispersed nature of regional planning and the tendency of suburban areas to have more influence, SCI encouraged grantees to "provide leaders of low-income communities and communities of color from across a metropolitan area the opportunity to identify their common issues, interests and needs, and to develop alliances to collectively address regional decisions" (Bergstrom et al., 2012: 3). Moreover, SCI defines community engagement as a capacity-building process "through which community members are empowered to own the change they want to see and involves communication, problem-solving, governance, decision-making skills and strategies" (Bergstrom et al., 2012: 4).

The training grantees received underscored the importance of designing a comprehensive, ongoing approach to engagement that serves multiple engagement functions over time including informing, consulting, involving, collaborating, and empowering. These five vital functions are the focus of the International Association for Public Participation's (IAP2's) Spectrum of Participation (Snyder, 2013).

The SCI grantees were ideal to study, given our interest in understanding the challenges and opportunities for federal investments in regional planning to support civic infrastructure and our specific research question: investigating the potential of regional planners to develop civic engagement strategies to inform, consult, involve, and empower diverse stakeholders to collaboratively develop equitable, sustainable communities of opportunity. Moreover, because these regional communities

¹ This learning network's resource library is available to partners online at <http://www.scllearningnetwork.org/>.

² As reported in Bergstrom et al. (2012), this budget commitment was required on page 57 of the Notice of Funding Availability for HUD's Fiscal Year 2011 Sustainable Communities Regional Planning Grant Program, released by HUD in 2011.

were given technical and financial assistance to develop civic engagement plans, we were able to control for the variables of access to funding and knowledge of innovative practices. With financial and technical support, this sample includes best practices in public process design.

Overview of Two-Part Research Design

We designed the study to provide a breadth of understanding through a comprehensive inventory and assessment of all civic engagement activities used across the 74 regions in the study. Recognizing that a holistic approach to an extensive civic engagement process is required to build regional capacity and enduring civic infrastructure, we coupled this assessment with a deep study of one exemplary region. The Buffalo-Niagara region's One Region Forward (1RF) planning process was selected based on three criteria: (1) 1RF was nationally recognized for its public outreach, receiving the National Planning Achievement Award for Public Outreach from the American Planning Association; (2) the University at Buffalo's School of Architecture and Planning primarily led the civic engagement effort, providing an opportunity to study the role of anchor institutions in civic engagement; and (3) the research team is based in Buffalo and could conduct in-person focus groups and interviews with past participants.

Summary of Assessment Framework for Civic Engagement Strategies

Both the broad study of 74 grantees and the deep study of the Buffalo-Niagara region use a standardized classification for civic engagement activities based on the IAP2 spectrum (exhibit 1).

Our classification offers definitions for five functions of civic engagement activities, instead of levels on a hierarchical ladder of participation.³ These five functions represent the various forms of interaction among planners and other participants in planning processes. The IAP2 model recognizes that strategies can inform, consult, involve, collaborate with, and empower community members from different sectors. All these functions should be part of a comprehensive, democratic participation approach. A single engagement strategy could be designed and implemented in a way to achieve all five of these functions.

³ Susan Arnstein's classic ladder of participation is traditionally used to assess the quality and impact of public participation and has been used to evaluate SCI-supported engagement activities (Chapple and Mattiuzzi, 2013). Instead, we chose to use an adaptation of IAP2's functional categories for several reasons. Arnstein's eight-rung ladder focuses on power distribution between two entities (the state and the public) with a linear progression in participation, from manipulation of the public by the state (rung 1) to citizen control over decisionmaking (rung 8; Arnstein, 1969). The theory implies that lower rungs are undemocratic and oppressive. While the ladder helps bring attention to power tensions between the state and the public, it has significant limitations for the analysis of the civic engagement strategies required in complex regions with multisectoral stakeholders. While Arnstein's ladder may suggest that imparting information (a mode of building human capital) is less "democratic" than opportunities for collaboration and empowerment, the IAP2 Spectrum of Public Participation recognizes that effective engagement must be multifaceted.

Exhibit 1

Functional Categories of Civic Engagement Activities

IAP2 Category	Functional Definitions of Activity Categories Adapted from IAP2 Spectrum
Inform	The activity provides the public with balanced and objective information that advances transparency and assists community members in understanding the problems, alternatives, opportunities, and solutions. Examples include fact sheets, websites, and open houses.
Consult	The activity obtains input from the public on analysis, alternatives, and decisions. Examples include public comment, focus groups, surveys, and public meetings.
Involve	The activity enables two-way communication between individual members of the public and the public sector decision makers; planners and public officials work directly with the public to ensure their concerns are voiced, understood, and considered.
Collaborate	The activity supports cross-sector partnership building, cultivation of social capital, and collaborative problemsolving and innovation.
Empower	This activity builds the capacity of agents of change (individuals, organizations, and so on) to advance a common vision and a collective impact. Individuals act on collective will, as if joined as one.

IAP2 = International Association for Public Participation.

Source: Classification modified by authors based on IAP2's spectrum of participation (http://c.yimcdn.com/sites/www.iap2.org/resource/resmgr/foundations_course/IAP2_P2_Spectrum_FINAL.pdf)

Given the context of regional planning, we adapted IAP2 definitions for “collaborate” and “empower” to better reflect the opportunities for cultivating empowered participation across diverse populations and sectors to address complex regional challenges. In the IAP2 spectrum, *collaborate* means that the agency and the public work as partners. Because regional planning involves multiple agencies and diverse stakeholders, our definition emphasized building social capital as a requirement for collaborative efforts. In the IAP2 spectrum, *empower* is defined as “place final decision-making in the hands of the public” (Snyder, 2013:13). Instead, our definition of *empower* emphasizes building community capacity to advance collective vision for an equitable, sustainable region. This definition was consistent with the definition of empowerment given by Bergstrom et al. (2012).

Broad Study: Review of Civic Engagement Strategies of 74 SCI-RPG Program Grantees

To conduct the civic engagement strategy census, the research team first conducted an inventory of all civic engagement strategies publicized on the websites of each of the 74 regions that received SCI-RPG. The team then classified all grantee engagement activities using the five IAP2 categories of civic engagement, recorded any evidence that the activity continued in the implementation phase and noted the extent to which activities appeared to advance equity. Raters went through multiple rounds of norming and quality control checks to ensure consistent classification. Interrater reliability was high for classifying inform and consult but decreased for involve, collaborate, and empower.

Inventory Results

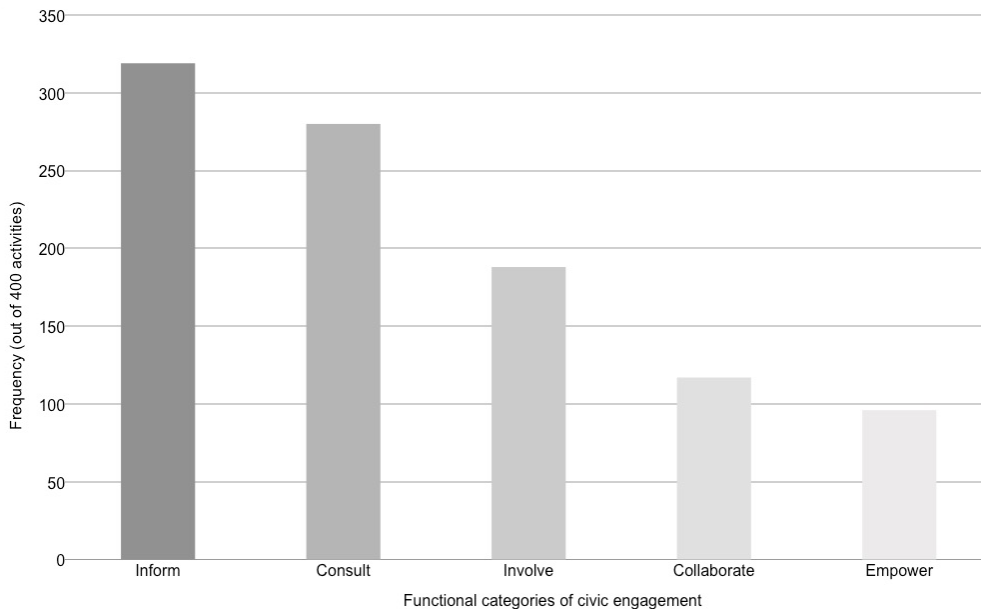
The results of the inventory and categorization of civic engagement activities employed by SCI regional grantees suggest that—

- Most activities serve to inform participants, whereas relatively few activities serve to empower them (see exhibit 2).
- Many regions employed a diverse range of activities—each with their own functions—that were often integrated into an overarching engagement plan.
- Some regions provided innovations on traditional activity types that expanded the function from only informing or consulting to also involving, collaborating, and empowering.
- Some regions provided innovations that informed and consulted stakeholders more equitably and powerfully than past methods.

Most regions went beyond traditional civic engagement activities and designed more comprehensive plans for civic engagement that integrated a range of activities to inform, consult, involve, collaborate, and empower. However, the range was significant in the sophistication of these strategies, both in the selection and design of individual tools and the art of assembling them into a holistic strategy for engagement.

Exhibit 2

Distribution of Observed Engagement Activities Across the Five IAP2 Categories



IAP2 = International Association for Public Participation.

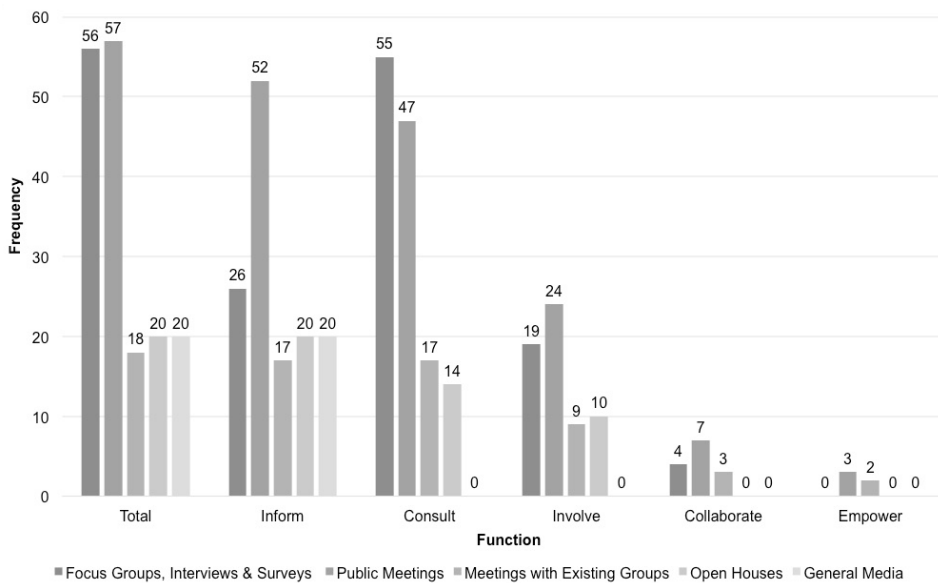
In the following, we present bar charts summarizing the IAP2 classifications for various types of engagement strategies. Bar charts are complemented by selected examples drawn from the regional cases. Each type of activity achieves a range of engagement.⁴

Traditional Outreach and Engagement Activities

This metacategory encompasses some of the most commonly used forms of community engagement, which we coded as, “Focus Groups, Interviews & Surveys,”⁵ “Public Meetings,”⁶ “Meetings with Existing Groups,”⁷ “Open Houses,”⁸ and “General Media.”⁹ As exhibit 3 shows, most of these

Exhibit 3

Frequency and Function of Traditional Outreach and Engagement Activities



⁴ The regional websites and HUD documents are generally only cited in the article in the case of direct quotations. However, they are available through correspondence with the primary author.

⁵ The code Focus Groups, Interviews & Surveys was used for traditional qualitative research approaches designed to gather feedback from the community. Retrospectively, surveys should have been a code for their own sake, as they are designed only for consulting.

⁶ The code Public Meetings includes educational meetings (for example, informal speaker series and topic-focused summits designed to increase human capital), as well as traditional public meetings in which the public is informed and then has an opportunity to speak their opinions.

⁷ The code Meetings with Existing Groups was originally intended to distinguish between large, general public meetings and meetings targeted for particular community groups, either formal organizations (who often could request a presentation by planners) or demographic groups. This code also came to be used for efforts to bring meetings to where people are, such as hosting a table at a popular event.

⁸ The code Open Houses was used to capture events where participants got to explore regional planning issues by visiting stations based on their interests and, oftentimes, engaging with planners at those stations. Sometimes plans simply mentioned open house without describing them. In these cases they were still coded as Open Houses.

⁹ General media broadly captured the efforts of regions to publicize the planning process and educate the public on planning issues through a wide array of media.

activities focused on one-way communication, either gathering input, from the public to the planners (consult), or providing updates, from the planners to the public (inform). Unidirectional information exchange does not imply that activities are necessarily less well designed.

Innovative practices for informing and consulting mostly focused on expanding the total number and diversity of people involved in the process. For instance, many activities coded as Meetings with Existing Groups were designed to “meet people where they are.” This code was interpreted liberally, including hosting tables or kiosks at a diverse range of well-attended community functions (for example, community festivals or concerts, grocery stores, restaurants, schools, or community centers) or developing a travelling road show to reach communities dispersed through regions. Many regions also effectively used various forms of media to reach underrepresented populations by providing translated materials and targeting culturally specific media outlets. A few regions developed informational videos and broadcasted them on mainstream media outlets. In the Sacramento region, public engagement began with focus groups that deliberately engaged a more diverse group of stakeholders than in previous regional transportation planning efforts and focused on issues of equity and inclusion. Focus groups sought input from marginalized communities such as low-income, senior, youth, disabled, and minority groups, and stakeholder groups representing diverse constituencies and interests in the region.

Some innovative activities created opportunities for two-way or multidirectional communication. For instance, four regions held focus groups that functioned more like mini-workshops, designed to enable participants to learn and network with each other. For example, focus groups for Together North Jersey’s Bloomfield Corridor Plans included a “dot-mocracy” mapping exercise that enabled the group to deliberate together about opportunities to increase access, awareness, health, and safety along the corridor. Several regions included live keypad polling in their public meetings to enable greater involvement and more effective real-time deliberation. The Southeast Florida Regional Partnership’s Prosperity Plan, Seven50, used a variety of innovations to turn a traditional public meeting into a highly engaging, ongoing process of learning and deliberation about the future of the region. The Seven50 process included summits for the general public that included keynote speakers on critical regional issues, interactive workshops, and opportunities to participate in live keypad polls.

Interestingly, the General Media category included a range of artistic practices, public art, and creative placemaking initiatives. In Chittenden County, Vermont, planners used community-created murals, community portraits, and youth creative writing as means to explore peoples’ ideas and feelings about the institutions they interact with and their surroundings. In the region surrounding Greenfield, Massachusetts, the Franklin Regional Council of Governments commissioned a public art display as a capstone to the public participation efforts. The art display was unveiled in a ceremony at the Franklin County Transit Center, which included choreographed dance and music performed by youth. The council created large posters of the mosaic, which were attached to the sides of the Franklin Regional Transit Authority buses for several weeks during the public comment period for the draft of the Sustainable Franklin County Plan, in order to help publicize it and future open houses. South Florida’s Broward metropolitan planning organization (MPO) created a short promotional video about transportation planning to be shown in movie theatre previews. It introduced the purpose of an MPO in long-term transportation planning, and encouraged viewers to participate in the future planning of their city. Most of these artistic activities had traditional

engagement classifications—none of the activity codes captured arts-based activities—and the IAP2 categories failed to capture the role of these activities in creating cultural capital and a sense of place and belonging.

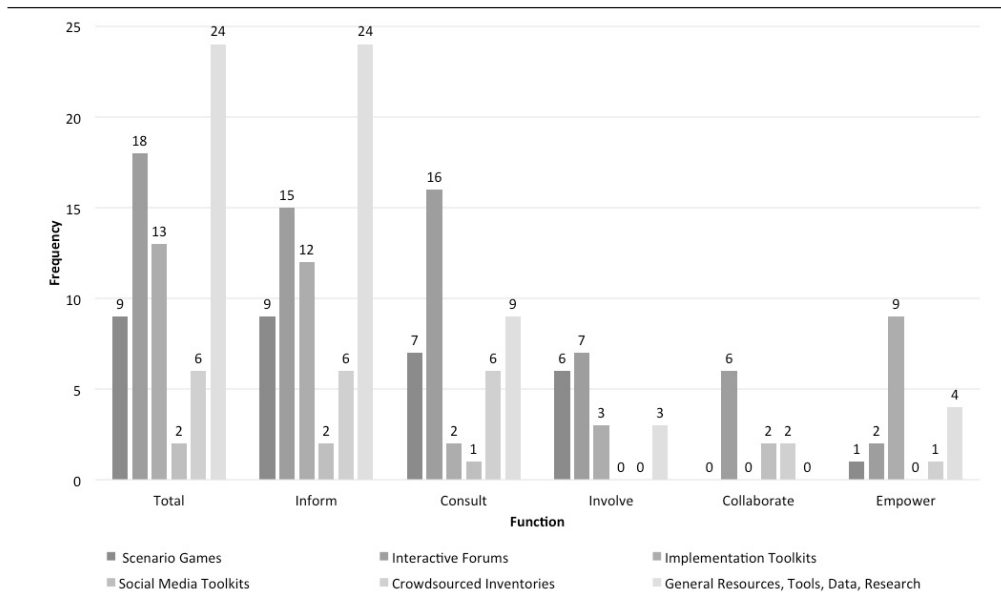
Websites and Online Engagement

Many of the regions made effective use of innovations in web-based technologies to inform, consult, involve, and even empower and collaborate with citizens and organizations from various sectors. This metacategory included the following web-based activity codes: “Scenario Games”; “Interactive Forums”; “Implementation Toolkits”;¹⁰ “Social Media Toolkits”;¹¹ “Crowdsourced Inventories”; and “General Resources, Tools, Data, Research.”¹²

As exhibit 4 shows, nearly all of the websites and online tools served to inform citizens, many consulted citizens, and far fewer served to involve, collaborate, or empower them. Nearly all the

Exhibit 4

Frequency and Function of Websites and Online Engagement Tools



¹⁰ Many regions posted Implementation Toolkits on their websites. These toolkits were generally sets of policy tools and strategies that towns could adopt in their efforts to implement the regional plan’s vision, goals, and objectives.

¹¹ The coding results for this category are slightly difficult to interpret due to interrater reliability challenges. Most grantees appeared to have some type of social media presence, but this was underreported in the inventory because of a choice to create a category focused on social media toolkits—and not just “social media”—designed to make it easy and desirable for community members to share updates and invitations through social media. It seemed that this was not happening, and social media seemed mostly to be a place for passive updates: not networking or interactive dialogue. More often, social media efforts were included as a tool under the “general resources” website classification.

¹² This category was a catchall for web resources that did not fit neatly into other categories. Generally, researchers appear to have only used this category when they have wanted to highlight an interesting tool or resource, and they classified it under the larger umbrella.

regional grantees had attractive websites with information about the planning process. Innovative, interactive web-based forums ranged from dynamically updating spreadsheets to interactive interfaces, such as Community PlanIt, MindMixer, or Ideascale. For instance, Imagine Central Arkansas employed Ideascale, an online, community-sourced forum for sharing, discussing, and rating ideas for sustainable placemaking, to reach a geographically diverse community in an interactive manner. Interfaces sometimes featured crowdsourced inventories, enabling dynamic asset mapping, needs identification, ideation, or a combination of the three through the region. New River Valley Livability in Virginia even included a crowdsourced financing mechanism for implementation through a partnership with a local community foundation, which raised more than \$60,000 in donations to implement ideas in the regional plan.

Web-based scenario games enabled professional planners to provide a more powerful, data-intensive interface in public meetings. For example, Utah and the Central Texas region used the Envision Tomorrow suite of web-based scenario planning support tools to provide snapshots of the possible impacts of policies, development decisions, and current growth trajectories to develop a shared vision of a sustainable future. The web-based platform integrates pop-up information windows that explain the theory and underlying research behind each indicator, explaining how the measures are connected to livability concerns, as well as providing design solutions via hyperlink text to online resources. Some regions offered interactive mapping platforms on their websites for the general public to use, such as MyVibrant NEO in the northeastern Ohio region.

In-Person, Interactive Workshops

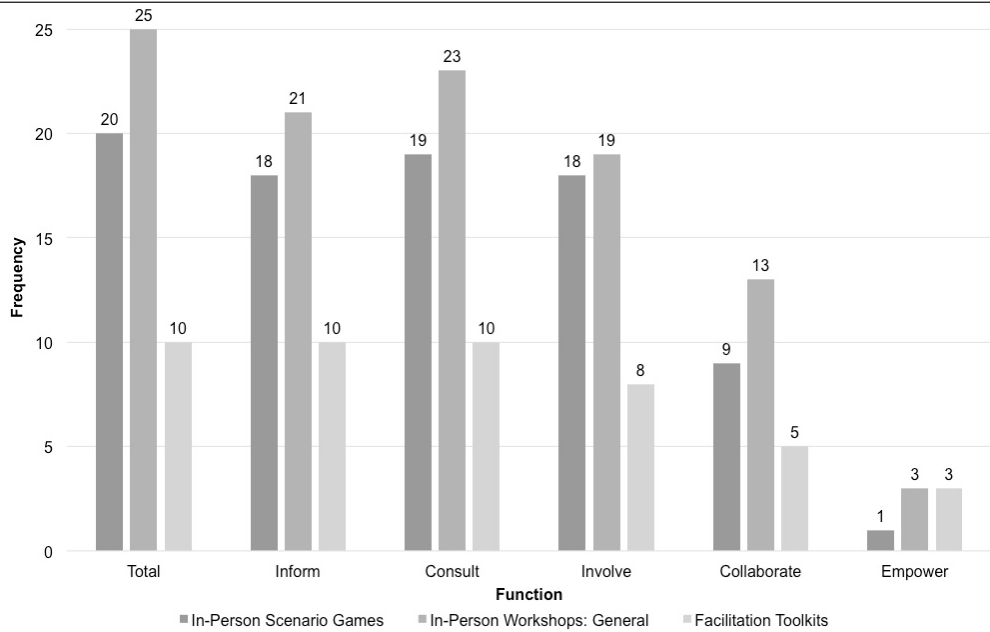
Beyond the traditional two-way, larger, general public meetings, grantees often used many hands-on engaging interactive workshops that enabled participants to engage with one another in smaller groups. This metacategory included the following workshops: “In-Person Scenario Games,” “In-Person Workshops: General,” and “Facilitation Toolkits.” Exhibit 5 shows the frequency of interactive workshop activities in each of these categories and the functions they served.

In-person scenario game workshops generally involved participants working in small groups situated around a regional map and deliberating together on land use, housing, and transportation choices for various future scenarios. For example, in northeastern Ohio, nearly 600 individuals participated in a series of six workshops that produced 73 maps. These interactive activities created opportunities for participants to expand their knowledge and know-how, while also building new relationships, thereby expanding human and social capital. Although these highly interactive workshops enabled people to collaborate with each other in the exercise, they generally did not appear to build the power to act. The only workshop that appeared to empower participants was an interactive workshop designed for local officials across the region. Although the activity did not empower disadvantaged groups, it did build capacity among decisionmakers to act more effectively in service of a common regional vision.

The number, frequency, geographical diversity, and linguistic diversity of these smaller group activities were limited by the availability of planning professionals to lead them. Some regions saw that they could address this problem, while simultaneously strengthening civic infrastructure in the regions, by developing a distributed approach. Through “Meetings in A Box,” “Convo to Go,” and “Ambassador” programs, regions equipped civic leaders with tools (and often training) to lead

Exhibit 5

Frequency and Function of In-Person, Interactive Workshops



smaller interactive workshops and conversations with stakeholders in their own circles. Instead of requiring people to come to a central location, public conversations could be hosted around a living room table, a coffee hour at a church, or any other ongoing meeting. This flexibility was especially valuable for geographically and socially diverse regions where centralized meetings are particularly difficult. Western North Carolina’s Community Road Trips Toolkit was developed for individuals and organizations interested in hosting small-format interactive meetings in under-represented or remote areas of the region. Grant funding was also available through an application process to support those individuals and organizations. Materials provided included a video introduction, a flipbook for review of the plan and prior community meetings, and instructions for process facilitation.

Capacity-Building Activities

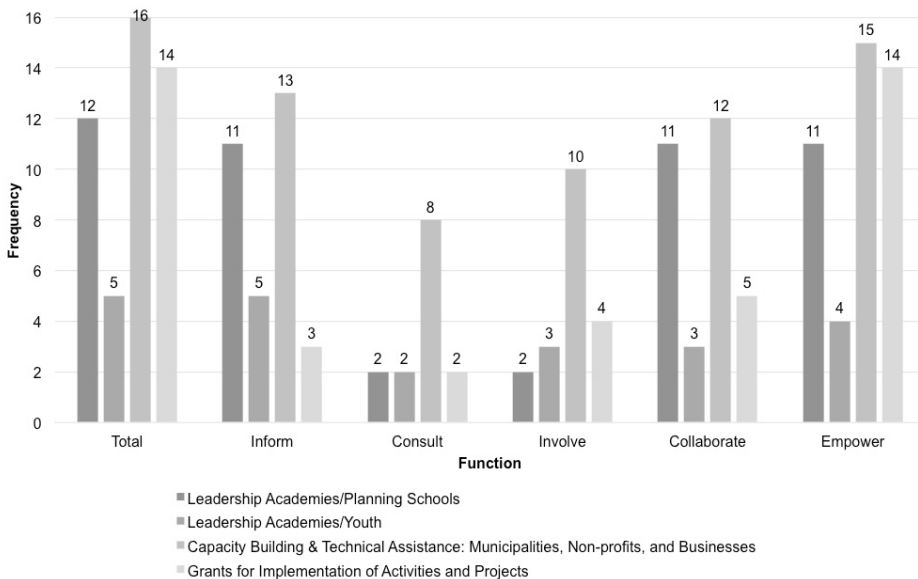
While most activities primarily intended to support the decisionmaking process for the plan, a wide range of activities were specifically intended to build capacity in the region for a more just, inclusive, and effective planning process and for long-term capacity for implementation and sustained democratic engagement. This metacategory of “Capacity-Building Activities” included

four activity types: “Leadership Academies/Planning Schools,”¹³ “Leadership Academies/Youth,”¹⁴ “Capacity Building & Technical Assistance: Municipalities, Non-profits, and Businesses,”¹⁵ and “Grants for Implementation of Activities and Projects.”¹⁶ Exhibit 6 shows the frequency of capacity-building activities in each of these categories and the functions they served.

Leadership academies, such as Des Moines, Iowa’s Urban Ambassadors and Houston’s Community Ambassador Team, supported local leaders with trainings and tools to use in the planning process for their communities and organizations. Leadership academies in some regions focused on training and involving youth as community leaders in the planning process. For example, the Chicago Metropolitan Agency for Planning supports the region’s Future Leaders in Planning (FLIP)

Exhibit 6

Frequency and Function of Capacity-Building Activities



¹³ Citizen planning academies were intended to empower citizens to meaningfully participate in the ongoing planning process, usually by building human and social capital. The code was generally reserved for regions that offered a series of educational and networking events framed as an academy, school, or institute similar to those defined and reviewed by Mandarano (2015). However, some raters also used this classification for ad hoc capacity-building workshops targeted for citizens.

¹⁴ This code was used to identify activities designed to support the empowered participation of youth, especially school-age youth, but also sometimes college students and young professionals. When interpreting this code, it is important to note that the research team noted special efforts to engage youth in 16 regions, even though only five activities were coded specifically as “Leadership Academies/Youth.” This topic will be discussed at the conclusion of this section.

¹⁵ This code was intended to capture capacity-building efforts for organizations (not only citizens), but it overlapped some with Leadership Academies/Planning Schools. It is helpful to consider all these groups collectively.

¹⁶ Some regions provided capacity-building grants to community groups, either to support them in implementing public participation activities or to complete demonstration projects related to plan implementation. Because funds for project implementation are not generally included in reports on community engagement processes, the totals reported here should not be interpreted as an exhaustive survey of implementation grants.

program. Through it, high school residents are taught, during an intensive 8-month period, about relevant urban planning issues. FLIP participants partner with civic leaders, engage in policy discussions, and advocate for regional planning techniques.

Some regions used SCI funding to provide capacity building, technical assistance, and implementation grants to advance projects that supported the regional planning process. The Chicago Metropolitan Agency for Planning established the Local Technical Assistance program with support from the Chicago Community Trust to initiate and invest in 112 projects with local governments, nonprofits, and intergovernmental organizations to address local issues at the intersection of transportation, land use, and housing. Together North Jersey's nongovernmental organization [NGO] Micro-Grant Program awarded eight grants ranging from \$15,000 to \$20,000 each to community-based NGOs with demonstrated ties to traditionally underrepresented neighborhoods of the North New Jersey region. Those organizations included community development corporations as well as social service and faith-based institutions. The grants were intended to facilitate and supplement the regional plan's outreach efforts in those areas, and any remaining funds were to be used for local planning activities related to neighborhood revitalization, active transportation and active living, and capacity building.

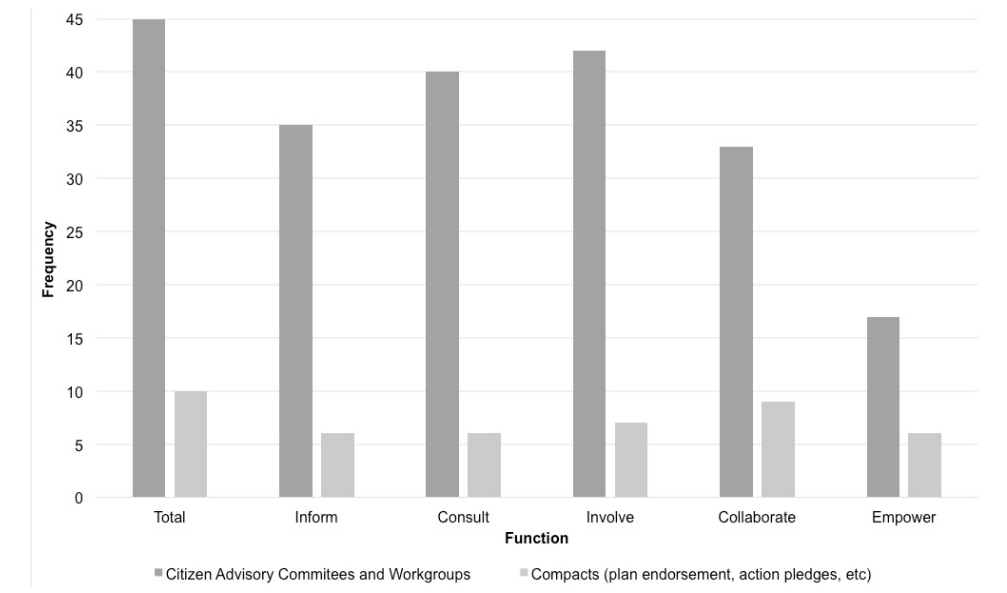
Infrastructure for Collective Action

Many of the activities described in the Capacity-Building Activities section were ongoing elements of the regions' civic infrastructure. The metacategory "Infrastructure for Collective Action" refers to organizational structures intended to support the planning and implementation processes, thereby enabling the region's diverse stakeholders to make, remake, and implement the social contract established by the plans. The metacategory includes "Citizen Advisory Committees and Working Groups"¹⁷ and "Compacts" through which regional partners signed on to advance the adopted plan as a whole.¹⁸ For example, East Tennessee established working groups comprised of residents who have special expertise and interest in a regional planning issue. The working group members produced research and advised the Plan East Tennessee leadership team on topics related to housing and transit. Omaha, Nebraska's Heartland Vision Regional Compact is a pledge by regional public and private stakeholders to continue working together beyond the planning phase to address the key issues facing the region. Local governments, agencies, businesses, and nonprofits that sign the compact are required to participate in plan implementation committees and attend semiannual plan implementation summits. Exhibit 7 shows the frequency of activities in both of these categories, as well as the functions they served.

When considering the functional ratings for Citizen Advisory Committees and Working Groups and for Compacts in the following, it is important to remember that the definition of empower used in this analysis focuses on building the capacity of diverse actors to act effectively in service of shared

¹⁷ This code was used to capture authentic citizen participation in ongoing advisory roles and issue-specific working groups committed to collective action in key areas.

¹⁸ It is best to interpret these activity types together and to recognize that (1) Citizen Advisory Committees and Working Groups may overly suggest robust, inclusive participation by citizens and (2) Compacts may underreport stakeholder commitments to regional plans.

Exhibit 7**Frequency and Function of Infrastructure for Collective Action**

vision. It does not necessarily imply addressing structural inequality by giving (or building) power to underrepresented groups in particular, even if such affirmative action is needed to truly build capacity among diverse actors.

Excellence in Equitable, Integrated Approaches to Civic Infrastructure Planning

The inventory results also revealed some regions that stood out for their use of a variety of activities integrated into a synergistic, comprehensive engagement process intended to address structural barriers to opportunity and engagement in demographically and geographically diverse regions. For all but 31 of the 74 regions, researchers classified at least 5 different engagement activity types. Researchers also anecdotally noted 55 activities that made clear efforts to advance equity, both by engaging members of marginalized communities and by focusing public attention on issues of structural inequality.

Four regions demonstrated exemplary efforts to creatively design coupled investments in civic infrastructure and physical infrastructure to advance equity outcomes. The Southeast Michigan region's Green Infrastructure Vision used an interactive mobile theatre program called "Did You See It Coming" to engage diverse community members and build their capacity to address challenging issues including transit, education, clean water, and housing. Seattle, Washington's Puget Sound Regional Council, Minneapolis, Minnesota's Corridors for Opportunity, and the Denver Regional Council of Governments' MetroVision plan all meaningfully engaged diverse community members in the design of regional transit and housing corridors that would advance economically and ecologically sustainable development and ensure that people of all incomes and backgrounds could share in the resulting opportunities. Each of these regions leveraged their

existing civic infrastructure by providing capacity-building grants to community-based organizations, establishing regional equity networks, and offering empowering workshops and summits.

These regions and others engaged in holistic, equitable design of the civic engagement process to expand the region's capacity to address structural barriers to opportunity and engagement in demographically and geographically diverse regions. Some were particularly committed to building capacity in marginalized communities through a holistically designed engagement process. Baltimore's Opportunity Collective stands out in these efforts and warrants a closer look.

Baltimore's Opportunity Collaborative employed a comprehensive engagement approach focused on building the capacity of regional partners and citizens to address the challenges posed by racial and spatial barriers to opportunity in the region.

Their approach focused on socially just processes for engagement as well as socially just outcomes and implementation. In alignment with SCI's emphasis on the "geographies of opportunity" framework of the Kirwan Institute, they incorporated participatory "opportunity mapping" exercises in public workshops. Not only did this give participants a common frame of reference to work from, it also was helpful in generating measurable outcomes and targets. A partnership with the Citizens Planning and Housing Association, Inc., an organization that has been supporting civic action in the region for more than 60 years, helped them engage underrepresented populations directly or indirectly through other advocacy or service organizations. More than 6,000 citizens engaged in the process. Baltimore's emphasis on movement building to support implementation and outcomes is also reflected in its Opportunity Fellows Leadership Development Program and demonstration grants.

Baltimore's Opportunity Fellows program engaged 34 residents in a leadership development program beginning in 2014, toward the end of the planning process, with the intention of cultivating community leaders who would steward the plan through implementation. The fellows attended retreats and workshops to learn about regional issues related to transportation, housing, workforce development, economic competitiveness, and community trusteeship. The program culminated in a three-part capstone community project that reviewed the regional plan, their program, and opportunities for the future. In February 2016, participants of the Opportunity Fellows program self-organized to form the Opportunity Coalition, a new group that intends to further implementation of the regional plans that were developed by the Opportunity Collaborative but with an added emphasis on the environment and environmental justice.

Demonstration and workforce development grants were used to road test sustainability initiatives and build capacity during the planning process. Baltimore's plan development consortium, the Opportunity Collaborative, awarded \$750,000 in demonstration grants to 16 organizations involved in making the region more sustainable in the areas of transportation, housing, and workforce development. These grants were awarded throughout the planning phase.

Observations on Implementation Phase Engagement

The results of the inventory revealed that very few of the grantees published clear plans for ongoing involvement. Of the 400 civic engagement activities surveyed, less than 10 percent (36 activities) showed explicit evidence of continuation in the implementation phase, although about 13

percent (53 activities) demonstrated an explicit intention, and 12 percent (48 activities) included tools and resources that were still available on websites. Although nearly all the regions had active websites, very few included active ways for citizens at-large or organizations to get involved in implementation. Funding through SCI supported production of attractive videos and websites, adoption of technological tools, and grants for outreach by community-based organizations. In regions where these are not priority investments of MPOs, philanthropic foundations, or other anchor institutions, these activities appear unlikely to continue. Moreover, the return on these investments and their sustainability will be limited in regions where civic infrastructure is weak to begin with. Civic engagement activities were more likely to continue in the implementation phase in regions where a culture of civic engagement, engaged anchor institution(s), well-established community-based organization(s), movements for socially just and environmentally responsible regional development, or a combination of the four was already established.

Conclusions of the SCI Civic Engagement Activity Inventory

The broad review of the 74 SCI-RPG program grantees revealed that SCI regional grantees employed a wide variety of civic engagement strategies to inform, consult, involve, collaborate with, and empower diverse stakeholders in their efforts to advance a sustainable future for the region. Through innovative civic engagement activities and thoughtfully designed comprehensive civic engagement plans, many regions succeeded in developing innovative practices to advance three important outcomes—

- Creating meaningful opportunities for diverse stakeholders to participate in processes to plan the future of their region.
- Building the capacity of communities to participate fully in the co-creation of a sustainable future, from planning through implementation and ongoing adaptation.
- Going beyond incidental, ad hoc engagement activities to invest in ongoing civic infrastructure in the region.

With regard to the third outcome, the results demonstrated efforts by many regions to design equitable, comprehensive, and innovative civic engagement plans that would support ongoing civic engagement. Many of these regions did so by leveraging the strength of their existing civic infrastructure. To better understand how such comprehensive approaches work in practice, the next section presents the results of a rich case study of the process developed by New York's Buffalo-Niagara region.

Deep Case Study: Buffalo-Niagara Region, New York

IRE, the sustainability plan for the Buffalo-Niagara region, stands out among these SCI regional grantees for having incorporated a rich variety of civic engagement strategies in its multiyear planning and implementation processes. More than 700 organizations and more than 5,000 citizens engaged in the shaping of the plan, with 28 percent of participants from high-poverty ZIP Codes. The region now benefits from a community-driven plan, a growing collective impact network

committed to its implementation, a range of sustained learning programs and tools for distributed action, and a continuously growing populace that is informed about issues of regional cooperation and sustainability.

Inventory

This section presents the 1RF case study, with a special focus on its Citizen Planning School (CPS) and Champions for Change programs. In the spring of 2016, six focus groups were conducted with 20 program participants, followed by 10 intensive interviews with Champions for Change graduates in the summer of 2016. It includes a tabular inventory of civic engagement strategies employed by 1RF as recorded in the SCI inventory (exhibit 8). A discussion of insights about the strengths and weaknesses of this integrated approach, based on focus groups and interviews, follows exhibit 8.

Exhibit 8

Inventory of 1RF Civic Engagement Strategies (1 of 3)

Engagement Strategies		Inform	Consult	Involve	Collaborate	Empower	Implement
Surveys, focus groups, and interviews							
Text it Forward surveys	1RF used a text message survey campaign to capture public sentiment and distributed it at bus shelters and in community centers. 1RF designed the surveys to be informative as well as to gather input.	X	X	0	0	0	NE
Public meetings, public comment							
Community Congresses with Poll-Everywhere	1RF held large public forums where conveners shared results on community preferences from prior activities, and citizens gave live feedback, both through conversation and the Poll-Everywhere live polling program. Live feedback enabled two-way communication between officials and the public, but the main function was to inform and consult.	X	X	0	0	0	NE
Meetings with existing groups							
Presentations to local organizations	Planners on the engagement team gave more than 50 presentations to local municipalities or community groups. Presentations created opportunities for two-way communication, although the function was mostly to inform and consult the community.	X	X	0	0	0	NE
Tabling at community events	By tabling at more than 30 community events, fairs, and local ethnic and neighborhood festivals, 1RF leaders engaged people who do not typically get involved in planning. Beyond tabling, 1RF leaders brought games and interactive activities. These engaging activities served mostly to inform and consult.	X	X	0	0	0	NE

Exhibit 8**Inventory of 1RF Civic Engagement Strategies (2 of 3)**

Engagement Strategies		Inform	Consult	Involve	Collaborate	Empower	Implement
Scenario-planning activities							
Scenario-mapping workshops	1RF planners brought scenario-mapping workshops to church basements, public housing authorities, bars, high schools, rural town halls, inner city community centers, and other venues. More than 770 citizens from across the region created 115 maps during the November 2013 Community Congress and the Workshops On The Road. The workshop enabled collaboration; participants engaged with other stakeholders with diverse perspectives, working to identify common ground and ways to address population stagnation, housing vacancies, brownfields, and other characteristics of economic decline. It is unclear if the workshop built capacity for shared action.	X	X	X	X	0	NE
Scenario-mapping open houses	Planners analyzed the 115 citizen-created maps to identify common trends, which they used to form three different alternative scenarios for the region's future. They presented the alternative scenarios at open houses, and used clicker technology and an online feedback tool to collect feedback from citizens.	X	X	X	0	0	NE
Leadership academies and planning schools							
Citizen Planning School	1RF created the CPS to "teach the plan" and offer implementation tools to citizen activists, nonprofit leaders, planning board members, and others. In 2014 and 2015, 1RF held two sets of listening sessions and workshops. Leaders from various sectors spoke in panels with interactive Q and A, followed by interactive, capacity-building workshops.	X	X	0	0	X	EE
Champions for Change	In 2014 and 2015, Champions for Change, a program of CPS, provided leadership development and project-based technical support for residents leading initiatives related to 1RF goals. Participants included leaders from low-income neighborhoods. The program includes an annual Idea Summit that exposes decisionmakers, funders, and the general public to the Champions' proposals for sustainable development. The program continued in 2017. To date, 42 community members have become "Champions for Change."	X	X	0	0	X	EE
Crowdsourced inventories (for example, asset maps)							
PhotoVoices	This online forum enabled residents to share photos or videos of places they want to change or places they want to keep for future generations. Outreach to summer youth camps brought youth into the planning process.	X	X	0	0	0	NE
Sustainability in Action	This digital repository of cases defining sustainability in the region was crowdsourced by individuals, businesses, organizations, and local officials. Contact information enables networking and collaboration.	X	X	0	X	0	TR

Exhibit 8

Inventory of 1RF Civic Engagement Strategies (3 of 3)

Engagement Strategies		Inform	Consult	Involve	Collaborate	Empower	Implement
General resources, tools, data, research							
Online tools	The program website features online tools, including Mapping Metrics, a Plan Library, Working Group Reports, Scenario Data and Trends, and others. Workshops were held in CPS to empower residents to use these powerful tools.	X	0	0	0	X	TR
Interactive games	These interactive quizzes and games sought to educate participants on key issues such as the connection between sprawl and housing vacancy, tax implications of expanding public infrastructure, climate change impacts, food access, and more.	X	0	0	0	0	TR
Social media							
Share-It-Forward Toolkit	This digital toolkit features flyers, images, web badges, and social media content for sharing with your networks.	X	0	0	X	0	TR
Social media presence	Social media presence on Facebook, Twitter, Google Plus, Flickr, and YouTube enables the engagement of greater numbers of people, expanding the potential for collaboration among growing social networks.	X	0	0	X	0	TR
Citizen advisory committees, work groups							
Local Government Council	A Local Government Council consisting of the mayors, supervisors, council members, and legislators from the region's 64 municipalities met to check in on the plan's progress to ensure those with the ability to shape policies, programs, and projects were actively engaged in the planning.	X	X	X	X	0	NE
Working teams	More than 100 local planning and subject-matter experts participated in a working group process that identified regional and local strategies in housing equity and efficiency, food access and justice, land use and development, transportation and mobility, and climate change mitigation and adaptation.	X	X	X	X	0	NE
Private Sector Council	A Private Sector Council involving representatives from major employers and development groups, along with every local chamber of commerce, was convened at key points in the process to create a two-way conversation between the business community and the planners working on 1RF.	X	X	X	X	0	NE
Implementation compacts (plan endorsement, action pledges, and so on)							
Committed action	The MPO, both counties, the region's two major cities, regional chamber of commerce, large nonprofits, anchor institutions, and university centers commit to implementing the plan both collaboratively and within their individual organizational powers and authorities. Official commitments empower others to act in accordance with the plan and support collaboration.	0	0	0	X	X	EE
Implementation Council	The 1RF Implementation Council meets quarterly to coordinate efforts around providing support, information, and tools to advance the principles of 1RF. The council represents the partnership of government and nonprofit and academic organizations in our region with capacity and experience in transportation, housing, economic development, community health, public engagement, and regional planning.	X	X	X	X	0	EE

1RF = One Region Forward. CPS = Citizen Planning School. EE = explicit evidence. MPO = metropolitan planning organization. NE = not explicit. TR = tools and resources (online).

Discussion of IRF's Civic Engagement Strategy

IRF's integrative approach to cross-sector civic engagement succeeded in engaging more than 5,000 people, representing a diverse range of interests, geographies (cities, towns, villages), and socioeconomic backgrounds. The design of the civic engagement process created a series of mutually supportive, reinforcing, and cumulative events that enabled meaningful involvement, collaboration, and empowerment. The engagement process was designed to ensure that stakeholders were engaged strategically, selectively, and with many points of entry to honor both the contribution of their time and insights. The following cursory summary of the process provides a glimpse at how a variety of engagement activities, with varied functions, were strategically integrated.

At the outset of the planning process, instead of using large group meetings to start a new conversation about regional values and vision, the engagement team recognized that conversations about the future of the region had been occurring for years, with countless hours of citizen participation having been invested in many different comprehensive plans throughout the region. As such, the IRF team first collected, read, and analyzed more than 160 plans to identify common values and visions (and the plans were posted in a Plan Library on the IRF website). The team then presented the results of their content analysis at two Community Congress meetings (one in Buffalo, one in Niagara Falls), in which more than 270 citizens and community group representatives provided their feedback. By using live-polling technology (Poll-Everywhere), participants were able to get a sense of the diversity of perspectives and areas of common ground in their responses.

The next phase of the process explored ways to advance the vision and values of the region via policy and land use recommendations. This phase included two general areas of knowledge and insight production: (1) policy recommendations particular to five key regional priorities—land use and development, transportation and mobility, housing and neighborhoods, food access and justice, and climate change action; and (2) integrated land use recommendations and scenarios. The first process leveraged the knowledge and expertise of regional experts and leaders through five working groups. Citizens were enabled to provide feedback on these areas through a Text It Forward Campaign with surveys focused on the working groups' research areas; additional questions were posed monthly during the spring and summer of 2014. The second process enabled citizens to give spatial expression to their regional priorities for land use through scenario mapping workshops.

In the fall and winter of 2013, 27 scenario mapping workshops (held both in large public events, and through smaller, distributed gatherings across the region) were employed that not only informed, consulted, and involved participants in two-way deliberation, but also created opportunities for collaboration and empowerment. In these hands-on workshops, small groups of participants were given base maps and game pieces representing different land use options. They were then challenged to work together to create a map of the future that would advance the common values and visions of the region, considering what they would like to invest in; protect and change; and where they would like to locate homes, jobs, and attractions. Using the game pieces, they worked within certain parameters to create a regional land use scenario they could all get behind. Not only did it create an opportunity for participants to integrate newer knowledge about regional trends (both from presentations and published reports of working groups) with their own local knowledge and apply it to the challenge, they also got to engage meaningfully with other citizens to work out solutions. One focus group participant said that, not only was the workshop effective in supporting

hands-on learning, he greatly enjoyed the opportunity to interact with other people with different backgrounds and perspectives about desired urban form. Thus, beyond collecting input, these workshops cultivated social capital and the capacity for collective problem solving in the region.

In the process, 770 citizens created 115 maps, which were then analyzed and synthesized into three different future land use scenario possibilities and one “business as usual” scenario. Using the Envision Tomorrow software package, the team demonstrated the predicted impacts of each of these land use scenarios. The results were then presented for collective feedback at two large Alternative Scenario open houses held in both Erie and Niagara Counties. Feedback was also collected via the Alternative Scenario Online Feedback Tool, enabling community members who could not attend meetings to participate; results were provided online for real-time feedback.

Buffalo-Niagara demonstrates that a comprehensive process can be designed using a wide range of valuable tools, each with their own functional value. Together, they served to inform, consult, involve, collaborate with, and empower a diverse range of stakeholders to shape a more sustainable future for the region. The engagement process cultivated both human and social capital that could be leveraged for plan implementation. Once the plan was completed, the engagement process continued, especially with the CPS and Champions for Change programs.

The Citizen Planning School

CPS was designed to cultivate the capacity and collective will of the region’s diverse residents to advance the vision, values, goals, and strategies of the sustainable regional plan. In 2014 and 2015, two sets of listening sessions and workshops were held in which leaders from various sectors spoke in panels with interactive Q and A, followed by interactive, capacity-building workshops designed to “teach the plan” and support its implementation. To date, the listening sessions and workshops have engaged over 300 citizens, and it is intended to continue going forward. In both years of the program, CPS also included Champions for Change, an intensive leadership development and project-based technical support program for residents leading initiatives related to IRF goals. Focus groups and interviews with participants held in the spring and summer of 2016 revealed that these capacity-building programs have cultivated human and social capital in four main ways.

Firstly, the participants reported that they appreciated learning new content knowledge about regional trends, challenges, and emerging solutions. Many found the panel presentations and discussions to be highly informative, both from the contributions of the presenters themselves and by the highly engaged, experienced audience. Two participants noted that the interactive quizzes used during the listening sessions were helpful, in that they reinforced what they had just learned. Several more reported that they found it very helpful that YouTube videos of presentations and working group reports were available online. Not only did these resources reinforce their learning, they were also available to share with others in their networks and with public officials. Furthermore, although the website resources were classified only for their function of “inform,” at least two focus group participants suggested that the Mapping Metrics tools were empowering for them; access to these powerful tools enabled them to be more effective in their advocacy efforts.

Secondly, participants in the Champions for Change program reported that the hands-on workshops and coaching from students, faculty, and peers in the program empowered their efforts in

making changes. Several found that they increased their capacity for program design and project management through the program, including developing proficiency with logic models. By talking their project ideas through with others and translating them into a clear structure, they were able to make meaningful progress. Additionally, the program created an energizing social context with social accountability that motivated personal action and followthrough.

Thirdly, participants in Champions for Change found that their own effectiveness was expanded through access to skills and resources in a broader network. Most directly, participants benefited from the technical assistance provided by students and faculty of CPS, especially with regard to graphic design, social media, research, and GIS, or geographic information system, support. Some were able to access funding from other outside sources through contacts made in the IRF network.

Finally, participants also suggested that CPS was empowering, in that it created a sense of collective will for a shared vision of the future. The story of the past and future presented by the IRF Plan resonated with many of them. Many participants drew inspiration from being part of a visible network of leaders working to improve the wellbeing of the region. Several participants appreciated the geographic and socioeconomic diversity of other participants (panelists and general citizens), as well as the range of perspectives at the table. One participant said that she enjoyed the Poll-Everywhere surveys because it helped her to get a clearer idea of where commonalities existed.

Role of University as Anchor Institution

As the discussion of perspectives previously suggests, for the most part, participants in the CPS found that the program was valuable for the community and personally benefited them. Although most wanted to see the program continue, many expressed their skepticism that the program would be carried into the future and wondered what would actually happen with the implementation of the plan. A recurring theme among participants was the idea that the University at Buffalo (UB) is a major driver of the regional economy and had contributed significantly to the recent surge in downtown reinvestment, especially with the new Buffalo Niagara Medical Campus. With this acknowledgment, many participants named a significant concern about emerging patterns of gentrification. As one Champion for Change noted, “there are a lot of buildings being built, but they aren’t building people.” Her immediate project for Champions for Change was to develop a business model for a whole human-centered economic empowerment program, but her larger motivation for participating was to keep apprised to the developments happening in the city and to hold leaders accountable to just, equitable development. Several other participants shared her concern that new jobs were not going to the people who had lived there. They believed that the CPS was one of the ways the university had been positively contributing to this challenge and urged that UB fulfill its responsibilities as an anchor institution in the area. The general CPS programming helped participants understand current trends and key players—essential to active citizen engagement. Most participants were impressed by the diversity of those in attendance at events, and one participant underscored that the convening power of UB was a key strength of CPS and IRF in building civic networks and social capital. The Champions for Change program helped build individual capacity that could be translated in many areas. However, many of the participants were concerned about the lack of updates they had about the plan, and many equated the IRF network with the university, in general, and the School of Architecture and Planning, in particular.

Implementation Phase: Successes and Challenges

Although focus groups revealed uncertainty among citizen planners about the progression of the plan's implementation and opportunities for their ongoing involvement, the perception that UB in general and its School of Architecture and Planning and UB Regional Institute (UBRI) would be key players in regional development was consistent. UBRI expanded its capacity for innovation in civic engagement and infrastructure in the course of the SCI planning process, but engagement activities require staff support and other funding. UBRI has succeeded in including funding for such engagement activities in grants from other projects, such as the Cleaner, Greener Communities Program with the New York State Energy, Research, and Development Authority and the Niagara Street Now streetscape redesign initiative. However, without sustained funding, it will be difficult to support ongoing civic infrastructure programming, like the CPS and its Champions for Change program, or even to keep track of and promote ongoing civic engagement opportunities related to advancing the regional plan that have been advanced by partners.

Concerns about the sustainability of regional civic infrastructure notwithstanding, it appears that 1RF laid a strong foundation for collaborative action toward a common vision, goals, and strategies. Having cultivated such a diverse range of informed, connected, and capable stakeholders, the civic engagement process established a foundation for collaborative action to forward the plan's vision of a sustainable region. In practical terms, this includes commitments from the region's MPO—Greater Buffalo Niagara Regional Transportation Council—both counties, the region's two major cities, the regional chamber of commerce, large nonprofits, anchor institutions, and university centers to implement the plan both collaboratively and within their individual organizational powers and authorities. As an example of this integration, the regional chamber of commerce now employs 1RF's performance measures in its selection of priority projects to promote in its state and federal advocacy work. Collective capacity, coupled with the SCI Preferred Sustainability Status designation, supported the submission of at least 15 collaborative grant applications in 2015 to implement elements of the plan (including a successful U.S. Department of Transportation grant to study opportunities for transit-oriented development).

Conclusions of Case Study

The 1RF case study reveals the capacity of regions to develop a comprehensive, multifunctional, multiyear, civic engagement process that meaningfully engages geographically, socioeconomically, and culturally diverse members of the regional community. Not only did 1RF's civic engagement process lead to a more informed, broadly supported regional plan, it also built human and social capital that will support the collective action required to realize the plan's vision.

A key strength of the 1RF process was the way it leveraged existing civic infrastructure. From the outset, 1RF leveraged existing municipal plans in the region, recognizing that tremendous human, social, and political capital had already been invested in these plans through existing civic infrastructure. Moreover, 1RF leveraged the strengths of UB as an anchor institution—particularly, the convening power and capacity-building strengths of the UB School of Architecture and Planning and UBRI. The case study also revealed the vulnerability of new civic infrastructure programs to a lack of ongoing funding.

Overarching Discussion and Conclusions

In review, this two-part study reveals the significance of the SCI's approach to investments in civic engagement from historical and practical perspectives.

From a historical perspective, SCI works to overcome the social inequality, segregation, and erosion of civic infrastructure that urban renewal-era regional planning causes. Although contemporary planning often debates the merits of top-down versus bottom-up planning, SCI integrates these processes and emphasizes the kind of holistic, comprehensive approach to regional planning. True to the foundations of regional planning, SCI leveraged existing civic infrastructure to more efficiently design context-appropriate, equitable infrastructure solutions, as reflected by the transportation corridor projects in Minneapolis, Denver, and Seattle. SCI grantees also leveraged the convening power and capacity-building strengths of local universities and other anchor institutions. Furthermore, SCI worked to advance regional equity by providing funding and technical support for grantees to engage marginalized communities in comprehensive civic engagement processes to support equitable, sustainable communities of opportunity.

From a practical perspective, the review of SCI regional grantees' civic engagement activities shows that SCI investments led to the implementation of innovative, holistic, multifunctional, and multi-year civic engagement processes that leveraged and strengthened existing civic infrastructure. The study revealed that even informing, consulting, and involving have their place in a comprehensively designed engagement process. Regional grantees employed innovative practices that expanded the equity and effectiveness of these three vital functions. For instance, meetings in a box, placemats with surveys, and interactive web-based activities enabled geographically, culturally, and socioeconomically diverse stakeholders to participate (and even network in some cases) without having to travel to a public meeting. Large public meetings were transformed through Poll-Everywhere technology and breakout interactive activities to enable more meaningful involvement, dialogue, and deliberation. Moreover, innovative activities were used to collaborate and empower—building the human, social, political, and cultural capital required to advance equitable, sustainable regions of opportunity. Speaker series, interactive workshops, working groups, leadership academies, and capacity-building grants all cultivated the capacity, connections, and collective will needed to lead change.

The study also revealed important challenges with regard to sustaining civic infrastructure, as well as designing and assessing the quality and effectiveness of civic engagement activities.

Challenges of Sustaining Civic Infrastructure

Sustained civic engagement is vital for regional plan implementation, yet most of the civic engagement activities we studied only occurred in the planning phase. When civic engagement activities did persist into the implementation phase, they were typically in areas where federal investments leveraged the strength of existing civic infrastructure, including community-based organizations, anchor institutions, philanthropic foundations, and MPOs. In metropolitan regions where strong community-based organizations already exist (for example, Boston, Baltimore, Denver, Minneapolis, and Seattle), SCI funds could be used to leverage these community assets to advance inclusive, responsive community engagement processes. SCI investments in Together North Jersey and IRF developed civic engagement processes that continued into the implementation phase by leveraging

local universities with a history of regional leadership. Even with these existing regional strengths, the results show that it is difficult to sustain regional equity networks, citizen planning academies, and other capacity-building civic infrastructure beyond the planning phase.

These findings present some dilemmas for future federal involvement in regional planning. Given the challenge that grantees had in sustaining civic engagement activities beyond the planning phase, should future federal investments provide ongoing support for engagement in the implementation phase? Because the regions that were most successful in sustaining engagement in the implementation phase were those that already had strong civic infrastructure, should federal funds be focused in regions with existing community capacity? On the contrary, should federal investments be used to build civic infrastructure in areas where it is weak to build a stronger foundation for future regional planning? The first two rounds of funding prioritized regions with strong, existing civic infrastructure—only regions that could demonstrate commitment and capacity for broad collaboration were considered. This strategy generated positive outcomes. Leveraging existing regional capacity expanded the impacts of federal funds, not only for the regions themselves, but also by developing a broader set of innovative civic engagement tools that can be shared more generally. Ideally, ongoing capacity building should be available, and funds should be used to build capacity for equitable development in all regions. However, given the interest in showcasing the feasibility of equitable, sustainable development where funds are limited, SCI's design strategy of bolstering communities with demonstrated commitments to equity and pre-existing civic infrastructure appears to be an efficient and effective strategy.

Challenges in Assessing the Quality of Civic Engagement Activities

The study also revealed challenges and opportunities in the development of frameworks to support the design, reporting, and evaluation of effective civic engagement processes in regional planning.

First, it is important to note that this study was limited to information that was voluntarily posted on public websites by regional grantees or required by HUD in reporting. Grantees were not required to systematically submit comprehensive civic engagement plans or reports on the effectiveness in implementation of those plans. This is somewhat surprising given that: (1) the 2011 notice of funding availability from HUD required that 10 percent of the budget be invested in engaging marginalized communities in participatory processes, and (2) grantees were provided with checklists and guidelines for equitable and effective civic engagement process design, including the IAP2 spectrum of public participation. Despite this foundation, reporting was highly inconsistent, especially around processes that advanced equity.

It is possible that attempts to address social and racial equity occurred but were not well publicized on websites. In the future, we recommend that all SCI grantees submit a comprehensive plan for civic engagement with specific, measurable, achievable, and relevant objectives informed by a standard design or evaluation framework for effective and equitable civic engagement in regional planning. In final reporting, grantees should submit a review of their effectiveness in achieving these objectives.

In considering the structure of a standard design or evaluation framework, we recommend building on the methodological approach in this study. Evaluating regional civic engagement activities based on the multiple functions they serve was helpful in understanding nuanced approaches and innovation among grantees. For example, reviewing the inventory of IRF strategies presented in

exhibit 8 makes it clear that the region took a comprehensive approach that served many important functions. If such a table were completed at the outset of a planning process, planners could easily see which functions were well served and where gaps could be filled. The focus on developing a functional inventory, rather than an assessment based on a scale of power distribution between the state and the citizens, is a clear methodological advantage for evaluation of civic engagement in a regional planning context with multiple decisionmaking agencies and diverse communities.

Although the functional codes used in this study are a step in the right direction, areas for improvement still exist. The codes for “inform, consult, and involve” were generally reliable and effective. The codes pertaining to capacity building for collective action for equitable and sustainable regions (collaborate and empower) posed methodological challenges. In the future, we recommend that planners and researchers consider the community capitals framework employed by Mandarano (2015) in her study of citizen planning academies to evaluate the potential of activities to build community capacity in the form of human, social, political, and cultural capital (direct potential outcomes of activities), if not also built and natural capital (indirect potential outcomes in some activities, and direct outcomes of some capacity-building implementation grants). Engagement plans should also be evaluated on the extent to which they strengthen civic infrastructure and advance equity. With regard to equity, activities should be evaluated on how they: (1) engage and empower marginalized communities in the process, and (2) build the capacity of diverse stakeholders to understand and address substantive and structural barriers to equity of opportunity in the region.

In closing, this study finds that the SCI’s approach to civic engagement and equity in regional planning represents a historically significant development in the evolution of regional planning theory and practice. It demonstrates that the federal government can play a vital role in integrating expert and local knowledge, top-down and bottom-up planning processes, and investments in civic infrastructure, coupled with infrastructure for transportation, housing, and environmental protection. In the future, planning for comprehensive, equitable, and regional civic engagement will be strengthened by the innovative practices demonstrated through these grantees, as well as enhanced frameworks for design and evaluation of civic engagement processes that inform, consult, and involve diverse stakeholders in ways that build their capacity to collaboratively build equitable and sustainable regions of opportunity.

Acknowledgments

The authors acknowledge members of the University at Buffalo (UB) student research team from END 473, URP 574, and ARC589 Spring 2016. They particularly thank Alexandra Nicosisa-Kopp and Camile Brown for their support in conducting indepth interviews with Champions for Change in the summer of 2016 and acknowledge the outstanding leadership of Madelaine Britt and Sarah Eisenstark during the semester. This collective effort would not have been possible without the contributions of Jesse Barry, Allan Chan, Christian Gibson, Amanda Mumford, Long Nguyen, and Garret Wykoff. The authors also thank Robert Shibley, Dean of the UB School of Architecture and Planning, for his support of the research project and Bart Roberts, Associate Director of Research and Faculty Engagement at UB’s Regional Institute, for providing extensive background on the One Region Forward civic engagement process. They also thank the 20 Citizen Planning School participants who shared their experiences through focus groups and the 10 Champions for Change who shared their experiences in focused interviews.

Authors

Elizabeth A. Walsh is visiting assistant professor at the University at Buffalo in the Urban and Regional Planning Department.

William J. Becker is an assistant project manager at Sinatra & Company Real Estate.

Alexandra Judelsohn is a research associate at the Food Systems Planning and Healthy Communities Lab at the University at Buffalo.

Enjoli Hall is an associate planner at the University at Buffalo Regional Institute.

References

- Arnstein, Sherry R. 1969. "A Ladder of Citizen Participation," *Journal of the American Institute of Planners* 35 (4): 216–244.
- Beierle, Thomas C., and David M. Konisky. 2001. "What Are We Gaining From Stakeholder Involvement? Observations From Environmental Planning in the Great Lakes," *Environment and Planning C-Government and Policy* 19 (4): 515–527. <https://doi.org/10.1068/c5s>.
- Bergstrom, Danielle, Kalima Rose, Jillian Olinger, and Kip Holley. 2012. *The Community Engagement Guide for Sustainable Communities*. Washington, DC: U.S. Department of Housing and Urban Development, Sustainable Communities Initiative. [http://www.policylink.org/sites/default/files/COMMUNITYENGAGEMENTGUIDE_LY_FINAL %281%29.pdf](http://www.policylink.org/sites/default/files/COMMUNITYENGAGEMENTGUIDE_LY_FINAL%281%29.pdf).
- Bullard, Robert Doyle. 2007. *Growing Smarter: Achieving Livable Communities, Environmental Justice, and Regional Equity*. Cambridge, MA: MIT Press.
- Burby, Raymond J. 2003. "Making Plans That Matter: Citizen Involvement and Government Action," *Journal of the American Planning Association* 69 (1): 33–49. <https://doi.org/10.1080/01944360308976292>.
- Chapple, Karen, and Elizabeth Mattiuzzi. 2013. *Planting the Seeds for a Sustainable Future: HUD's Sustainable Communities Initiative Regional Planning Grant Program*. Berkeley, CA: Center for Community Innovation; University of California, Berkeley. https://huduser.gov/portal/sites/default/files/pdf/2013-06_UCBerkeley_Chapple-and-Mattiuzzi_Planting-Seeds-for-a-Sust-Future.pdf.
- Checkoway, Barry. 1994. "Paul Davidoff and Advocacy Planning in Retrospect," *Journal of the American Planning Association* 60 (2): 139–142.
- Davidoff, Paul. 2007. "Advocacy and Pluralism in Planning." In *The City Reader*, edited by Richard T. LeGates and Frederic Stout. New York: Routledge: 435–445.
- . 1965. "Advocacy and Pluralism in Planning," *Journal of the American Institute of Planners* 31 (4): 331–338. DOI: 10.1080/01944366508978187.
- Forester, John F. 1999. *The Deliberative Practitioner: Encouraging Participatory Planning Processes*. Illustrated edition. Cambridge, MA: The MIT Press.

Healey, Patsy. 1992. "Planning Through Debate: The Communicative Turn in Planning Theory," *The Town Planning Review* 63 (2): 143–162.

Innes, Judith E., and David E. Booher. 2010. *Planning With Complexity: An Introduction to Collaborative Rationality for Public Policy*. Hoboken, NJ: Taylor & Francis.

Innes, Judith E., David E. Booher, and Sarah Di Vittorio. 2011. "Strategies for Megaregion Governance: Collaborative Dialogue, Networks, and Self-Organization," *Journal of the American Planning Association* 77 (1): 55–67. <https://doi.org/10.1080/01944363.2011.533640>.

Innes, Judith E., and Jane Rongerude. 2013. "Civic Networks for Sustainable Regions—Innovative Practices and Emergent Theory," *Planning Theory & Practice* 14 (1): 75–100. <https://doi.org/10.1080/014649357.2012.754487>.

Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Random House.

Kania, John, and Mark Kramer. 2013. "Embracing Emergence: How Collective Impact Addresses Complexity," *Stanford Social Innovation Review*. http://www.ssireview.org/blog/entry/embracing_emergence_how_collective_impact_addresses_complexity.

———. 2011. "Collective Impact," *Stanford Social Innovation Review*. https://ssir.org/articles/entry/collective_impact.

Larsen, Larissa, Sharon Harlen, Bob Bolin, Edward Hackett, Diane Hope, Andrew Kirby, Amy Nelson, Tom Rex, and Shephard Wolf. 2004. "Bonding and Bridging: Understanding the Relationship Between Social Capital and Civic Action," *Journal of Planning Education and Research* 24 (1): 64–77.

Mandarano, Lynn. 2015. "Civic Engagement Capacity Building: An Assessment of the Citizen Planning Academy Model of Public Outreach and Education," *Journal of Planning Education and Research* 35 (2): 174–187. <https://doi.org/10.1177/0739456X14566869>.

Meadows, Donella H. 1997. "Places To Intervene in a System," *Whole Earth*.

Meller, Helen. 2005. *Patrick Geddes: Social Evolutionist and City Planner*. New York: Routledge.

Parr, John. 2008. "Civic Infrastructure: A New Approach to Improving Community Life," *National Civic Review* (summer). DOI: 10.1002/ncr210.

———. 1993. "Civic Infrastructure: A New Approach to Improving Community Life," *National Civic Review* 82 (2): 93–100. DOI: 10.1002/ncr.4100820203.

Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Rittel, Horst W.J., and Melvin M. Webber. 1973. "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 (2): 155–169.

Snyder, Ken. 2013. "Mapping Tools to Process." PowerPoint slides presented at the HUD Sustainable Communities Initiative 2013 Grantee Convening, Washington, DC. <http://scllearningnetwork.org/sites/default/files/mappingtoolstoprocess.pdf>.

The Impacts of the Sustainable Communities Initiative Regional Planning Grants on Planning and Equity in Three Metropolitan Regions

Juan Sebastian Arias
Sara Draper-Zivetz
Amy Martin
University of California, Berkeley

Abstract

This article explores the planning process dynamics and outcomes of the U.S. Department of Housing and Urban Development's (HUD's) Sustainable Communities Initiative (SCI) in three metropolitan regions: the San Francisco Bay Area, the Puget Sound region in Washington State, and the Minneapolis-Saint Paul, Minnesota (Twin Cities) region. Approved by Congress in 2010 and renewed in 2011 for \$250 million in appropriated funding, SCI was a grant program formed out of the Partnership for Sustainable Communities, an interagency collaboration among HUD, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency. In this article, we assess the impact of the SCI grants on planning processes, specifically, the extent to which SCI fostered greater collaboration and shared definitions of equity. Through indepth interviews with more than 50 SCI participants across the three regions, this study finds that the grants had both short- and long-term impacts in (1) breaking down barriers to coordination and collaboration across jurisdictions and planning sectors, (2) promoting a greater attention to and understanding of issues of social equity, and (3) institutionalizing equitable planning practices. The impacts were uneven across regions, however; the project in the Twin Cities was by far the most effective. The findings of this research have implications for HUD and other agencies as they select grantees with which to collaborate in the future.

Introduction

In 2010, the U.S. Congress appropriated \$250 million for the Sustainable Communities Initiative (SCI), an interagency collaboration among the U.S. Department of Housing and Urban Development (HUD), the U.S. Department of Transportation, and the U.S. Environmental Protection Agency. The initiative was intended “to improve regional and local planning efforts that integrate housing and transportation decisions, and increase the capacity to improve land use and zoning to support market investments that support sustainable communities.” This report analyzes the structure, processes, and impacts of SCI Regional Planning Grants that were disbursed in three regions: the San Francisco Bay Area in California, the Puget Sound region in Washington State, and the Twin Cities (Minneapolis and St. Paul) region in Minnesota. This empirical research explores outcomes related to equity and collaboration and the lasting impact of SCI on regional planning processes.

As researchers, we sought to understand whether and how SCI improved cross-sector collaboration and increased alignment of regional goals and strategies. Through indepth interviews with several dozen participating organizations and entities across the three metropolitan regions, we explored short and long-term impacts of the SCI grants in (1) breaking down barriers to coordination and collaboration across jurisdictions and planning sectors, (2) promoting a greater attention to and understanding of social equity, and (3) institutionalizing equitable planning practices. Interviewees included regional planners, municipal officials, and members of community-based organizations (CBOs). Interviews explored a range of topics, from specific organizations’ roles within their SCI regional consortium to broader reflections on how the SCI grant impacted regional planning culture.

Given our location in the Bay Area, we selected the Bay Area as one of three case study sites. Then, to compare our findings and test our hypotheses explaining outcomes in the Bay Area, we selected the Puget Sound and Twin Cities regions due to their comparable levels of economic inequality, market strength, and high nonprofit capacity. Holding these regional characteristics constant across three case study regions enabled greater comparison and a deeper inquiry into the nuance of process and outcomes in each of the three regions.

We begin our article by offering a high-level overview of relevant academic literature on the themes of collaboration and equity in regional planning efforts. Our findings are then presented as three independent case studies. For each case study, we provide background on the regional effort, information about stakeholder engagement, an analysis of jurisdictional dynamics, our findings surrounding the degree to which the region experienced a lasting impact as a result of the grant, and conclusions. We end with a final comparison of thematic findings and implications for equity, stakeholder engagement, and jurisdictional dynamics. We also suggest some areas for future research to further unpack the themes we highlight.

Literature Review

Several assumptions underlay the SCI program: namely, the need to address social equity and inclusion at the regional scale and the need to integrate existing planning silos. This literature review examines decades of academic debate related to both the purpose and execution of the SCI grant program.

A core premise of SCI was that U.S. regional planning suffers from *siloeing*, or the separation of certain key jurisdictions, planning issues, or institutions to a point of dysfunction. This has become conventional wisdom among politicians, academics, planners, and thought leaders alike. Prominent siloeing scholar and former Minnesota legislator Myron Orfield has produced several widely read works on the frustrated dynamics of jurisdictionally siloeed regions, which he terms “metropolitics.” Orfield (1999: 43) pointed out the tension between different levels of government: “central control versus local autonomy in federated systems is the central political dilemma in American history.”

A second primary goal of SCI programming was to enhance consideration of social equity within regional planning processes. The logic underlying SCI—enabling a more inclusive and equitable regional planning table—was to both improve planning outcomes and ensure decisions were responsibly influenced by those bearing the eventual impacts. Kania and Kramer (2011) explored this “table setting,” arguing that alignment of goals and definitions is instrumental to the success of addressing complex social ills within a diverse group of actors.

This alignment occurs through an intentional process of continuous communication, shared metrics, and mutually reinforcing activities known in the field as “collective impact.” Mathur, Price, and Austin (2008) further stressed an “ethical requirement” for planners to value democratic participation as a main engagement method.

In a parallel thread of research, Fung (2006) echoed the importance of adding “community” seats at the table, given the planning field’s traditional domination by an “expert” class. Planning often occurs in expert isolation, yet a stronger connection by planners to the people and places they serve results in more successful outcomes (Manzo and Perkins, 2006). This research supports the SCI goal of making regional planning processes more inclusive.

Mathur’s ethical requirement for broader stakeholder inclusion is not without its critics, however. Seemingly engaged stakeholder participation may serve only to deflect attention from what is an otherwise top-down decisionmaking process (Kaza, 2006). Moreover, a seat at the table for impacted community members does not automatically result in a socially preferable outcome (Kaza, 2006; Lester and Reckhow, 2013).

Theorists have also developed metrics for evaluating the success of SCI silo-busting efforts. Dichotomizing outcomes into tangible and intangible benefits may help define and discern what initially seems immeasurable. Intangible benefits, such as increased trust or stronger relationships, can produce indirect effects on planning efforts. By contrast, tangible outcomes could include the adoption of new policies or plans, legislation, or implementation strategies (Innes and Booher, 1999). Examining both tangible and intangible benefits of SCI is necessary to produce broadly applicable best practices.

Leadership and incentive-based explanations for successful cross-sector collaboration offer a more pragmatic lens for understanding SCI. Strong leadership that defines structures and governance mechanisms early in a collaborative process, for example, is key (Crosby and Bryson, 2010). For the SCI specifically, collaboration may be most successful when consortium members “have a reason to stay at the table and negotiate” (Frick et al., 2015).

The academic literature reviewed here foreshadows collaboration and tensions expressed by interview subjects. Concepts of desiloing, strong leadership figures, naïve process expectations, and the ethical requirement all appear and are discussed. Our examination of SCI in three regions serves to both ground-truth existing academic discourse and validate the importance of the regional planning conversation.

Regional Case Studies

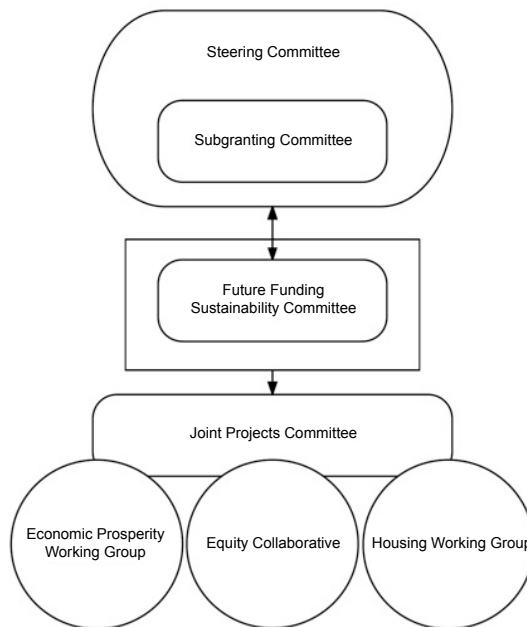
The following analysis discusses four themes salient across case study sites: (1) the nature and significance of equity outcomes from the SCI process, (2) the nature and significance of stakeholder engagement in the SCI process, (3) the jurisdictional dynamics at play in the SCI process, and (4) the lasting impacts of the SCI process on regional planning culture.

Case Study: The San Francisco Bay Area

The San Francisco Bay Area’s SCI grant funded the development of the Regional Prosperity Plan (RPP), led by the Metropolitan Transportation Commission (MTC), which, in partnership with the Association of Bay Area Governments, is the metropolitan planning organization (MPO) for the nine-county Bay Area region. Exhibit 1 illustrates the organizational structure of the San Francisco Bay Area’s RPP Consortium.

Exhibit 1

Organizational Structure of the San Francisco Bay Area Regional Prosperity Plan Consortium



The RPP identified four main focus areas: (1) limited opportunities for low-wage workers, (2) regional housing unaffordability, (3) housing and jobs spatial mismatch, and (4) gentrification and displacement pressures. To address these needs, the RPP developed an Economic Prosperity Strategy to expand opportunities for low- and moderate-income individuals. The RPP also focused on funding community-based pilot projects intended to address economic and housing disparities.

Regional Approaches to Equity

The RPP saw mixed results in its effort to integrate equity considerations in regional planning. At a high level, MTC's embrace of equity was perceived to be superficial and inadequate. However, the evolution of the RPP's governance did create a space for more targeted attention to equity related issues.

In the other two regions' SCI governance structures, a focus on equity materialized early on in the process. In the Bay Area, the consortium added a separate equity-focused working group, named the Equity Collaborative, later in the process. Even once the dedicated working group was created, however, its exact charge was unclear. The Equity Collaborative was seen as somewhat effective; according to a Bay Area CBO worker and Equity Collaborative member, the group "was [funding] really cool and interesting stuff, but it was really hard to tell what it all added up to." A CBO executive from the Bay Area also raised concerns about the group's lack of integration with other parts of the regional effort: "Equity did kind of get pigeon-holed a little bit into the equity work group... equity advocates got kind of siloed in there."

On the other hand, some saw value in this siloed approach, claiming it created a safe space for more meaningful equity conversations to occur, instead of being relegated to the margins of other working groups. An executive of a large nonprofit shared, "The strategy of building up equity-centered space is helpful, because people feel they can come into that space and talk about what their communities truly need, what they're hearing, more openly." In this sense, a separate space was key to legitimizing and elevating equity issues in conventional regional planning.

Still, the working group did not help establish a shared regional definition of "equity." Much of the conversation around regional equity was focused on residential displacement and low-wage work conditions, with race and ethnicity largely left out. Although stakeholders in other regions felt that racial issues were more directly confronted, this focus was absent in the Bay Area.

Stakeholder Engagement

Distrust, both between small and large CBOs and between local and regional governments, characterized much of the Bay Area project. These dynamics influenced the way stakeholders were engaged, especially among businesses with political and financial capital to support regional efforts and community members with the lived experience to inform and steer regional priorities.

Business engagement. Although in other regions business coalitions and chambers of commerce stepped up to serve as a business liaison to the SCI process, these stakeholder groups in the Bay Area were ultimately less involved. The Bay Area Council (BAC), a local business-sponsored advocacy group, was initially engaged in developing a regional economic development strategy through the Economic Prosperity work group. However, their involvement ended over political

disagreement with the scope of the work group's effort. Unsurprisingly, RPP consortium members (particularly CBOs) later expressed frustration with the local business community's lack of willingness to collaborate.

Following this rift, however, the BAC released a separate regional economic development report supported by MTC. The release of the report signaled a deeper engagement of the business community in regional planning discussions, but also cemented the divisions between BAC and the RPP consortium, and established parallel visions for regional economic development.

Community engagement. In contrast to the Twin Cities and to the Puget Sound Region, the Bay Area did not initially build in mechanisms to ensure community voices were included in the governance structure.

The RPP eventually addressed this issue by directly resourcing participation for low-capacity stakeholders through stipends to working group leadership. The RPP also had small grants funds that did help engage smaller community groups otherwise excluded from regional planning dialogues. However, these efforts did not add up to a comprehensive community engagement strategy, especially as compared with other case study regions. As a result, grantmaking decisions were regarded with skepticism; SCI funds were seen as yet another funding stream for the higher capacity organizations that already had an established voice. Ultimately, the SCI process did not shift tensions between large and small advocacy and community groups in the region.

In spite of these shortcomings, the RPP did produce some successes in community engagement. For example, community organizations reported stronger relationships among their peers. Some also gained a greater understanding of regional political and power structures as a result of their participation in the RPP consortium, which resulted in shifts in their organizing and advocacy strategies. In some instances, CBO-led projects have continued beyond SCI, signifying lasting changes in the capacity of grassroots groups.

Jurisdictional Dynamics

In some cases, unlikely partnerships emerged across and among jurisdictions. However, regional coordination was still a challenge due to competing policy priorities and interest among local and regional governing bodies. A CBO employee shared an example: "in the inner core, we're talking about more bus lines, more service on existing bus routes, connecting last mile connections between transit hubs and job centers," whereas in more outlying counties, the conversation is "about Uber, and shuttle apps and rideshare mobile apps that would help with rideshares, those kinds of strategies which are much more diffuse. We tried to hear those ideas and incorporate them but they're different."

In spite of these competing priorities, sharing and learning across municipalities did occur. For example, Santa Clara and Marin County, two counties with little historic interaction, shared and adapted a workforce strategy from SCI participants in Palo Alto for Marin communities. Similarly, urban jurisdictions provided some suburbs that have lower planning capacity with new technical tools and insights to address issues, such as displacement.

The greatest identified challenge to regional collaboration, however, was the lack of local incentive to act in the regional interest. A Bay Area nonprofit employee described these political dynamics.

Local decision-makers don't want their local decisions conditioned based on regional priorities. There are no political incentives for people to act at a regional level. They're elected by local populations. They get campaign donations by people who are interested in local issues. ... And they will put on this magical regional hat and we expect them, without sufficient political pressure, or without legal pressure or whatever, to act in a regional self-interest.

Another CBO leader summarized the same sentiment: "We can have all these regional aspirations but parochialism is ripe in this region."

Lasting Impacts and Institutionalization

Several community group representatives shared their distrust of the regional MPO. Many felt MTC should not have been leading the charge if the grant's goal was to advance regional equity. This skepticism about the regional agency suggests that MTC had ample room for growth in the institutionalization of equity concerns in its policies and programs.

Still, a few interviewees did report seeing the MPO's perspective shift on equity. At the very least, the grant and its related processes put concepts of equity on the radar of MTC. As one regional agency employee described, "it allowed for equity to become an increasing core component of what agencies are either talking about or are going to be implementing."

The extent to which the SCI program contributed to more formal, lasting changes in MTC practice and policy is less clear, however. Although considerations of equity issues like displacement have received greater attention among the agency's staff, similar shifts in perspective had not yet reached the agency's leadership. Several years after grant ended, MTC commissioners, for example, were still not convinced displacement was an issue to address at the regional scale. By this account, a failure to shift the perspective of MTC commissioners led to little change in MTC practice.

On the other hand, several CBOs reported having a more direct relationship with MTC and better understanding of how they can affect change within the agency after participating in SCI. One CBO employee elaborated on this success.

So, now we're in a moment where many more of the local equity groups are aware of the regional agencies ... we are aware of what they do. We are aware of who they are. We are aware of where they're located. We understand their programs, their policies, etc. and so that is shifting and so as we understand that then we're able to do a better job sharing that kind of information with the folks who are impacted by the policies and decisions of the regional agencies.

Still, as compared with other case studies, the Bay Area did not institutionalize equity priorities to a great extent within its regional planning agency.

Conclusions From the San Francisco Bay Area Region

Historic dynamics and challenges in the Bay Area planning were not significantly disrupted by the SCI grant or the RPP. The RPP’s initial governance structure replicated traditional power structures and areas of focus, which exacerbated—rather than shifted—regional tensions among stakeholders. The Bay Area was able to course correct on some of its structural challenges relatively early on in the process, but without enough purpose or clarity to achieve more sweeping change. Nonetheless, some incremental progress was achieved, particularly around a greater familiarity with equity issues and more communication among jurisdictions and stakeholders. Much of what did begin to shift could take several years before significant progress is observable, and future assessments of these dynamics would be useful to testing this theory.

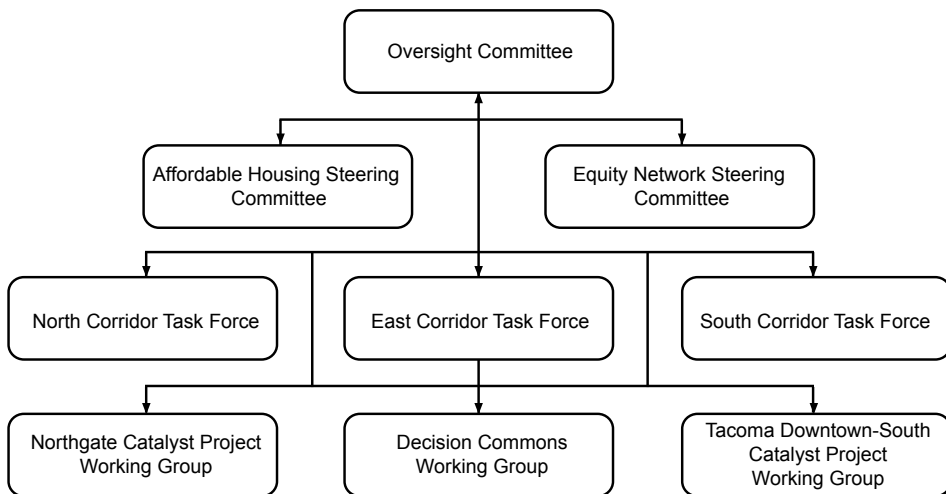
Case Study: The Puget Sound Region

The Puget Sound region’s SCI grant program, called Growing Transit Communities (GTC), was focused on integrating regional transportation and land use planning. The region’s MPO, Puget Sound Regional Council (PSRC), was the lead consortium member, host organization, and staffer for GTC. The grant was catalyzed by conversations between the Urban Land Institute and PSRC. Exhibit 2 illustrates the organizational structure of the Puget Sound region’s GTC Consortium.

The central goal of GTC was to “overcome key implementation challenges of VISION 2040.” VISION 2040, the region’s growth strategy, is based primarily on a \$15 billion transit expansion plan intended to help the region grow in an environmentally and economically sustainable manner.

Exhibit 2

Organizational Structure of the Puget Sound Regional Growing Transit Communities Consortium



Regional Approaches to Equity

We observed mixed impressions of PSRC's focus on equity. On one hand, the MPO gained a broader understanding of equity by leading and participating in the GTC. PSRC staff revealed this sentiment: "We had an equity training...here at the agency today. I think it's...an outcome. So, certainly, a reorientation internally that grew out of that, that interaction outside of our usual silos."

Other participants, however, disagreed that concerns of equity genuinely penetrated PSRC's organizational ethos, claiming that the agency's tight control over the GTC process produced expected status quo outcomes. A Puget Sound region CBO worker said the following.

For these kinds of big planning initiatives, how you set it up will almost always dictate what you end up with. So, if you set up a process whereby the information and the analysis is coming from highly-technical specialists, they have the power—they will have the power in how you define the problem and how you define the solution at the end of the day ... to really put equity at the center of this, required a very different approach than PSRC took.

In terms of the GTC governance structure, a focus on equity materialized relatively early on, a reality largely attributed to the early inclusion of CBOs in the process. Participants felt that the PSRC wasn't merely "checking boxes" in assembling the HUD SCI consortium, but bringing greater intentionality to stakeholder engagement from the beginning. This intentionality included establishing a separate body charged with an equity directive. The grassroots organizations and CBOs involved in the grant application process formed the Regional Equity Network (REN), a major subcommittee of the GTC effort. REN's primary role was coordinating the community engagement process through a subgrant program that connected regional and subregional efforts. This effort was widely viewed as a success, in that it resourced community participation and framed how the GTC understood and addressed equity issues.

Additionally, equity issues did appear to be elevated through the SCI process. The GTC prioritized the development of a working definition of equity as an explicit goal. Through the creation of its "Principles of Equitable Development," the REN laid the foundation for a common understanding of equity for GTC participants and other regional actors.

The Principles of Equitable Development defined social equity as follows.

[All] people can attain the resources and opportunities that improve their quality of life and enable them to reach their full potential. Addressing the history of inequities in the systems we work in and their on-going impacts in our communities is a shared responsibility. Social equity also means that those affected by poverty, communities of color, and historically marginalized communities have leadership and influence in decision making processes, planning, and policy-making. Together we can leverage our collective resources to create communities of opportunity.

A REN member reflected on the origination of the definition.

We developed a definition of equity from a community perspective. And that was huge because that definition has become the fallback definition for jurisdictions on equity. ... It gave our region a common definition and understanding. It was amazing to participate in.

A member of the REN framed equity in terms of capturing community benefits for current residents and raising awareness about cultural, residential, and commercial displacement: “We can develop all these wonderful places but if we really don’t see benefits accruing to the people that live there, that’s not what we want to see.” Preventing cultural and commercial displacement and retaining community benefits for long-time residents were addressed more in the Puget Sound region than the other regions examined.

Although it remains unclear whether the region’s efforts to define equity and elevate a conversation around equity issues have seeped into broader planning efforts, these efforts have likely laid the groundwork on which future advocates and planners can build.

Stakeholder Engagement

Business engagement. In the Puget Sound region, small business interests have a history of influencing regional planning. Local ethnic business coalitions worked on transit development initiatives before reengaging in GTC to ensure their displacement concerns were heard. As these stakeholders were previously active, they were able to maintain a more successful engagement throughout SCI than seen in other SCI recipient regions. Puget Sound small businesses may have also succeeded in regional engagement due to the GTC’s focus on transit development, which had clear repercussions for the small business community.

Small business engagement still faced some challenges however. According to one coalition leader, local business owners could not directly engage with planning processes due to lack of capacity, language barriers, and a lack of knowledge about the process. Some were also skeptical of their potential to influence the planning process due to prior challenges with transit initiatives. One community representative described significant commercial displacement having occurred along a light rail construction corridor and felt a lack of higher-level concern for the shuttered establishments. Although PSRC and the REN sponsored small business engagement through small participatory grant awards, the local business community still felt outreach had not been substantial or effective enough.

The project had even less success in stimulating and maintaining engagement of major employers and large business interests. According to interviewees, large business interests provided initial input to inform the SCI process but were less willing to stay continuously engaged. As one regional planner from Seattle summarized, “They’re only willing to engage at a certain level, over a certain period of time. . . . They’re willing to come to a meeting and react to something, and then go away and then come back again when the new thing is done.” Representatives from the Seattle Chamber of Commerce indicated that although the organization had the capacity to provide representation to the process, engagement was not prioritized for them.

Community engagement. The Puget Sound region attempted to bring historically marginalized communities into the planning process through specific mechanisms in the governance structure, built to ensure community voices were included. This concentrated effort of community engagement took shape through the REN, which focused on engaging communities of color and immigrant communities. The REN played a crucial, successful role in organizing community engagement. Part of this success may have resulted from the decision to use an expert facilitator

to equalize power dynamics in the consortium. An REN member described the facilitated process, saying: "...even though there may have been more people at the table from Seattle/King County there was equal attention that was paid to all voices at the table."

Still, these efforts to build institutional mechanisms for community engagement in planning processes faced obstacles. One was the inaccessibility of technical-planning jargon and its mystified processes, which the consortium tried to overcome through specialized training, capacity-building workshops, and peer networking to help stakeholders understand where to influence the process. Attempts to level the playing field for participants in the GTC were well received and may be implemented easily in other regions.

Jurisdictional Dynamics

The SCI program successfully brought together stakeholders from across jurisdictions and issues. Participants lauded PSRC and the SCI process for successful engaging both core cities and suburban jurisdictions. A city employee spoke of the grant's ability to not only spur connections across the region but also to create a place for grantees to connect and learn from one another. Creating this space allowed for important and difficult discussions to take place. A participant from Snohomish County admitted that although "there were some really uncomfortable conversations with people," at the end of the day, they felt their concerns were heard and taken "to heart" by the other government leadership at the table. The same interviewee elaborated: "I think the same was true for Pierce County. So, I think that was the best outcome."

However, the GTC's focus on light rail expansion led to challenges in identifying issues and pursuing strategies that would align with the priorities of *both* core cities and suburban jurisdictions. Not all parts of the region currently benefit from the light rail system, and many are not part of plans for future expansions. Not surprisingly, participants from Seattle felt that the focus on light rail galvanized the entire grant process, whereas those from outlying jurisdictions felt frustrated that the goals of the GTC weren't as locally relevant.

Lasting Impacts and Institutionalization

At one end of the spectrum, PSRC devoted substantial hours and maintained a tight grip on the execution of GTC. One oversight committee member described PSRC as "directly managing the entire process and they kept a really firm hand on it. They managed all those committees and they kept a pretty tight rein on the kind of communication. ... The oversight committees were organized by them and they were very scripted agendas." Some saw this tight control of the process as a highly efficient and effective way to make progress, whereas others felt it drowned out true engagement with a diversity of voices.

Some participants felt PSRC remained relatively unchanged in the aftermath of the GTC process. One interviewee called the affordable housing work accomplished in GTC "spectacular" but lamented that "a lot of this stuff has now gone onto the shelf and is just sitting there and that's unfortunate." The same respondent lamented the lack of capacity that was directed toward GTC issues after the grant's formal conclusion: "What's really needed is for PSRC to have a staff person with capacity to come back to this, all this, and say these are priorities and we're devoting staff people to it."

The Puget Sound region managed to increase the institutionalization of equity into ongoing work, at least according to some interviewees. Establishing a working definition of equity and incorporating it into the GTC's Principles of Equitable Development may represent a step toward broader consideration and implementation of equity in the region. Further, the proposed Regional Equitable Development Initiative, a "revolving loan fund for property acquisition in transit station areas for affordable housing development," represents some institutionalized change within the PSRC. However, little indication of further institutionalization in the agency emerged.

Although the SCI grant might have provoked limited institutional change within PSRC, it may have catalyzed efforts to bring change to local jurisdictions. As one CBO leader described: "cities have comprehensive plans. So, one of the things we're trying to do to institutionalize the efforts of SCI is to get... elements of the regional strategies, particularly the equity elements, to become incorporated into the comprehensive plans and the countywide plans."

Conclusions From the Puget Sound Region

The Puget Sound region managed to produce a shared definition of equity that continues to be used, the core membership of the REN remains active in advancing equity initiatives, and CBOs working on equity issues have formed new alliances to continue to collaborate beyond the life of the SCI grant. Both urban and suburban jurisdictions were engaged in the process, although the GTC faced similar challenges with respect to regional governance experienced in the other case study regions.

Case Study: The Twin Cities

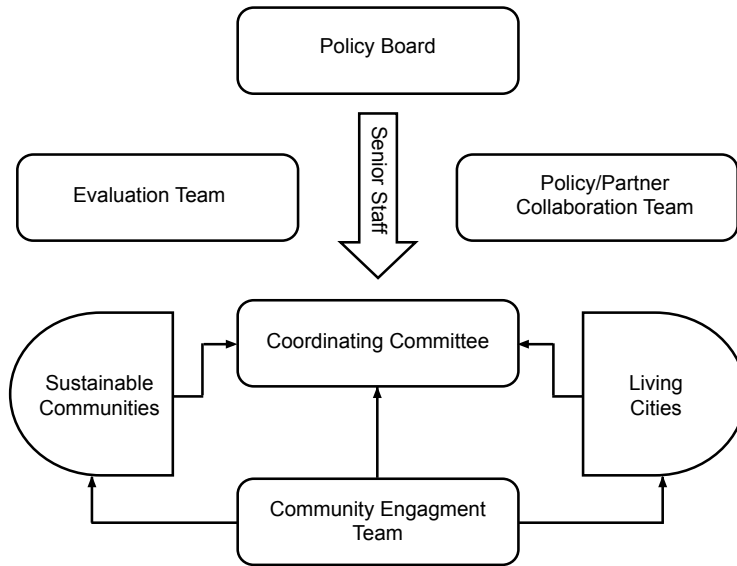
In 2011, the Twin Cities region was awarded an SCI grant known as "Corridors of Opportunity" (CoO), which ran until 2013. The consortium lead for the grant was the Metropolitan Council (Met Council), the seven-county regional government body serving the nearly 3 million residents of Minneapolis, St. Paul, and the entire Twin Cities region. The CoO work "focused on accelerating the buildout of the region's transit system while promoting adjacent development that advances economic vitality and benefits people of all incomes and backgrounds." The grant execution was closely coordinated with Metro Transit, an operating division of Met Council. Exhibit 3 illustrates the organizational structure of the Twin Cities region's CoO Consortium.

In addition to the \$5 million HUD SCI investment, the Twin Cities region also received \$19.1 million in grants and loans from Living Cities' 2010 Integration Initiative. This SCI-concurrent national philanthropic investment provided technical assistance and more funding for implementation in the region.

The CoO was overseen by a policy board, shepherded by a coordinating committee, and distinguished from other regions, to some extent, by a Community Engagement Team (CET), which spearheaded a thorough and multilayered engagement and regranting process via a Community Engagement Steering Committee. This committee consisted of representatives from a number of the Twin Cities CBOs.

Exhibit 3

Organizational Structure of the Minneapolis Corridors of Opportunity Consortium



Regional Approaches to Equity

The CoO was developed and implemented in the Twin Cities against the backdrop of both facilitating and impeding forces. The local political climate was newly supportive of collaboration after decades of competition, especially between St. Paul and Minneapolis. The notion that equity goals were important was fairly universal, although a shared definition of equity and strategy around achieving those goals was more elusive.

The region faced, and continues to face, significant racial disparities and has a history of exclusion of minority voices in public infrastructure decisions and development. These challenges and opportunities shaped the implementation and ultimate impact of the SCI grant; Twin Cities participants embraced a culture of collaboration, and historic exclusion led to a stronger community engagement approach than might otherwise be expected. Specifically, this context meant that equity goals were advanced in the dialogue and action within key institutions but efforts to maintain a shared definition and priorities around an equity agenda are ongoing.

Equity in Structure

A central component of advancing the equity agenda in the Twin Cities was to “bake” equity into the structure of the SCI grant. The approach to decisionmaking and power-sharing amongst the key players—the policy board, CET, and Met Council—would determine whose voices were heard and what outcomes might be advanced.

On receiving the CoO funding, the Met Council, which typically held authority and decisionmaking power in the region, relinquished much of its control to the policy board. The policy board, in turn, devolved much of the decisionmaking around where and how to allocate resources to the CET, which was given \$750,000 of the grant for allocation among local organizations. The CET then went a step further, allocating the majority (\$720,000) of these funds to a Community Engagement Steering Committee, which was empowered to distribute these funds to support local involvement in the planning process. This committee was staffed and led by local CBOs whose “whole purpose was to create a powerful voice for low-income communities and communities of color to secure community benefits for [the] regional transitway system,” according to a Twin Cities CBO worker. Ensuring community voices were heard became a critical component of the structure of the CoO grant. Although many were doubtful about the authenticity of this approach at first, participants in the CoO were ultimately encouraged: “The Policy Board was really nervous about all of this. Are we going to have a final say in your granting process or not? . . . The powers that be were very nervous about this. But to their credit they allowed us to move forward.”

In addition to devolving of funds and decisionmaking to the CET, inclusion of people of color at the senior governance level of the CoO, including in the policy board, was also seen as a positive, equitable step forward. Although in their first year the board was largely a racially homogenous group, this lack of diversity was recognized and ultimately led to the recruitment and inclusion of additional individuals, such as Paul Williams, the African-American Deputy Mayor of St. Paul.

Equity Narratives and Definitions

The structure of the CoO was an important mechanism through which to elevate equity issues, but the degree to which equity issues were confronted in the CoO's work was also key. In the Twin Cities, the initiative supported a robust and nuanced conversation around inequities, despite the lack of a dedicated equity-oriented subcommittee. According to a CoO evaluator, “Equity was a big element of everything from the beginning. The Policy Board, the big group went out of their way to incorporate equity.”

In the Twin Cities, the equity dialogue focused on racial disparities in educational achievement, employment, and other outcomes. As one regional agency employee pointed out, “[The newly appointed Met Council's] principles [mandated actions] to address what is a pretty deep disparity in this region—we are an economically thriving region as a whole but not everyone has been beneficiaries of that. And that's gotten worse over the last 20 years.”

To address these disparities, the idea of promoting shared prosperity was repeatedly referenced among interviewees in the Twin Cities. As a participant from a regional transit agency put it, the consortium “look[ed] at the challenges we faced in shared prosperity, meaning equity in terms of employment, equity in terms of pay, equity in terms of opportunities for business development and business growth.”

Numerous participants agreed that over the course of the grant, general comfort discussing these issues increased, and equity considerations had been ingrained in regional planning dialogue. Producing a broadly shared definition of the term, however, continues to be a challenge. As one Twin Cities municipal official put it: “I don't know that the region is comfortable with a *definition*

[of equity]. Certainly we worked really hard on it, staff and the Policy Board worked on it, and struggled and struggled and struggled. I don't know that we still have something the region would agree to or be able to tell you what it is."

Stakeholder Engagement

Business engagement. Digging into the extent and nature of engagement with stakeholders also reveals some unique aspects of the Twin Cities SCI grant. With respect to the business community, existing regional actors helped set the stage for involvement. The Itasca Project—an employer-led alliance that seeks to address regional economic issues in the region—was active and established before CoO and was already playing an influential role in regional planning. For example, prior to CoO, Itasca members worked to generate political will among regional representatives in the state legislature to override a governor's veto of a transportation spending bill—a bill that ultimately helped finance the very light-rail transit expansion around which the CoO was centered.

While individual major employers and businesses may not have prioritized ongoing engagement, business coalitions and chambers of commerce were, in some cases, able to serve as a liaison to the SCI process on behalf of these interests. In the Twin Cities, the Itasca Project and local chambers of commerce both played this role successfully.

Conflicting narratives emerged on the degree of success with which small businesses were brought into the process. Although a few grant participants felt that small businesses had a strong voice at the regional table, several others noted that they were hard to engage and unlikely to even be aware of the regional planning effort.

Community engagement. Community members who had previously engaged with power structures in the Twin Cities were generally skeptical of the CoO process, expecting repeated patterns of disconnection and disingenuity. One member of a local advocacy organization described the skepticism and local dynamics at the time the consortium was formed: "We had to overcome that—we had to persuade folks [that] this is a new Met Council, new leadership, a lot of possibilities and potential—but we had to get over this deep-seated suspicion."

The intentionality in the formation of the CET and steering committee around sharing decision-making was repeatedly described as an attempt to disrupt existing power dynamics. One city government official from the Twin Cities elaborated: "I wasn't on the community engagement team but I certainly know those parties and I was in the group that said we need to actually share power here, we need to give people money and we need to let them make the decisions."

Still, these efforts to build institutional mechanisms for community engagement in planning processes faced obstacles, including the inaccessibility of planning jargon and its black box-like processes.

Jurisdictional Dynamics

In the Twin Cities region, the two major municipalities of St. Paul and Minneapolis have a contentious history that can sometimes be characterized as combative, competitive, and distrustful. A local foundation worker admits, "St. Paul is the smaller of the two cities, it is the poorer of the two cities, it has the least corporations of the two cities, and the least amount of philanthropy that's

invested in the two cities. So, it has an underdog syndrome.” Several interviewees believed the SCI process substantially improved relationships between Minneapolis and St. Paul, as well as between Hennepin and Ramsey Counties (where the respective cities are). A government employee from one of the municipalities said: “It was clear, at that point, that the region was hungry for the cities to quit fighting. . . . I don’t think that any of us guessed how powerful this would be.”

The urban-regional distinction was also important in the grant process. Elected officials struggled to balance leadership and decisionmaking that would benefit the region, with loyalty and accountability to more localized interests of their jurisdiction and constituency. As one local representative put it: “I was one of the main leads on the central corridor but it wasn’t even touching my district. I would go back to my community and people would say ‘Why are you working so hard on this when this is our district?’”

This urban-regional tension extended to collaboration between suburbs and urban cores. The SCI process began with only a single suburban mayor involved. Later, as a research foundation employee explained, an additional suburban mayor was included “to give better voice and a fairer chance of participation [for the suburban communities].”

Despite this gesture, several interviewees explained that the representatives from suburbs were never fully engaged. As one elected official put it, “We had a number of different suburban mayors throughout the process, no one mayor committed. We had a number of suburban county commissioners that came and went. . . . It wasn’t something they were comfortable with. And I think that even at some times it was stuff that they were adversarial to, they felt threatened.”

The Twin Cities recognized this jurisdictional dissonance and created a “submarket strategy” to better address the divergent needs of their core cities, suburban job centers, and rural areas. As a result, the greater Minneapolis-St. Paul region is now dedicated to using different models to address varied regional needs—particularly those related to creating jobs and attracting businesses and investment. Implementation of these submarket strategies is the goal for the next 2 years.

Lasting Impacts and Institutionalization

To what extent were the changes effected by the SCI grant institutionalized? How, when, and where do these changes create a lasting impact? Many interviewees felt that the culture around community engagement in planning has been fundamentally shifted as a result of the CoO grant program. Both cultural norms (for example, who was involved in meetings and who had a voice) and structural changes emerged; as one city official told us, “There’s a different expectation around what it’s going to look like when good engagement is happening, that it’s not going to be a bunch of white people and a microphone.” In addition to changes to cultural norms and expectations, the Twin Cities also saw institutionalized structural change, as described by a Twin Cities CBO employee.

The first task they set out was to establish regional standards on community engagement. It took them a long time and they got huge pushback from Met Council like: ‘That’s the gold standard and we don’t do that here.’ And, but, a couple years later . . . [the process] ended up with them rewriting [a public engagement plan] in partnership with the community engagement steering committee. . . . Now they apply it not just to transportation spending but also to all activities of the Met Council. That was a huge win.

In addition to the adoption of CoO's best community engagement practices into Met Council's public participation plan, other institutional changes include—

- An *Equity Advisory Committee* to the Met Council, with 17 of the 21 seats designated for community members. The CoO CET advocated strongly for the creation of this committee.
- An *Everyday Equity cross-agency team* at Metro Transit focused on identifying and breaking down institutional barriers to equity both within the agency and in Metro Transit's operations.
- An *expanded Engagement and Outreach Team* at Metro Transit housed within the Marketing and Customer Services Division. Previously a lone dedicated community engagement officer, the team has grown to five employees drawn from diverse backgrounds including community organizing.
- A *Transit-Oriented Development (TOD) office* in Metro Transit that could provide expertise on TOD to the region.

Furthermore, the capacity building of CBOs to engage more thoroughly in the regional planning process represents another institutionalized impact. The CET continued to meet until 2016 to ensure this capacity was expanded and secured. One CET member noted the completion of the team's goals as the reason for the group's winddown: "We have agreements and partnerships that have agreed to sunset—and it was time. The goal for us was . . . how our partners and grantees thrive. Some have turned into full-fledged organizations that have been able to do their own thing now."

Conclusions From the Twin Cities Region

In many respects, the Twin Cities region stands out as a strong example of equity building and progress as a result of the CoO initiative. An existing, if fledgling, culture of collaboration in the public sector among some in the nonprofit community, and to some extent in the private sector as well, may have put this region at an advantage in terms of the extent and level of culture change needed to implement and achieve the stated goals of the SCI grant. The willingness, especially early on, for traditionally empowered leaders to hand over decisionmaking may have set the tone for subsequent buy-in and change by other stakeholders. Finally, the involvement of Living Cities' Integration Initiative may have facilitated deeper and better engagement of stakeholders, given the availability of significant additional and more flexible resources. Although the work begun by the SCI grant showed significant promise for the equitability of regional planning in the region, future evaluation will be essential to monitoring just how significant and lasting these impacts ultimately are.

Conclusions From Three Case Studies

Thematic Findings and Implications

Across our interviews with stakeholders in the Twin Cities, Bay Area, and Puget Sound regions, we identified insights across the themes of equity, stakeholder engagement, and jurisdictional dynamics.

Equity

Central to our research was the concept of equity as a goal to be advanced through regional collaboration. We define equity, as opposed to equality, as fairness in outcomes across race, ethnicity, class, and other status. We had three broader findings related to regional efforts to promote equity.

First, communities and advocates within all regions viewed regional planning efforts to advance equity with skepticism. Likely based on historic relationships, we found a broad distrust of MPOs and a related skepticism that MPOs were authentically attempting to promote equitable outcomes across the region. In the Twin Cities, the region's SCI-related success built off of recent organizing momentum created by advocates. In other regions, the history of prior MPO disengagement from low-income communities and communities of color was evident in how they approached the SCI process. HUD should work with MPOs to realistically assess distrust from grassroots advocates and leaders and ensure action is taken to rebuild trust.

Second, each region studied made explicit space for equity within the collaborative governance structure—albeit in different forms and with different sequencing in the development of the collaboratives. In the Bay Area, the Equity Collaborative was formed late in the process without clarity of purpose. In the Twin Cities, equity was incorporated through a focus on community engagement and sharing of decisionmaking authority. Similar to the Bay Area, the regional collaborative in the Twin Cities only incorporated this targeted focus on community engagement at the tail end of the application process. In the Puget Sound region, the regional collaborative formed the Regional Equity Network very early on, with an explicit goal of co-creating an equity agenda for the region. These various experiences show the importance of both creating a space explicitly focused on equity and of clearly defining the goals and mechanisms through which an equity agenda will be articulated. The late formation of these committees was at times an obstacle to building trust with communities, suggesting that HUD should consider encouraging their formation from the start.

Third, the narratives around equity also varied greatly across regions. Our interviews revealed that regions often struggled to arrive to a shared definition of equity. In the Bay Area, conversations tended to focus on displacement and low-wage work. In the Puget Sound and the Twin Cities regions, however, the conversation was more explicit about race. The Twin Cities in particular was particularly race conscious, with racial disparities often cited as a structural problem with which the region needed to grapple. Only in the Puget Sound region, however, was defining a regional equity agenda a priority, which was locally lauded as a significant win. To help assist regions in arriving at a shared vision of equity, HUD should encourage regions in future regional planning efforts to formally prioritize the creation of a common definition of equity with a related agenda and expectation for action.

Stakeholder Engagement

We were also interested in the extent to which various stakeholder groups were engaged in the regional planning process.

We found that the SCI grants largely magnified existing regional dynamics, instead of fundamentally shifting them. Where distrust and animosity already existed, local entities struggled to

meaningfully collaborate across silos. Where a culture of collaboration permeated the region, such as in the Twin Cities, the SCI grantee built on this strength and used federal funding to strengthen collaboration between stakeholders.

This trend was true across both business and community engagement efforts. With respect to the former, existing dynamics often determined the extent to which businesses were successfully engaged. When business stakeholders were already active in the regional planning conversation, they were more likely to play a role in SCI collaborative. Efforts also varied depending on which business stakeholders were targeted. Grantees differentiated among larger corporations, smaller neighborhood businesses, real estate developers, and regional or statewide business associations. Indeed, different strategies are needed for different types of stakeholders. The increased partnership of larger business associations or alliances, such as the Itasca Project in the Twin Cities, is key to long-term regional success, whereas small business engagement was most often critical in mitigating harm to commercial districts during transit infrastructure expansion. In future regional planning efforts, HUD should be mindful of these local dynamics, which can pose significant barriers to regional planning success.

With respect to community engagement, we found that a focus on building institutional mechanisms for deeper engagement—such as the CET in the Twin Cities—led to greater, lasting success. Common challenges to authentic and inclusive public engagement across all three regions included a historic distrust of regional planning (as mentioned previously), the inaccessibility of planning jargon, and limited resources and staff capacity to engage. Although each SCI grantee attempted to address these challenges in various ways, the most success was seen when the regional collaborative and MPO shared actual decisionmaking power with community residents. HUD can encourage regions to follow in the footsteps of the success in Minnesota by recommending grantees form and resource a community engagement committee comprised of community members and local CBOs that are empowered to make decisions. This institutional mechanism for community-led decision-making can also help combat the historic distrust of government.

Jurisdictional Dynamics

Lastly, we compared how regions fared in promoting increased collaboration across different municipalities and levels of governance. Although the SCI grant had an explicit focus on regional collaboration, regions saw uneven participation from local jurisdictions. In some case, the relationships were more focused on cross-jurisdictional learning than actual collaboration. In regions like the Bay Area, which are very decentralized, some felt collaboration was too spread out to be coherent. In regions that are more tightly defined, as in the Puget Sound and the Twin Cities, suburban jurisdictions often felt excluded and ended up largely sitting out of the collaborative process. HUD should consider these dynamics of defining regions in future efforts.

This uneven participation was rooted in our related findings. First, planning priorities in core cities were different from those in suburban jurisdictions. Second, local priorities also differed from regional ones. Indeed, all regions grappled with getting locally elected officials to act in the interest of the broader region. Local interests were often at odds with regional interests, which presented some naturally limiting constraints to advancing a regional agenda. HUD may have limited authority over granting MPOs additional authority, which may need to come from states themselves.

Final Thoughts

Our research suggests that the starting point from which each region launched was a key factor in how much progress could be achieved within SCI. Although that may seem obvious, this nuance complicates how the implementation of a national grant program lands in regions with many different contexts. The SCI program goalposts were all various distances away from where each region was, suggesting that a more nuanced understanding of where regions are at in different situations is needed to build effective and realistic program goals.

We have identified potential strategies for HUD and any other federal agencies supporting regional planning to consider for future program implementation. First, federal leaders should encourage MPOs to address the historic distrust with which communities often view them, encourage or mandate the formation of equity-centered committees early in the application process, and require regions to collectively define a vision and definition for regional equity as a key program outcome. To encourage more inclusive stakeholder engagement, HUD should also encourage greater participation of regional business interests while also providing technical assistance for collaboratives to build institutional mechanisms for community engagement. Lastly, supporting the influence or efficacy of regional governance bodies is an important way of ensuring local interests do not consistently override regional needs.

Indeed, the experiences of SCI Regional Planning Grant program grantees are rich with potential lessons to be learned. Additional case studies that examine regions with weaker markets, lower nonprofit capacity, and varying MPO strength can add nuance to our findings from the Bay Area, Puget Sound, and Twin Cities regions. Revisiting regions to assess outcomes after more time has passed since SCI will enable a greater understanding of lasting tangible and intangible outcomes. Lastly, additional research on the findings from this article, such as the importance of intentionally defining “equity” or the challenges of MPO distrust, would offer relevant lessons for future federal programs that work with regions across the country.

Acknowledgments

The authors thank Karen Chapple for her guidance and support in this process, the Surdna Foundation and Ford Foundation for their financial support of the project, and, for their partnership in this research, their 2016 classmates: Samantha Beckerman, Genise Choy, Joni Hirsch, Dov Kadin, Colleen Kredell, Joseph Poirier, Kristine Williams, and James Yelen. They also thank the interviewees of all organizations, but especially those with limited capacity and budget, for taking the time to discuss this experience and for their collective ongoing work in their regions to advance equity and collective impact in the planning process.

Authors

Juan Sebastian Arias is a program officer with Enterprise Community Partners.

Sara Draper-Zivetz is the Associate Director of the Turner Center for Housing Innovation at the University of California, Berkeley.

Amy Martin is a consultant at Four Nines Technologies.

References

Crosby, Barbara C., and John M. Bryson. 2010. "Integrative Leadership and the Creation and Maintenance of Cross-Sector Collaborations," *The Leadership Quarterly, Public Integrative Leadership* 21 (2): 211–230. DOI: 10.1016/j.leaqua.2010.01.003.

Frick, Karen Trapenberg, Karen Chapple, Elizabeth Mattiuzzi, and Miriam Zuk. 2015. "Collaboration and Equity in Regional Sustainability Planning in California: Challenges in Implementation," *California Journal of Politics and Policy* 7 (4). <http://escholarship.org/uc/item/9502t3w9.pdf>.

Fung, Archon. 2006. "Varieties of Participation in Complex Governance," *Public Administration Review* 66 (December): 66–76.

Innes, Judith E., and David E. Booher. 1999. "Consensus Building and Complex Adaptive Systems," *Journal of the American Planning Association* 65 (4): 412–423. DOI: 10.1080/01944369908976071.

Kania, John, and Mark Kramer. 2011. "Collective Impact," *Stanford Social Innovation Review*, Winter 2011: 36–41. http://www.lano.org/resource/dynamic/blogs/20131007_093137_25993.pdf.

Kaza, Nikhil. 2006. "Tyranny of the Median and Costly Consent: A Reflection on the Justification for Participatory Urban Planning Processes," *Planning Theory* 5 (3): 255–270.

Lester, T. William, and Sarah Reckhow. 2013. "Network Governance and Regional Equity: Shared Agendas or Problematic Partners?" *Planning Theory* 12 (2): 115–138.

Orfield, Myron. 1999. "Metropolitics: A Regional Agenda for Community and Stability," *Forum for Social Economics* 28 (2): 33–49. <http://link.springer.com/article/10.1007/BF02833982>.

Manzo, Lynne, and Douglas Perkins. 2006. "Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning," *Journal of Planning Literature* 20 (4): 336–350.

Mathur, Vivek Narain, Andrew Price, and Simon Austin. 2008. "Conceptualizing Stakeholder Engagement in the Context of Sustainability and Its Assessment," *Construction Management and Economics* 26 (6): 601–609.

Additional Reading

Basolo, Victoria. 2003. "U.S. Regionalism and Rationality," *Urban Studies* 40 (3): 447–462. DOI: 10.1080/0042098032000053860.

Benner, Chris, and Manuel Pastor. 2012. *Just Growth: Inclusion and Prosperity in America's Metropolitan Regions*. Regions and Cities 50. London; New York: Routledge.

Purcell, Mark. 2009. "Resisting Neoliberalization: Communicative Planning or Counter-Hegemonic Movements?" *Planning Theory* 8 (2): 140–165. DOI: 10.1177/1473095209102232.

The Impact of the Sustainable Communities Initiative on Engagement and Collaboration in Planning: Experiences From Four U.S. Regions

Meghan Z. Gough

Virginia Commonwealth University

Jason Reece

The Ohio State University

Abstract

In 2010 and 2011, the U.S. Department of Housing and Urban Development awarded 74 Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) program grants. The grants supported 3-year regional planning efforts that prioritized inclusive processes and addressed the interdependent challenges of economic prosperity, social equity, and environmental protection. This article examines the experiences of four 2010 SCI-RPG grantees, investigating the impact of the SCI-RPG program on public engagement and collaboration. Using survey data, interviews, and document analysis from these regions, we consider how SCI-RPG helped to break down silos between jurisdictions and organizations, and how it increased representation of underserved populations in planning decisions. We find that SCI-RPG successfully created greater awareness of the connections between the “three Es” of sustainability, increased interjurisdictional and cross-section collaborations, and generated more effective public engagement efforts. However, we question the potential for plan implementation and continuation of these outcomes. We conclude with implications for planning and policy, and we offer recommendations for future federal large-scale planning programs.

Introduction

In 2008, when the United States was faced with increasing economic distress, federal agencies sought better ways to leverage agency financial investments that could facilitate economic recovery initiatives. In response, the U.S. Department of Housing and Urban Development (HUD), the U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA) established the Partnership for Sustainable Communities (PSC), recognizing their collective ability to influence community-level conditions and heighten the potential for local economic opportunity. As part of PSC, HUD's Sustainable Communities Initiative (SCI) allocated \$165 million to support regional planning and development efforts that coordinate planning and investment in housing, transportation, infrastructure, economic development, natural resources, workforce, and other critical community development issues.

The Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) funding was awarded in government fiscal years 2010 and 2011. Each grant supported a 3-year regional planning effort that prioritized inclusive processes and the intent to address the interdependent challenges of economic prosperity, social equity, and environmental protection. When reviewing grant applications, HUD, DOT, and EPA screened for applications that identified clear plans for involving underserved populations and those not typically involved in planning, including low-income households, minorities, youth, seniors, people with disabilities, and those people with limited English proficiency (EPA, 2010). Economically distressed communities received extra points in the application review, in accordance with the federal goal of removing regulatory and policy barriers to sustainable community development in distressed areas.

To be considered for SCI-RPG, applicants had to design a consortium of cities, counties, private, and nonprofit partners who would govern the project and work collectively to achieve intended outcomes of the grant. Most successful regions dedicated considerable time preparing the grant application, which required working together to coordinate interest, outline goals, and detail ways in which representatives from the different jurisdictions and sectors would make decisions and carry out the regional planning efforts (Chapple and Mattiuzzi, 2013). For some at the table, it was the first time their organization had representation in planning efforts. A total of 74 regions were funded through the SCI-RPG program, 45 of which were funded in the 2010 fiscal year.

The 2010 regional grantees were the first to navigate an innovative federal approach that not only incentivized regional planning, but also sought to fundamentally change the way communities understand and enact regional sustainability planning. In theory, regional planning informed by an inclusive public input process and conducted with multi-jurisdiction and cross-sector collaboration could better address the interdependent challenges of issues, such as affordable housing provision, access to jobs, and environmental protection. To date, researchers have examined ways in which these large-scale goals are approached at the local level, in terms of process (Gough, 2015) and implementation (Frick et al., 2015).

This article examines the experiences of four 2010 SCI-RPG program grantees and is the first to investigate consortia members' perceived success of the SCI-RPG process in terms of its impact on public engagement and collaboration. Using survey data from these regions, we consider how SCI-RPG helped break down silos between regional stakeholders and how it helped address longstanding underrepresentation of underserved populations.

Building Capacity for Regional Sustainability

Policies to create more sustainable communities—communities with access to jobs, affordable housing, education, and healthy environments—have been central in recent discussions in planning research and practice. In the past decade, most scholars have focused on sustainability at the local scale, examining motivations, actions, and implementation by cities (Daley, Sharp, and Bae, 2013; Feiock et al., 2014; Portney, 2013; Zeemering, 2009). However, we know that in order to be effective, sustainability requires a long-term strategic approach that leans on the collective commitment of multiple localities in a region (Wheeler, 2013). Although regional sustainability programs have the potential to yield greater results, they are more complex and politically complicated, and can strain localities' limited capacities for service delivery and policymaking.

Regional planning demands that involved organizations learn new behaviors, form new relationships, and set new expectations and norms for the practice of planning. In response to changing policies, for example, organizations must learn how to develop and negotiate shared goals and create a structure for multi-jurisdictional collaboration, which is not an easy task; organizational theory suggests that cultivating a collaborative relationship between organizations is challenging, and that "... unless the number of individuals in a group is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or group interest" (Olson, 1965: 2).

The promise of new organizational capacity and resources may be a "special device," drawing in partners for collaboration. Recent research proposes that old behaviors and norms for planning can be "unlearned," and new behaviors, such as those that accommodate sustainability, efficient land use investments, and regional coordination, can be reinforced by funding, increased resources, and organizational capacity (Lubell, Feiock, and De La Cruz, 2009; Wang et al., 2012). Therefore, to enable new behaviors at the local level, regional sustainability efforts must systematically enhance political, financial, and technical support to build organizational capacity for policy change.

Implementation of regional planning efforts continues to be challenging because of complicated governance in the United States; localities, not regions, possess authority over land use and zoning decisions. Although an overall regional vision acts as a guide, local governments have little incentive to navigate complex intergovernmental issues and cooperate in key areas, such as land use, affordable housing provision, and equity. In the United States, regions' limited authority to make decisions on land use and implement plans prevents large-scale effective regional planning. In most states, regional authorities possess no power or "teeth" to implement, but they can offer incentives. Regional initiatives are frequently caught between local governments that guard their right to determine local land use decisions, and higher-level governments that are unable or unwilling to support attempts at regional coordination.

The mix of participants in regional sustainability efforts is critical. Research shows that participation in collaborative networks tends to advance communitywide sustainability policies (Daley, Sharp, and Bae, 2013). Participation of a broader network of organizations bolsters the capacity of the group through knowledge and expertise in sustainability, and makes implementation more effective (Hawkins and Wang, 2012). Scholars find that involvement of diverse and interdependent

stakeholders can enhance the success and longevity of a collaborative network if a process is established to facilitate joint knowledge development and create shared social and political networks (Innes, Booher, and Di Vittorio, 2010).

Arnstein's "ladder of participation" has framed much of the dialogue on citizen participation and inclusive engagement during the past 50 years (Arnstein, 1969). Both Arnstein and others (Booher and Innes, 2002) suggested that more participatory approaches to policy development result in more just and equitable outcomes, especially for communities that are traditionally marginalized from planning processes. Citizen support for sustainability initiatives can increase the legitimacy of sustainability actions and enhance the political will to invest in and implement policies, and, similarly, oppositional interest groups can act to constrain policy implementation (Sharp, Daley, and Lynch, 2011).

Participation not only enhances meaningful interactions, but it also facilitates learning and education about the issues. A deeper understanding of the interconnections between economic development and environmental protection, for example, may also build trust in government (Wang, 2001) and its sustainability efforts.

Methods

To analyze the SCI-RPG experience of engagement and regional collaboration, we used survey and interview data focused on four case study regions: Gulf Regional Planning Commission (GRPC) in the Gulf Coast of Mississippi; the Metropolitan Area Planning Commission (MAPC) in the Boston, Massachusetts region; the New River Valley Planning District Commission (NRVDC) in southwestern Virginia; and the Puget Sound Regional Council (PSRC) in the Seattle-Tacoma region of Washington. We purposefully chose four regions that had great diversity of geographic location, population, and previous experience with regional planning.

The survey was designed to obtain information about the perceived impact of the SCI-RPG process on civic engagement and collaboration across sectors and jurisdictions within the region. Survey questions included a mix of multiple choice, Likert scale, and open-ended questions. Draft surveys were reviewed for input by external reviewers, including relevant staff at HUD, and resulted in clarification in language, which was incorporated into the survey protocol.¹

In July 2014, the survey was distributed via email utilizing the REDCap™ online surveying tool to consortium members in the four regions under investigation. The lead grantee for each of the four regions provided a comprehensive list of the consortium members and contact information. The consortiums led by GRPC, MAPC, and NRVDC had membership ranging from 26 to 67 members. PSRC was an outlier, however, having a much more robust consortium structure with 372 members. The PSRC planning oversight committee, which consisted of organizational stakeholders, was similar to the size of other consortia.

In total, the survey was emailed to all consortium members identified by each regional planning consortium (n = 493). To improve survey response rates, we utilized the Dillman method of contacting respondents three times to encourage online survey completion.

¹ The protocol was submitted and approved by the Institutional Review Board (Project # HM200011943) at Virginia Commonwealth University (appendix A).

To further inform the research questions, we conducted 1-hour phone interviews with representatives from each of the four regional organizations that served as the lead grantees for SCI-RPG. Each representative was active in the consortium for the duration of the SCI-RPG funding period and could speak to the process and perceived impacts on engagement and collaboration.

Results and Discussion

We used the survey instrument to collect information about the perceived outcomes, obstacles, and opportunities that SCI-RPG introduced on public engagement and collaboration across sectors and jurisdictions. We received 110 responses to the survey (a 22-percent response rate). Of the total survey responses, 23 percent (26 respondents) represented MAPC, 25 percent (27 respondents) represented GRPC, 15 percent (16 respondents) represented NRVPCD, and 37 percent (41 respondents) represented PSRC (exhibit 1).

The great diversity of stakeholders who responded yielded a more representative assessment of the SCI-RPG process and early outcomes. Most of the survey respondents represented local government (37 percent) or nonprofit (21 percent) stakeholders. An equal number of respondents were advocacy- or interest-group stakeholders (11 percent) and regional planning organization staff (11 percent). Fewer respondents held the roles of technical assistance provider or consultant (7 percent each) or interested citizens (6 percent). Although respondent perceptions of the SCI-RPG process or outcomes varied slightly based on their stakeholder type (for example, government, nonprofit, or advocacy group) within the regional consortium, analysis did not confirm any significant differences. Therefore, results are reported in aggregated form, highlighting selected differences among the four regions when applicable.

Exhibit 1

Overall Survey Response and Response Rate by Region

Region	Responses	Sample	Response Rate (%)	Regional Response Rate in Sample (%)
GRPC	27	67	40	25
NRVPDC	16	28	57	15
PSRC	41	372	11	37
MAPC	26	26	100	24
Total	110	493	22	100

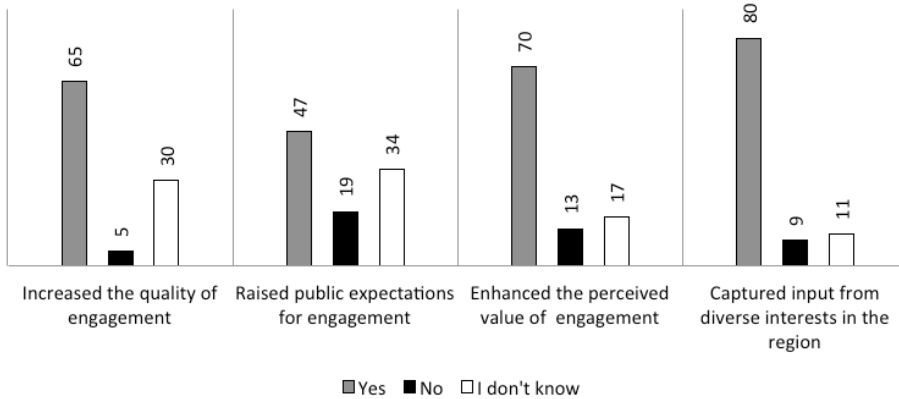
GRPC = Gulf Regional Planning Commission. MAPC = Metropolitan Area Planning Commission. NRVPCD = New River Valley Planning District Commission. PSRC = Puget Sound Regional Council.

Impact on Public Engagement

Surveys of consortium members identified multiple benefits to community engagement from the SCI-RPG process (exhibit 2). Approximately two out of three respondents agreed that the process had increased the quality of community engagement (65 percent) and improved the value of community engagement (70 percent). Respondents from all four regions recognized the important role that dedicated engagement resources had on the capacity to design more intentional and sophisticated approaches to seeking public input. Examples of innovation in engagement included digital

Exhibit 2

Respondent Perspectives on the Impact of SCI on Community Engagement



SCI = Sustainable Communities Initiative.

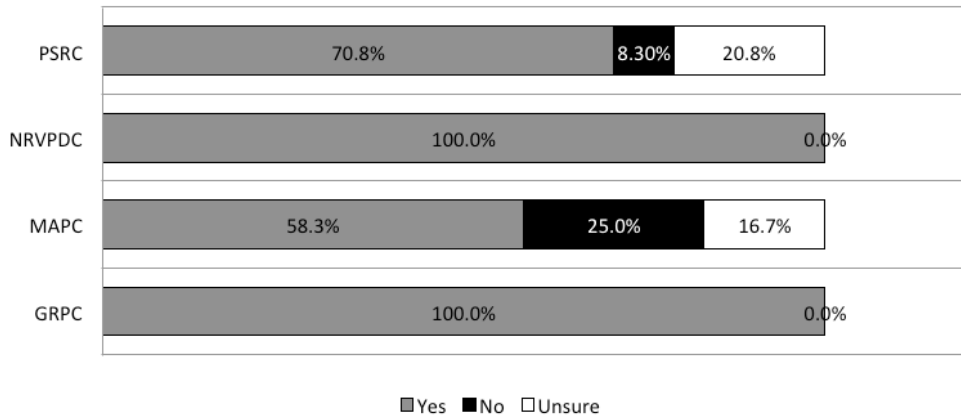
storytelling, theater, and role playing, as well as a number of different planning games intended to encourage input from diverse voices and perspectives and redefine the “public meeting.” Many respondents linked their engagement innovations with the value of community engagement. As one PSRC consortium member reflected, “dedicated staff for outreach provided guidance and technical assistance around engagement... grants provided financial resources to assure independent and authentic engagement.”

Although most respondents agreed that the value of engagement was heightened by the SCI-RPG experience, only about one-half of respondents (47 percent) agreed that it raised public expectations for future community engagement. This inconsistency between high recognition of the value of engagement and limited anticipation that it will alter future expectations of engagement may be explained by the strong understanding of the resources needed for meaningful public engagement. Pointing out this complexity, a PSRC representative explained, “[the grant] fundamentally changed the way that we have done outreach to local communities...and it raised expectations for what we are going to do in the future. That is a little scary. There has been a wide recognition of the value of the approach that we have taken and we will try to figure out how exactly to maintain these relationships and continue to resource [this approach].” Another PSRC consortium member added, “better community engagement has become important for individual stakeholders throughout the region...unfortunately, without the funding to thoroughly invest in this goal, small jurisdictions especially struggle to live up to their commitment.”

Effective public engagement strategies are not one size fits all. Different approaches must be tailored to engage specific target audiences, especially those that are harder to reach and less likely to attend public meetings. Most respondents felt that SCI-RPG excelled at cultivating new forms of community engagement, particularly among voices that have not traditionally been included in planning efforts (exhibit 3). Four out of every five consortia respondents (80 percent) agreed that the SCI-RPG process helped collect community input that was representative of diverse interests in the region, such as age, race, income, or location.

Exhibit 3

Respondent Perspectives on Whether the SCI Process Helped To Collect Representative Input Into the Planning Process



GRPC = Gulf Regional Planning Commission. MAPC = Metropolitan Area Planning Commission. NRVPCD = New River Valley Planning District Commission. PSRC = Puget Sound Regional Council. SCI = Sustainable Communities Initiative.

Challenges in Engaging Underrepresented Voices

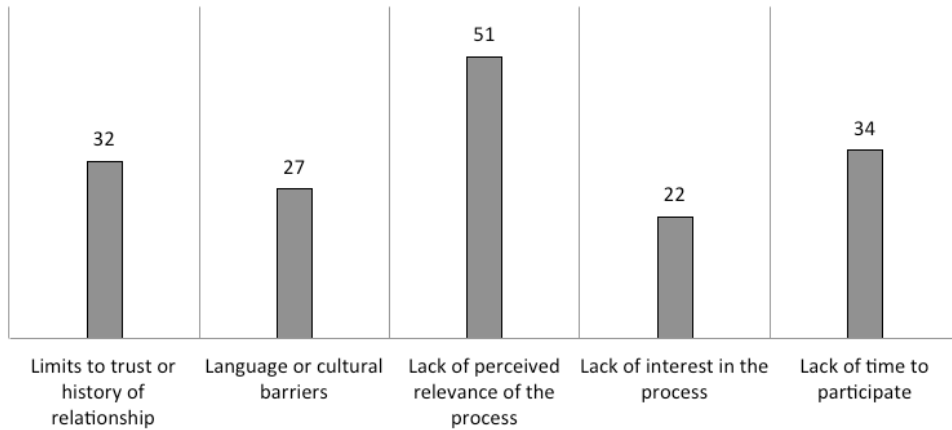
One of the requirements of the SCI-RPG process was to engage underrepresented audiences and persons traditionally marginalized from the planning process. Despite more attention and resources invested toward engagement, consortium members recognized persistent barriers to engaging diverse community voices. The most cited barriers (exhibit 4) were stakeholders’ lack of perceived relevance of the SCI-RPG processes (51 percent), lack of time to participate in the engagement events (34 percent), and limited trust or negative history of relationships with public planning (32 percent).

More than one-half of the respondents recognized that underrepresented stakeholders wrestle with the relevance of a long-range planning process on their current needs. A local government respondent from the Puget Sound region stated, “We were talking about long range initiatives 20 or more years in the future to people who need help understanding how to access opportunity today.” Other respondents linked the lack of relevance and limited time, and they came to the same conclusion as a GRPC consortium member who said, “there are bigger issues of priority on the minds of disadvantaged.”

In open-ended responses, survey respondents focused on challenges related to history of distrust between community stakeholders and planners. One NRVPCD consortium member observed “long-standing trust issues based on past planning efforts in which [minority residents] had felt marginalized and dismissed.” Some respondents felt that these barriers stemmed from limited local precedent in direct public discussion about the role of race, income and social equity in planning decisions. One respondent shared that, “non-confrontation and white privilege get in the way of confronting issues openly and without funding or mandate [to do so], these issues are not regularly factored into governmental or economic policy decisions.” Many respondents recognized that it

Exhibit 4

Respondent Perspectives on Engagement Barriers With Underrepresented Populations



was difficult to engage issues of race and equity, especially in regions with historical or recent racial equity challenges. One respondent noted that “without the actions of the advocacy organizations, HUD and [technical assistance] providers, race wouldn’t have been on the table at all.”

Finally, 24 percent of respondents identified barriers preventing engagement, including individuals that were against regional planning because they felt it infringed on their property rights (exhibit 4). Some regions, such as the New River Valley, faced this challenge more than others. The New River Valley region found that some individuals that felt threatened by regional sustainability planning chose to not participate in the public meetings, and others were openly hostile to exploring issues around affordable housing or energy conservation. As a NRVPCD consortium member explained, “...it is very difficult to engage people who are ideologically committed to defeating any regional effort.” However, NRVPCD was able to transcend these barriers by changing its approach: “We didn’t set out to change anybody’s philosophical opinions,” explained Kevin Byrd, representative from NRVPCD. “The quicker we got to that point, the happier everybody was while working on this project. We just continued to do what we do, and do it well. We certainly got feedback from people that opposed the work and didn’t see value in it, but more and more people were engaged because they saw value in what we wanted to do and they wanted to direct policy,” he said (Byrd, 2014).

Innovations To Improve Engagement

Despite ongoing challenges, SCI-RPG program grantees recognized the important role that engagement innovations played in improving access to and representation of underrepresented populations in the SCI-RPG process. A common “innovation” noted by respondents was that the SCI-RPG structure gave underrepresented stakeholders power and voice in the process. A GRPC respondent found that, “by far, the most innovative and best practices were those consortiums that gave under-represented groups a seat at the decision-making table.” Elaine Wilkinson, representative of the GRPC consortium, reinforced this notion. “... If we did not have ethnically and racially

diverse representation within our consortium, we probably would not have really understood what we were doing when we were going out and talking to communities“ (Wilkinson, 2014). Still, some respondents felt that the consortia did not have enough representation of community-based groups. “[More participation by] Fair Housing coalitions, the NAACP, Latino organizations and community based neighborhood groups would give some validity to the process,” noted a MAPC consortium member.

All four regions recognized the essential role of the SCI-RPG funding that was used to increase involvement of community-based organizations and equity groups by offsetting the costs of collaboration. Respondents explained that they could use the grant funds to finance community-based organizations’ outreach efforts and their consultation on issues of regional concern, although the scope of the regional plan was out of their traditional purview. “It’s not that equity groups would not want to [be involved],” explained a MAPC consortium member, “but their mission may be focused on finding housing for homeless populations, not to plan for zoning...and [given] their limited time and resources, collaboration was made easier when we could say here is a pot of money that could fund organizations like yours to work with us.”

Regions used the SCI-RPG funding to support community-based organizations that could give them access to underrepresented groups. In fact, when asked what role community development corporations (CDCs) played on the consortium, the largest number of respondents (46 percent) selected the response that CDCs “increased access to nontraditional stakeholders.” PSRC dedicated one-third of its \$5 million grant toward engagement, focusing on nontraditional stakeholders. As explained by Ben Bakkenta, representative for the PSRC grantee, the consortium reserved \$450,000 in direct aid to communities in the form of small grants of up to \$15,000, resulting in awarding 36 grants to 31 community-based organizations throughout the region that work with nontraditional stakeholders. Noting the impact of this structure, one of the CDCs that received funding shared that this opportunity “put resources to support active, on the ground participation from non-traditional partners in underserved communities in an unprecedented way” (Bakkenta, 2014).

In regions with opposition, consortia chose to innovate by reframing communication and using data to illustrate the overarching goals of the regional planning process. For example, the MAPC region tracked its *participation gap* at meetings—the difference between who was present at public meetings and the demographics (that is, race, ethnicity, age, income, and homeownership) of the overall study area. Illustration of this difference helped to clarify the degree to which input was gathered from a representative public. The MAPC region created important opportunities for public education when the consortium purposefully elevated its attention to equity during the planning process. Holly St. Clair, representative of the MAPC region, explained, “at meetings we would pull up an environmental justice map and someone would say, ‘I don’t know what environmental justice has to do with where we are going to place jobs,’ and we could say ok, let’s talk about that” (St. Clair, 2014). In fact, 60 percent of respondents said the SCI-RPG process improved the linkages between economic development and social equity.

Following strong political opposition by the Tea Party, the NRVPDC consortium decided to rethink its program and approach. The region developed an alternative way to engage discuss local and regional issues, creating opportunities for people of all political affiliations to participate in the process. The region designed Built NRV: A Planning Game for Public Engagement as a novel way

to encourage conversations around community planning. As part of this game, citizens talk about the things that are most important to them when it comes to their neighborhood and communities through a series of hands-on interactive exercises. As explained by a consortium member from that region, “requiring the players [of the game] to make decisions about how to plan this community as individuals and as a group... encouraged productive and often difficult conversations in a way that made everyone feel comfortable.” Participants across the region quickly identify their own priorities and explore how they fit in with community values and resource constraints.

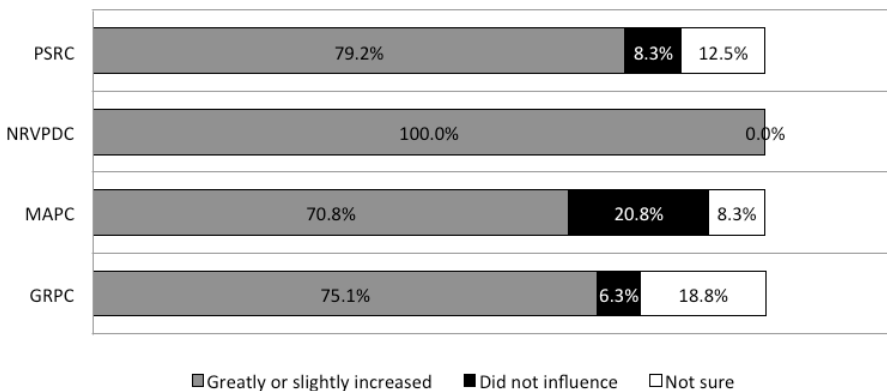
Impact on Collaboration

Surveyed consortium members corroborated the benefits of the SCI-RPG process to enhancing collaborations with other jurisdictions and sectors in the regions. Most respondents (approximately 80 percent of the total) felt that the mandate to develop a regional consortium positively influenced collaboration on planning issues between jurisdictions (exhibit 5). Of those, about one-half (49 percent) felt that the mandate increased collaboration slightly, and 30 percent of respondents indicated that it greatly increased collaboration. Many respondents elaborated in open-ended responses on the impact of SCI-RPG on collaboration in their region. Themes that emerged in these responses included enhanced communication and improved understanding about the interdependencies of community indicators.

A general sentiment from the survey was that too often political jurisdictions are more competitive than cooperative with one another, but that the SCI-RPG structure helped create more collaboration. One respondent noted that the experience “further demonstrated that every jurisdiction has its own unique challenges, but overwhelmingly, the jurisdictions share many of the same issues... SCI opened the door for other coordination outside the program and increased regular communication.” Additionally, this experience put different levels of government on the radar for respondents. One region noted, “We didn’t have much reason to care about HUD before, but this project raised the issue of housing in a new way for our agency.”

Exhibit 5

Respondent Perspectives on the Impact of SCI on Interjurisdictional Collaboration



GRPC = Gulf Regional Planning Commission. MAPC = Metropolitan Area Planning Commission. NRVPC = New River Valley Planning District Commission. PSRC = Puget Sound Regional Council. SCI = Sustainable Communities Initiative.

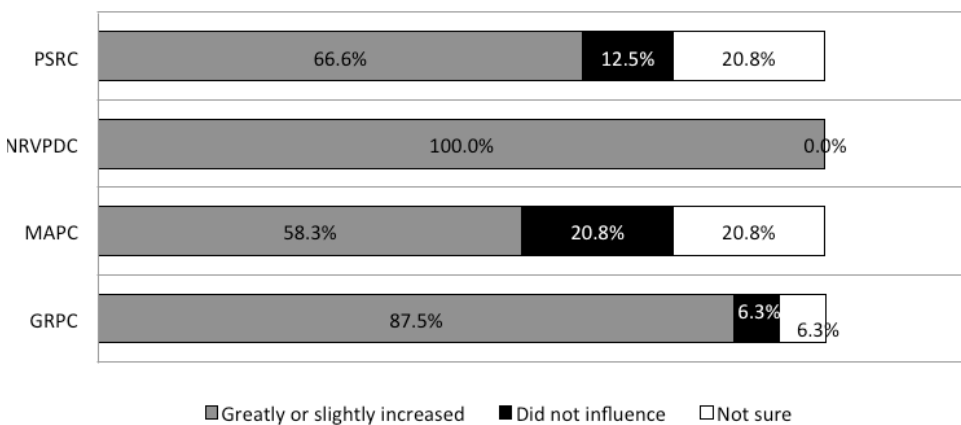
Survey respondents also identified collaborations created between nontraditional partners—or organizations that do not typically work with each other—as an outcome of the SCI process. Most frequently, survey respondents representing local planning agencies cited nonprofits, educational organizations, and advocacy groups as examples of new partners. Most respondents (75 percent) responded positively regarding collaboration with nontraditional partners, indicating that the SCI mandate either slightly increased or greatly increased the collaboration between nontraditional partners in the region (exhibit 6). Of these respondents, 41 percent felt that this type of collaboration increased greatly, and 34 percent indicated that it increased slightly. Open-ended comments revealed that the opportunity afforded by SCI to interact with nontraditional partners helped to improve understanding about the interdependencies of community conditions, needs, and planning approaches.

Overwhelmingly, respondents felt that SCI-RPG helped to broaden the stakeholders in regional planning efforts. One respondent observed, “a lot of folks who had not sat around the same table related to planning efforts finally came together, which makes incredible sense, but I doubt that there would have been such strong cross-sector collaboration without such a mandate.” Another respondent noted how the project process built new relationships “primarily through the shared experience, but also by exposure to new points of view.” Other respondents felt that the process made local jurisdictions more aware that nontraditional partners exist and should be included in future planning initiatives. Most respondents (65 percent) did anticipate that relationships developed through the regional consortium would continue following completion of the SCI-RPG grant, and several respondents cited examples of new, unrelated collaborative projects which were enabled by a better understanding of partner needs, interests, and resources.

Finally, although the majority (84 percent) of respondents indicated that they would be interested in helping to implement the goals outlined in the plans created from SCI-RPG (exhibit 7),

Exhibit 6

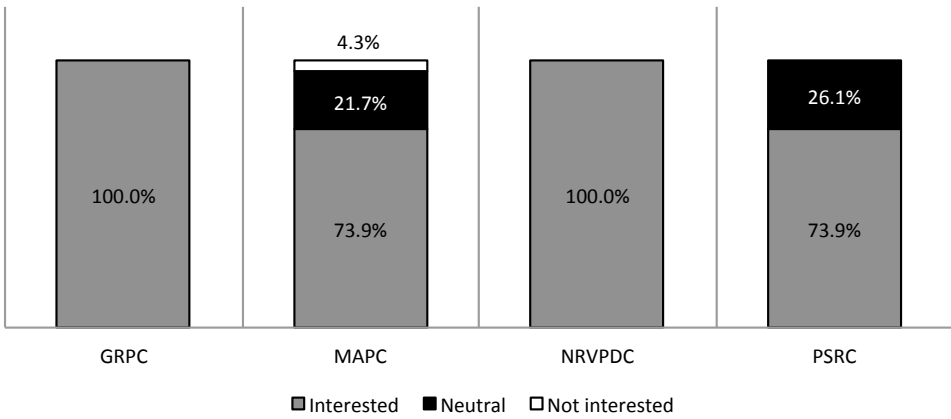
Respondent Perspectives on the Impact of SCI on Building New Partnerships



GRPC = Gulf Regional Planning Commission. MAPC = Metropolitan Area Planning Commission. NRVPCD = New River Valley Planning District Commission. PSRC = Puget Sound Regional Council. SCI = Sustainable Communities Initiative.

Exhibit 7

Respondent Interest in Assisting With Plan Implementation



GRPC = Gulf Regional Planning Commission. MAPC = Metropolitan Area Planning Commission. NRVPC = New River Valley Planning District Commission. PSRC = Puget Sound Regional Council.

respondents cited many concerns related to implementation, including future funding provision, the influence of political will, and the presence of a collective vision for implementation. One respondent captured some of these common sentiments, saying “planning is only useful if it can be implemented. It is not clear how the funders of SCI can help the regions they invested in transform from the planning to implementation phase...there is a great opportunity here beyond just developing a plan.”

Implications for Future Policies

SCI-RPG intended to impose a structure for regional planning that would be driven by the inter-relationships of economic development, social equity, and environmental protection, governed by a consortium representative of regional interests, and informed by broad participation, including underrepresented stakeholders. Based on the data analysis considered in this article, for at least for four grant-recipient regions, this federal experiment in incentivizing sustainable regional planning across the United States was largely successful. SCI-RPG helped these grantees achieve greater awareness of the principles of sustainability, increased interjurisdictional and cross-section collaborations, and incentivized more effective public engagement efforts. However, this analysis presents an opportunity to discuss areas in which the federal program could improve in terms of its structure and potential for implementation.

SCI-RPG demonstrated great impact on the introduction of new regional partners across jurisdictions and sectors, even for jurisdictions that had limited experience with collaboration. It is possible that the purposeful structure to support collaboration in SCI-RPG is an example of the necessary “special device” that Mancur Olson suggested as a precondition to collaboration (Olson, 1965). However, without additional funding to support staff time, especially for partner

organizations, collaboration may be limited. Moreover, without a common purpose toward plan implementation, these new relationships, which are not yet institutionalized, are not likely to continue. Importantly, implementation of the resulting regional plan will demand continued collaboration between local jurisdictions; implementation depends on the political will of localities to adopt land use policy changes that adhere to the regional plan.

Due to the nature of local governance and ephemeral elected officials, the political will to implement a long-term regional sustainability plan is not guaranteed. Although elected officials may have originally committed to policies and strategies laid out in plans, the realities of local politics make it challenging to balance economic development and equity goals, especially with public pushback from developers. Federal officials from HUD, DOT, and EPA should engage local elected officials with the goal of increasing their commitment to the regional sustainability plan. Retreating back to the silos and giving up on innovations for engagement will not serve changing communities.

As an overarching assessment, although survey respondents recognized positive impacts of SCI on planning engagement strategies and regional partners, many questioned the next steps and future vision of the 3-year investment. It appears that HUD provided little guidance or recommendations on a path toward implementation for these consortia, leaving regions with an impressive set of goals but no confidence in how to integrate them into practice and policy, and leaving local leaders with an uncertain immediate future. In reality, the complexity of governing and implementing this project may require ongoing internal and external governance mechanisms. Likewise, financial investment is essential for plan implementation, especially for smaller jurisdictions with limited staff and resources. In some cases, the new partnerships formed through SCI have capitalized on the diversity of funding opportunities available through their broadened networks; instead of only public-sector resources, partners are seeking nonprofit and private-sector funding for subsequent planning and implementation. To facilitate implementation of the regional plans, the federal government could consider aiding and incentivizing efforts by dedicating additional resources or further elevating the importance of these plans in other grant competitions it resources.

A sustainable community and region broadly engages its diverse stakeholders and learns from the shared experiences and needs of its citizens. Sustainable communities also enable and maximize the utility of all their realized and potential assets through synergistic collaborations across jurisdictions and sectors. This study demonstrates that SCI-RPG successfully seeded novel and effective innovations in planning outreach and engagement, and introduced new potential for regional planning in the United States. Without future investment in these efforts, a tepid legacy of SCI-RPG experiment may prevail, with HUD opening the door to regional thinking and partnerships, but ultimately, and perhaps ironically, failing to sustainably implement or institutionalize regional sustainability goals in perpetuity.

Appendix A

The Sustainable Communities Initiative Survey Instrument is reproduced on the following pages.

Confidential

Page 1 of 5

Sustainable Communities Initiative

Please complete the survey below.

Thank you!

The survey will collect information about the process and and impact of the Sustainable Communities Initiative (SCI) regional planning grant awarded to your region.

Questions will focus on:

- 1. Strategies used to encourage public participation**
- 2. Topics of broad concern across your region**
- 3. Influences of the process on relationships between localities and/or organizations**

There are no wrong answers and you should respond to survey questions based on your opinion or assessment.

Your survey response will remain anonymous, so your answers will not be connected to your name or organization.

Other regions awarded SCI regional planning grants are also completing this survey. The information collected from this research will be used to identify best practices and inform future planning efforts.

Thank you for taking the time to share your insights related to the SCI regional planning process.

With what region are you primarily associated?

- Gulf Regional Planning Commission (GRPC)
- Metropolitan Area Planning Commission (MAPC)
- New River Valley, Virginia (NRVPDC)
- Puget Sound Regional Council (PSRC)
- Other (specify)

Please explain your regional affiliation:

What role did you primarily assume in the SCI regional planning process?

- Regional planning organization staff
- Other governmental stakeholder
- Non-profit stakeholder
- Advocacy or interest-group stakeholder
- Technical assistance provider or consultant
- Interested citizen
- Other (specify)

Please explain your role in the SCI process, including how you participated and the objective of your involvement:

Confidential

Page 2 of 5

What was the primary role for local community development corporations (CDCs) and nonprofits in the SCI regional planning process? (CHOOSE TWO ITEMS)

- Helped communicate the relevance of the process to regional stakeholders
- Provided expertise and analysis
- Increased access to non-traditional stakeholders
- Identified planning goals and planning actions
- Ensured a fair process
- We did not interact with these groups
- Other (specify)

Please explain the "Other" role for local community development corporations and nonprofits in the SCI regional planning process:

What was the primary role for advocacy or interest-based groups in the SCI regional planning process? (CHOOSE TWO ITEMS)

- Helped communicate the relevance of the process to regional stakeholders
- Provided expertise and analysis
- Increased access to non-traditional stakeholders
- Identified planning goals and planning actions
- Ensured a fair process
- We did not interact with these groups
- Other (specify)

Please explain the "Other" role for advocacy or interest-based groups in the SCI regional planning process:

These questions ask you to reflect on any influence of the SCI regional planning process on COLLABORATION.

In your opinion, has the SCI regional planning process:

	Yes	No	Don't Know
Built local capacity for collaborative planning efforts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced the "costs" of collaboration through funding provision?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Built trust between organizations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developed a common framework/goals for organizations to support?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what degree do you think the structure of the SCI mandate to develop a regional consortium influenced collaboration on planning issues between JURISDICTIONS (i.e., city/county/region/town) in your region?

- Greatly increased collaboration
- Slightly increased collaboration
- Did not influence collaboration
- Slightly decreased collaboration
- Greatly decreased collaboration
- I don't know

Briefly elaborate on your observation related to changes in inter-jurisdictional collaboration, including anything related to the process that may have influenced collaboration:

To what degree do you think the structure of the SCI mandate to develop a regional consortium influenced collaboration between NON-TRADITIONAL PARTNERS in your region?

- Greatly increased collaboration
- Slightly increased collaboration
- Did not influence collaboration
- Slightly decreased collaboration
- Greatly decreased collaboration
- I don't know

Confidential

Briefly elaborate on your opinion related to changes in collaboration with non-traditional partners in the region, including factors that might promote or hinder new partnerships:

Do you anticipate that relationships developed through the regional consortium will continue after the SCI grant is completed?

- Yes
- No
- Unsure

Please explain any other influence that you think the SCI regional planning process has had on COLLABORATION between organizations, groups or agencies:

These questions ask you to reflect on the influence of the SCI regional planning process on YOUR REGION.

In your opinion, has the SCI regional planning process:

	Yes	No	Don't Know
Increased the quality or sophistication of community engagement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Raised public expectations for community engagement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contributed to the perceived value of community engagement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helped to introduce the interrelationships between economic, environmental and equity needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How do you think the integration of required housing assessment (e.g., Fair Housing Equity Assessment) in the SCI regional planning process will influence future policies or plans in your region? (CHOOSE UP TO THREE ITEMS).

- It will likely influence comprehensive planning
- It will likely inform zoning ordinance amendments
- It will likely promote coalition building
- It will likely support future community development investments
- It will likely influence future transportation policies or investments
- It will likely influence other inclusive housing policies
- It will likely influence collaboration on policies or plans
- It will not likely influence future policies or plans

Please explain any other influence that you think the SCI regional planning process has had on YOUR REGION:

These questions ask you to reflect on PARTICIPATION strategies used in the SCI regional planning process.

In your opinion, has the SCI regional planning process helped collect community input that is representative of diverse interests in the region (i.e., age, race, income, location)?

- Yes
- No
- Don't Know

Confidential

Page 4 of 5

What barriers, if any, challenged the engagement of underrepresented or disadvantaged populations?

- Lack of time to participate
- Lack of interest in the process
- Lack of perceived relevance of the process
- Language or cultural barriers
- Limits to trust or history of relationship
- Other (specify)

Please explain your answer:

In your opinion, what were the top TWO effective and/or innovative approaches to engaging underrepresented or disadvantaged groups in the SCI regional planning process?

What were the top TWO challenges in promoting policies which met the needs of disadvantaged populations (i.e., affordable housing, workforce education, green space, etc.) in the regional planning process? (CHOOSE TWO ITEMS)

- Political opposition
- Difficulty engaging issues of race and class
- Experience working on issues of social equity
- Barriers to engagement with underrepresented or disadvantaged groups
- Limitations in influencing local regulatory decision making
- Funding or resource limitations
- We did not face challenges
- Other (specify)

Please explain your answer:

These questions ask you to reflect on the influence of the SCI regional planning process on YOUR ORGANIZATION.

In your opinion, has the SCI regional planning process:

	Yes	No	Don't Know
Introduced new policy areas that your organization previously did not address?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Focused new connections for your organization between economic development and social equity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provoked a new internal commitment to social equity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emphasized a regional lens for land use/development?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved relationships between yours and other organizations in the region?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Confidential

In your opinion, has the SCI regional planning process influenced your organization's traditional approach to community development in any of the following ways? (check all that apply)

- It established my organization as a leader in community development research or advocacy
- It revealed new and potential community development partners
- It increased my organization's ability to facilitate community discussions
- It improved my organization's perceived expertise in community development
- It introduced new data
- It introduced new community needs
- It has not influenced my organization's approach to community development
- Other (specify)

Please explain your answer:

Please explain any other influence that you think the SCI regional planning process has had on YOUR ORGANIZATION:

This final section asks for your OVERALL assessment of the SCI regional planning process:

In your opinion, what is the biggest accomplishment of the SCI regional planning process that would not have been possible without the structure or financial support from the federal grant?

How willing would you be to help implement the plan that resulted from this process?

- Greatly willing
- Slightly willing
- Neutral
- Slightly unwilling
- Greatly unwilling

Is there anything else you would like to share about the SCI regional planning process and your involvement?

Acknowledgments

The authors thank the representatives from the 2010 Sustainable Communities Initiative Regional Planning Grant recipients that participated directly in this research: Gulf Regional Planning Commission in the Gulf Coast of Mississippi; the Metropolitan Area Planning Commission in the Boston, Massachusetts region; the New River Valley Planning District Commission in southwestern Virginia; and the Puget Sound Regional Council in the Seattle-Tacoma region of Washington. The authors especially acknowledge the important efforts that these four regions made to encourage participation in the survey and for their willingness to share the challenges and accomplishments experienced as part of the Sustainable Communities Initiative.

Authors

Meghan Z. Gough is an associate professor in Urban and Regional Studies & Planning at the Virginia Commonwealth University, Wilder School of Government & Public Affairs.

Jason Reece is an assistant professor in City & Regional Planning at The Ohio State University, Knowlton School of Architecture.

References

- Arnstein, Sherry R. 1969. "A Ladder of Citizen Participation," *Journal of the American Institute of Planners* 35 (4): 216–224.
- Bekkenta, Ben. 2014. Personal communication (interview). Program Manager, Puget Sound Regional Council.
- Booher, David E., and Judith E. Innes. 2002. "Network Power in Collaborative Planning," *Journal of Planning Education and Research* 21 (3): 221–236.
- Byrd, Kevin. 2014. Personal communication (interview). Director, New River Valley Planning District Commission.
- Chapple, Karen, and Elizabeth Mattiuzzi. 2013. *Planting the Seeds for a Sustainable Future: HUD's Sustainable Communities Initiative Regional Planning Grant Program*. Berkeley, CA: University of California, Berkeley, Center for Community Innovation. <http://communityinnovation.berkeley.edu/SCIRPGFinal%28080713%29.pdf>.
- Daley, Dorothy M., Elaine B. Sharp, and Jungah Bae. 2013. "Understanding City Engagement in Community-Focused Sustainability Initiatives," *Cityscape* 15 (1): 143–161.
- Feiock, Richard C., Kent E. Portney, Jungah Bae, and Jeffrey M. Berry. 2014. "Governing Local Sustainability: Agency Venues and Business Group Access," *Urban Affairs Review* 50 (2): 157–179. DOI: 10.1177/1078087413501635.
- Frick, Karen, Karen Chapple, Elizabeth Mattiuzzi, and Miriam Zuk. 2015. "Collaboration and Equity in Regional Sustainability Planning in the U.S. and California: Challenges in Implementation," *California Journal of Politics and Policy* 7 (4): 1–25.

Gough, Meghan Z. 2015. "Reconciling Livability and Sustainability: Conceptual and Practical Implications for Planning," *Journal of Planning Education and Research* 35 (2): 145–160. DOI: 10.1177/0739456X15570320.

Hawkins, Christopher V., and XiaoHu Wang. 2012. "Sustainable Development Governance: Citizen Participation and Support Networks in Local Sustainability Initiatives," *Public Works Management & Policy* 17 (1): 7–29.

Innes, Judith E., David E. Booher, and Sarah Di Vittorio. 2010. "Strategies for Megaregion Governance: Collaborative Dialogue, Networks, and Self-Organization," *Journal of the American Planning Association* 77 (1): 55–67.

Lubell, Mark, Richard C. Feiock, and Edgar E. Ramirez De La Cruz. 2009. "Local Institutions and the Politics of Urban Growth," *American Journal of Political Science* 53 (3): 649–665. DOI: 10.1111/j.1540-5907.2009.00392.x.

Olson, Mancur. 1965. *Logic of Collective Action Public Goods and the Theory of Groups*. Rev. ed. Cambridge, MA: Harvard University Press.

Portney, Kent. 2013. *Taking Sustainable Cities Seriously: Economic Development, the Environment and Quality of Life in American Cities*. Cambridge, MA: MIT Press.

Sharp, Elaine B., Dorothy M. Daley, and Michael S. Lynch. 2011. "Understanding Local Adoption and Implementation of Climate Change Mitigation Policy," *Urban Affairs Review* 47 (3): 433–457.

St. Clair, Holly. 2014. Personal communication (interview). Director, Data Services, Metropolitan Area Planning Commission.

U.S. Environmental Protection Agency (EPA). 2010. *Partnership for Sustainable Communities: An Interagency Partnership of HUD, DOT, and EPA*. Washington, DC: Environmental Protection Agency.

Wang, Xiaohu. 2001. "Assessing Public Participation in U.S. Cities," *Public Performance & Management Review* 24 (4): 322–336.

Wang, XiaoHu, Christopher V. Hawkins, Nick Lebrede, and Evan M. Berman. 2012. "Capacity to Sustain Sustainability: A Study of U.S. Cities," *Public Administration Review* 72 (6): 841–853. DOI: 10.1111/j.1540-6210.2012.02566.x.

Wheeler, Stephen. 2013. *Planning for Sustainability: Creating Livable, Equitable and Ecological Communities*. New York: Routledge.

Wilkinson, Elaine. 2014. Personal communication (interview). Director, Gulf Regional Planning Commission.

Zeemering, Eric S. 2009. "What Does Sustainability Mean to City Officials?" *Urban Affairs Review* 45 (2): 247–273. DOI: 10.1177/1078087409337297.

Planning Without Agency: Vibrant NEO 2040

Kathryn Wertheim Hexter
Sanda Kaufman
Cleveland State University

Abstract

Since the 1970s, Northeast Ohio has experienced the ill effects of sprawl, as a declining population exerted pressure to develop previously undeveloped land. Local elected officials, planners, and policymakers have long recognized their interdependence and the need for a strategy to sustain the region. However, structural, political, and administrative fragmentation has challenged efforts to develop and implement such a strategy. With no entity having regional authority to implement plans at a regional scale, efforts had not progressed beyond talk.

In 2010, a newly formed Northeast Ohio Sustainable Communities Consortium (NEOSCC) obtained a U.S. Department of Housing and Urban Development Sustainable Communities Initiative grant to develop Vibrant NEO 2040, a regional planning framework for sustainable development. NEOSCC built a land use map for the 12 counties comprising its area of interest. It collected land use, fiscal, transportation, and environmental data and public preferences. It produced forecasts and constructed four alternative development scenarios, which it submitted to the public for consideration.

At the conclusion of the Vibrant NEO 2040 project in 2014, NEOSCC developed a publicly accessible regional database, generated a framework of development principles, and selected preferred development scenarios. Attention then turned to implementation.

However, in strong home rule states such as Ohio, planning is primarily a local government function. The only entities with a mandate to plan on a regional scale are metropolitan planning organizations and councils of governments. Regional planning frameworks such as Vibrant NEO can be implemented only if local governments agree to work together.

Despite efforts to encourage adherence to NEOSCC's framework, the path to the implementation of a regional plan remains unclear at best. We examine these efforts to move toward regional plan implementation in the absence of agency and explore the extent to which any portion of the 12-county region can deviate from the Vibrant NEO vision before the regional plan loses its coherence and meaning. We ask whether a voluntary

Abstract (continued)

framework such as Vibrant NEO can promote and sustain collaborative decision processes among regional decisionmakers and local communities. We find that, in general, this framework is implementable; however, because it is voluntary, implementation depends highly on leaders who find that it is in their (or the public's) best interest to stay within the framework. In the NEOSCC case, several obstacles reduce the likelihood of regional implementation, even as subregional actors move toward voluntary compliance with the framework.

Introduction

Legacy cities are “older, industrial urban areas that have experienced significant population and job loss, resulting in high residential vacancy and diminished service capacity and resources” (Legacy Cities Partnership, n.d.). These cities and their surrounding regions pose structural challenges to efforts to address their social, economic, and environmental problems sustainably. One such challenge is the mismatch between their physical layout—dating from the time when core cities attained peaks of population and economic activity—and their current population, needs, and resources. For example, legacy cities’ structures and infrastructure tend to take more space than if they had been built to meet the needs of the current population, with current technology. Aging infrastructure needs repair or replacement, while tax bases to fund these improvements are strained and declining. In the absence of new strategies to set them on a sustainable course, legacy regions are necessarily reactive in the short run, using their resources to respond to urgent needs. This reactive strategy is both unsustainable and unwise in the long term; it consumes the relatively small amounts of “seed corn” to repair and maintain what is an already inefficient organization of space that will continue to experience stress and deterioration.

Beyond this general characterization of the legacy status, each city and region tends to have specific circumstances that require tailored solutions. For example, scale is a key consideration: how should the boundaries of a region be selected for planning purposes? Other considerations include environmental assets and expected climate change impacts, housing, transportation and infrastructure needs, economic and political structure, and social problems. Not least are planning and implementation resources and capabilities, including numerous government agencies, private and nonprofit organizations, and local attitudes and willingness to participate in public decision processes. These considerations are not independent of each other; rather, they are interrelated in complex ways with high likelihood that addressing any of them may give rise to “wicked problems” (Rittel and Weber, 1973; Skaburskis, 2008) and unwanted consequences. Therefore, to understand and advance planning in the legacy context, it is necessary to explore both the general features and study specific cases of legacy region planning projects. We propose to engage in this task by focusing on the implementation of Vibrant NEO 2040, a planning framework for the northeast Ohio region devised between 2011 and 2014.

In general, we distinguish three classes of place characteristics that matter both for making and implementing plans. Although these classes are relevant to any region, their mix and interplay is region specific. The first class includes tangible factors: the physical layout, structures and their environment, population size and composition, and socioeconomic characteristics that drive local needs and resources. All factors in this class are affected by a region's legacy status. For example, population and economic decline undermine a region's resource base and attractiveness, as does an environment impaired by previous heavy industrial activities. The aging infrastructure poses both functional and health risks, and the tax revenue necessary for remediation is dwindling. High proportions of population in poverty impose additional demands on the already strained resource base. The current mix of skills does not match well the nature of jobs in the growing industries, and travel connections between where people live and where they might find work are weak or nonexistent for those depending on public transportation. Thus, the legacy status affects both the kinds of plans that can be considered for the region, as well as the prioritization of the scarce resources for implementation.

The second class includes formal functional and organizational systems of governance and their linkages. This class includes the various planning and coordinating agencies, special districts and local governments, and the ways in which they interact. In older regions, it is likely that the passage of time alone accounts for the many layers of government. The overlapping jurisdictions of the various planning and implementation agencies are a result of the region's growth over time, with each planning exercise generating new requirements, regulations, and funding limitations. Thus, today's governance structure is the suboptimal outcome of a set of incremental responses to needs during a multi-decade time span. Were it possible to redesign the governance system for current needs, it would likely look different—leaner and with more coordination and sharing potential. However, the opportunity to redesign a region's governance structure arises rarely, if ever. This legacy reality suggests that the strategy for escaping the mismatch between current regional needs and a region's ability to respond to them may also have to be incremental, although in time it could become more flexible and adaptive by design. Such a strategy would have to consider what could be accomplished and how unlikely it is to happen in the short run, given the current governance patterns, rather than propose and rely on governance changes such as adding a regional decision layer.

The third, intangible class includes informal collective decisionmaking capacity, traditions and processes, and local attitudes toward planning. For example, legacy regions have long histories that left their marks on local cultures, with both positive and negative consequences for decisionmaking and the ability to adapt to new circumstances. In regions where planning—that is, a collective decision mode—has traditionally been perceived as limiting individual freedom regarding the use of private property, it is very difficult to make and implement regional plans, as each locality tends to jealously guard its ability to make land use decisions. The numerous unilateral local decisions increasingly add up to higher collective costs of sustaining duplicative infrastructure and services, reduced ability to adapt to new circumstances, as well as higher environmental impacts. This spatial driver of suboptimal outcomes for all is the result of decisions that may seem desirable from a narrowly local perspective but ignore the broader regional consequences. As is the case with governance, it is unlikely that the local culture can be changed to facilitate planning and

implementation in the short run. However, if incremental changes driven by needs and resources result in successes, it may be possible in time to change attitudes toward regional collaboration and plan implementation.

The three classes of factors affecting plans and their implementation (exhibit 1) are not independent. They interact through complex linkages that sometimes enhance, and at other times lessen, the effects of each on a region. These effects can be surprising and, when they become manifest, are irreversible or difficult to turn around, should it be necessary. Therefore, it is all the more important to devise planning and implementation approaches that take into account these three factors and incorporate them into the plans—which is easier said than done, but not impossible. However, we propose that plans that do not actively take account of these challenges are almost sure to fail. The case of Northeast Ohio analyzed here offers the opportunity to explore how the three classes of factors of exhibit 1 affect implementation in the particular circumstance of a plan devised without an institutional mandate.

We begin by describing the Northeast Ohio region that formed the object of the NEOSCC planning effort. Then we present the resulting Vibrant NEO 2040 framework. We compare this framework with plans devised in other Sustainable Communities Initiative (SCI) regions that share some of Northeast Ohio’s characteristics. We examine what place and process similarities and differences contributed to the outcomes and to the likelihood of plan implementation, and how the three factors affecting them—tangible characteristics, governance structure, and intangibles—played out in these cases. We end with some observations regarding implementation of the Vibrant NEO framework that can inform both our case and others aiming to set legacy regions on a sustainable course.

Exhibit 1

Place Characteristics Affecting Plan Implementations

Class of Place Characteristics	Components
1. Tangible/measurable characteristics	<ul style="list-style-type: none"> • Physical layout • Structures and their environment • Population size and composition • Socioeconomic characteristics driving local needs and resources
2. Formal functional and organizational systems of governance and their linkages	<ul style="list-style-type: none"> • Planning and coordinating agencies • Special districts and local governments • The ways in which governance entities interact
3. Intangible informal collective decisionmaking capacity	<ul style="list-style-type: none"> • Traditions and processes • Local attitudes toward planning • Informal relationships • Past participatory experiences

The Northeast Ohio Region and Its Legacy Characteristics

Northeast Ohio has many legacy hallmarks and challenges, few of which are unique but whose interplay is specific to the region. The degree of political and administrative fragmentation, and of overlapping jurisdictions, is high. For example, more than one agency has jurisdiction over the

same environmental and infrastructure systems. No entity with planning authority exceeds the boundaries of a single metropolitan area or county. Because northeast Ohio is far from socioeconomically homogenous, and because plans tend to benefit residents differentially, any decision is likely to be opposed by some interest group.

The political and administrative fragmentation coupled with the complex physical and functional interactions among the various natural and social systems of Northeast Ohio pose a serious planning challenge; regardless of how we define the planning region, it is impossible to address sustainable development and legacy challenges within the confines of a single county. Therefore, we may ask how the region's boundaries should be defined for planning and implementation purposes. Which counties should be included, and by what criteria? For guidance on how best to define the region for planning purposes, we look first at the ecological, economic, and infrastructure systems that transcend the political boundaries. The region's dominant ecological element is Lake Erie, with the many watersheds feeding it. Other natural assets include agricultural land and open spaces and the Cuyahoga Valley National Park. Administrative services such as economic development, transportation, infrastructure, and water and sewer services also cross county boundaries. Agencies serving these cross-jurisdictional needs include metropolitan planning organizations (MPOs), large water and sewer agencies, and, on a much smaller scale, numerous local agencies and school districts. Decisions in the regional space are bound to affect interests of several of these entities, requiring coordination.

In a region such as Northeast Ohio, where numerous actors with limited planning mandates make decisions in real time, it is not surprising to find that outcomes are rarely coherent with respect to their stated goals and objectives. Instead, mutual interference, unnecessary competition, duplication of services, and waste of scarce public resources are likely. In particular, unsustainable development patterns can emerge and proceed unchecked in the absence of regional coordination. Such coordination could be provided by an entity, absent in Northeast Ohio, with recognized "agency"—the capacity of exerting legitimate decision mandate—to plan across city, county, or MPO boundaries.

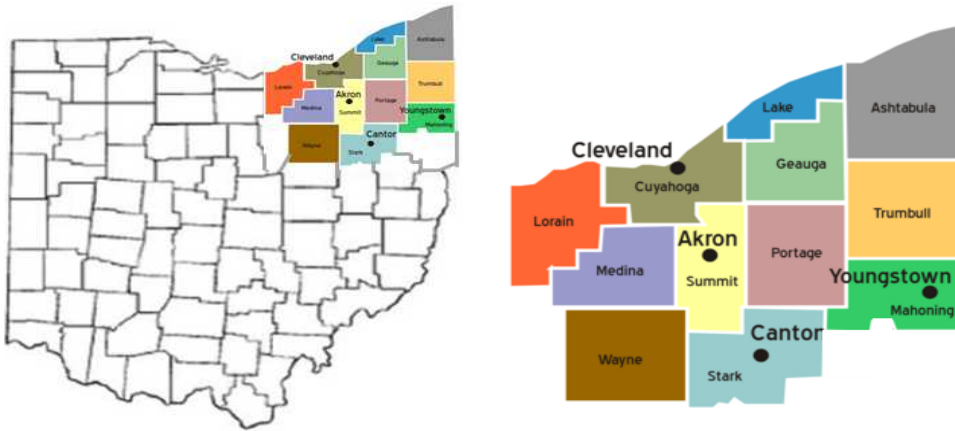
It is within this complex legacy context of competing regional definitions and spheres of influence that the Northeast Ohio Sustainable Communities Consortium (NEOSCC) has engaged in an ambitious 3-year, 12-county collaborative planning initiative. It was funded by a fiscal year 2010 (Round 1) Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) from the U.S. Department of Housing and Urban Development (HUD). We focus on this case to explore whether and how planning without agency—a necessity also faced by other regions—can contribute to regional sustainability.

The physical area of Northeast Ohio¹ that was the object of NEOSCC's planning effort is relatively large, encompassing 12 counties (see exhibit 2). This geography largely coincides with the boundaries of the Connecticut Western Reserve: an area owned, sold, and distributed by the State of Connecticut in the years after the American Revolution, with many of the early settlers coming from New England. With 3.3 million acres of land bounded by Lake Erie to the north and

¹ Here we use *Northeast Ohio* to refer to the definition used for the purposes of NEOSCC's plan.

Exhibit 2

The Northeast Ohio Region, as Defined by NEOSCC



NEOSCC = Northeast Ohio Sustainable Communities Consortium.

Pennsylvania to the east, the Western Reserve extended in the south to include what are now the cities of Youngstown and Akron. Included are the watersheds of the Cuyahoga,² Black, Rocky, and Mahoning Rivers (exhibits 2, 3, and 4).

The 12-county region represents 18 percent of Ohio's land area. It houses 3.8 million residents, or about a third of the state's population. One-half of the land is used for agriculture; 25 percent of it is taken by residential uses; the balance consists of industrial and commercial uses, and less than 5 percent of it is open space and parks. About three-fourths of the housing stock is single-family, and one-half of the stock is more than 50 years old; 70 percent is owner occupied. Poverty is heavily concentrated in the region's central cities, with 53 percent of their residents earning less than \$50,000 per year (exhibit 5). However, in 2015, the regional poverty rate (13.3 percent) overall was slightly lower than that of the state (14.8 percent). At \$51,000, the 2015 regional median household income was slightly lower than the statewide median of \$53,300. The region's unemployment rate, at about 5 percent in 2015, was comparable to the statewide rate (exhibits 2 through 4).

Educational attainment is not high in the state of Ohio. The 2014 U.S. Census estimates rank it 36th of the 50 states for the percentage of people 25 and older with at least a bachelor's degree. Earlier American Community Survey census data, from 2010–2012, indicate that the Northeast Ohio region is similar to the state in the percentage of the population without a high school diploma (nearly 10 percent) and the percentage with a bachelor's degree or higher (nearly 30 percent). However, levels of education vary greatly across the 12 counties, with the central cities having lower high school graduation rates and lower proportions of the population with college degrees (Center for Community Solutions, 2014).

² Of "burning river" fame, due to a serious fire kindled in 1969 by debris and oil discharged by industry and freight ships, the Cuyahoga River is credited with raising environmental awareness across the country, leading to the establishment of the U.S. Environmental Protection Agency in 1970 (Layzer, 2015).

Exhibit 3

Population Trends of Vibrant NEO's 12-County Region, by County

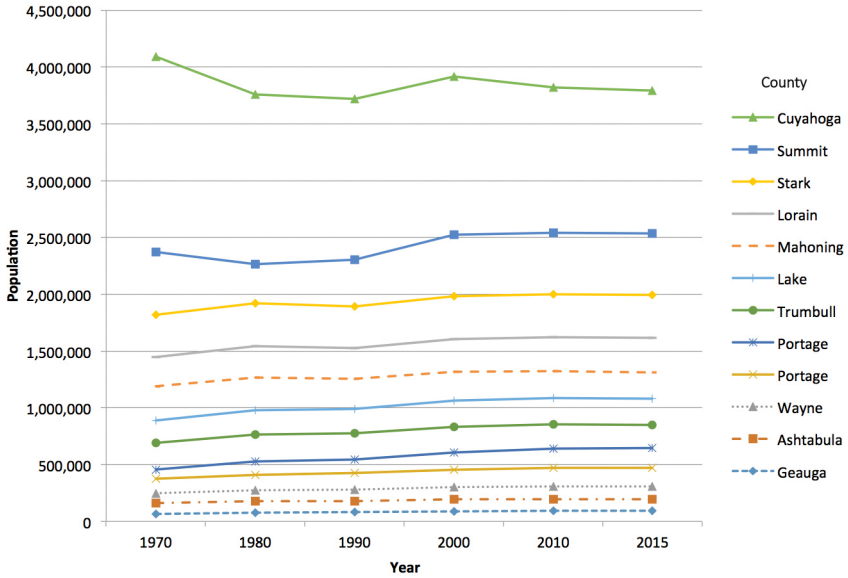
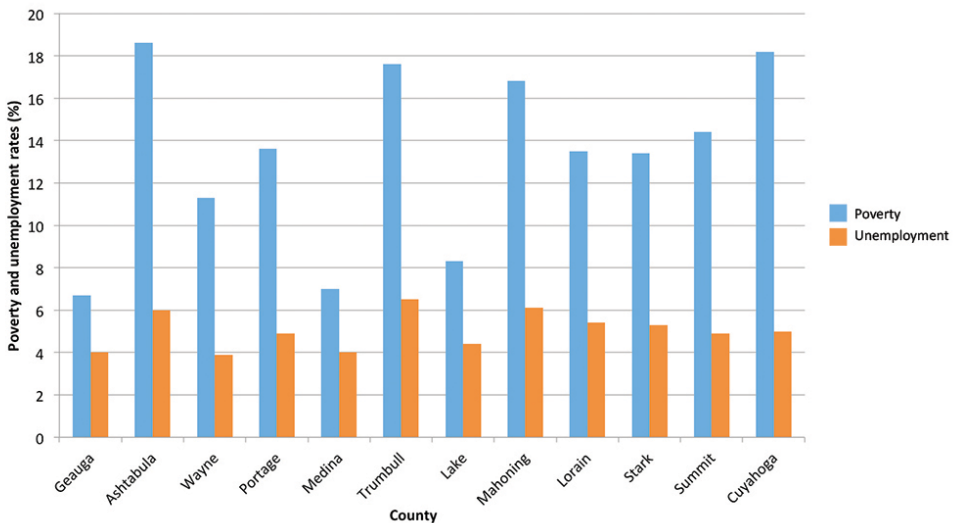


Exhibit 4

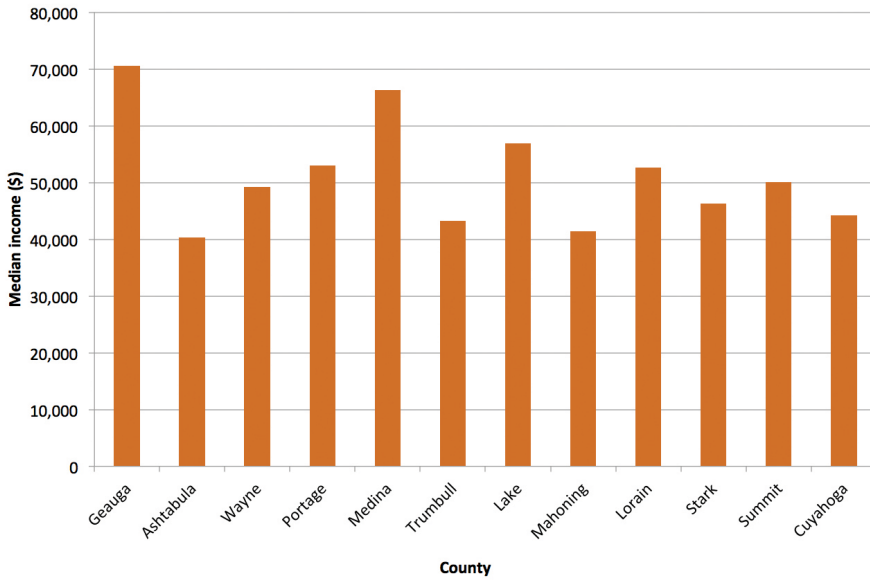
2015 County-Level Poverty and Unemployment Percentages in Vibrant NEO's 12-County Region



Note: Counties ordered by increasing population size.

Exhibit 5

2015 Median Income in Vibrant NEO's 12-County Region



Note: Counties ordered by increasing population size.

Within this 12-county region are 7 legacy cities (Akron, Ashtabula, Canton, Cleveland, Lorain, Warren, and Youngstown); 400 smaller cities, villages, and townships; 15 public housing authorities (PHAs); 700 taxing jurisdictions; and 5 special-purpose multicounty intergovernmental organizations. Governance of the region involves more than 2,500 elected officials. Little evidence of a shared identity or culture exists among the distinct urban, suburban, and rural parts of the region. It is highly segregated both racially and economically. The strongest unique shared identifiers that emerged during a 2005 regional visioning process called Voices and Choices, were arts and cultural amenities, Lake Erie, the Cuyahoga Valley National Park, and to some extent Cleveland's sports teams (Northeast Ohio Citizens Speak, 2006).

Since the 1970s, the Northeast Ohio legacy region has experienced tension between a sharply declining population (exhibit 3), especially in its urban centers, and intense pressure to develop previously undeveloped land. The drift from central cities toward the edges resulted in low-density sprawl. The amount of urbanized land in the region increased by 60 percent from 1970 to 2000, while the region's population grew less than 4 percent (Fund for Our Economic Future, 2011).

The pattern of population out-migration from the central cities has been partly subsidized by the federal and state highway system, a failure to include the cost of infrastructure expansion in the price of new development, and partly by state and local economic development incentives that encouraged development in greenfields. The legacy of sprawl has far-reaching consequences across all interacting physical and social systems of the region. Benefits typically accrue to those sufficiently wealthy to buy property at the underdeveloped edges, whereas costs of new development

are shared across the board through higher prices for utilities and other regional infrastructure and amenities. Sprawl has either created or enhanced environmental, socioeconomic, and political/administrative threats to the sustainability and resiliency of the region.

Sprawl has extended the radius of commuting, with pressure on the transportation system and increased levels of pollution in all media—air, water and soil—due to the heavy reliance on cars throughout the region. It has required expansion of the radius of infrastructure services, with costs borne by everyone in the region. The costs of sprawl have been well documented (for example, Burchell et al., 2002; Carruthers and Ulfarsson, 2003; Gordon and Wong, 1985; Harvey and Clark, 1965; Johnson, 2001; Litman, 2015; Trubka, Newman, and Bilsborough, 2010). Some sprawl consequences include increased poverty in central cities, a locational mismatch between affordable housing and jobs, depletion of the local tax base, declining city services, replacement of agricultural land with suburban development and its negative impact on local food supply and green spaces, and the fragmentation or even elimination of some wildlife habitat. Added to sprawl consequences, environmental threats to the Northeast Ohio region include the effects of climate change on Lake Erie, pollution of water, soil, and air—partly a legacy of the industrial heyday—and invasive species of plants and wildlife. As a result, quality of life has declined for all.

Local elected officials, planners, and policymakers have long recognized the need to stem the movement of population and businesses away from the region's urban cores and into greenfields. On the other hand, the region's political fragmentation and Ohio's strong culture of local government home rule have been steady barriers to the kind of planning that would lead to sustainable growth patterns. Despite repeated calls for solutions, ranging from regional government to regional cooperation around economic development and planning, the region has never made much progress on this front, unlike places such as Chicago or New York.

Regional leaders from every sector—the church, political leaders, philanthropists, grassroots, academics and leadership organizations—have also understood the need for greater collaboration to address the costs of sprawl. The 1990s and early 2000s were especially active in efforts to promote greater regional sustainability. “Church in the City,” in 1993, an initiative led by the Catholic Diocese of Greater Cleveland, focused on the social and economic consequences of sprawl; the Regional Prosperity Initiative, initiated by the Northeast Ohio Mayors and City Managers Association, promoted regional collaboration, tax sharing, and sustainable economic development across a 16-county region. Other sectors also got involved. In 1994, the Ohio Taskforce on Regional Competitiveness and Cooperation, led by three Northeast Ohio state legislators, sought to develop strategies for regional economic competitiveness and cooperation across governmental jurisdictions; the Sustainable Communities Symposium, a citizen-based, grassroots effort based at Cleveland State University, with funding from the U.S. Environmental Protection Agency (EPA) and various foundations, worked to build support for sustainable regional planning. In 2004, the Fund for Our Economic Future (the Fund) was formed as a philanthropic collaborative based in Northeast Ohio and committed to shaping and sustaining the region's long-term economic competitiveness. One of its first efforts was the aforementioned “Voices and Choices” regional visioning process. At the height of its activities, the Fund covered 22 counties coinciding with the regional definition used by Jobs Ohio, the state economic development agency. The Fund followed on the heels of the Regional Economic Indicators project, a university-based effort to track the regional

economy in the Cleveland, Akron, Canton, and Youngstown metropolitan areas. The Northeast Ohio Regional Leadership Task Force, a consortium of 14 community leadership programs created in 1995, held an annual region day to educate future leaders about regional issues and organized several university-based research projects and conferences on regional issues.

These civic initiatives, discussions, and studies have raised awareness of the benefits of sustainable regional growth and of the negative impact on sustainability that continued sprawl was having on the region's economy. Real progress toward regionalism remained slow, however. As in many legacy regions, citizens and civic leaders may begin to think differently about their future after participating in initiatives such as those described previously. Nevertheless, heightened public awareness does not translate into the political will needed to overcome existing political and administrative fragmentation and to engage in collaborative planning across jurisdictions. In the absence of an entity with the ability or authority to plan and implement at a regional scale, most Northeast Ohio efforts never progressed to the stage of "do things differently."

Would the usually contentious communities of Northeast Ohio ever agree to collaborate to produce a regional plan, in recognition of the interdependencies of their disparate communities? If so, once they produced a plan, would they collaborate to implement it? HUD's SCI presented an opportunity to answer these questions. Next, we describe how some actors in the region took advantage of this opportunity to coalesce into NEOSCC and attempt to generate a framework for regional sustainability-enhancing decisions.

Approach

We used a qualitative approach to examine the NEOSCC case. Our approach has several components that shed light on the roles played by the three classes of factors which we identified as affecting planning processes and the likelihood of plan implementation (exhibit 1). We scanned the regional planning and collective impact literature. We identified comparable SCI projects among the first round of grantees to derive linkages between planning context, scale, structure, and likelihood of implementation. We reviewed documents produced by NEOSCC, contemporaneous newspaper and social media information, and social-environmental regional data, as well as HUD's database and literature about the SCI projects. We attended several of the NESOCC workshops and community events and a scenario generation workshop. One of us currently serves on the newly established NEOSCC Launch Board, tasked with implementation. Lastly, we interviewed 22 individuals: several of the key participants in the NEOSCC process, some of those involved in the NEOSCC Launch Board, and leaders of a comparable SCI project in Buffalo, New York. Our analysis of responses led to ex-post assessments of the NEOSCC process and expectations for implementation of Vibrant NEO. To address the key issues in this article—planning without mandates in a legacy region—we characterize the context of the regional decline, the scale of the initiative, its outcomes, and the role of governance structures, including lack of a superordinate organizational structure with a planning and coordination mandate. We also examine how collaborative efforts can be sustained in such contexts. We draw on previous research in these topical categories.

For example, through meta-analysis, Ansell and Gash (2008) extracted several models of collaborative governance and provided the conditions for success for each model. They identified several

characteristics that were critical in the success or failure of the 137 collaborative governance cases they studied. Along with the history of relationships, they included a set of variables relevant to our case: the participation incentives that partners had, as well as the power balance. Leadership and the specific institutional arrangements were of consequence for these initiatives, as they are for NEOSCC.

Goldman and Deakin (2000) explored planning through partnerships in the regional space in the context of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, which gave the larger MPOs decisionmaking authority that in most states had previously rested with state departments of transportation. They examined MPO leadership roles in related collaboratives in 24 cases. Of the five types of activities and arrangements they identified—consultation, coordination, cooperation, consensus building, and collaboration—the first three predominated among MPOs. This finding constitutes a benchmark for assessing the past and future role of the MPOs in NEOSCC. The authors highlighted the social learning effect of collaboratives, and also recognized that results are mixed.

Kaufman (2016) addressed various aspects of governance and how they might affect planning and implementation in a legacy context, specifically in terms of responding and adapting to climate change—which is one of the concerns in the quest for sustainability of regions. She deemed implementation a key evaluation criterion for plans because, in its absence, the best laid-out plans will miss their mark. The Vibrant NEO case is explored in the light of the implementation imperative.

Because Vibrant NEO is one of the projects funded by the SCI-RPG program, we drew on evaluative research of new regionalism. Work by Alexander (2010), Bates and Zapata (2013), Kok and Veldekamp (2011), and the earlier Wilbanks and Kates (1999) are particularly relevant to our question about the “right” scale for regional planning initiatives. The latter also touches on sustainability, a central concern of Vibrant NEO.

Ample literature on community collaborative efforts exists. We drew on instances of regional collaboration, such as described by Benner and Pastor (2015). The quality of Vibrant NEO’s public participation aspect is informed by work such as Irvin and Stansbury (2004). Vibrant NEO made use of scenarios to get consensus around a preferred alternative. We looked at similar and other uses of scenario tools for regional planning, such as that of Chakraborty (2010). Together, these sources helped us derive insights about how context, scale, and stakeholder engagement affected the NEOSCC project, and more generally, how these factors can contribute to or hamper regional planning and implementation of legacy regions’ redevelopment.

Vibrant NEO 2040

NEOSCC produced the Vibrant NEO 2040 vision and framework, from 2011 to 2013, in the context of the large and complex legacy region described previously. The collective impact model of SCI offered an appealing approach to tackling longstanding concerns and planning issues and to position the region to compete in the new economy. The NEOSCC partners hoped that the funding and a supportive federal partner would provide the impetus needed to bridge longstanding divides

and support the hard decisions that would be needed to move to a regional approach to strengthen the economy and sustain the region. The relationships and alliances that would be forged through the planning process were expected to carry through to implementation.

Other SCI legacy region grantees faced similar challenges and had, perhaps, similar hopes. We identified 12 comparable places with one or more commonalities with the northeast Ohio project, including an informal alliance of partners, more than five political jurisdictions, and more than one MPO or other regional planning body, such as a council of governments (COG; exhibit 6). NEOSCC stood out in several ways, even among the 12 comparable regions. To our knowledge, it was the only grantee that created a new, nonprofit entity as its “backbone” organization to carry out the SCI planning process. It was also the only one to bring together five regional planning entities (MPOs and COGs) across 12 counties. In addition to the relatively large geographic scale of the planning area and the low level of social cohesion within it, we set out to explore the relationship between the NEOSCC structure and the planning outcomes and the likelihood of their implementation.

We examine how NEOSCC dealt with its challenges in both the planning and more recently, the implementation phases. Despite the challenging context, the NEOSCC project represented an unprecedented opportunity to develop a framework for regional planning in Northeast Ohio. Our analysis focuses on the lessons NEOSCC offers for planning without agency. In the remainder of this section, we describe NEOSCC’s organizational structure, its goals, and its planning approach.

Exhibit 6

SCI Grantee Projects Comparable to NEOSCC

State	Lead Organization	Project
California	Sacramento Area Council of Governments	Regional Plan for Sustainable Development
Massachusetts	Metropolitan Area Planning Council	MetroFuture
Texas	Capital Area Council of Governments	Sustainable Places Project
Texas	Houston-Galveston Area Council	Our Region Houston-Galveston Regional Plan for Sustainable Development
Virginia	Thomas Jefferson Planning District Commission	Many Plans, One Community
Florida	South Florida Regional Planning Council	Seven50: Southeast Florida Prosperity Plan
Alabama	East Alabama Regional Planning and Development Commission	Community Livability for East Alabama Region Plan 2030 (CLEAR Plan)
Missouri	East-West Gateway Council of Governments	One STL: Many Communities, One Future
Missouri	Mid-America Regional Council (MARC)	Creating Sustainable Places: Regional Plan for Sustainable Development
North Carolina	Piedmont Authority for Regional Transportation	Piedmont Together
New York	Regional Plan Association Inc.	New York-Connecticut Sustainable Communities
Ohio	Northeast Ohio Areawide Coordinating Agency	Vibrant NEO 2040: Northeast Ohio Sustainable Communities Consortium Initiative

NEOSCC = Northeast Ohio Sustainable Communities Consortium. SCI = Sustainable Communities Initiative.

Organizational Structure

Aiming to promote a regional economic growth strategy for a 16-county Northeast Ohio region, the Fund convened, in 2010, a consortium of 33 Northeast Ohio public and nonprofit organizations that successfully competed for a Category 1 SCI-RPG, administered by HUD. The consortium created a new nonprofit to carry out the work: NEOSCC, a freestanding nonprofit, “civic consortium” incorporated in 2011. During the course of 3 years, NEOSCC proceeded to formulate Vibrant NEO 2040, a vision and framework for developing sustainably 12 Northeast Ohio counties.

The decision to create a new nonprofit was made once it was determined that “no single organization was equipped to manage an effort of this scale and ambition” (interview with NEOSCC participant). As the region’s largest MPO, serving 5 of the 12 counties, the Northeast Ohio Areawide Coordinating Agency (NOACA), in Cleveland, became NEOSCC’s fiscal agent. To encourage buy-in from leaders across the planning region, and to avoid a Cleveland-centric perception, NEOSCC located its offices in Akron, Ohio, the region’s second largest city. The organization’s 501(c)(3) status was not formalized, and the organization was not fully functional (with staff and an office) until October 2011, 9 months after NOACA entered into the formal grant agreement with HUD. This process significantly delayed the start of the organization’s activities.

NEOSCC had a board comprised of 33 entities including representatives from 4 MPOs, 1 regional COG, 6 counties, 4 cities, 3 universities, 3 PHAs, and 13 other regional organizations. Many of these entities had been involved in one or more previous initiatives during the course of nearly 20 years to promote regional collaboration and planning. However, while earlier initiatives set the stage, NEOSCC’s was the first regional planning effort in that 20-year period that had obtained considerable federal funding. The participants contributed in-kind resources that supplemented the grant and enabled the group to fund consulting services for producing a geographic information system (GIS) regional database and scenarios for the future and for the design and facilitation of public outreach.

At its peak in 2012, the nonprofit had a staff of 12, including interns, and also worked with several consultants. NEOSCC also drew on NOACA staff to manage the work, and all the participating MPOs contributed staff time. In July 2012, NOACA’s long-time director retired, and the board hired Grace Gallucci, who came to Cleveland from Chicago. She brought a new approach and perspective on regional planning, having worked on larger regional collaborative projects in Chicago. She took a more active role in NEOSCC than her predecessor. In December 2012, as the work was floundering, leadership of NEOSCC shifted to the MPOs. Gallucci became the board chair and the leaders of the other MPOs became officers; a representative from HUD was added. Together, the new leadership convinced the NEOSCC board to hire the planning consulting firm Sasaki Associates to complete the scenario planning and fiscal impact model. Since the end of the planning period, Gallucci has continued to lead the Launch Board and add representation from the private sector to the effort (Gallucci, 2015).

NEOSCC Goals

NEOSCC aimed to produce a regional sustainability plan for Northeast Ohio that encouraged active integration of the region’s employment centers (Cleveland, Akron, Canton, and Youngstown) and addressed the region’s economy, environment, transportation systems, housing and community

development, and placemaking. Some of these issues—economy, environment, and transit or transportation—are regional, in the sense that they are functionally and economically interconnected across the regional space and therefore most effectively addressed on a regional basis. Moreover, the planning and administrative bodies have authority that typically crosses municipal and, in some cases, county boundaries, making it feasible for decisions to be made collaboratively. For other issues—housing, land use, community development, and placemaking—decisions are made locally, although the impacts of these decisions have regional implications. The NEOSCC framework was expected to account for these different levels of “agency” and to achieve the following outcomes.

- Concrete plans for regional issues.
- Shared priorities to guide local action.
- Formal shared strategies and processes to enhance local planning.
- A set of shared tools to support ongoing planning efforts.

The NEOSCC Planning Approach

In the first phase of the Vibrant NEO project, NEOSCC participants organized around thematic groups or workstreams corresponding to key categories of concerns: Environment, Connections (transportation), Housing and Communities, Economic Development, and Quality Connected Places. Each group was responsible for surfacing problems in its category, identifying and collecting information, and formulating sustainable development principles for the region. They all received data and GIS support.

As it had promised in its proposal, NEOSCC sought community input throughout the planning process through various communication channels—in person, and through media, newsletters, community meetings, caucuses, workshops and charrettes, surveys, and an online planning game, “Imagine my NEO.” It also conducted a regional assessment of impediments to fair housing and a fair housing equity assessment.

The second phase entailed assembling a regional information database, including the first ever regional land use map for all 12 counties. Forecasts were developed by extending trends from 1970 to 2010 for key regional variables, including population, employment, housing, and transportation. This database was used to construct four future growth scenarios: “trend,” “grow the same,” “grow differently,” and “do things differently.” The scenarios differed from each other in their underlying regional preferences for planning and growth choices. For example, the “trend” scenario depicted current trends continuing along with no planning intervention, a scenario NEOSCC considered to be unsustainable. As alternatives, they offered the three other scenarios: one in which population and employment growth remained constant but local government implemented the Vibrant NEO framework (“Do Things Differently”); a second one in which population and employment growth increased but jurisdictions made no policy changes (“Grow the Same”); and a third in which growth increased, and Vibrant NEO was implemented (“Grow Differently”).

These scenarios were then submitted to the public for consideration through the various communication channels. According to NEOSCC documents, 5,600 people in the region were engaged. Most participants preferred the “Do Things Differently/Grow Differently” scenarios, both of which included the implementation of the Vibrant NEO framework.

In the final phase, the Vibrant NEO framework consisted of 8 objectives, 4 themes, 9 recommendations, and 41 initiatives for implementing the recommendations. The four themes for building a vibrant, resilient, and sustainable Northeast Ohio were rather unobjectionable and, to some extent generic, likely a good fit for any legacy region. Their intent was to counter some of the negative effects of past urban sprawl, and to contain it in future development. The four themes are—

- Strengthen our Established Communities.
- Increase our Transportation Choices.
- Protect our Natural Resources Regionally.
- Promote Collaboration and Efficiency.

For example, strengthening established communities means building inside existing urban areas instead of greenfields. Protecting regional natural resources is also to be accomplished by foregoing continued expansion in the regional space in favor of compact development.

Examples and principles for collaboration and partnering, for data-driven decisionmaking, and for governance accompanied the themes. At its conclusion, the Vibrant NEO framework was posted on its website, and more than 1,300 people signed on as Vibrant NEO Champions. The products included a publicly accessible regional database, and a framework of development principles that would correspond to the two scenarios that garnered the most public support: “Do Things Differently/Grow Differently.”

To inform the predictions and scenarios, NEOSCC worked with each of the 12 county auditors or financial officers to compile a parcel-level land use and zoning map for more than 1.8 million discrete parcels in the region. It was the first time such a map had been created in northeast Ohio. NEOSCC also obtained zoning maps from the 400 cities, villages, and townships in its planning space. This GIS-based regional database had many benefits. It pulled together existing data and more than 200 existing plans and studies that were used in the scenario planning. It provided the participating MPOs a regional dataset and a fiscal impact analysis, along with the assumptions used to construct the four scenarios. This extensive database continues to be accessible. For example, NOACA used it to prepare its long-range transportation plan, saving the time and money that would have had to be spent to collect the data it needed.

At the end of the SCI grant period, NEOSCC published the Vibrant NEO 2040 Vision, Framework and Action Products. This award-winning framework³ consisted of options, in the form of the four scenarios, with associated fiscal impact analyses for the future of the region. It illustrated that Northeast Ohio’s communities would experience serious deficits in the future if development

³ Vibrant NEO 2040 was the winner of the American Planning Association’s 2015 Daniel Burnham Award for a Comprehensive Plan.

patterns continued as population levels fall. The report included recommendations and tools that could be used to implement the preferred scenarios “Do Things Differently/Grow Differently.” NEOSCC also delivered a promised dashboard of critical indicators, a tool kit of best and promising practices, and a set of potential pilot programs and policy recommendations.

Next Steps

At the outset, NEOSCC hoped that federal funds would be available to assist with implementation, and that the new nonprofit would generate sufficient local political (and financial) support to enable it to become the champion of plan implementation. However, by the end of the grant period, in June 2014, it became clear that NEOSCC lacked the political and financial support to continue its activities. It demobilized its staff, closed the Akron office, and expended its remaining funds.

The MPOs, which had led much of the planning process, stepped up and created the NEOSCC 2.0 Launch Board (which retained NEOSCC’s nonprofit status) to generate a structure for implementing the recommendations. NOACA director Gallucci, who had chaired the NEOSCC board, was elected chair of the Launch Board and became the steward of the SCI mission. Thus, NOACA became the new “backbone” organization for the Launch Board bringing together the other MPOs and partner organizations. The Launch Board’s primary role is to energize and activate the Vibrant NEO framework and the principles therein⁴ by educating regional stakeholders and the general public about the plan, and by encouraging and tracking progress. Launch Board members contribute a small membership fee to cover expenses. Outside of membership dues, Vibrant NEO has no additional funding. NOACA has been providing in-kind staff support to convene meetings, manage funds, and prepare a newsletter that showcases initiatives that align with the framework, but the Launch Board has no dedicated staff. However, its nonprofit status enables the Launch Board to apply for grants and raise additional funds in the future and at some point, with sufficient funds, it could formally track implementation and/or undertake an assessment of progress and impacts.

As with the other comparable SCI grantees, the task of implementing plans that align with the Vibrant NEO framework and principles fell to local and regional planning organizations. NEOSCC’s MPO members have taken the lead. Not surprisingly, they have different levels of commitment to abide by the Vibrant NEO principles. NOACA used the framework, and the accompanying data collected and analysis developed for the scenario planning, to create county-level reports for each of the five counties in its metropolitan region. NOACA staff also encouraged county planning agencies in its five-county region to apply the principles and framework in community land use planning, which is happening most notably in Cuyahoga and Lorain Counties. Several MPOs used the data and analysis and incorporated the principles and framework in its long-range transportation plan. Further, the MPOs are trying to work with regional business partners to define job centers and encourage companies to locate in areas consistent the Vibrant NEO 2040 framework.

The next section examines the planning process and outcomes, using the three classes of factors proposed at the outset to affect plan implementation: tangible, functional-organizational, and intangible (exhibit 1). In the process, we make comparisons of NEOSCC with other SCI projects.

⁴ <http://vibrantneo.org/vibrantneo-2040/vneo-2040-full-report/>.

Analysis of the NEOSCC Process and of the Vibrant NEO Outcomes

The NEOSCC planning process and the resulting Vibrant NEO 2040 Framework advanced somewhat Northeast Ohio's ability to think and act regionally. In this section, we analyze both the planning process and the implementation of the framework. The planning process was inclusive and comprehensive. The involvement of the three federal agencies—HUD, EPA, and the U.S. Department of Transportation—modeled the kind of collaborative approach necessary at the regional level for carrying out SCI. It encouraged the Northeast Ohio MPOs to work together. The federal funding and inclusion in a national pilot provided an incentive for local governments and agencies to participate. Working through the process together gave the participants an appreciation of each another's assets and potential regional contributions. It also provided the opportunity to come and stay at the regional decision table, even when disagreements about the direction cropped up.

About halfway through the planning process, some of the NEOSCC members began to get “cold feet,” perhaps because they began to encounter pushback from constituents concerned about losing local control with a regional plan. NEOSCC began to reframe the work as a framework rather than a plan to more accurately reflect the intended end product. The framework provided a menu of recommendations and enabled local entities to pick those most applicable to their corner of the regional space. Also at this time, leadership made a subtle shift from the nonprofit NEOSCC to the MPOs, which was an important turning point because the MPO boards include local elected officials with the ability and mandate to implement transportation and environmental plans. Further, some recognized that once the framework was completed, the MPOs would be the champions in moving the region toward the Vibrant NEO vision of sustainability (Gallucci, 2015).

Some stakeholders have argued that the networking, community building, and relationships that were developed and strengthened during the planning period are the most important outcomes. “There was true value in the having the dialogue even if the final product had to be moderate enough to win consensus. It offered a rare opportunity for decisionmakers and stakeholders in this large region to come together and debate the issues. This was a real value. Regardless of the final product value, the process was useful” (interviewee). “The project opened minds, particularly in Stark and Mahoning counties, about what could be accomplished together” (interviewee). “It will be a challenge for this group going forward to keep relationships moving in a way that is beneficial for all involved” (interviewee).

The NEOSCC planning process laid the groundwork for new types of collaboration among the 4 MPOs of the region as they move forward in the implementation phase. Their GIS staff trained together and are now using the same software and base maps. The leaders have continued to work together. Their participation in the regional planning effort, together with the regional database and heightened awareness of impediments to fair housing and to regional sustainability, appear to have left a meaningful mark on their decisionmaking resolve.

Further, several stakeholders value the Vibrant NEO tools for scenario planning and fiscal impact analysis, coupled with the new relationships between the four MPOs. Early evidence indicates that MPOs are using the Vibrant NEO framework and its principles to collaborate more than would

have been the case in the absence of the NEOSCC project. The framework lends legitimacy to the allocation of funds to improve the quality of life in core communities, such as complete streets and added bike lanes. Further evidence indicates that the region's MPOs are incorporating the Vibrant NEO framework principles in their economic development strategies. Examples include the Northeast Ohio Four County Regional Planning and Development Corporation's (NEFCO)⁵ 2017 Comprehensive Economic Development Strategy and NOACA's Long-Range Transportation Plan Connections+ 2035. In addition, two counties in NOACA's service area (Cuyahoga and Lorain counties) have adopted comprehensive plans that align with Vibrant NEO.

In other comparable SCI regions, the SCI-RPG program grants were most effective when used to boost an existing regional planning process in which the participants were partners who had already worked together in the past on regional planning issues. Examples are the Buffalo and St. Louis, Missouri-Illinois projects. Through this previous experience, the partners had developed preferences and norms for working together. Their backbone organization or coalition had a clear and tested identity connected with the region for which they were planning (Akerlof and Kranton, 2010). These conditions created a natural constituency for dealing with inevitable conflicts and committing to carry out the plan beyond the SCI grant period. Thus, in Buffalo and St. Louis, at least two of the three classes of factors affecting implementation (exhibit 1)—governance and intangibles related to collective decisionmaking capacity—were in place.

No entity existed that “spoke for” the Northeast Ohio region (as defined for the Vibrant NEO initiative). NEOSCC was incorporated as a nonprofit to fulfill the role of such a regional convener. In other words, compared with Buffalo and St. Louis, Northeast Ohio began at a disadvantage with respect to governance and collective decisionmaking capacity. The creation of the new nonprofit structure was an attempt at making up for both gaps. However, the kinds of relationships that contribute to implementation are difficult to conjure in the short run because they require time for trust building, and for jointly developing decisionmaking routines. Setting up a new nonprofit was also expensive (according to interviewees); it diverted limited administrative time and funds away from the demanding work required by the terms of the grant. The most compelling case for creating the nonprofit was the need for a neutral convener, and indeed, NEOSCC served that purpose. However, NEOSCC proved unsustainable, perhaps because it failed to make its own sufficiently persuasive case. The coalition members were not interested in raising the funds needed to support a planning and coordinating organization with a focus on the 12-county region. In contrast, among the 12 SCI projects comparable to NEOSCC, 6 were convened and hosted by regional planning bodies, either a COG or MPO (Lombardi, 2016).

We note that the loose connection among NEOSCC members appears to be the most salient difference between Vibrant NEO and other SCI projects, which have kept their planning collaboratives together and are using them to facilitate plan implementation. One added contributor to the success of those projects may be the set of physical characteristics of the planning region—the first of the three classes of factors affecting plan implementation that we proposed at the outset (exhibit 1). Accordingly, the Vibrant NEO planning process and implementation might have been less difficult and more successful if it had been less spatially ambitious.

⁵ NEFCO serves Portage, Stark, and Summit Counties and the city of Wooster in Wayne County.

For example, the Cleveland and Akron metropolitan regions are connected through out-migration and commuting patterns, economic activities, natural environmental subsystems, and infrastructure, and thus already shared some regional identity. Their MPOs had worked closely together on planning efforts (historically, they had been one MPO). For these reasons, a planning effort focused on these two metropolitan areas may have been more successful. It would have been easier to persuade the governing entities and the public at large of the benefits of collaborating for a sustainable future, including joint land use and housing planning to limit further sprawl and reduce transportation costs.

It is certainly possible, and sometimes desirable, to plan across a large regional footprint and implement at a local level. As noted, a large regional footprint makes sense from an economic, environmental, or transportation standpoint. That is because those systems are interconnected across relatively large spaces that transcend administrative boundaries. In setting NEOSCC's geographic footprint, the Fund, which triggered the initiative, worked within practical and political limitations to get as close as they could to the geographic outline for the State of Ohio's Third Frontier and other regional economic development efforts, including the Fund's own 16-county geography (interviewee). However, in retrospect, it would have been wiser to "start small," develop some successful examples of collaborative planning, and build out over time to the larger "economic region."

The "start small" strategy would have enabled NEOSCC to overcome an obstacle specific to the Ohio context that other SCI projects may not have had to contend with. Implementing plans like Vibrant NEO is voluntary in Ohio; no means of enforcement or recourse exists, should any of the NEOSCC members fail to act in keeping with this framework. Therefore, implementing the Vibrant NEO framework depends on many autonomous regional partners voluntarily coordinating their actions in the regional space to attain joint objectives. Moreover, the plan has no formal (regional) custodian. In other words, no entity has a mandate to even monitor, let alone enforce, plan implementation. The incentives, in the form of increased efficiencies and sustainability of the region accrue in the long term, while the necessary resources have to be expended in the short and middle terms. Therefore, what elected officials, administrators, and the public face is the challenge of difficult tradeoffs among competing, equally desirable objectives, requiring expenditures from a finite source, some of which pay off in the shorter run than Vibrant NEO. Elected officials, in particular, tend to prefer projects whose quick results redound to their reelection benefit.

Next, we focus on the functional-organizational characteristics and on the intangible: the collective decisionmaking capacity, traditions and processes, and local attitudes toward planning of exhibit 1 to assess NEOSCC's ability to encourage implementation of the Vibrant NEO framework. We consider the Buffalo project to be the most similar to NEOSCC for several reasons. Although most SCI-RPG program grantees face similar implementation challenges that make it advantageous to pursue a distributed rather than centralized approach, New York is a home rule state like Ohio, where individual municipalities have land use jurisdiction whereas the MPOs are primarily focused on transportation. As well, neither Northeast Ohio nor the Buffalo region has a regional governing body. However, in the Buffalo region, a history of key regional actors working together through the University of Buffalo's Regional Institute toward shared goals carried through implementation of the SCI project (Quebral, 2016). The steering committee guiding the planning also lacks a planning

mandate but had built sufficient trust across a smaller geographic region to have a stronger voice than NEOSCC. It meets regularly to identify grants and collaborative opportunities, programs to be aligned with the regional plans, and other collaborative opportunities to implement.

Despite this important similarity, two significant differences from NEOSCC account for the more successful Buffalo SCI experience. First, unlike in Northeast Ohio, Buffalo's business community remained very involved in the project; and second, a parallel regional planning initiative at the state level rewards with funding regions that collaborate. The strong alignment between the SCI plan and the state regional development plan reinforced private sector acceptance of the sustainability framework (interviewees). Significantly, the New York state agency that oversees regional economic development was part of the group that applied for the SCI and played a key role on the steering committee. State funding supported implementation. Some major state investments catalyzed projects that are aligned with the project. The SCI project helped to position the Buffalo region to compete for state funds.

The University of Buffalo was a key convener and anchor partner through the university's regional institute, which has a grant to provide technical assistance in the area of clean energy. In addition, the university contributes to implementation through a public citizen planning school. Communal learning and teaching the plan to citizens, community leaders, and city officials is a key part of the implementation. The individuals are expected to get involved in various projects that further the SCI goals and get training and technical expertise from students, faculty, and professionals at the school. Through their high-quality and intense public participation effort, Buffalo provided a ready pool of educated citizens who could effectively advocate for the implementation of sustainability principles.

NEOSCC has not yet developed any process guidance for the framework, or any tools for contingent arrangements that would provide incentives for members to act consistently with the Vibrant NEO framework. Beyond the SCI grant period, technical assistance is provided informally, if at all. The NEOSCC project is not unusual in this sense; planners tend to direct their attention to objectives and expected outcomes. Rarely do they incorporate into plans or frameworks the steps needed to achieve these outcomes, nor is it usual to incorporate into plans implementation milestones where review and adjustment might be warranted, given progress on the ground or contextual events that might warrant a course change. It is not clear that NEOSCC, with its structure and lack of formal mandate, would have been able to build in these process steps and commitments. In general, however, planning interim commitments should become both a best practice and an evaluation criterion for plans.

In terms of the type and quality of public participation, NEOSCC fell short. Several key constituencies needed for plan implementation were not involved in developing the Vibrant NEO framework. Specifically, most participants were public entities. Political and business leaders gave only tepid support during the planning process. As a result, no clear political or business champions emerged to advocate for the regional aspects of the plan. Worse yet, in Geauga, a largely suburban and rural county that is part of NOACA, county commissioners signed a resolution opposing the Vibrant

NEO framework, reflecting the attitudes of constituents active in groups opposing sustainability initiatives such as Agenda 21 (Sitarz, 1993).⁶ These groups had their largest impact in Geauga although they were also active in other parts of the region.

Recognizing that business should be at the implementation decision table, NEOSCC participants changed the composition of the board during the postgrant launch phase. The plan had been for the Launch Board to be comprised of one-third government, one-third business, and one-third nonprofit sector members. Nevertheless, public entities ended up occupying 60 percent of the Launch Board positions, with 17 percent going to nonprofits, and 19 percent to developers and architects from the private sector. One task of the Launch Board, albeit voluntary, is to track accomplishments. Once per quarter the partners are to submit reports. However, no one is tracking these reports or applying to them any performance measures. Other SCI projects are facing similar issues.

As in other SCI projects, the responsibility for advocacy, technical assistance, and data collection and distribution at a regional level is dispersed and ad hoc. However, other legacy regions such as Buffalo and St. Louis have a designated organization tracking their progress and offering technical assistance to communities that want to develop plans aligned with the SCI principles and frameworks. Northeast Ohio lacks such an entity. For the Buffalo project, the University of Buffalo is playing this monitoring role as an ongoing activity through its Regional Institute although it too is done on an in-kind basis, without a dedicated funding stream to support the work. In contrast, no entity is formally tasked with tracking Vibrant NEO progress although members are asked to report NEOSCC-related “news” to NOACA. Without clearly defined roles and responsibilities for tracking progress or implementing the framework among the members, and in the absence of a dedicated funding source to support even part of a full-time equivalent (FTE) on an ongoing basis, regular tracking, reporting, and evaluation are extremely difficult. To keep sustainability in the public eye, and to maintain relevancy and momentum for the plan, it helps to promote actions that are going to align with the plan.

Local deviations from the course set by the Vibrant NEO framework are to be expected throughout the Northeast Ohio region, which leads us to ask: to what extent can any portion of the region deviate from Vibrant NEO before the framework loses its coherence and its ability to steer the region toward sustainability? How would progress toward sustainability and deviations from it be assessed? How could one prevent a complete unraveling by the plan’s horizon of 2040? Collaborative decisionmaking at the regional level might contribute to plan implementation, provided the Vibrant NEO process promotes and sustains collaborative decision processes among regional decisionmakers and local communities. While it is too early to tell, unless the Vibrant NEO implementers engage in concerted, directed efforts to tend to the collaborative aspects, this project is unlikely to attain its horizon-year target.

Early signs are not boding well for the collaborative. Citizens from across the region repeatedly express support for regional, collaborative, and sustainable approaches. However, to implement

⁶ In 1992, the United Nations passed a nonbinding action plan called Agenda 21 that encouraged cities to pursue sustainable development. Despite no formal adoption of the policy in the United States, some activists view it as a limit on property rights.

such approaches, decisionmakers have to expend serious political capital at the local level. So far, politicians have been reluctant to make hard decisions to change development patterns. Further, key state institutions such as the Ohio Department of Transportation and the Governor's office were not involved in the NEOSCC effort, resulting in very little state support for collaborative regional planning (interviewee).

The decisionmakers' reluctance to collaborate and change course is partly due to the fact that, despite NEOSCC's attempt at community engagement, the level of grassroots awareness of Vibrant NEO in the Northeast Ohio region is quite low. It is insufficient to motivate politicians to take risks. Bringing people in the region together, engaging, and consulting them could have been easier had the Vibrant NEO target region been a subset of the 12 counties it included. With a smaller region, interdependence arguments for regional collaboration ("we're all in it together") would have been more compelling to residents. Instead, the participation process effectively elicited public input on goals and values, enough to give NEOSCC members a sense that the recommendations reflect what people want (interviewee) but not necessarily sufficient to support actions. Nevertheless, engaging the public even to a small extent across the 12 counties may have laid the groundwork for future collaborations, which may not happen at all otherwise.

NEOSCC's failure to build capacity to continue beyond the grant is proving to be a major challenge. In part, this failure is a consequence of NEOSCC's lack of formal planning and implementation mandate. As one interviewee observed, it is difficult enough to produce and implement plans with a mandate. All the MPOs in Northeast Ohio have agreed to implement the Vibrant NEO framework by incorporating its principles in their regional strategic plans and long-range transportation plans. Ozawa, Shmueli, and Kaufman (2017) argued that agencies' readiness to implement principles can sometimes stem from their intent to take the recommended actions anyway. In the Vibrant NEO case, the MPOs acting as good regional partners costs nothing and provides some benefits. Their buy-in would have been tested if they had had to expend additional resources and change their course.

The conceptual reframing of Vibrant NEO from a plan to a framework was helpful in easing the NEOSCC members' concerns regarding interference with their local decision processes. A plan may direct the specific siting of various land uses for the collective regional benefit, but at the expense, perceived or actual, of certain parts of the region. In contrast, a framework consists of decision principles that serve a set of jointly agreed-upon guidelines, without specifics. Thus, local decisionmakers remain free to act as they prefer, as long as they abide by the principles of the framework. For example, encouraging the location of businesses at the existing cores is a principle that can be implemented in any way that seems feasible locally. It was relatively easy for NEOSCC members to agree on such broad planning principles across the 12-county region, such as "reinvest in core areas."⁷ Predictably, however, conflicts arise when the time comes to act on the framework principles. Examples of decisions that could be expected to generate conflict and intraregional competition include where to invest the regionally available resources in infrastructure; how to attract new businesses to core areas; where to change zoning for an equitable distribution of affordable housing; or how to provide transportation access for workers to lower-wage job centers. In other words,

⁷ Ozawa, Shmueli, and Kaufman (2017) dubbed such general, unobjectionable principles "motherhood and apple pie": they fit in nearly every region of the nation, and it is easy to garner consensus around them in the abstract.

unsurprisingly, when NEOSCC members realize concretely what the lofty goals and principles of the Vibrant NEO framework mean for their constituents in the short run (rather than at the 2040 horizon), the ensuing conflicts overwhelm and override the consensus around principles.

Conclusions

Any regional planning effort has supporters and critics. The direct participants in NEOSCC whom we interviewed believe the region will be better off for having the Vibrant NEO framework. However, expecting NEOSCC, without a formal mandate, to become the regional planning entity for 12 counties may have been too ambitious. As in other regions, as a result of NEOSCC's lack of mandate, the Vibrant NEO project implementation has to rely on the organizations in the region that do have "agency" to plan. NEOSCC faced some additional challenges resulting from the region's lack of will to plan. These challenges are related to the three classes of factors laid out at the beginning of this article (exhibit 1) that affect plan implementation: tangible characteristics, governance, and collective decisionmaking capacity.

Among the tangible obstacles to implementation, we deem the most important to be the scale of the undertaking. Selecting the boundaries of a region for planning purposes is complicated, with pros and cons for broad and narrow definitions. In our case, NEOSCC chose the broad approach, with several disadvantages, especially for an undertaking with no mandate and no history of collaborative planning at that scale. In its current configuration NEOSCC lacks the public mandate for change that might keep the project going. Setting aside the logistical difficulties, this region encompassed too many differences—rural and urban, wealthy and poor, growing and shrinking—so the affected stakeholders were bound to have very divergent interests that proved difficult to bridge. Arguably, this difficult situation would not have been the case had the planning region included fewer counties sharing more physical and socioeconomic characteristics and a higher degree of interdependence. A narrower definition of the planning region would also have made possible more meaningful public participation and buy-in, which in turn would help propel the effort into the future.

In terms of governance obstacles to implementation, NEOSCC's lack of agency and resources, beyond those secured through the SCI-RPG program grant, undermines its ability to continue to bring its members to one decision table, to encourage collaboration and to support and advocate for the principles put forth in its planning framework. NEOSCC was very careful to call its work a framework and not a plan. This distinction is meaningful—many decisions can be construed as consistent with a framework; this is more difficult with a plan. Arguably, plans obsolesce faster than frameworks and are more difficult to update when necessary, due to the need for plans to be guided by a specific sense of how people will live in the future, and to make spatially specific siting choices for specific land uses. The longer the time horizon of the plan, the more likely it becomes that technological, economic, and lifestyle changes will make some or even most of the planned allocations unnecessary or outright undesirable. By looking back for a number of years comparable to the plans horizon instead of trying to guess ahead, it is sometimes easier to realize how much has changed in this equivalent time span. For example, 25 years ago (the distance in the past about equivalent to Vibrant NEO's horizon) we travelled, worked, shopped, communicated, used

energy, and accessed information quite differently from today. Planning decisions responding to those needs are now obsolete. In contrast, a framework that proposes to conserve open spaces, protect the natural environment, or diversify energy sources and transportation modes—without specifics on how to do it—runs a lesser risk than a plan to become meaningless in 25 years. It has been argued (for example, Grübler, 2003) that the pace of technology development is accelerating. In such a context, attention to the assumptions we make about the future when devising plans becomes even more important.

NEOSCC made a point of empowering local leaders and residents to make planning decisions. This empowerment helped to allay concerns voiced by local governments and gave the process greater legitimacy. Plan implementers can never rest; they must continuously communicate with the public and evaluate and update plans in response to changing conditions. To do so, the many decisions about projects and their funding that affect the planning space need to be tracked, assessed for consistency with the plan, and communicated back to the public, as is being done in other SCI regions. In Northeast Ohio, it remains up to each MPO to abide by the proposed Vibrant NEO framework or deviate from it, as they deem necessary and consistent with their duties. If deviations accumulate, the framework runs the risk of becoming nothing but a document on a shelf or website, a fate shared with many regional plans.

With respect to collective decisionmaking capacity, NEOSCC's nonprofit structure was unsustainable. It undermined its ability to attract and hold potential funders' interest. NEOSCC's failure to achieve buy-in from the political and business communities limited its ability to make the case that the seven metropolitan areas in the counties were sufficiently interdependent to be "all in it together." One sign of lack of collective interest in the Vibrant NEO framework has been, and continues to be, the absence of political or business champions for making the changes necessary to implement the sustainability plan. The "trend" scenario, consisting of trend projections, depicted a regional future no different from the recent past, which led to an unsustainable use of resources, as localities continue to fight for their share of a shrinking pie. Had NEOSCC successfully persuaded decisionmakers and the public of the need for a course change, we would have expected it to trigger a broader public conversation, to call for regional collaboration and for concerted regional efforts to take action to buck the trend. However, civic and political leaders have failed to call for such joint action. The region's MPOs are the only agencies stepping up to meet regional challenges and solve the problems.

In the end, NEOSCC was not able to channel the relationships that were built among decisionmakers, the scenario planning and fiscal impact analysis tools, or the fair housing plans, to fundamentally change decisionmaking processes in the region. However, the strategy it championed—investing in core areas—is wise for Northeast Ohio. As a legacy region, it must adapt to its current circumstances (declining population and resources and growing urban sprawl). The first remaining challenge is finding ways to implement investment, mostly in core areas, in the absence of local and state government incentives to do so. The second challenge is to engage in collaborative decisions consistent with that goal. Such engagement is not outside the realm of possibilities. The NEOSCC initiative has set the table for continued conversations among the region's decisionmakers by surfacing their joint interests and getting them to think regionally. Grace Gallucci (2016) has expressed hope, saying, "If we haven't done anything else, we have created a mental map across the

region that enables better decisions at the county and metro levels. Even though it's a more informal structure, if it can get the job done it will suffice." However, more needs to be done to take this framework and its core principles to the point where key decisionmakers change the way they act and begin to help the region "Do Things Differently/Grow Differently" by setting it on a different path.

It takes great political courage to join forces across the region and to overcome the barriers of race and income that divide Northeast Ohio. Georgine Welo, the mayor of South Euclid, one of Cleveland's inner ring suburbs and a long-time political observer, said, "We fail at regionalism because we can't find political solutions. We don't recognize that sharing strengthens us, not weakens us." Despite the drawbacks mentioned, the Vibrant NEO project has value both in terms of process and products. It resides mainly in the framework, data platform, and fiscal impact tools, which are likely to continue to be used in comprehensive planning throughout the region. The implementation of the Vibrant NEO framework will depend on the extent to which the many organizations with "agency," for example MPOs and other planning agencies in the region, voluntarily align their plans with the framework. The true test, however, will be whether they can ever agree to collaborate on major development and infrastructure investment decisions.

Acknowledgments

The authors thank the many NEOSCC staff and board members who agreed to be interviewed anonymously for this article and shared with us their insights and expertise. We acknowledge the contributions of Levin College graduate assistants Ethan Goodman and Susan Spinell.

Authors

Kathryn Wertheim Hexter is Director of the Center for Community Planning and Development, Levin College of Urban Affairs at Cleveland State University.

Sanda Kaufman is professor of planning, public policy and administration in the Levin College of Urban Affairs at Cleveland State University.

References

- Akerlof, George A., and Rachel Kranton. 2010. "Identity Economics," *The Economists' Voice* 7 (2): 1–3.
- Ansell, Chris, and Alison Gash. 2008. "Collaborative Governance in Theory and Practice," *Journal of Public Administration Research and Theory* 18 (4): 543–571.
- Bates, Lisa K., and Marisa Zapata. 2013. *Revisiting Equity: The HUD Sustainable Communities Initiative*. Portland State University Urban Studies and Planning Faculty Publications and Presentations (winter). Portland, OR: Portland State University.
- Benner, Chris, and Manuel Pastor. 2015. "Collaboration, Conflict, and Community Building at the Regional Scale: Implications for Advocacy Planning," *Journal of Planning Education and Research* 35 (3): 307–322.

- Burchell, Robert W., George Lowenstein, William R. Dolphin, Catherine C. Galley, Anthony Downs, Samuel Seskin, and Terry Moore. 2002. *Costs of Sprawl—2000*. Transit Cooperative Research Program (TCRP) Report 74. Washington, DC: Transportation Research Board.
- Carruthers, John I., and Gudmunder F. Ulfarsson. 2003. "Urban Sprawl and the Cost of Public Services," *Environment and Planning B: Planning and Design* 30 (4): 503–522.
- Center for Community Solutions. 2014. *Education, Income, and Health Conditions in Northeast Ohio, A Northeast Ohio Regional Impact and Outcomes Indicator Report*. Cleveland.
- Chakraborty, Arnab. 2010. "Scenario Planning for Effective Regional Governance: Promises and Limitations," *State and Local Government Review* 42 (2): 156–167.
- Fund for Our Economic Future. 2011. *Northeast Ohio Regional Business Plan*. Washington, DC: The Brookings Institution.
- Gallucci, Grace. 2015–2016. Personal communications (interviews). Executive Director, Northeast Ohio Areawide Coordinating Agency.
- Goldman, Todd, and Elizabeth Deakin. 2000. "Regionalism Through Partnerships? Metropolitan Planning Since ISTEA," *Berkeley Planning Journal* 14 (1): 46–75.
- Gordon, Peter, and Hung Leung Wong. 1985. "The Costs of Urban Sprawl: Some New Evidence," *Environment and Planning A* 17 (5): 661–666.
- Grübler, Arnulf. 2003. *Technology and Global Change*. Cambridge, United Kingdom: Cambridge University Press.
- Harvey, Robert O., and William A. Clark. 1965. "The Nature and Economics of Urban Sprawl," *Land Economics* 41 (1): 1–9.
- Johnson, Michael P. 2001. "Environmental Impacts of Urban Sprawl: A Survey of the Literature and Proposed Research Agenda," *Environment and Planning A* 33 (4): 717–735.
- Kaufman, Sanda. 2016. "Governance for (Climate) Change in American "Legacy" Cities: A Case Study of Cleveland." In *Climate Adaptation Governance in Cities and Regions: Theoretical Fundamentals and Practical Evidence*, edited by Jörg Knieling. Chichester, United Kingdom: Wiley: 333–354.
- Kok, Kasper, and Tom A. Veldekamp. 2011. "Scale and Governance: Conceptual Consideration and Practical Implications," *Ecology and Society* 16 (2): 23.
- Layzer, Judith A. 2015. *The Environmental Case*. Thousand Oaks, CA: SAGE Publications.
- Legacy Cities Partnership. n.d. Homepage. <http://www.legacycities.org/>.
- Litman, Todd. 2015. "Analysis Of Public Policies That Unintentionally Encourage and Subsidize Urban Sprawl." The New Climate Economy. <https://files.lsecities.net/files/2015/03/NCE-Sprawl-Subsidy-Report-021.pdf>.
- Lombardi, Derek. 2016. Personal communication (email). National Center for Smart Growth, University of Maryland, College Park, May 18.

- Northeast Ohio Citizens Speak. 2006. *Individual Citizen Interviews: Data Analysis Final Report*. Cleveland: Cleveland State University, Data Analysis Team.
- Northeast Ohio Four County Regional Planning and Development Organization (NEFCO). 2017. *Comprehensive Economic Development Strategy 2017 Annual Performance Report*. Akron, OH.
- Ozawa, Connie P., Deborah F. Shmueli, and Sanda Kaufman. 2017. "Process Design Decisions in Community-Based Collaboration: Implications for Implementation and Collateral Social Benefits," *Planning Theory and Practice* 18 (3): 407–427.
- Quebral, Laura, 2016. Personal communication (interview). Director, University of Buffalo Regional Institute.
- Rittel, Horst W.J., and Melvin M. Webber. 1973. "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 (1): 55–69.
- Skaburskis, Andrejs. 2008. "The Origin of 'Wicked Problems,'" *Planning Theory and Practice* 9 (2): 277–280.
- Sitarz, Daniel, ed. 1993. *Agenda 21: The Earth Summit Strategy To Save Our Planet*. New York: United Nations.
- Trubka, Roman, Peter Newman, and Darren Bilsborough. 2010. "The Costs of Urban Sprawl: Physical Activity Links to Healthcare Costs and Productivity," *Environment Design Guide* 85: 1–13.
- Welo, Georgine. 2017. Personal communication. Mayor of South Euclid.
- Wilbanks, Thomas J., and Robert W. Kates. 1999. "Global Change in Local Places: How Scale Matters," *Climactic Change* 43 (3): 601–628.

Epistemic Communities or Forced Marriages? Evaluating Collaboration Among Sustainable Communities Initiative Regional Planning Grant Recipients

Karen Chapple
Grace Streltsov
Mariana Blondet
Cristina Nape
University of California, Berkeley

Abstract

The Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) program supported collaborative regional planning that crosscut silos, such as transportation and housing or business and social justice advocacy groups. This article examines the extent to which the program helped diverse regional actors work together and form an “epistemic community,” in which diverse actors develop a common understanding of problems. To analyze the formation of these communities, we built databases on the organizational characteristics of core partners in each grantee consortium, the governance of the grant, and regional economic and demographic characteristics. Multivariate regression models suggest that elements of epistemic communities are indeed emerging, but their effect on implementation is harder to predict. Three case studies of grantee regions with longstanding political divides, inequality, or both illustrate just how the SCI-RPG program helped to bridge differences and form new epistemic communities. The findings of this research suggest that federal grant programs like the SCI-RPG can help catalyze and institutionalize regional collaboration among diverse actors.

Introduction

Communities in the United States face complex issues of growth, decline, and sustainability that are challenging to address at the local scale or within agency silos, such as transportation, housing, or economic development. However, in the face of deep regional schisms about how to move forward and the lack of a formal regional government, regional problemsolving requires collaborative governance networks. Nonprofits, the private sector, and other nonstate actors often work with the public sector to help envision the region's future, design new policy approaches, and implement specific projects.

The rise of these regional governance networks is leading to a lively debate about their form and effectiveness. If the networks are inclusive, leaderships and resources are in place, and processes are nimble and adaptive, leading to a shared vision, regional governance may be effective (Innes and Booher, 1999; McKinney, Parr, and Seltzer, 2004). A variety of regional actors may come together in a “diverse epistemic community” or in the formation of a regional consciousness among stakeholders that leads to joint problem definition and solving (Benner and Pastor, 2012). When confronting a problem, networks of actors come together to ascertain facts, share concerns, and reach a shared understanding. In the process, actors begin seeing them as part of a region where fates are intertwined (Benner and Pastor, 2012). At the same time, even when they strive to be inclusive, collaborations may reinforce existing power dynamics if inequities among stakeholders are not addressed (Lester and Reckhow, 2013).

Because the U.S. Department of Housing and Urban Development's (HUD) Sustainable Communities Initiative Regional Planning Grant (SCI-RPG) program required participants to develop broad collaborations or consortia, it offers an excellent case to examine regional governance and collaboration, specifically the formation of epistemic communities. Funded by Congress in 2010 and 2011, the SCI-RPG program provided grants on a competitive basis for collaborative regional planning efforts supporting more sustainable development patterns. With \$165 million awarded to 74 grantees from across the country, the program marks the largest federal government investment ever in regional planning in the United States.

Based on a mixture of quantitative data analysis and qualitative case studies, this article examines whether SCI-RPG grantees succeeded at forming epistemic communities, and more broadly, at engaging in regional collaboration and governance. Specifically, we ask—

- What factors, if any, led to the formation of diverse epistemic communities among SCI-RPG participants?
- How did the existence of epistemic communities shape the implementation and sustainability of the initiative in grantee regions?

This article begins with a review of academic debates about regional collaboration, focusing on the definition of epistemic communities. After providing a brief background on how the SCI-RPG program structures collaboration, we describe our methodological approach and data. Based on the unique databases constructed for this study, the following section describes collaboration and governance structures among grantees. Regression analysis of both partners and plan adoption is used

to identify the factors that lead to epistemic community formation, and suggests the role communities play in implementation. Case studies both confirm and complicate the quantitative findings. A final section concludes and offers policy implications.

Conceptualizing Regional Collaboration

A rich literature establishes how collaborative planning can foster dialogue among diverse stakeholders (Innes and Booher, 1999; Forester, 1999). In a “community of inquiry,” a cooperative and creative dialogue can build a common understanding that then motivates collaboration (Innes and Booher, 2000). An inclusive, equitable regional planning table, at which goals and definitions are aligned among stakeholders, can also help a diverse group of actors address complex social ills (Kania and Kramer, 2011). Thus, collaboration becomes critical in regional planning, which requires shared interests in order to rally around a regional vision (McKinney and Johnson, 2009). Given how experts have traditionally dominated planning, inclusion at the table, and in general, a stronger connection by planners to the people and places they serve, is critical for success (Fung, 2006; Manzo and Perkins, 2006).

Interconnected crises of job loss, inequality, and political fragmentation have led Benner and Pastor (2015: 7) to argue that “the starting point for addressing all three has to be shrinking the epistemic distance that allows us to believe we are living in separate and disconnected worlds.” In this section, we will explore Benner and Pastor’s definition of an epistemic community, as well as how similar concepts from collaborative public management research can help explain the collaborative knowledge communities created under SCI.

Building on constructivist scholarship in international relations, political scientists—notably Peter M. Haas—use the term epistemic communities to describe scientific knowledge production in global environmental governance. Haas (2008: 3) defined *epistemic communities* as “networks—often transnational—of knowledge-based experts with an authoritative claim to policy relevant knowledge within their domain of expertise.” Members of these communities “share knowledge about the causation of social or physical phenomena in an area for which they have a reputation for competence, and a common set of normative beliefs that will benefit human welfare in such a domain.”

Finding this reliance on expertise too narrow, Benner and Pastor (2015: 16) differentiated their approach by focusing on epistemic communities as “having a broader membership base, an ability to accommodate multiple ways of knowing, a scope of action which stretches across multiple outcomes and conversational arenas, a desire to move beyond the episodic, and a capacity to handle conflict even as they facilitate a sense of common destiny.”

Inclusiveness and cultural humility must be core values in epistemic communities, or they risk perpetuating the very injustices that participants are trying to address (Daukas, 2006). Moreover, for local collaboratives to effectively address racial equity, members must develop a shared understanding and definition of racial equity that includes an analysis of historic laws and policies that have perpetuated racial inequities and defines bias and structural racism (Nelson, 2015).

Collaborative public management scholars help explain how and why formal epistemic communities are formed and sustained. For instance, in their framework for successful cross-sector collaborations, Crosby and Bryson (2010: 226) noted that cross-sector collaborations often have “competing institutional logics” that “significantly influence the extent to which collaboration leaders can agree on essential elements of process and structure as well as outcomes.”

Another factor that influences the formation of cross-sector collaborations is system turbulence, which includes competitive forces, turbulent environments, and changing conditions, as well as recognition on the part of regional leaders that cross-sector collaboration is needed (Crosby and Bryson, 2010). The most important contributing factors to the formation of epistemic communities are “conditions of complexity and uncertainty... that lead people to recognize the value of” diverse knowledge communities (Benner and Pastor, 2015: 197).

Boundary objects and experiences are helpful for understanding how epistemic communities can be fostered in practice (Feldman et al., 2006). Like epistemic communities, boundary groups are “collections of actors who are drawn together from different ways of knowing or bases of experience for the purpose of coproducing boundary actions” (Feldman et al., 2006: 95). Boundary experiences are “shared or joint activities that create a sense of community and an ability to transcend boundaries among participants,” whereas boundary objects are “physical objects that enable people to understand other perspectives” and “provide a common focus for different ways of knowing” (Feldman et al., 2006: 93–94). Examples of boundary experiences include field trips, joint problemsolving, and community projects, whereas boundary objects can be anything from a picture to a report or grant.

Boundary objects and boundary experiences help form the “alternative set of microfoundations” on which epistemic communities are formed (Benner and Pastor, 2015: 192–193), “in which individuals have a sense of place, are transformed by their interactions with each other, and come to see doing good and planning for the regional future as simply a set of standards and social norms they hold for themselves and others.”

Collaboration in the SCI-RPG Program

In 2010, HUD, the U.S. Department of Transportation, and U.S. Environmental Protection Agency joined together for a first-of-its-kind grant program dedicated to promoting collaborative regional planning. The Sustainable Communities Initiative (SCI) funded multijurisdictional planning efforts across the country that addressed “the interdependent challenges of: (1) economic competitiveness and revitalization; (2) social equity, inclusion, and access to opportunity; (3) energy use and climate change; and (4) public health and environmental impact.”¹

Acknowledging the complexity of sustainable development governance, the Notice of Funding Availability (NOFA) required applicants to organize a consortium of government entities and nonprofit partners, including the region’s principal city or county; additional cities to represent

¹ Sustainable Communities Regional Planning Grant program. Notice of Funding Availability FR-5396-N-03. Fiscal Year 2010: U.S. Department of Housing and Urban Development: 68.

no less than 50 percent of the region's population; the metropolitan planning organization (MPO) or regional planning agency; and a nonprofit organization, foundation, or educational institution. Applicants from outside of a designated metropolitan statistical area (MSA) or MPO were asked to include similar partners with a rural planning organization or council of governments to substitute for the MPO. The core partners in the consortium could invite other collaborators as well. Although each consortium had a lead applicant, HUD's intention was for the consortium members to be as interdependent and cooperative as possible. To this end, consortium members were required to sign a memorandum of understanding that they will share responsibility for executing the grant activities. The NOFA also required matching or leveraged funds to 20 percent of the grant amount.

Acceptable activities under the SCI-RPG include improving regional planning and decisionmaking processes, coordination among agencies, and data collection. A regional plan for sustainable development could include an inclusive housing plan, a sustainable transportation plan, planning for water infrastructure, reducing environmental impacts of new land uses, planning for economic development activities that will create jobs, or conducting scenario planning or climate-impact assessments. The NOFA provides extensive examples of activities that constitute sustainable planning, with a focus on providing housing and transportation choices within the region, not simply shifting demand outside the region.

Data and Methods

To understand the nature of collaboration under the grant, we focused on three components of collaboration: who participated in the grant, how that participation was structured, and grant outcomes (as self-reported by grant recipients). We captured each with its own distinct database: a Partner Database, a Collaboration Database, and an *eLogic* database.² We defined each grantee region as the counties associated with each grantee (for more details, please see the appendix).

To get a sense of the types of groups involved in the consortia, we gathered the organizational characteristics of consortium members from a variety of secondary sources, including HUD databases and reports, and member websites. We also analyzed grantee consortia agreements and work plans to measure formal collaboration methods, and used a database of final grant report metrics to analyze collaboration outcomes.

Partner Database

To better understand the sectoral diversity of each grant consortium, we gathered the organizational characteristics of partners that collaborated with SCI grantees. We defined *partners* as the organizations listed in a HUD-maintained database of 2,550 organizations involved with each grantee project. For each of these partners, we gathered a series of variables: budget (2014 gross revenue), mission statement (available from their website and the Guidestar nonprofit database), and entity type, which we defined as the stakeholder group that the partner represented. Then, we developed a typology of 22 organization types (see appendix); these were then consolidated into

² These databases are available online at our project website, <http://www.planningsustainableregions.org>.

the 6 categories used in the analysis.³ These categories were also used to calculate the organizational diversity index, an entropy measure where 100 equals a perfect balance of the 6 types, and 0 means that only 1 type is represented.

The Partner Database makes no distinction between actual consortium members and organizations with less active involvement, and thus it may either underestimate or overestimate participation. For instance, the Partner Database includes the 150 businesses that participated in Erie County, Pennsylvania's economic working group, but these businesses did not participate in the formal grant consortium, which consisted of 74 members. Conversely, more than 100 municipalities and organizations were involved in East Arkansas' regional planning efforts according to their final plan, but the Partner Database only lists 34 partners.

Collaboration Database

The Collaboration Database measures both regional characteristics and the governance structure of each grantee's consortium.

In reviewing consortia agreements, we realized that grantees employed a host of tactics for building shared understanding of regional problems among stakeholders. Despite the challenge of measuring inclusive practices with secondary data, we noted some common trends. Using consortia agreements and grantee work plans supplied by HUD, we developed a governance typology by asking a series of questions about each grantee consortium and then entering the answer in our database. For this article, we use only two questions (in the following; the full set can be found in the appendix).

- In the governance structure, how many organizational tiers were between the highest body and lowest body? (In other words, was the organizational structure more horizontal or vertical?)
- How many governance structure bodies (committees, working groups, boards, etc.) did the consortium produce? (In other words, how broad was stakeholder participation?)

The regional characteristics for each grantee include three sets of variables—regional demographics, regional economy, and structural characteristics—identified by Benner and Pastor (2012) as important determinants of equitable regional growth. The variables employed in the analysis include the size of the region's Black and Latino middle class and the degree of service fragmentation within a region. We aggregated all variables by grantee county.⁴

We applied a similar methodology to our Demographic and Inequality variables. We calculated the total regional population and racial and ethnic makeup by summing the county-level 2010 Census

³ For budget, we preferred to use 2014 gross revenue; however, for many partners, this figure was not possible to determine, and instead we used the budget from the most recent year available. For partners that were no longer operational, we used information from their final year of operation. Content analysis of mission statements determined whether language on the "three Es" of sustainability (the economy, the environment, and equity) was present.

⁴ We obtained the number of middle-class Black and Latino households, defined as households identifying as Black or African-American alone or Hispanic or Latino, from the American Community Survey (ACS). We defined the total number of middle-class households as the number of households that fell into income groups between two-thirds of and twice the median household income of each county. We defined service district complexity by dividing the total number of non-school district special purpose governments by the county population.

data for each grantee. We aggregated median household income with a weighted average using the total number of households.⁵ We obtained income segregation and racial diversity indices from the Equality of Opportunity Project website (Chetty and Hendren, 2014). The racial segregation measure is a Theil's *H* multigroup entropy index, which is a 0 to 1 scale, where 1 represents complete segregation, and 0 represents fully integrated neighborhoods. We calculated both variables using data from 2000; for this analysis, we assume that segregation patterns have remained constant through the 2000s.

The limitation of this sort of analysis, however, is that it only shows the initial and formal structures of collaboration and not the more informal and interpersonal ways that consortia members interacted and operated. Furthermore, additional working groups, networks, and governance structures formed during the course of the grant were not captured with this method. For instance, each of the six demonstration projects that the Capitol Regional Council of Government's (CRCOG's) Sustainable Knowledge Consortium ended up forming their own local advisory councils, but this action was taken after the consortium had already formed its formal governance structure. Furthermore, some consortium agreements didn't describe their governance structure, so it is possible that bodies were not accounted for in the database. Finally, in some cases, working groups mentioned in the agreement may never have been formed. Overall, this database likely underestimates the extent of collaboration that occurred, but in some cases, it may overstate collaboration.

***eLogic* Database**

In their final grant reports to HUD, grantees were asked to report a number of metrics related to their projects in a reporting document called an *eLogic Model*. The results were compiled into a database. Some of the metrics collected—including the number of residents participating in plan decisions, the number of participating jurisdictions, and the amount of local policy changes that resulted from the plan—are helpful for measuring the diversity and dynamism of each grantee's consortium. In this article, we focus on the number of jurisdictions that actually adopted the plans or projects from the initiative.

As self-reported metrics shared on a final grant report, the reliability and validity of the *eLogic* data points are questionable. Furthermore, many grantees were confused about the *eLogic* reporting forms, and quite a few skipped sections or the report entirely. As a result, the dataset is only partial, and the values it contains may be inflated.

Describing Epistemic Communities

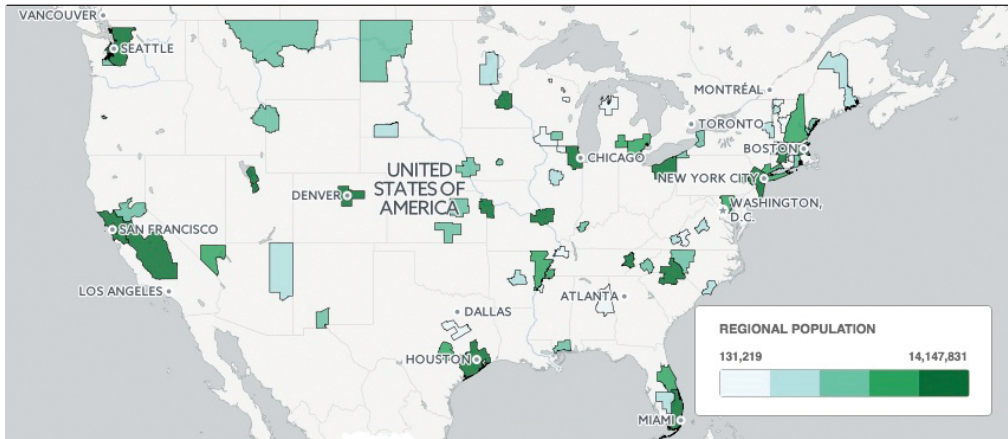
The 74 SCI-RPG grantee regions are situated across the country (exhibit 1). The group includes rural, small, and large metropolitan areas, ranging in population from 20,000 to 14 million. The regions present a broad range of income and racial/ethnic diversity, as well as political preferences.⁶

⁵ ACS 2014 5-year Estimates, Table B19001.

⁶ To explore these differences further, see the maps at <http://www.planningsustainableregions.org/sci-grant-recipients>.

Exhibit 1

Location of SCI-RPG Grantee Regions



SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

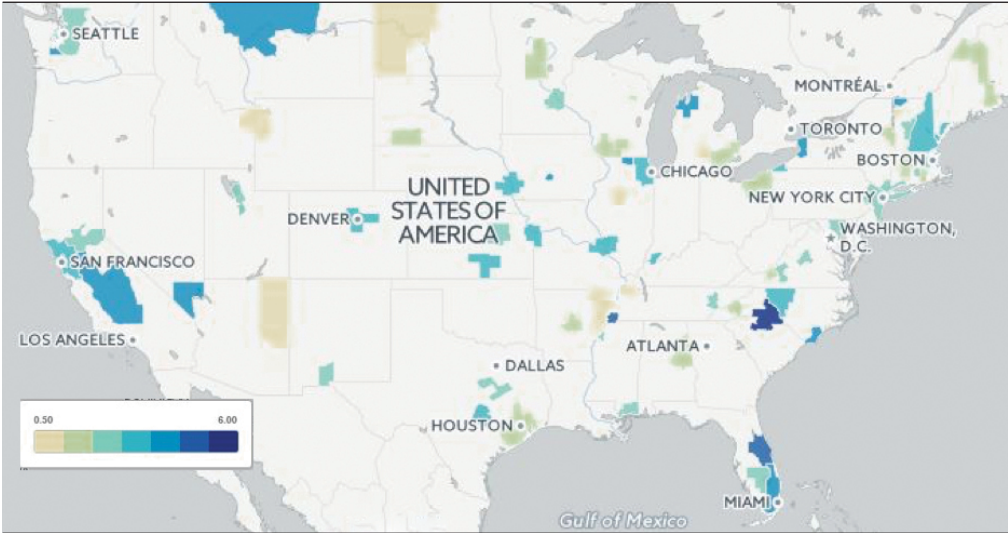
The Collaboration Database develops a typology of governance structures, and in this article, we focus on two variables: governance tiers and bodies. Structures with more governance tiers (shown in the darker shade in exhibit 2) have more levels of management or oversight for the project, representing a more vertical structure; those structures with fewer tiers are more horizontal (and possibly offer more opportunities for participation, input, and influence). Structures with more governance bodies (exhibit 3) have a more elaborate (and possibly cumbersome) management structure, including committees, working groups, boards, and so forth. On the one hand, having multiple groups may represent more opportunities to collaborate and develop shared ownership for a project. On the other, more governance bodies may create more fragmentation in governance.

The Partner Database categorizes the organization types for the 2,550 partners that participated in SCI-RPG across the 74 regions. These data represent the full consortia membership during the duration of the grant. Exhibit 4 groups the partners into six organization types. Not surprisingly, because the consortia were required to include governments representing 50 percent of the region's population, local government is the most common organization type. Likewise, each consortium was supposed to include a regional government entity, so more than 100 of these entities are represented across the grantees. What is more surprising is the involvement of nonprofits, business, and to a certain extent, universities in the consortia.

To learn more about the focus of these partner organizations, we took note of whether they had an explicit mission that addressed economic, environmental, or equity issues. Although all three areas were well represented among the partners, missions focusing on economic issues were most prevalent (exhibit 5).

Exhibit 2

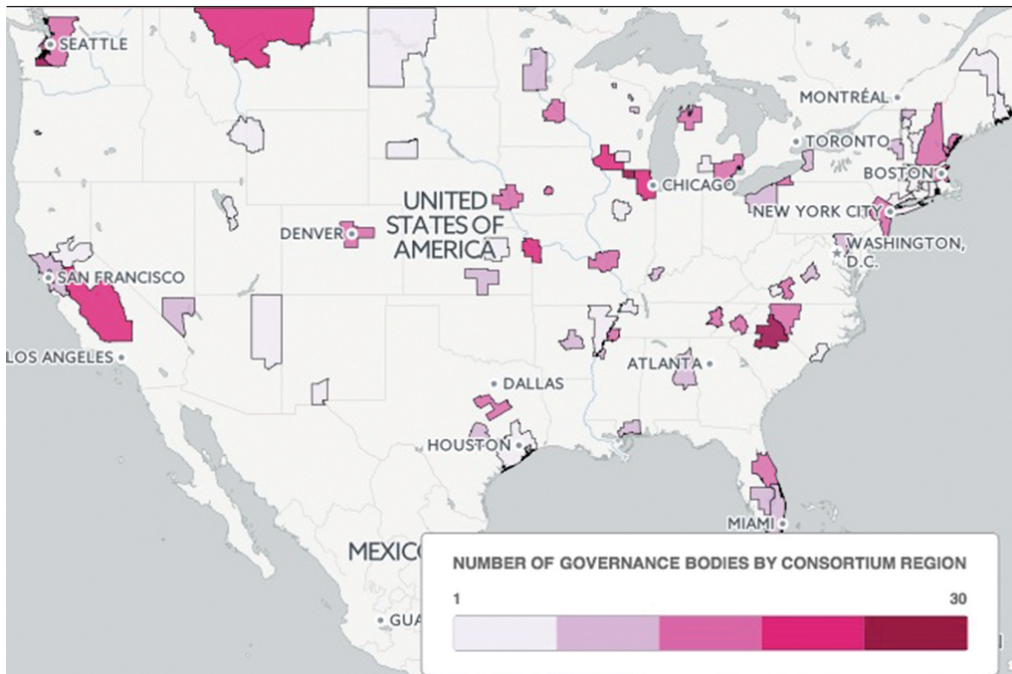
Governance Tiers by SCI-RPG Grantee Region



SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

Exhibit 3

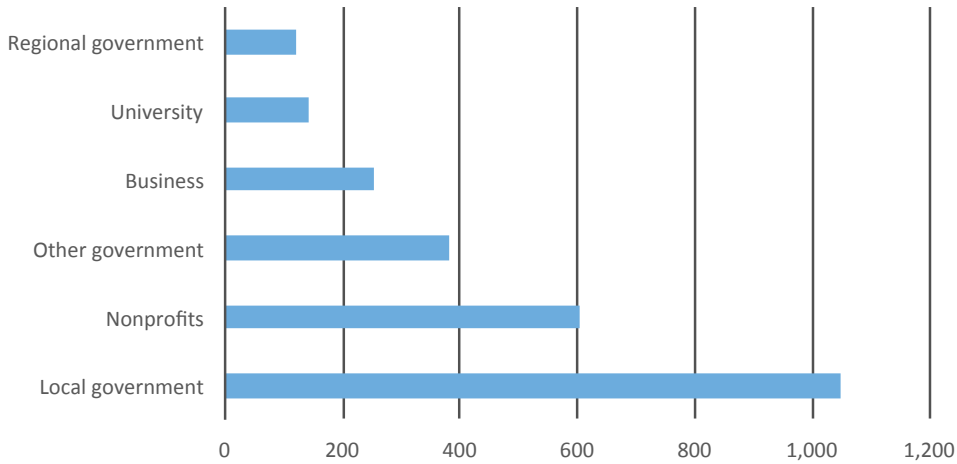
Governance Bodies by SCI-RPG Grantee Region



SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

Exhibit 4

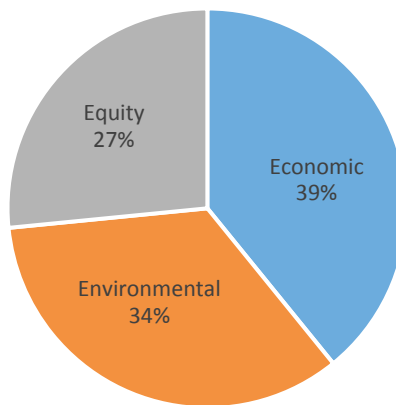
SCI-RPG Partner Organization Type, Governing Consortia



SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

Exhibit 5

Mission of SCI-RPG Partner Organizations



SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

We also evaluated participation via the results reported in the *eLogic Models*. These reports suggested that more than 200,000 residents nationwide engaged in regional planning processes related to the SCI-RPG grants. Participants included 1,856 jurisdictions, about one-third in the original consortium and another two-thirds joining with time. Altogether, 356 jurisdictions adopted plans or projects resulting from the grants.

The 74 grantees are a diverse set of regions in terms of demographic and regional characteristics. Exhibit 6 describes the key independent and dependent variables used in the models to predict epistemic community formation in the next section. In particular, the mean number of governance

Exhibit 6

Descriptives for Variables in Regressions

Type	Variable	Number	Minimum	Maximum	Mean	SD
Demographic characteristics	Regional population (2010)	74	20,048	14,147,831	1,593,051	2,407,620
	Median income	74	27,735	82,046	52,815	10,874
	Income segregation (2000)	74	0.01	0.14	0.06	0.03
	Racial diversity (2000)	74	0.01	0.51	0.15	0.09
	Percent of middle-class households that are African-American	74	0.00	0.72	0.08	0.11
	Percent of middle-class households that are Latino	74	0.00	0.56	0.08	0.10
Regional structure	Service district complexity (districts/10,000 population)	74	0.05	15.34	1.94	2.53
Governance structure	Number of governance structure bodies	71	1	30	7.73	5.80
	Number of governance structure tiers	71	0	6	2.20	1.38
	Number of partners whose mission statement mentions economic issues	74	0	33	5.34	5.95
Dependent variables	Organizational diversity	74	14.02	96.84	61.31	20.78
	Share of partners related to business	74	0%	33%	5%	8%
	Number of jurisdictions adopting plans	74	0	75	4.81	11.20

SD = standard deviation.

bodies is 7.7, whereas the mean number of tiers is 2.2. On average, 5.3 partners focused on economic issues. Average organizational diversity is relatively high, with an entropy index of 61.3, whereas the mean share of business partners is quite low, at 5 percent. Nearly 5 jurisdictions per region adopted the plan, on average.

Predicting Epistemic Communities

The literature on epistemic communities and how they help regions grow more equitably suggests the importance of several readily measurable factors. First, collaborations should be inclusive and diverse (that is, cross-sectoral); they may also be large and horizontally networked (Benner and Pastor, 2015; Innes and Booher, 1999). Second, regional economic and spatial structure matters: in particular, segregation and metropolitan fragmentation may be drags on the economy, whereas the existence of an African-American middle class may be positive (Benner and Pastor, 2012).

Using multivariate regression models, we examine the role of regional characteristics and collaboration governance in the formation and impact of epistemic communities, specifically examining the diversity of the collaboration (based on partner organization types), the participation of business,

and the project's effectiveness (as measured by plan adoptions). The findings suggest that epistemic communities, as measured by collaboration diversity and business participation, are indeed forming, but their impact on specific plans is harder to determine.

Ordinary least squares, or OLS, regression analysis is used, with a parsimonious set of variables representing regional demographic and economic characteristics, regional fragmentation, and governance structure. We identified multicollinearity by generating correlation matrices and variance inflation factors for each regression. Because of multicollinearity issues, we were only able to use one or two governance variables in each regression.

Collaboration Diversity

To measure the grants' diversity of collaborations—one indicator of epistemic communities—we developed a dependent variable that measured the diversity of partner organizations. We then examined the factors that predict diversity. The model is highly significant, with an adjusted *R*-squared of .306. In general, the most important predictors are related to economic challenges (exhibit 7): higher levels of income segregation, lower median income, and a lower share of the Latino middle class. At the same time, lower levels of fragmentation are important. In terms of governance, the most important factors leading to organizational diversity are less fragmentation in the region (in terms of special districts), fewer bodies in the governance structure, and partners who emphasize economic issues in their mission statement. In general, these findings confirm a common epistemic community narrative: collaborations coming together over a crisis and finding common ground in economic issues, facilitated by simpler governance and less fragmented regions.

Exhibit 7

Predicting the Diversity of Collaboration Partners

Type	Variable	Unstandardized Coefficients	S.E.	Standardized Coefficients	t-Statistic
Demographic characteristics	Regional population (2010)	0.000	0.000	- 0.101	- 0.643
	Median income	- 0.001**	0.000	- 0.327	- 2.133
	Income segregation (2000)	285.420***	103.276	0.442	2.764
	Racial diversity (2000)	- 34.049	30.420	- 0.162	- 1.119
	Percent of middle-class households that are African-American	- 10.516	22.566	- 0.056	- 0.466
	Percent of middle-class households that are Latino	- 51.120*	25.793	- 0.254	- 1.982
Regional structure	Service district complexity (districts/10,000 population)	- 2.172**	0.891	- 0.275	- 2.438
Governance structure	Number of governance structure bodies	- 0.603*	0.356	- 0.173	- 1.692
	Number of partners whose mission statement mentions economic issues	0.967**	0.377	0.285	2.567
	Constant	90.030	14.852		6.062

S.E. = standard error.

*** *p* < .01. ** *p* < .05. * *p* < .10.

Notes: *n* = 70. Significance = 0.000. Adjusted *R*² = 0.306.

Business Participation

To measure the extent of business participation in the partnerships—another indicator of epistemic communities—we developed a dependent variable that measured the share of partner organizations that were businesses or business representatives. The model is even more significant, with an adjusted *R*-squared of .455. Relatively few variables predict business participation (exhibit 8). In terms of regional economic characteristics, important predictors are more populous regions and a larger share of the middle class that is African-American middle class. In contrast to the first regression, more complexity actually enhances business participation; perhaps having a high number of special districts makes it more complicated to involve government in the collaboration, and businesses fill in the gap. Not surprisingly, however, the most important predictor of business participation is partner focus on economic issues. Overall, this idea suggests that businesses are most comfortable coming to the table with some degree of regional prosperity already present.

Exhibit 8

Predicting Business Participation in the Collaboration

Type	Variable	Unstandardized Coefficients	S.E.	Standardized Coefficients	t-Statistic
Demographic characteristics	Regional population (2010)	0.000**	0.000	-0.295	-2.125
	Median income	0.000	0.000	-0.124	-0.916
	Income segregation (2000)	0.474	0.350	0.192	1.354
	Racial diversity (2000)	0.033	0.103	0.041	0.320
	Percent of middle-class households that are African-American	0.188**	0.076	0.261	2.452
	Percent of middle-class households that are Latino	-0.044	0.087	-0.058	-0.506
Regional structure	Service district complexity (districts/10,000 population)	0.006**	0.003	0.205	2.048
Governance structure	Number of governance structure bodies	0.001	0.001	0.071	0.781
	Number of partners whose mission statement mentions economic issues	0.007***	0.001	0.558	5.677
	Constant	0.002	0.050		0.034

S.E. = standard error.

****p* < .01. ***p* < .05. **p* < .10.

Notes: *n* = 70. Significance = 0.000. Adjusted *R*² = 0.455.

Plan Adoption

To predict the number of jurisdictions that adopted plans or projects (that is, the impact of epistemic communities and the SCI-RPG grant program), we used a dependent variable from the *eLogic Model* that reported this information. Not surprisingly, impact is harder to predict; the model is still significant, but with an adjusted *R*-squared of .142.⁷ Again, the variables that stand out tend to be related to regional economic characteristics (exhibit 9), especially larger regional population, higher median income, and an African-American middle class. Unexpectedly, more complexity (that is,

⁷ In this model, we had to drop the segregation variables because of collinearity problems.

Exhibit 9

Predicting Plan Adoption by Jurisdictions

Type	Variable	Unstandardized Coefficients	S.E.	Standardized Coefficients	t-Statistic
Demographic characteristics	Regional population (2010)	0.000*	0.000	- 0.267	- 1.682
	Median income	0.000***	0.000	0.456	3.250
	Percent of middle-class households that are African-American	28.813**	13.073	0.276	2.204
	Percent of middle-class households that are Latino	12.841	14.843	0.115	0.865
Regional structure	Service district complexity (districts/10,000 population)	0.993*	0.566	0.226	1.753
Governance structure	Organization diversity	0.081	0.069	0.145	1.178
	Number of governance structure tiers	- 1.914*	0.976	-0.234	- 1.962
	Constant	- 24.264**	9.805		- 2.475

S.E. = standard error.

***p < .01. **p < .05. *p < .10.

Notes: n = 70. Significance = 0.018. Adjusted R² = 0.142.

fragmentation) makes plan adoption more likely. Although diversity of the collaboration does not predict plan adoption, a more horizontal governance structure (with fewer tiers) does. This finding suggests that the models have mixed success at proxying for epistemic communities, and regardless, more affluent regions are most likely to adopt plans developed in the program. Further research might probe whether this success is due to their greater resources, capacity, or other factors.

Understanding the Formation and Impact of Epistemic Communities

How the SCI-RPG program helped regions form epistemic communities varied across regions. In regions that had already formed epistemic communities, SCI helped grantees bring a more diverse set of actors to the table and expand their shared vision for the region’s future. In regions with no history of collaboration, SCI helped establish foundations for inclusive and deliberative regional decisionmaking. Even when grantees struggled to bridge epistemic differences or see them as a unified region with a common destiny, the process was still able to get a diverse set of regional actors to begin working together, and develop a joint understanding of the problems facing their region.

We conducted interviews with consortia members and analyzed grant documents of three SCI grantees to understand whether the grant helped regions form diverse and dynamic epistemic communities. For our case studies, we sought to examine collaboratives in fragmented regions, which we defined as having significant levels of racial and/or income inequality and jurisdictional complexity, but that were still able to build large consortia. We measured these features with the regional racial income gap, regional Gini coefficient (a commonly used statistical measure of inequality), number of municipalities per 10,000 people, and number of consortium partners. Because we were

also interested in examining the ways grantees were able to bridge epistemic differences, we chose consortia with significant participation from the business community. We used the relative number of consortium partners that were businesses or business councils as the proxy for participation by the business community.

The consortia we studied were the Sustainable Knowledge Corridor Consortium in New England, reNEW East Arkansas in eastern Arkansas, and Destination Erie in Erie County, Pennsylvania—regions that all exhibited high racial and income inequality and fragmentation, yet had relatively large consortia with business involvement (exhibit 10). Although the methodology was not exhaustive, conversations with consortia participants suggest that existing planning culture and consortium process design were major influences on the diversity and dynamism of epistemic communities that were formed. Although merely getting people involved makes a difference, the extent to which regions could bridge institutional logics and build epistemic communities ultimately came down to how well designed and facilitated their collaborative processes were.

The following text first provides a brief overview of the cases, then focuses on three aspects: the structure of the collaboration/epistemic community, how the collaboration led to shared understandings, and the lasting legacy of the region’s collaboration.

Exhibit 10

Characteristics of SCI-RPG Case Study Regions

	Racial Income Gap	Gini Coefficient	Jurisdictional Fragmentation	Consortium Size	Business Partners
East Arkansas	Medium (0.67)	High (0.461)	High (2.77)	High (32)	1
Erie County	High (0.97)	Medium (0.455)	Medium (1.35)	High (359)	2
Capitol region	High (0.72)	Medium (0.455)	Medium (0.61)	High (39)	116
All regions (median)	0.505	0.45	0.72	21	0

SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

Sustainable Knowledge Corridor Consortium

The New England Knowledge Corridor is a two-state region encompassing three metropolitan areas: Hartford and New Britain, Connecticut, and Springfield, Massachusetts. Municipalities around the region face issues such as revitalizing urban centers, housing, food security, sustainability, and climate adaptation. Regional priorities include the Connecticut River’s environmental quality, transit systems, highways, and focusing local land use decisions to support transit-oriented development.

The greater Hartford region benefited from an existing culture of collaboration among different jurisdictions as well as an epistemic community. According to one regional planner, the region’s three MPOs—CRCOG, Springfield’s Pioneer Valley Planning Commission, and the Central Connecticut Regional Planning Agency—all “shared many common goals for the area and decided that the best way [...] to work on issues was to put together a cross-border consortium.” The consortium was focused on the New England Knowledge Corridor, “a concept that has evolved over the last 10 years through the work of the MPOs and the partner agencies of the Hartford Springfield Economic Partnership” (CRCOG, 2011: 6). This work had established “the interrelatedness of these three regions as a single economic unit tied together by a wide range of regional assets,” and regional planners generally acknowledged the artificiality of political boundaries.

The Sustainable Knowledge Corridor Consortium's primary planning concern was how to use \$1.53 billion dollars in incoming transportation investment "to expand opportunity to all residents of the region" (CRCOG, 2011: 1). The grantee sought to "create a foundation of opportunity—in housing, education, transportation, employment, nutrition, and community resources—for all the residents in the region."

reNEW East Arkansas

The East Arkansas Planning and Development District (EAPDD) is one of Arkansas' eight planning and development districts. The district consists of 12 counties along Arkansas' eastern border, and borders three states: Mississippi, Tennessee, and Missouri.

The region is sharply divided, with local differences in racial composition, industrial structure, and even competition between local high schools. East Arkansas has a high racial income gap as well as high levels of income inequality and racial and income segregation. Quite a bit of competition between jurisdictions in the region, particularly around economic development, is known to take place. The region is also divided between areas that rely on a more industrial economic base and areas that are driven predominantly by agriculture.

The ultimate goal of the reNEW East Arkansas project was to find the root causes of apathy in the region and develop a shared vision for East Arkansas' future based on an inclusive and bottom-up process. The overall project involved developing a regional plan that would be informed by the development of 21 local strategic plans, a regional housing analysis, a land/use transportation plan, data analysis, local foods analysis, and community engagement.

Destination Erie

Bordered by Ohio, New York, and Lake Erie, Erie County has more than 280,000 residents. Its main municipality is the City of Erie, which, like many Rust Belt cities, has been hit hard by the loss of manufacturing jobs. Many of the surrounding 38 jurisdictions, however, are rural and have a more agrarian economic base. Poverty throughout the county is one of the region's greatest challenges, according to locals.

Like East Arkansas, Erie County did not have an extensive history of interjurisdictional collaboration. The region's racial, economic, and industrial diversity informed the consortium's goals to create a regional plan to build "a more prosperous and sustainable future for the Erie region" (Erie County Regional Plan for Sustainable Development Consortium, 2012: 1).

Structure of the Epistemic Communities

Despite their differences in regional characteristics and collaborative culture, all three grantees developed large consortia with a diverse set of institutional logics.

CRCOG and its partners used the grant process to expand the number and type of organizations participating in the New England Knowledge Corridor work. In addition to the three regional planning agencies, a number of other entities participated in the consortium, including municipalities; state and local agencies; educational institutions; and organizations dealing with workforce

development, sustainable agriculture, fair housing, transit, homelessness, and economic development issues. Although not everyone participated fully in each meeting, all members participated at various points in the process, and subgrantees reported back to the larger group.

Erie County's consortium, Destination Erie, was a 72-member consortium with five working groups: economic development, environment, housing and neighborhoods, community facilities, and transportation and infrastructure. Working groups met independently, whereas the entire consortium came together as a group only once or twice in the process. Unlike many SCI grantees, Erie County was successful in recruiting substantial participation from the business community. The Erie Regional Chamber and Growth Partnership was a key champion of the project; the largest and most engaged working group was in economic growth, which involved more than 150 businesses.

According to reNEW East Arkansas' final regional plan, "partnerships were developed with all 12 counties, most of the 107 cities, Arkansas State University, University of Arkansas-Little Rock, five community colleges and a consulting team" during the course of the grant (EAPDD, 2015: A-1). Each of the 12 counties formed their own plans, as did 9 municipalities. Plans were developed in each jurisdiction through an intensive series of workshops during the course of a week, called *Plan Weeks*. Uniquely, reNEW East Arkansas' local plans then informed the overall regional plan.

All three grantees benefited from bringing a wide array of actors together. In many instances, grantees were able to help consortia members bridge institutional logics. For instance, advocates and community-based organizations in the Sustainable Knowledge Corridor Consortium were able to raise issues with regional economic development practitioners that weren't already involved, particularly with projects and discussions related to transit-oriented development, growing the local economy, and how to best utilize transit investments. When economic development practitioners in the consortium argued for an increased focus on housing and initiatives to counter unemployment in the region, other members lifted up the need to prevent gentrification and displacement, as well as advocating for housing that serves the full range of the market, not only upper income. Similarly, advocacy and service organizations infused discussions about imminent transportation investments with the perspective that not everyone would be using the newly developed high-speed rail and rapid transit systems, and the on-road bus system within both regions still needed improvements. These conversations led to formal acknowledgement of the importance of putting "in place now the land use regulations and infrastructure that will...ensure that existing low income populations are not displaced" (CRCOG, 2015: 2).

In East Arkansas, the creation of the consortium created an "icebreaker that forced difficult conversations," particularly over infrastructure, education, racial inequality, and food deserts. For instance, a ridge geographically separates Poinsett County, which participated in the planning process; jurisdictions on either side of the ridge had traditionally interacted very rarely with one another. The county's Plan Week brought together more than 40 education leaders, community leaders, nonprofits, business leaders, tourism professionals, and opinion leaders throughout the county. According to a Poinsett County Plan Week participant, conversations throughout the process "were often heated and emotional, but ultimately led to new relationships, identification of common goals, and a desire to collaborate."

Although having these difficult conversations were undoubtedly important and beneficial, it is critical that people physically come together to have these conversations in person. When unresolved disagreements arose in all three case studies, it was often between working groups that did not regularly meet, and this lack of face-to-face interaction made it challenging to resolve conflicts and bridge different perspectives.

The creation of local committees or decisionmaking bodies also helped resolve regional differences and expand consortium participation. In addition to consortium members, many of the Sustainable Knowledge Consortium's six demonstration projects had some form of local advisory committee, such as the working group for New Britain's Complete Streets Master Plan and Streetscape Design, the membership of which were self-described as "extremely diverse culturally and professionally" (CRCOG, 2015: 2). In East Arkansas, each of the 21 local plans had their own steering committees of at least eight people and a plan director. The Plan Weeks also engaged a large number of local stakeholders.

Although issue-based working groups and committees enable participants to dive into complex topics, some instances also risked re-siloing participants with this structure. For instance, one participant felt that having issue-based working groups discouraged municipal participation, as jurisdictions didn't see a natural way to plug in. This move, according to the participant, in turn signaled that the grantee did not really intend for them to participate. Furthermore, at least among these three grantees, those that directly involved most of their consortia in stakeholder engagement felt more satisfied with the results of the process than grantees that relied on consultants, subgrantees, or committees to lead that work.

Building Shared Understandings

Just as the literature on collaboration suggests, several elements were key to building trust and shared understandings among the consortia members: skilled process facilitation, small wins through actionable demonstration projects, and the use of boundary objects and experiences. However, one area in which regions struggled to create shared understandings was racial equity.

Facilitation

One reNEW East Arkansas participant attributes the success of the entire process to the methodology and skill of its Plan Week facilitator, the consultant Building Communities. Strong facilitation enabled participants to delve into difficult issues while remaining focused on the end goal. Many of the people participating in Plan Week had deep-seated differences. The process emphasized that differences can strengthen communities, causing many participants to realize that they could collaborate with one another despite their differences.

In addition to strong facilitation, developing a shared understanding must be an explicit goal that is continually revisited. Benner and Pastor (2015: 15) noted that, "in high-performing regions, conflicts are attenuated by the recognition of a common regional destiny." The reNEW East Arkansas initiative was formed with the ultimate goal of developing a shared vision for the region, and consortium leaders were adamant throughout the process that actors were stronger together than apart, and that a regional voice was essential for generating progress.

Small Wins

Achieving small and actionable wins early in the process is another helpful way to establish and manage trust in collaborations (Huxham and Vangen, 2005). Building on lessons learned from Destination Erie, subsequent planning efforts in Erie County have attempted to balance the need for long-term systemic change and have demonstrated results with a mix of specific projects and work on broader systemic issues. The Sustainable Knowledge Consortium was able to strike this balance with its six demonstration projects. In East Arkansas, Building Communities' unique approach enabled participants to stay "focuse[d] instead on the development of action-oriented projects and initiatives" (EAPDD, 2015: A-6).

Use of Boundary Objects and Experiences

In addition to strong facilitation and a focus on actionable projects, reNEW East Arkansas' processes also benefited from the use of boundary objects and boundary activities to foster deliberative and inclusive epistemic communities.

EAPDD (2015: A-3) commissioned an ethnographic study on the "root causes for disenfranchisement" and apathy in the region in order to "determine the best methods of reaching deep into the fabric of communities in the Delta." Presentation of these findings to government officials was instrumental in shifting municipal leaders' perspectives. In particular, it debunked public perception that little could be done to affect change in the lives of the disenfranchised.

Large-scale data sharing was also a key factor in EAPDD's planning process. EAPDD conducted a large-scale collection and data dump process and uploaded everything to a portal for citizens and local jurisdictions to use. Sharing data also helped develop a shared understanding of the region's issues, as everyone was using the same information. Data collection was also incorporated into stakeholder engagement and the Plan Week processes.

By providing a "common focus for different ways of knowing" and helping "people understand other perspectives," both quantitative and qualitative datasets acted as excellent boundary objects (Feldman et al., 2006: 95).

EAPDD also made excellent use of boundary experiences. In addition to the localized Plan Weeks held throughout the region, the larger regional consortium met every 6 weeks. Meeting locations rotated around the district, and each meeting also consisted of a consortium field trip to a landmark or historical icon in that particular location. This arrangement helped the group develop a sense of regional appreciation and pride and rally around reNEW East Arkansas initiatives. Participants grew very close from these experiences, and relationships built during the course of the grant continue today.

Addressing Racial Equity

None of the grantees were able to significantly advance racial equity throughout their consortia. Regional racial inequalities, however, were addressed in some manner by all three consortia, and some consortium members addressed the needs of underrepresented communities. For example, the East Arkansas consortium identified outreach strategies for disadvantaged Delta communities, the Capitol Region studied the mismatch between at-risk Black and Latino youth and available jobs, and the Erie County consortium members discussed the challenges of communities that had been historically marginalized.

However, the lack of focus on racial equity issues could have been due to a lack of a shared “racial equity framework” (Nelson, 2015); none of the grantees used an explicit racial equity lens to approach their regional planning process. For many participants, the grants were the first time that they were addressing racial disparities as a group, according to interviewees. Thus, the grants may have been a first step toward this conversation.

Moving Beyond the Episodic: SCI’s Legacy

Although only two of the three consortia have been able to sustain their collaboration, all three consortia have had some long-term impact. Despite hopes otherwise, the Sustainable Knowledge Consortium did not continue meeting after the end of the grant. Although this cessation is partly due to staff capacity, former consortium members are collaborating in other ways, and many of the projects initiated by the grant are moving forward on their own. Although the consortium no longer meets, one regional planner feels that “people have a better sense of who’s working on what and how another discipline could connect to what’s being done in one way or another.”

Through Destination Erie, regional leaders were able to establish a shared understanding of Erie’s problems. The final plan includes the “top five causes behind Erie County’s biggest challenges today, as identified by the Consortium membership” (County of Erie, 2015: 3). Destination Erie’s consortium also committed to formalizing and continuing its partnerships by creating Emerge 2040, “the successor organization to guide the implementation of the plan. This organization, funded with a mix of public and private funding, will support and coordinate a prioritized group of initiatives to move the Destination Erie recommendations forward” (County of Erie, 2015: 5). The City of Erie also developed its own comprehensive plan that built on the work of Destination Erie.

Collaboration also continues in East Arkansas, particularly around adult education, workforce development, and postsecondary education. Many participants “became like family” during the course of the grant and continue working together.

Although some grantees expressed disappointment that the formal consortium formed under the grant did not continue, Benner and Pastor (2015: 18) noted that “ultimately the processes of producing collective knowledge and common ground... are rooted in communication between people over long periods of time that may only partially and temporarily correspond to existing organizational structures.” A more appropriate measure would be whether SCI-RPG created sustained relationships and a desire among regional actors for continued conversations and collaborations, which they most certainly did.

Conclusion: Epistemic Communities or Forced Marriages?

Fostering diverse epistemic communities may help support collaboration and governance in regions with deep divisions along lines such as race, class, and ideology. This research examined how SCI supported the formation of diverse epistemic communities, and what their impact was on regional planning. The analysis suggests that some elements of epistemic communities, as measured by collaboration diversity and business participation, are indeed emerging, but their impact on plan implementation is harder to determine. Regional economic characteristics, such as the presence of an African-American middle class, affect the composition of the governing consortia more than

governance characteristics do. In general, it seems that a diverse set of actors is coming to the table in areas with economic challenges, whereas business participation is occurring in areas with some degree of prosperity already. However, it is regional affluence, coupled with a more horizontal governance structure that shaped whether jurisdictions adopted plans developed under the grant program.

The cases studies provide a much more nuanced picture of how epistemic communities form and self-sustain. Although the Sustainable Knowledge Corridor Consortium had the advantage of building on foundations of regional collaboration, their regional planning grant enabled them to engage new stakeholders, and therefore deepen the shared understanding of the region. According to one regional planner, “the greatest thing that this grant did was bring people together who didn’t have a history of working together. There were interests and individuals that weren’t necessarily connected [before] that needed to be. Having that interchange of ideas and sectors was a new thing for the region and beneficial.”

Destination Erie helped regional partners come together and develop relationships that wouldn’t have otherwise been formed. Although Erie County still struggles to speak with a united voice or self-identify as a cohesive region with unified interests, the sense of the problems that the region faces is shared. Now, with *Emerge 2040*, the work continues with more focus on action and implementation.

By using processes, objects, and experiences that helped participants acknowledge differences and build a sense of togetherness, reNEW East Arkansas was able to hold numerous difficult and transformative conversations that helped a wide array of regional stakeholders coalesce around a shared vision for their communities.

Although compiling this unique dataset on regions participating in the SCI-RPG program enables a more thorough examination of epistemic communities than has been possible in previous research, the ability of the data to capture shared understandings and problemsolving is still limited. The variables serve as proxies for certain elements of successful collaboration, but questions remain about the validity of the data, that is, how accurate the proxies are. Our case studies suggest the importance of triangulating such databases with more qualitative interview findings.

Future research might investigate the role of jurisdictional complexity in epistemic community formation, given that we found mixed results (negative impacts on collaboration diversity, but positive impacts on business participation and plan adoption). Because other research (for example, Benner and Pastor, 2012) has found similarly contradictory results, it would be worthwhile to conduct more research on the challenges and opportunities of regional fragmentation for regions trying to build collaboration.

Another direction for future research could be a comparison of SCI-RPG regions with control regions. How did those who received SCI grants differ from those who did not, in terms of epistemic communities? The challenge would be to find matched pairs, with nonfunded regions conducting projects that are comparable to the SCI-RPG projects.

This article provides some evidence that SCI-RPG grantees succeeded in developing cross-sectoral collaborations that bridged agency silos and coordinated growth management across the region. In some cases, new dialogue led to new plans and solutions. Mostly, however, it was only in a few

regions that true epistemic communities emerged to help heal long-term divisions and conflicts with a shared vision for the region's equitable future. Even so, the SCI program was arguably one of the most innovative federal approaches to advance the goal of equitable regional growth in recent history.

Appendix A: Methodology

Geographies

We defined the grantee region as the counties associated with each grantee, which we obtained from the Grantee geographic information system shapefiles file on the U.S. Department of Housing and Urban Development (HUD) Sustainable Communities Initiative website.⁸ We also assigned one Core Based Statistical Area (CBSA) to each grantee by linking the list of grantee counties via the established crosswalk,⁹ which we then reconciled with the grantee metropolitan statistical area (MSA) designation from HUD's Grantee Information Table. With discrepancies, preference was generally given to HUD's MSA designation.

Partner Database

For entity type, we developed a typology of 22 types, grouped into 6 categories, as shown in exhibit A-1.

Exhibit A-1

SCI-RPG Grantee Organization Grouping

Organization Type	Category	Organization Type	Category
Business	Business	Government authority	Other
Business council		Quasi-governmental agency	government
Private		Native American nation	
Individual		Other government	
		Rural planning organization	
City	Local government	State	
County			
Joint city-county		Nonprofit (local)	Nonprofit
		Nonprofit (national)	
COG	Regional government	Nonprofit (other)	
MPO		Foundation	
Joint MPO-COG		Political	
		University	University

COG = council of governments. MPO = metropolitan planning organization. SCI-RPG = Sustainable Communities Initiative Regional Planning Grant.

⁸ <https://archives.huduser.gov/sci/index.html>.

⁹ U.S. Census Bureau, Population Division; Office of Management and Budget, February 2013 delineations.

Collaboration Database: Questions

- Did the consortium goals and objectives simply reiterate the Partnership for Sustainable Communities' six livability principles; go beyond the livability principles; or fail to mention livability principles or consortium goals at all?
- Were consortium members eligible for subgrants or subcontracts?
- Were members paid to participate in the consortium?
- Were members expected to contribute non-in-kind funding to the consortium?
- Did the agreement mention equity or a proxy for equity (traditionally underrepresented groups, marginalized communities, and so on) as an explicit value or goal?
- Did the agreement have a definition of equity?
- Did the consortium have a designated seat or representation requirement for equity or public engagement?
- Did the governance structure include an equity or public engagement committee, working group, or other body?
- Did the governance structure include a body with open membership?
- Did the governance structure assign weighted votes to particular members?
- How many tiers were between the highest body and lowest body?
- How many signatories did the consortium agreement have?
- How many governance structure bodies (committees, working groups, boards, and so on) did the consortium produce?

Acknowledgments

Support for this research came from the Ford and Surdna Foundations. The authors thank Patrick Revord for his assistance. All remaining errors are those of the authors.

Authors

Karen Chapple is professor of City and Regional Planning at the University of California, Berkeley.

Grace Streltsov is a housing fellow at the San Mateo County (California) Housing Department.

Mariana Blondet is an energy and environmental specialist at the United Nations Development Programme in Peru.

Cristina Nape is an infrastructure analyst at HATCH.

References

- Benner, Chris, and Manuel Pastor. 2015. *Equity, Growth, and Community: What the Nation Can Learn From America's Metro Areas*. Oakland, CA: University of California Press.
- . 2012. *Just Growth: Inclusion and Prosperity in America's Metropolitan Regions*. New York: Routledge.
- Capitol Region Council of Governments (CRCOG). 2015. *Sustainable Knowledge Corridor Final Narrative Report*. Hartford, CT: CRCOG.
- . 2011. *Sustainable Knowledge Corridor Final Workplan*. Hartford, CT: CRCOG.
- Chetty, Raj, and Nathaniel Hendren. 2014. Causal Effects, Mobility Estimates and Covariates by County, CZ and Birth Cohort; Online Table IV: Complete County Level Dataset, Equality of Opportunity Project. <http://www.equality-of-opportunity.org/>.
- County of Erie. 2015. *Final Narrative Report for Sustainable Communities Regional Planning Grant*. Erie, PA: County of Erie. <https://archives.huduser.gov/sci/sites/default/files/zip/SCI-FinalNarratives-FY10.zip>.
- Crosby, Barbara C., and John M. Bryson. 2010. "Integrative Leadership and the Creation and Maintenance of Cross-Sector Collaborations," *The Leadership Quarterly* 21 (2): 211–230. DOI: 10.1016/j.leaqua.2010.01.003.
- Daukas, Nancy. 2006. "Epistemic Trust and Social Location," *Episteme: A Journal of Social Epistemology* 3 (1): 109–124. DOI: 10.1353/epi.0.0003.
- East Arkansas Planning and Development District (EAPDD). 2015. "Dawning of the Delta Revival: A Regional Plan for Sustainable Development." <http://www.eapdd.com/reneweastarkansas/>.
- Feldman, Martha S., Anne M. Khademian, Helen Ingram, and Anne S. Schneider. 2006. "Ways of Knowing and Inclusive Management Practices," *Public Administration Review* 66: 89–99.
- Forester, John. 1999. *The Deliberative Practitioner: Encouraging Participatory Planning Processes*. Cambridge, MA: MIT Press.
- Fung, Archon. 2006. *Empowered Participation: Reinventing Urban Democracy*. Princeton, NJ: Princeton University Press.
- Haas, Peter M. 2008. "Epistemic Communities." In *The Oxford Handbook of International Environmental Law*, edited by D. Bodansky, J. Brunnee, and E. Hey. Oxford, United Kingdom: Oxford University Press: 791–806. DOI: 10.1093/oxfordhb/9780199552153.013.0034.
- Huxham, Chris, and Siv Vangen. 2005. *Managing To Collaborate: The Theory and Practice of Collaborative Advantage*. London, United Kingdom: Routledge.

- Innes, Judith E., and David E. Booher. 1999. "Consensus Building and Complex Adaptive Systems: A Framework for Evaluating Collaborative Planning," *Journal of the American Planning Association* 65 (4): 412–423.
- Kania, John, and Mark Kramer. 2011. "Collective Impact," *Stanford Social Innovation Review* 9 (1): 36–41.
- Lester, Thomas W., and Sarah Reckhow. 2013. "Network Governance and Regional Equity: Shared Agendas or Problematic Partners?" *Planning Theory* 12 (2): 115–138.
- Manzo, Lynne C., and Douglas D. Perkins. 2006. "Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning," *Journal of Planning Literature* 20 (4): 335–350.
- McKinney, Matthew, and Shawn Johnson. 2009. *Working Across Boundaries: People, Nature and Regions*. Cambridge, MA: Lincoln Institute of Land Policy.
- McKinney, Matthew, John Parr, and Ethan Seltzer. 2004. "Working Across Boundaries: A Framework for Regional Collaboration," *Land Lines* (July): 5–8.
- Nelson, Julie. 2015. "Advancing Racial Equity and Transforming Local Government." The Haas Institute for a Fair and Inclusive Society. http://haasinstitute.berkeley.edu/sites/default/files/gare-resource_guide.pdf.

Symposium

The Family Options Study

Guest Editors: Anne Fletcher and Michelle Wood

Guest Editors' Introduction

Next Steps for the Family Options Study

Anne Fletcher

U.S. Department of Housing and Urban Development

Michelle Wood

Abt Associates

The views expressed in this article are those of the guest editors and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. government.

Introduction

The U.S. Department of Housing and Urban Development (HUD) administers the largest federal program dedicated to addressing homelessness, the Continuum of Care (CoC) program. Through the CoC program, HUD awards approximately \$2 billion annually to local communities with the aim of quickly rehousing homeless individuals and families.¹

Given concerns about how homelessness may influence the life experiences of children, policy-makers have given particular attention to the needs of families who experience homelessness. Despite increasing appropriations dedicated to homeless assistance during the past three decades, family homelessness has stubbornly persisted.

Family homelessness is dynamic, with families moving in and out of homeless assistance programs every day. Throughout the year in 2015, nearly 155,000 families with children, representing more than 500,000 adults and children, accessed the homeless assistance system (Solari et al., 2016). Over the years, divergent theories about the cause(s) of family homelessness have led to the rise of different types of interventions designed to address the problem. One theory holds that, whatever other challenges a family may face, homelessness is purely an economic problem—housing costs surpass the incomes of poor families—and housing assistance alone can resolve it. Another theory posits that, whereas housing assistance is indeed crucial, family homelessness is the result of other

¹ FY 2018 HUD congressional budget justifications, <https://portal.hud.gov/hudportal/documents/huddoc?id=22-HomelessAGrants.pdf>.

challenges (such as child welfare engagement, mental health or substance abuse challenges, or unemployment), which must be addressed in order to end families' homelessness. In addition to these two broad theories on the causes of homelessness, evidence that at least some families experiencing homelessness will eventually secure housing without assistance has led to two schools of thought on appropriate policy, with some arguing that the need for access to assistance is permanent, and others arguing that it need be only temporary. Debate on the appropriateness of various housing and services interventions to assist homeless families is also influenced by the policy tradeoffs necessitated by the range of costs of alternative interventions.

The Family Options Study, launched by HUD in 2008, is a multisite randomized controlled trial, which was designed to measure the relative impacts of various housing and services interventions for homeless families.² The study was designed as a randomized experiment to generate the most rigorous evidence suitable for informing policy. Gubits et al. (2016, 2015) provide evidence about the effects, relative to usual care, of giving families in emergency shelters priority access to different types of housing and services interventions. Because each intervention is designed to address homelessness through different pathways, outcomes of interest extended beyond housing stability to also include family preservation, child well-being, adult well-being, and self-sufficiency.

The results of the Family Options Study offer striking evidence of the power of offering a long-term rent subsidy to a homeless family in shelter, substantially increasing housing stability and yielding benefits across a number of important domains, including reductions in residential moves, child separations, adult psychological distress, experiences of intimate partner violence, food insecurity, and school mobility among children, although those benefits were accompanied by reductions in work effort. These findings provide support for the notion that family homelessness is largely an economic issue, and that, by solving the economic issue, families experience additional benefits that extend beyond housing stability. Equally notable is the fact that these significant benefits that accrued to the families offered a long-term rent subsidy were achieved at a comparable cost to other interventions tested, which offered few positive outcomes for families in any domain.

Family Options Study Overview

HUD launched the Family Options Study in 2008 to learn about which housing and services interventions work best for families with children experiencing homelessness. Recruitment took place in emergency shelters across the 12 participating study sites.³ To be eligible for the study, families had to have been in emergency shelter for at least 7 days and have at least one child under the age of 15 with them in shelter. All families meeting the criteria were invited to be part of the study. In total, the study team enrolled 2,282 families, including nearly 5,400 children,

² The Senate Report 109–109 for the fiscal year 2006 Transportation, Treasury, the Judiciary, Housing and Urban Development and Related Agencies Appropriations Bill directed HUD to “undertake research to ascertain the impact of various service and housing interventions in ending homelessness for families.”

³ Alameda County, California; Atlanta, Georgia; Baltimore, Maryland; Boston, Massachusetts; the New Haven and Bridgeport regions of Connecticut; Denver, Colorado; Honolulu, Hawaii; Kansas City, Missouri; Louisville, Kentucky; Minneapolis, Minnesota; Phoenix, Arizona; and Salt Lake City, Utah.

into the study between September 2010 and January 2012. The study team followed the families for 3 years and measured outcomes in five domains of family well-being: (1) housing stability, (2) family preservation, (3) adult well-being, (4) child well-being, and (5) self-sufficiency.

Randomly assigning many families to different interventions is the most certain way to ensure that the results reflect the effects of priority access to a particular type of program rather than preexisting differences in the families. After providing informed consent and completing a baseline survey with each participating study family, the family was immediately randomly assigned to one of four groups—⁴

- The SUB group, in which families have priority access to a long-term rent subsidy for housing in the conventional market, typically a housing choice voucher (HCV), but no other dedicated supportive services.
- The CBRR group, in which families have priority access to a short-term rent subsidy lasting up to 18 months paired with limited housing-focused services, in the form of community-based rapid re-housing assistance.
- The PBTH group, in which families have priority access to a temporary, service-intensive stay, lasting up to 24 months, in a project-based transitional housing unit.
- The UC group, in which families have access to usual care homeless and housing assistance but do not have priority access to any particular program. In this case, *usual care* means leaving families to find their way out of shelter without priority access to a program that would provide them with a place to live.

The interventions reflect different implicit theories about the nature of family homelessness and the approaches best suited to address the problem. CBRR and SUB programs are based on the view that family homelessness is largely a consequence of housing costs that exceed the ability of some poor families to pay on an ongoing basis, a problem that housing subsidies can solve. Proponents of transitional housing emphasize that many families who become homeless have barriers in addition to poverty that make it difficult for them to secure and maintain housing. PBTH programs are based on the view that addressing these barriers and needs with an array of services in a supervised residential setting lays the best foundation for ongoing stability.

Following random assignment, families were free to take up the programs to which they were given priority access or to make other arrangements on their own, as would be the case for any family given a referral to a program in the absence of the study. Priority access provided families with immediate access to a program slot—for an HCV or other housing subsidy, or for a unit in a transitional housing facility—but families still needed to meet the eligibility criteria of the program to which they were referred, complete any required paperwork, and, in some cases, find an acceptable housing unit. Families were not prohibited from using other programs to which they were able to gain access outside the study. In this way, the study evaluates the effect of priority access to a program and thus shows the effect of a policy emphasis on a particular approach—that

⁴ All interventions were not available in all sites at all times during the enrollment period. In addition, some families were not eligible for all available interventions. A description of how this challenge was addressed methodologically is included in Wood and Fletcher (2017).

is, relatively more availability of a given type of program in a community. The design of the study provides a strong basis for drawing conclusions about the impacts of alternative policy emphases for families in emergency shelter on subsequent episodes of homelessness and housing instability, as well as several aspects of family well-being.

Gubits et al. (2015) presented short-term impacts measured 20 months after random assignment, but that period was not long enough to evaluate priority access to temporary programs that could last up to 2 years. Gubits et al. (2016) presented impacts measured approximately 3 years (37 months) after random assignment. Some impacts detected at 20 months were not detected at 37 months. Other impacts detected at 37 months were not apparent at the earlier followup point. Impacts found at either point in time hold importance when considering the relative benefits of the interventions during the 3 years of study.

Long-Term Rent Subsidy Compared With Usual Care

The study defined the primary outcome as housing stability and, in particular, the prevention of families' return to homelessness. Priority access to a long-term housing subsidy led to the best outcomes, by far, for reducing family homelessness at both 20 months and 3 years after random assignment.

The most notable effect of assignment to the SUB intervention compared with usual care was the reduction in homelessness and doubling up in the same housing unit with another family. At both the 20- and 37-month followup points, assignment to the SUB intervention reduced by more than one-half the proportion of families who reported having spent at least 1 night in shelter, in places not meant for human habitation, or doubled up in the past 6 months; increased the proportion of families living in their own place; and reduced the number of places lived in the past 6 months. The study team also measured use of emergency shelter during two 12-month periods: 7 to 18 months after random assignment and 21 to 32 months after random assignment. Relative to usual care, assignment to the SUB intervention reduced the proportion of families with a stay in shelter by nearly one-half during the earlier period and by more than three-fourths during the later period. Assignment to the SUB intervention also produced beneficial effects in other areas of family well-being and reduced food insecurity. In addition to improved housing outcomes, families assigned to the SUB intervention demonstrated significantly improved outcomes in non-housing domains, including adult well-being (reductions in psychological distress, intimate partner violence), child well-being (reductions in school mobility, behavior problems and sleep problems, and more pro-social behavior), as well as increased food security and decreased economic stress. In contrast to these beneficial effects, assignment to the SUB intervention, compared with usual care, reduced the proportion of family heads working at 20 months and reduced the proportion of those who had worked between followup surveys.

Short-Term Rent Subsidy Compared With Usual Care

Nearly no evidence exists that assignment to the CBRR intervention affected outcomes differentially compared with usual care at either followup point, across the domains of housing stability, family preservation, or adult and child well-being. Most strikingly, no evidence suggests that assignment to the CBRR intervention, relative to usual care, reduced stays in shelter or places not meant for human habitation at either followup point. Only a few effects on child well-being were apparent,

with scattered evidence of benefits from the CBRR intervention. At 20 months, relative to usual care, assignment to the CBRR intervention improved food security and family income (Gubits et al., 2015: chapter 7). Neither of these effects was evident at 37 months (Gubits et al., 2016: chapter 4).

Project-Based Transitional Housing Compared With Usual Care

Relative to usual care, assignment to the PBTH intervention reduced stays in emergency shelter during the period that some families remained in transitional housing. No evidence exists, however, of impact on other measures of housing stability or in other domains.

The Homeless Services System

In addition to documenting the impacts of interventions for families, the study sheds light on how the homeless services system works. Information on the study's implementation shows that, at the time families received priority access to CBRR and PBTH programs from 2010 to 2012, many such programs had screening criteria that could exclude families with greater challenges (Gubits et al., 2013). In addition, the use of programs by study participants shows that not all programs are equally attractive to homeless families. Families in the SUB group were more likely than families in the CBRR and PBTH groups to use the offered program type. The study also shows how families in the 12 communities access homeless and housing assistance in the absence of any priority offer. By 37 months after random assignment, 37 percent of UC families who responded to the followup survey had used some type of long-term rent subsidy (including HCVs, public housing, permanent supportive housing, and project-based Section 8 subsidies), 30 percent had used PBTH, and 20 percent had used CBRR (Gubits et al., 2016: exhibit 2-3). Over time, the use of housing subsidies increased and the use of temporary homeless assistance (emergency shelter, transitional housing, and rapid re-housing) decreased.

Costs of the Interventions

The study also analyzed the costs of emergency shelter and of the programs offered in the three active interventions, including all resources used to provide shelter or housing with supportive services, to a family during the course of 1 month. The analysis shows that emergency shelters are very expensive—even more expensive than transitional housing—on a per-month basis. Both emergency shelters and transitional housing incur substantial costs for the services they provide to families. CBRR programs have the lowest monthly cost. Although the CBRR and SUB interventions both offered rent subsidies, CBRR programs do not use the subsidy formula of HUD's HCV program and, on average, provide a somewhat smaller monthly subsidy than that provided by HCVs.

The study also measured the cost of all the programs the families used during the 3-year followup period. This measure accounts for use of the offered program type and other programs families accessed. The Family Options Study shows that homelessness is expensive for families and communities. Even without priority access to assistance, families in 12 communities used housing and services programs costing about \$41,000, on average, during a period of a little more than 3 years. Despite this considerable public (and in some cases private) investment, many families who had been in shelter for at least 1 week at the outset of the study were still not faring well 3 years later. About one-third had been homeless or doubled up recently, nearly one-half were food insecure, and incomes averaged less than two-thirds of the poverty threshold (Gubits et al., 2016: chapter 2).

Symposium Overview

The Family Options Study represents a significant milestone in research on homelessness, both in the scale and complexity of the study and in the power and clarity of the findings. The purpose of this symposium is to consider the implications of the findings to date and present a set of original articles that serve to extend the findings already documented in short-term and long-term outcomes reports.

The Family Options Study symposium presented in this issue of *Cityscape* is designed to delve deeper into the findings from the Family Options Study. The symposium begins with three commentaries from internationally renowned experts on homelessness, each of whom considers the findings from the study by comparison with homelessness and housing policy in their countries—Ireland, Australia, and Canada. Following the international commentaries, five U.S. researchers known for their expertise in child welfare, interpersonal violence, food insecurity, child development, and adult well-being provide commentaries on the significance of nonhousing impacts that were observed for families who were offered a long-term rent subsidy. Finally, the symposium includes six original articles that expand the analysis of both the short- and long-term outcomes for families and provide lessons learned from the implementation of this complex study.

International Commentaries

The symposium begins with three commentaries from international researchers who consider the methodology, findings, and policy implications from the Family Options Study through the lens of homelessness research and policy in Ireland, Australia, and Canada. Eoin O'Sullivan describes the extent of family homelessness in Ireland, noting possible reasons for the recent sharp increase of family homelessness in Dublin. He then considers the policy responses and the evidence base for these responses in light of the findings yielded by the Family Options Study (O'Sullivan, 2017). Guy Johnson and Juliet Watson follow with a commentary that assesses the extent of family homelessness in Australia, describing the main program responses that have been implemented in Australia in response to increasing family homelessness since the 1980s. Johnson and Watson (2017) conclude that, despite substantial social and economic differences between the United States and Australia, similarities in key aspects of both countries' programmatic responses to family homelessness suggests that the findings from the Family Options Study could be instructive for Australian policymakers. Finally, Geoffrey Nelson provides a comparison between the Family Options Study and a recently completed randomized controlled trial from Canada, At Home/Chez Soi, which evaluated a set of housing and service interventions for adults experiencing chronic homelessness and mental illness (Goering et al., 2014). Although the populations and interventions in the Family Options Study and At Home/Chez Soi were different, the commentary draws the parallels between the two research efforts, including their findings and policy implications (Nelson, 2017).

U.S. Commentaries

The international commentaries are followed by five commentaries written by leading U.S. experts in areas of family well-being in which the Family Options Study found significant positive impacts that extend beyond housing stability. Although the research team and HUD hypothesized that

the offer of a long-term subsidy might improve family preservation, adult well-being, and child well-being, the impacts observed extended across a broader set of outcomes than anticipated. The radiating effects of priority access to a long-term subsidy were in fact greater than hypothesized, both in the size of the impact and in the sustained impact across both points of observation. This set of commentaries encourages a second look at the child welfare, interpersonal violence, food insecurity, child development, and adult well-being findings from the study and lessons for policy.

Marah A. Curtis provides the first commentary, offering observations about the impacts on broader family well-being—including psychological distress, experience of intimate partner violence, and food insecurity—observed among families offered a long-term rent subsidy (Curtis, 2017). This piece is followed by commentaries that dig more deeply into two of these specific outcomes. First, Elaine Waxman offers an overview of the existing literature documenting the intersecting nature of housing and food insecurity and comments on the impacts on food insecurity among families who participated in the Family Options Study (Waxman, 2017). Nicole E. Allen then provides observations on the link between housing and intimate partner violence. Allen (2017) reviews the findings of the Family Options Study, offers commentary on the measurement of intimate partner violence used in the Family Options Study, and discusses opportunities for further exploration of the connections between intimate partner violence and housing policy.

The final two commentaries address issues related to child well-being that were observed in both the short- and long-term outcomes of the Family Options Study, including child welfare involvement and outcomes related to child development. Patrick J. Fowler's commentary includes an overview of the literature examining the interconnectedness of housing instability and child welfare involvement of low-income families and the resulting policy implications of the Family Options Study (Fowler, 2017). Finally, Aletha C. Huston's commentary considers the child development outcomes observed at both the short- and long-term followups (Huston, 2017).

Original Articles

The symposium features six original articles using data collected during the life of the Family Options Study. The short- and long-term outcome reports primarily focused on the impact analysis of the pairwise comparisons generated by the experiment (Gubits et al. 2016, 2015). On the other hand, this collection of articles features analyses that explore the full range of data collection supported throughout the study, including a series of qualitative interviews with a subset of study families; the extensive baseline data collection conducted with all families during enrollment into the study; and analysis of the Program Usage/Living Situation database, a unique data source constructed by the study team to track families' monthly living situation during the 3-year followup period.

The first article, by Michelle Wood and Anne Fletcher, examines lessons learned from the implementation of the Family Options Study. The study team addressed several challenges in executing the experimental design adopted for the study, including identifying interventions for study, selecting study sites, addressing ethical considerations, and implementing random assignment. The strategies applied to overcome these challenges can inform future experimental research (Wood and Fletcher, 2017).

The remaining articles included in the symposium each take a closer look at a specific research or policy question that was addressed using the data collected during the course of the Family Options Study, each having direct implications for the organization and delivery of community-based homeless assistance.

In their article, Marybeth Shinn, Scott R. Brown, Brooke E. Spellman, Michelle Wood, Daniel Gubits, and Jill Khadduri use data gathered during the enrollment phase of the Family Options Study to document the misalignment that often exists between the characteristics and needs of the families that enter shelter and the programs that have been established in communities that are purportedly designed to serve them. Families who enter shelter are frequently found ineligible for assistance that is offered, and Shinn et al. (2017) find that programs often systematically screen out families with housing and employment barriers, despite the presumption that these are the families who most need interventions to achieve housing and economic stability.

The next three articles in the symposium address the housing status of families following random assignment, including analyses of subsequent returns to housing instability or doubled-up living situations following a stay in emergency shelter. Zachary Glendening and Marybeth Shinn consider the subset of study families included in the pairwise comparison between families assigned to usual care and families offered a long-term rent subsidy. Glendening and Shinn (2017) developed risk models measuring returns to housing instability among this subset of study families, considering a set of family characteristics recorded at study enrollment and the extent to which these characteristics might predict a return to homelessness roughly 20 months after enrollment. Hannah Bush and Marybeth Shinn explore a specific type of housing instability—doubling up—in their article. *Doubling up* refers to one or more individuals in addition to the head of household residing in the same housing unit. Although this living arrangement is increasingly common, because doubling up can be either protective or detrimental to families depending on the circumstances, it is difficult to understand the overall implications of this trend. Bush and Shinn (2017) analyze the content of qualitative interviews with 35 study families, noting the advantages and disadvantages of doubling up as experienced by the head of household.

Daniel Gubits, Tom McCall, and Michelle Wood present analyses of the living situations of study families during the 3-year followup period, making use of the Program Usage/Living Situation database constructed by the research team during the study. The Program Usage/Living Situation database was developed by combining living situation data collected directly from families at five different points during the course of the study (enrollment; 6-, 12-, and 27-month tracking surveys; and the 20- and 37-month followup surveys) with administrative records that capture receipt of homeless assistance or housing assistance. Gubits, McCall, and Wood (2017), analyze the resulting month-by-month data about the kinds of situations in which families were living each month after random assignment to examine patterns related to families living in their own place and families doubling up with a relative or friend.

The final article, by Claudia D. Solari and Jill Khadduri, takes a closer look at the long-term rent subsidy intervention, with a focus on families who received priority access to HCVs and leased up using the subsidy and on families who did not receive priority access but nevertheless were able to access a long-term rent subsidy. Solari and Khadduri (2017) consider the outcomes of families who

accessed a long-term rent subsidy regardless of their random assignment, using cross-tabulations and multivariate analysis to show correlations between family and site characteristics and voucher use.

Conclusion

The Family Options Study was an ambitious research effort undertaken to better understand a critical national policy question: What is the most effective way to resolve family homelessness? The execution of the experiment resulted in a considerable volume of original data, valuable lessons learned that can inform the design and implementation of future social science experiments, and significant advancements in our understanding of the effectiveness of various housing and service interventions in addressing family homelessness.

The study findings suggest that families who experience homelessness can successfully use and retain housing vouchers, and that by doing so families experience significant benefits in a number of important domains. Importantly, the study also demonstrates a compelling set of positive outcomes that directly benefit the children in families offered a long-term rent subsidy, including reductions in child separations (observed at 20 months); psychological distress of the family head (observed at both time points); economic stress (observed at both time points); intimate partner violence (observed at both time points); school mobility (observed at both time points); behavior problems and sleep problems of children (observed at 37 months); and food insecurity (observed at both time points). The homeless assistance system does not currently provide immediate access to such subsidies for most families in shelter, although more than one-third of families without priority access nevertheless obtained some type of long-term housing subsidy during the 3-year followup period. The striking impacts of assignment to the SUB intervention in reducing subsequent stays in shelter and places not meant for human habitation provide support for the view that, for most families, homelessness is a housing affordability problem that can be remedied with long-term housing subsidies without specialized services.

HUD made a significant investment in the execution of the Family Options Study, and the research team generated a large volume of original data, in addition to accessing multiple sources of administrative data, which were analyzed to address the research questions posed by HUD at the outset of the study. Even with the production of three highly detailed reports developed under contract to HUD as a part of the original project specification, and a series of research briefs, many questions with valuable policy significance remain that could be pursued through additional analysis of the Family Options Study data. For example, the U.S. Department of Health and Human Services (HHS) is leveraging the platform provided by the study by supporting the development of a series of issue briefs addressing policy questions of interest to the mission of HHS.⁵

In order to maximize the value of these data resources, HUD is supporting the storage of the data resulting from the Family Options Study at the Center for Administration Records Research and Applications within the U.S. Census Bureau;⁶ see the Request for Proposals on page 497 of this issue. Qualified researchers will be able to access these data in order to conduct research to

⁵ <https://www.acf.hhs.gov/opre/research/project/homeless-families-research-briefs>.

⁶ <https://www.huduser.gov/portal/sites/default/files/pdf/Letter-of-Interest-MTO-Family-Option.pdf>.

address additional policy questions that can inform policymaking about the most effective ways to address homelessness among families with children. Although the Family Options Study sought to understand both the short-term and the long-term impacts of the various interventions that were studied, the long-term impacts were measured only 3 years after random assignment. Recent work published by Chetty, Hendren, and Katz (2016) demonstrated the value of a far more extended window of observation, particularly in studies that seek to understand the impacts of programs and policies designed to assist children. HUD hopes that by making the wealth of data collected while implementing the Family Options Study available to a broad set of researchers, additional findings and outcomes can be explored to support its efforts to pursue evidence-based approaches to address the pressing issue of family homelessness.

Acknowledgments

The guest editors give special thanks to the families participating in the Family Options Study, who shared their experiences and opened their lives to the study team. The authors also acknowledge the dedication of local service providers, continuum of care (CoC) leaders, and public housing agencies in the 12 participating communities: (1) Alameda County, California; (2) Atlanta, Georgia; (3) Baltimore, Maryland; (4) Boston, Massachusetts; (5) the New Haven and Bridgeport regions of Connecticut; (6) Denver, Colorado; (7) Honolulu, Hawaii; (8) Kansas City, Missouri; (9) Louisville, Kentucky; (10) Minneapolis, Minnesota; (11) Phoenix, Arizona; and (12) Salt Lake City, Utah. The study team is grateful for their many contributions and commitment to the study.

Guest Editors

Anne Fletcher is a social science analyst at the U.S. Department of Housing and Urban Development.

Michelle Wood is a principal associate at Abt Associates.

References

- Allen, Nicole E. 2017. "U.S. Commentary: Insights From the Family Options Study Regarding Housing and Intimate Partner Violence," *Cityscape* 19 (3): 245–253.
- Bush, Hannah, and Marybeth Shinn. 2017. "Families' Experiences of Doubling Up After Homelessness," *Cityscape* 19 (3): 331–356.
- Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence From the Moving to Opportunity Experiment," *American Economic Review* 106 (4): 855–902.
- Curtis, Marah A. 2017. "U.S. Commentary: The Family Options Study and Family Well-Being Outcomes," *Cityscape* 19 (3): 229–234.

- Fowler, Patrick J. 2017. "U.S. Commentary: Implications From the Family Options Study for Homeless and Child Welfare Services," *Cityscape* 19 (3): 255–264.
- Glendening, Zachary, and Marybeth Shinn. 2017. "Risk Models for Returns to Housing Instability Among Families Experiencing Homelessness," *Cityscape* 19 (3): 309–330.
- Goering, Paula, Scott Veldhuizen, Aimee Watson, Carol Adair, Brianna Kopp, Eric Latimer, Geoff Nelson, Eric MacNaughton, David Streiner, and Tim Aubry. 2014. *National At Home/Chez Soi Final Report*. Calgary, Alberta: Mental Health Commission of Canada.
- Gubits, Daniel, Tom McCall, and Michelle Wood. 2017. "Family Options Study: Effects on Family Living Situation," *Cityscape* 19 (3): 357–386.
- Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.
- Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.
- Gubits, Daniel, Brooke Spellman, Lauren Dunton, Scott Brown, and Michelle Wood. 2013. *Interim Report: Family Options Study*. Washington, DC: U.S. Department of Housing and Urban Development.
- Huston, Aletha C. 2017. "U.S. Commentary: Effects of Housing Subsidies on the Well-Being of Children and Their Families in the Family Options Study," *Cityscape* 19 (3): 265–270.
- Johnson, Guy, and Juliet Watson. 2017. "International Commentary: The Implications of the Family Options Study for Family Homelessness in Australia," *Cityscape* 19 (3): 211–217.
- Nelson, Geoffrey. 2017. "International Commentary: Eliminating Family Homelessness and the Family Options Study," *Cityscape* 19 (3): 219–227.
- O'Sullivan, Eoin. 2017. "International Commentary: Family Options Study Observations From the Periphery of Europe," *Cityscape* 19 (3): 203–209.
- Shinn, Marybeth, Scott R. Brown, Brooke E. Spellman, Michelle Wood, Daniel Gubits, and Jill Khadduri. 2017. "Mismatch Between Homeless Families and the Homelessness Service System," *Cityscape* 19 (3): 293–307.
- Solari, Claudia D., and Jill Khadduri. 2017. "Family Options Study: How Homeless Families Use Housing Choice Vouchers," *Cityscape* 19 (3): 387–412.
- Solari, Claudia D., Sean Morris, Azim Shivji, and Tanya de Souza. 2016. *The 2015 Annual Homeless Assessment Report (AHAR) to Congress. Part 2: Estimates of Homelessness in the United States*. Washington, DC: U.S. Department of Housing and Urban Development.

Waxman, Elaine. 2017. "U.S. Commentary: The Family Options Study and Food Insecurity," *Cityscape* 19 (3): 235–243.

Wood, Michelle, and Anne Fletcher. 2017. "Lessons for Conducting Experimental Evaluations in Complex Field Studies: Family Options Study," *Cityscape* 19 (3): 271–292.

International Commentary: Family Options Study Observations From the Periphery of Europe

Eoin O'Sullivan

Trinity College Dublin

Introduction

From a European perspective—and, more specifically, an Irish perspective—the Family Options Study offers crucial insights into how policy responses to family homelessness are theoretically framed and into the efficacy of the actual services constructed to meet the perceived needs of homeless families. The study identifies two dominant ways of thinking about family homelessness. The first sees family homelessness as resulting from income insufficiency, resulting in an inability to successfully compete in tight rental housing markets; the second sees family homelessness as a consequence of both income insufficiency and a range of other personal dysfunctions. The appropriate response to preventing and ending family homelessness, if family homelessness is understood as resulting from income insufficiency, is to provide financial subsidies (short- or long-term subsidies), to bridge the gap between family income and market housing costs, or subsidized social housing. The appropriate response, if homelessness and low-incomes are both seen as resulting from individual dysfunctions, is to remedy those dysfunctions prior to the provision of a housing subsidy. The perceived wisdom is that successful treatment is best provided in supervised transitional congregate settings that address these dysfunctions and adequately prepare families for independent living through a series of therapeutic interventions.

The seminal contribution of the Family Options Study is that it enabled the systematic evaluation of these different responses to family homelessness. Crucially, the study's long-term outcomes report (Gubits et al., 2016) concluded emphatically that the priority provision of long-term housing subsidies (the *SUB* intervention) is the optimal response to ending family homelessness, as opposed to emergency accommodation (the *ES* intervention), short-term housing subsidies (the *CBRR* intervention), or transitional congregate facilities (the *PBTH* intervention). It also finds that both long- and short-term housing subsidies are considerably less costly than emergency shelter or transitional congregate facilities, while also offering substantial additional benefits across a range of psychosocial domains. It is striking that, after emergency accommodation, the per-family monthly cost of transitional congregate housing was more than double the cost of long-term housing subsidies, coming in at \$2,706 versus \$1,172. This additional cost might be justified if the psychosocial outcomes were superior, as the theoretical basis of the transitional model argues. However, of

the 18 psychosocial challenges studied—grouped under the headings of housing stability, family preservation, adult well-being, child well-being, and self-sufficiency—Gubits et al. (2016: 103) concluded that, “[c]onsidering the set of 18 outcomes as a whole, even among families facing high levels of challenges, one would prefer the SUB intervention to the PBTH intervention regarding all the housing stability outcomes and regarding other dimensions such as child separations, number of schools children attended, and food security for which the SUB intervention had uniformly more positive impacts than the PBTH intervention across levels of psychosocial challenges.”

Although difficult to accurately quantify due to data limitations (Busch-Geertsema et al., 2014; Pleace, 2016), increases in the extent of family homelessness are evident in several European member states. In the case of Ireland, the extent of family homelessness has increased dramatically during the past three years. In this section, I look at the extent of family homelessness in Ireland, the possible reasons for the increase, the policy responses, and the evidence base for these responses, considering the Family Options Study.

Family Homelessness in Ireland: Trends, Trajectories, and Targets

Trends

During the week of March 20 to 26, 2017, 1,069 homeless families were recorded in Dublin and 187 were recorded outside of Dublin, for a total of 1,256 families.¹ These numbers compare with 411 in Dublin and 60 outside of Dublin during the week of March 23 to 29, 2015, an increase of more than 200 percent in a 2-year period. Of these homeless families in March 2017, 426 were adult couples with dependent children and 830 were adult individuals (almost exclusively women) with dependent children, with a total of 2,563 child dependents, giving a total of 1,682 adults and 2,563 child dependents. In March 2015, the 175 adult couples with dependent children and 296 adults with dependent children had a total of 1,054 child dependents.

The number of new family presentations to homeless services per annum in Dublin (data are not available outside of Dublin)—that is, families who had no previous contact with homeless services—increased from 183 in 2013 to 875 in 2016. Due to this rapid increase in new presentations, existing designated homeless services for families in Dublin quickly reached capacity, and families were increasingly placed in commercial for-profit hotels and bed-and-breakfast-type accommodation. In March 2017, in Dublin only, 815 families were in commercial hotels (with 1,641 child dependents), and 254 families were in designated accommodation for homeless families compared with 270 families in commercial hotels and 141 families in designated accommodation for homeless

¹ These data are generated by the PASS (Pathway Accommodation & Support System), a national bed management system for homelessness services, and allow for a monthly report on the number of households in designated homeless accommodation, starting in April 2014 and broken down by gender, age, and nature of accommodation. These data provide information only on households in specific state homelessness accommodation. Accommodation for those persons escaping domestic violence—a total of 21 residential services with a bed capacity of approximately 250—have been transferred from Housing Authorities to a separate Child and Family Agency, and have therefore not been enumerated in the monthly data, since January 1, 2015. Thus, the data on homelessness provided by the PASS system underestimate the extent of family homelessness.

families in March 2015. Because of the increasing reliance on private for-profit accommodation provision, in the fourth quarter of 2016, Dublin municipal authorities (who have statutory responsibility for meeting the needs of homeless households) expended slightly more than €14 million on commercial hotels and bed-and-breakfast accommodations for homeless families compared with slightly less than €3 million in the fourth quarter of 2013.

Trajectories

Analyses of the trajectories of families into homelessness established that most of the families cited the termination of their tenancy in the private rented housing sector as the key trigger for their immediate homelessness or eventual homelessness following a period of sharing overcrowded accommodation (O'Donoghue-Hynes, 2015; see also Focus Ireland, 2017, 2016a, 2016b, 2015; Walsh and Harvey, 2017, 2015). Increases in market rents at a time when rent subsidies were static and not keeping pace with market rents, rendering the dwelling unaffordable, and the sale of private rented dwellings by landlords, which allows for the termination of a tenancy, caused the termination of the tenancies. In the most detailed analysis of the housing careers of the families who entered homelessness in March 2016, Focus Ireland (2016a) identified three types of housing histories: (1) previous stability in the private rented sector, which accounted for nearly one-half of families; (2) precariousness in the private rented sector; and (3) prolonged housing instability and sharing with friends and family.

All homeless families in Ireland are entitled to a means-tested rent subsidy, which is delivered via a number of schemes that provide households with a cash payment to bridge the gap between household income and market rents for private rented dwellings. Homeless families are also eligible for social housing via the provision of a dwelling, a *bricks-and-mortar approach*, managed by either a municipal authority or a not-for-profit body known in Ireland as Approved Housing Bodies.

Until July 2016, rent subsidies did not keep pace with rapidly rising market rents, which rose an average of nearly 8 percent per annum between 2014 and 2016, particularly in urban areas. By the time the rent subsidies were increased, with an enhanced subsidy for families at risk of homelessness (the basic subsidy plus up to 50 percent), the supply of private rented dwellings had rapidly dwindled, with only 1,600 units available to privately rent in Dublin; by May 2017, slightly more than 1,000 units were available to rent.² These numbers compare with 4,500 dwellings available to privately rent in June 2012. To assist tenants in the private rented sector, a Tenancy Protection Service was established in June 2014. This service allowed for an enhanced rent supplement if a household was at risk of homelessness. Between June 2014 and December 2016, 9,900 households contacted the service, with more than one-half of the contacts identified as being at risk of homelessness. Slightly more than 2,800 households that contacted the service had their tenancies protected; only 40 households that contacted the service entered homelessness.

In the case of the provision of social housing, as a consequence of the bailout conditions imposed on Ireland in late 2010, the amount of public spending on capital projects such as social housing

² The 2016 census identified 114,462 households privately renting accommodation in Dublin, giving a vacancy rate of less than 1 percent.

was restricted.³ Between 2010 and 2015, slightly fewer than 6,000 social housing units were constructed nationally compared with an output of nearly 35,000 new units between 2004 and 2009. A statutory assessment of social housing need conducted in September 2016 enumerated 91,600 households that qualified for social housing. Commencing in January 2015, the Minister for the Environment, Community and Local Government issued a series of statutory directives to the four Dublin Local Authorities to the effect that 50 percent of social housing dwellings available for allocation be given to homeless and other vulnerable households and that 30 percent be allocated in the other four major urban centers. These directives expired at the end of April 2016 as a consequence of concerns raised by the chief executives of the four Dublin Councils, who argued that “[i]t is our view that this requirement is now having the effect of encouraging some households who are in housing need and who are awaiting social housing to enter the ‘homeless’ system in the mistaken belief that this will hasten the allocation to them of a social housing unit” (Keegan, 2016).

Despite the substantial increase in cash subsidies from July 2016 onward to households at risk of homelessness and seeking to exit homelessness, the rapidly declining availability of private rented dwellings, allied with little new social housing and the removal of priority access to such housing for homeless families, has resulted in unprecedented numbers of homeless families in emergency accommodation.

Targets

In May 2016, following a general election in February, a new Programme for a Partnership Government was announced, which stated that, “[i]t is not acceptable in 2016 to have families living in unsuitable emergency accommodation or to have people sleeping rough on our streets” (Government of Ireland, 2016: 19). The Programme committed to publish, within 100 days, a new action plan for Housing. In July, “Rebuilding Ireland: An Action Plan for Housing and Homelessness” launched. The plan stated that the “long-term solution to the current homelessness issue is to increase the supply of homes” (Department of Housing, Planning, Community and Local Government, 2016: 33). The plan promised to limit the use of hotels for accommodating homeless families by mid-2017, stating—

It is recognised that accommodating family units in hotel arrangements is inappropriate for anything other than a short period of time. The prevalence of homeless families and the utilisation of hotels for emergency accommodation is a much more significant issue in the Dublin Region than it is in the rest of the country.... Our intention is to move the existing group of families out of these hotel arrangements as quickly as possible, and to limit the extent to which such accommodation has to be used for new presentations. *Our aim is that by mid-2017, hotels will only be used for emergency accommodation in very limited circumstances.* (Department of Housing, Planning, Community and Local Government, 2016: 34; emphasis added)

Despite this commitment, as noted previously, the number of families in hotels and other privately provided emergency accommodation grew in the third and fourth quarters of 2016 and the first

³ In November 2010, the European Commission, the European Central Bank, and the International Monetary Fund agreed on a financial aid program for Ireland that placed limits on the capacity of the Irish government to deliver social programs.

quarter of 2017. By early 2017, the Dublin Local Authorities made a decision to manage homeless families through the provision of Family Hubs, with a capacity for 500 families and a budget of €25 million. In these hubs, families would share various facilities, described euphemistically as “co-living” in the promotional video for the Hubs, and would be time limited to 6 months. The first hub opened in March, operated by an Approved Housing Body, and was described in the press release as—

... our humanitarian response to address the needs of homeless families in Ireland today. Many of the families here need and now have proper facilities, especially for their children. Our 24-hour support services are tailored to the needs of individual families with key workers for every resident. This is interim accommodation—with the aim that families leave Respond in a better position than when they arrived and move into homes of their own. (Respond Housing Association, 2017)

No rationale for the establishment of, essentially, congregate transitional supervised accommodation for homeless families has been published, but it does seem to depart from the stated objective of homelessness policy in Ireland to move to a housing-led approach that would eschew the use of congregate emergency and transitional accommodation. The ideology supporting the hubs appears to be based on a view of homeless families as families who have underlying psychosocial dysfunctions that require therapeutic intervention to ensure that they are adequately prepared for housing at the end of their 6-month stay. In addition to the therapeutic logic for the establishment of the hub, a punitive logic is also possible, with the view, most openly expressed by the chief executives of the four Dublin Local Authorities, that families were entering homelessness to fast track their way to social housing. Thus, the provision of supervised and surveilled accommodation seeks to deter all but the most desperate families from accessing the homelessness system. As noted previously, however, repeated surveys of the trajectories of families into homelessness consistently show that housing market failure—rather than family failure—is the driver of family homelessness and that supplying affordable, secure housing, rather than placing families in transitional accommodation, will both prevent family homelessness and enable families to exit their currently unsuitable emergency accommodations. However, one possible successful outcome for the hubs is that families residing in hubs will no longer be classified as living in hotels (although some of the proposed hubs are existing hotels that will morph into hubs by the end of June), and thus a political promise can be partially kept.

Conclusion

The enduring popularity of congregate emergency, transitional, and shelter accommodation for homeless individuals and families is perplexing. Shelters for homeless people had their origins in the early 19th century, and their emergence was in parallel with the construction of a range of other institutions to manage low-income people, including workhouses, prisons, and a vast array of asylums and penitentiaries. The failure of these institutions to reform, rehabilitate, desist, or deter was clearly evident by the end of the 19th century, but it took several decades before most of these massive mausoleums of misery gradually fell into disuse and disgrace. However, homeless shelters not only have survived the welcome demise of other dismal institutions, they have thrived.

Across the European Union, despite some success in shifting policy toward housing-led, rather than shelter-led, approaches in Finland, Norway, and Denmark, the primary response to individual and family homelessness is the provision of emergency shelter in either congregate facilities with onsite psychosocial services or commercial hotels and other temporary accommodation.

From the data on Ireland outlined in this article, it is clear that the dramatic increase in family homelessness during the past 3 years reflects a dysfunctional housing market, wherein limited supply and skyrocketing rents in the private rented sector, and historically low levels of new social housing output, have coincided to push increasing numbers of families into homelessness with declining options to exit. However, the introduction of Family Hubs—when we know from the Family Options Study that such congregate transitional supervised accommodation for families is more expensive and less effective than long-term housing subsidies—seems an attempt to construct the issue as one of dysfunctional families rather than of a dysfunctional market. Some 20 years ago, Gerstal et al. (1996: 551) described what they termed the “therapeutic incarceration of homeless families” as a response to a lack of affordable housing and how “constraints on housing availability were translated into a language of individual deficiency and therapeutic remedy.”

Although the political and administrative concern to respond to the needs of the now-considerable number of homeless families, particularly in Dublin, living in unsuitable emergency accommodation is understandable, adopting a model of provision that is costly, ineffective, and stigmatizing, is not an effective response. The results of the Family Options Study suggest that prioritizing access to long-term secure housing for such families is a more optimal response.

Author

Eoin O'Sullivan is a professor in social policy in the School of Social Work and Social Policy, Trinity College Dublin, and editor of the *European Journal of Homelessness*.

References

- Busch-Geertsema, Volker, Lars Benjamisnen, Masa Filipoviv Hrast, and Nicholas Pleace. 2014. *Extent and Profile of Homelessness in European Member States: A Statistical Update*. Brussels: FEANTSA.
- Department of Housing, Planning, Community and Local Government. 2016. *Rebuilding Ireland: Action Plan for Housing and Homelessness*. Dublin: Department of the Environment, Community and Local Government.
- Focus Ireland. 2017. *Survey of the Families That Became Homeless During September 2016*. Dublin: Focus Ireland.
- . 2016a. *Survey of the Families That Became Homeless During March 2016*. Dublin: Focus Ireland.
- . 2016b. *Survey of the Families That Became Homeless During June 2016*. Dublin: Focus Ireland.

———. 2015. *'Come Back When You're Homeless': Preventing Family Homelessness Through Assisting Families To Stay in Their Homes or To Find Alternative Affordable Accommodation*. Dublin: Focus Ireland.

Gerstal, Naomi, Cynthia J. Bogard, Jeff McConnell, and Michael Schwartz. 1996. "The Therapeutic Incarceration of Homeless Families," *Social Services Review* 70 (4): 543–572.

Government of Ireland. 2016. *A Programme for a Partnership Government*. Dublin: Government of Ireland.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development.

Keegan, Owen P. 2016. "Letter to Minister Alan Kelly re: Ministerial Directive Regarding Housing Allocations." April 22.

O'Donoghue-Hynes, Bernie. 2015. *Analysis of 78 Newly Homeless Families Accommodated by Dublin's Homeless Services in August 2015: A Briefing Paper*. Dublin: Dublin Region Homeless Executive.

Pleace, Nicholas. 2016. "Exclusion by Definition: The Under-Representation of Women in European Homelessness Statistics." In *Women's Homelessness in Europe*, edited by Paula Mayock and Joanne Bretherton. London: Palgrave: 105–126.

Respond Housing Association. 2017. "Minister Coveney Launches New Family Hub Model of Accommodation." Press Release. Dublin: Respond Housing Association.

Walsh, Kathy, and Brian Harvey. 2017. *Families Exiting Homelessness: A Qualitative Study*. Dublin: Focus Ireland.

———. 2015. *Family Experiences of Pathways Into Homelessness: The Families' Perspective*. Dublin: Housing Agency.

International Commentary: The Implications of the Family Options Study for Family Homelessness in Australia

Guy Johnson
Juliet Watson
RMIT University

Abstract

Prior to the 1980s, family homelessness was rare in Australia. Since then, homelessness has become part of the lives of many families, but we know little about what interventions work. In this article, we assess the extent of family homelessness in Australia and then describe the main program responses. We then turn our attention to the Family Options Study, a randomized controlled trial that examines the impact of three interventions on 2,000 homeless American families in 12 locations during a 3-year period. We conclude that, despite substantial social and economic differences between the United States and Australia, similarities in key aspects of program design mean that results from the Family Options Study are important for Australian policymakers to consider. Indeed, the study raises challenging questions as to whether the current emphasis in Australia on transitional approaches is the most effective way of tackling family homelessness.

The Prevalence of Family Homelessness in Australia

Australians tend to view homelessness as an issue confined to single people living on the streets who have drug or alcohol problems, mental health issues, or a combination. Families, and the issues they face, are rarely mentioned. The exclusion of women and families from public perception and debate is, however, at odds with the empirical evidence. Two sources of data in Australia provide information on the size and composition of the homeless population, and each confirms that women, families (particularly those headed by women), and children make up a sizable proportion of the homeless population.

The first comes from the Australian Bureau of Statistics (ABS). Every 5 years, the ABS conducts a population census. Since 1996, the ABS has undertaken a special enumeration strategy to estimate the number of individuals experiencing homelessness on census night. In the 2011 census, when the most recent data were collected, 105,237 individuals were deemed to be homeless (ABS, 2012). In Australia, homelessness is often broadly defined, and the ABS's operational definition is no exception. The ABS counts people as homeless if, on census night, they are without any shelter, living in emergency accommodation, staying temporarily with other households, living in boarding houses, or living in severely crowded dwellings (exhibit 1).

The census reveals that women make up 44 percent of the homeless population, with most living in severely crowded dwellings (44 percent) or in emergency accommodation (23 percent). Relatively few women live on the streets (5 percent). According to the ABS, 17,845 people ages 12 years or younger (17 percent of the homeless population) were homeless on census night in 2011. Census results have been influential in Australia. Targets to reduce homelessness, as well as policy decisions about the allocation of funding, have been based on census results (Council of Australian Governments, 2009). The census provides useful information on the age profile and gender composition of the homeless population. However, it only counts individuals, not households, and thus tells us nothing about families.

The second source of quantitative data about the homeless population is the Specialist Homelessness Service (SHS) system data collected by the Australian Institute of Health and Welfare (AIHW). The SHS database collects information from all persons who request assistance from homelessness services across the country during a 12-month period. From 2015 to 2016, slightly more than 279,000 Australians accessed SHS across the country. Women accounted for 59 percent of all service users. This profile is different from the census. SHS data show that families account for nearly half (47 percent) of all presenting households, and nearly three-quarters of the families are sole-parent families, with women heading the majority (70 percent).¹ Although data from the SHS system tell us more about family homelessness than the census, it reflects only those households that use homelessness services. This distinction is important, as nearly 40 percent of the people who experience homelessness at some point in their lives do not use homelessness services (ABS, 2014).

Exhibit 1

Homeless Operational Groups in Australia, by Gender

Operational Group	Overall	Men	Women
Literally homeless	6,813	4,602	2,210
Emergency accommodation	21,258	10,519	10,742
Other households (temporary)	17,369	9,725	7,643
Boarding houses	17,721	13,246	4,475
Severely overcrowded	41,390	21,036	20,353
Other temporary lodgings	686	296	390
Total	105,237	59,424	45,813

Source: ABS (2012)

¹ All data are drawn from the AIHW Supplementary Tables at <https://www.aihw.gov.au/getmedia/a743a506-f350-40af-82d5-d81cc8242f77/national-supplementary-tables-shs-2015-16.xls.aspx>.

Homelessness agencies also collect information on the reasons people seek assistance. Although there is good reason to be cautious about data derived from open-ended questions “that do not define key terms like ‘reason’ carefully” (O’Flaherty, 2009: 4), domestic and family violence was the most commonly cited reason for women to present to a homelessness service. Although data on presenting reasons cannot be broken down by household, given that women head most families, we think it is reasonable to assume that domestic violence is one of the main factors driving family homelessness.

Service Responses

Australian responses to homelessness, generally, and family homelessness, more specifically, are based on a continuum model. Families are (theoretically) initially assisted into short-term crisis or refuge accommodation and then moved into transitional accommodation. Caseworkers provide support to families in transitional accommodation, which is typically dispersed throughout the community and heavily subsidized. With the assistance of support workers, households are expected to exit into permanent accommodation within a specified timeframe (generally 9 months), but due to limited affordable accommodation options bottlenecks are common. The logic underpinning the Australian transitional model is very similar to the U.S. model. As in the United States, Australian supporters of a transitional approach view family homelessness as a consequence of both poverty and pathology—that is, families become homeless because they have a range of complex problems “that make it hard for them to maintain and secure housing” (Gubits et al., 2015: xxi).

In recent times, the emphasis on transitional accommodation has been questioned from two directions. First, key advocacy groups have argued that many families have the skills to live independently and do not need the support that is an integral part of the transitional model (Council to Homeless Persons, 2015). For these families, rapid re-housing would be more suitable. Key features of proposed rapid re-housing models are taken directly from the U.S. approach. Although tentative steps have been taken toward developing rapid re-housing programs in Australia, progress is slow.

A second challenge to the transitional model reflects recent policy and cultural shifts toward recognizing the impact of family violence on homelessness and the importance of holding perpetrators responsible for their behavior. Most notably, this recognition has occurred through the Victorian Royal Commission into Family Violence (State of Victoria, 2016), the first inquiry into family violence of this scope worldwide. A key finding of the Royal Commission was that the service system has traditionally operated under the assumption that women and their children will respond to family violence by leaving home. This commonly requires them to move to a refuge or transitional accommodation in a location far from their community and social supports or having to stay in emergency accommodation that often consists of rooming houses, caravan parks, or motels—locations that are also often unsafe for women (Chamberlain, Johnson, and Theobald, 2007; Murray, 2011; Watson, 2018). The Royal Commission has responded to this situation by recommending the implementation of a housing “blitz”—highlighting a move toward rapidly re-housing women and children who are forced to leave their homes and are stuck in crisis or transitional accommodation (State of Victoria, 2016).

Although the current configuration of service responses in Australia has caused much debate, reliable evidence indicating optimal program configuration is limited. Indeed, the Australian evidence base around family homelessness is thin. Few studies explicitly focus on family homelessness, and extant studies are typically cross-sectional, small, and most often focused solely on family violence (Bartholomew, 1999; Tually et al., 2008). Where longitudinal studies have been undertaken, families are an explicit focus in only one (Hulse and Sharam, 2013). Similarly, robust evidence of the efficacy of interventions designed to end family homelessness is virtually nonexistent. Australia has nothing like the Family Options Study in terms of sample size, geographical scope, or methodological rigor. The key question is: can we learn anything from the Family Options Study?

The Family Options Study: Implications and Issues for Australian Policy

Although the details of the Family Options Study methodology are well covered elsewhere, from an Australian perspective, the study is distinguished not only by its size, scope, and relatively high retention rate (71 percent) but also by the random allocation of households into different interventions. Randomized controlled trials (RCTs) are a powerful methodology that, if done well, can provide robust evidence on the causal impact of an intervention relative to other interventions. In Australia, however, the use of RCTs to evaluate the impact of social interventions is exceedingly rare—high costs and ethical concerns are two commonly cited reasons for that. In the area of homelessness, we could only find two RCTs and both have limitations (Borland, Tseng, and Wilkins, 2013; Johnson et al., 2014).

Randomization presents distinct challenges for researchers evaluating social interventions. One issue is that the social world is inherently messy. Individuals are active agents who make decisions based on what they view as their best interests. Families involved in the Family Options Study clearly viewed permanent housing subsidies as the most attractive option. Indeed, fully 83 percent of the families who were given priority access to the housing subsidy (the SUB group) used it. In contrast, only 59 percent of families assigned to community-based rapid re-housing (the CBRR group) used it, and the corresponding rate for families assigned to project-based transitional housing (the PBTH group) was 53 percent.

The study deals with the different takeup of priority access to the three programs by employing an approach known as intention to treat (ITT). ITT is a tricky concept but, as it influences the magnitude of any estimated effects, it is important to understand. Put simply, using ITT, the estimated impact of the three interventions is derived from the results of families assigned to a particular intervention, “regardless of whether or not the family received the intervention” (Gubits et al., 2016: xviii). The application of ITT thus raises a number of issues for policymakers and service providers.

First, knowing who does and who does not take up a specific intervention, and why, is important information for policymakers. The relatively high takeup rate in the SUB group makes intuitive sense—disadvantaged families know that a long-term subsidy provides better protection than a short-term intervention against any future social and/or economic “shock.” With respect to the lower takeup rates in the CBRR and PBTH groups, the study shows that PBTH had the highest

proportions of ineligible families and families who choose not to take up the assigned program. Pointedly, the study shows that PBTH screened out more complex families—those with substance use problems, criminal histories, and other problems (Gubits et al., 2015: xx). It strikes us as important information that a program underpinned by a view that families who become homeless do so because they need assistance to address a range of personal and relational problems is more likely to exclude families with such problems.

Second, and related to the previous point, evaluations can overestimate the impact of an intervention if certain groups are systematically excluded—for example, people who have more complex behaviors and needs and who are less likely to succeed. ITT can help to address biases of this sort. Clearly, the reasons for employing ITT are valid. Equally, however, understanding the impact of an intervention on those who actually receive it is important information for policymakers. The authors signal their intention to do such an analysis, subject to sufficient sample size and statistical power, and we certainly encourage them to do so.

With respect to the intervention that had the largest impact during the 3 years and across the five key domains—housing stability, family preservation, adult well-being, child well-being, and self-sufficiency—permanent housing subsidies generated the most substantial benefits for families relative to usual care. However, the SUB intervention was also the most expensive, its availability in the *real world* was limited, and it was not designed specifically to address homelessness. As Australia has no directly comparable program, and is unlikely to in the near future, the most relevant results of the Family Options Study relate to the impact of the two interventions designed specifically to end family homelessness, and which are also available in Australia—PBTH and CBRR.

The study found that, across the five domains, neither program performed much better than usual care. A few minor effects on child well-being were observed in the CBRR group. The study also pointed out the lack of impact on adult and child well-being observed in the PBTH intervention, despite the “emphasis that PBTH programs place on delivering supportive services in these areas” (HUD, 2016: 7).

However, because complex patterns of service utilization will always make it difficult to precisely define what constitutes usual care, the report also presents pairwise comparisons—that is, the study compares each intervention against the others. We found these results particularly informative. When we examined the pairwise results comparing CBRR against PBTH, the picture that emerged was different and more nuanced.

Although no evidence indicated that either intervention had an impact on housing stability and family preservation, the study did find significant effects in some areas for those families assigned to CBRR compared with those assigned to PBTH. Both alcohol and drug abuse were lower, as was the amount of psychological distress for family heads among those assigned to CBRR. Similarly, the study observed fewer childhood behavioral problems and a decline in food insecurity among the CBRR group. The report also shows that families assigned to the CBRR group had the lowest average costs for all programs used, and nearly \$10,000 less in average costs, compared with comparable families in PBTH. Overall, the results of the pairwise comparisons favor those families assigned to CBRR. In the context of emerging interest in rapid re-housing in Australia, these results are important.

Conclusion

The Family Options Study makes a unique contribution to knowledge about family homelessness and the impact of three interventions. Despite some concerns about the ITT approach, the study's conceptual and methodological frameworks are strong. Although we have focused on only a limited set of results, the Family Options Study goes far deeper and further, and we encourage policymakers and service providers outside of the United States to consider the reports more closely. Nevertheless, even with our limited focus, it is clear to us that the Family Options Study provides valuable material for policy makers. Although the configuration and delivery of transitional and rapid re-housing vary across Australia, as no doubt they do in the United States, the results of the Family Options Study emphasize that poverty, not pathology, lies at the heart of family homelessness in the United States. Whether that is also the case in Australia is difficult to tell with the data we currently have available, but clearly we need to know this if we want to determine the optimal program configuration. As much as the study raises questions about the overall impact of transitional housing and rapid re-housing, it raises direct questions about whether we are over-investing in transitional accommodation in Australia, which is more expensive to run and has less impact compared with rapid re-housing. Further, inasmuch as transitional programs are families' least desirable option, the Family Options Study draws attention to designing programs that meet people's needs as they define them. The Family Options Study is a complex study that attempts to shed light on complex interventions. Although it does that well, perhaps if one clear message is to be had from the study, it is that providing ongoing security against the vicissitudes of poverty is the most effective way of addressing family homelessness.

Authors

Guy Johnson is a professor of Urban Housing and Homelessness at RMIT University and Director of the Unison Housing Research Lab.

Juliet Watson is the Unison Lecturer in Housing and Homelessness and the Deputy Director of the Unison Housing Research Lab at RMIT University in Melbourne, Australia.

References

- Australian Bureau of Statistics (ABS). 2014. 4159.0 *General Social Survey: Summary Results, Australia, 2014*. Canberra: Australian Bureau of Statistics.
- . 2012. *Census of Population and Housing: Estimating Homelessness*. Canberra: Australian Bureau of Statistics.
- Bartholomew, Terry. 1999. *A Long Way From Home: Family Homelessness in the Current Welfare Context*. St. Kilda, Australia: The Salvation Army.
- Borland, Jeff, Yi-Ping Tseng, and Roger Wilkins. 2013. "Does Coordination of Welfare Services Delivery Make a Difference for Extremely Disadvantaged Jobseekers? Evidence From the YP4 Trial," *Economic Record* 89 (287): 469–489.

Chamberlain, Chris, Guy Johnson, and Jacqui Theobald. 2007. *Homelessness in Melbourne: Confronting the Challenge*. Melbourne: RMIT University.

Council of Australian Governments. 2009. *National Partnership Agreement on Homelessness*. Canberra: Australian Government.

Council to Homeless Persons. 2015. *Council to Homeless Persons PreBudget Submission 2015–2016*. Melbourne: Council to Homeless Persons.

Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Hulse, Karen, and Andrea Sharam. 2013. *Fighting for My Family: A Longitudinal Study of Families Experiencing Homelessness*. Melbourne: Hanover Welfare Services.

Johnson, Guy, Daniel Kuehnle, Sharon Parkinson, Sandra Sesa, and Yi-Ping Tseng. 2014. *Sustaining Exits From Long-Term Homelessness: A Randomised Controlled Trial Examining the 48 Month Social and Economic Outcomes From the Journey to Social Inclusion Pilot Program*. St. Kilda, Australia: Sacred Heart Mission.

Murray, Suellen. 2011. "Violence Against Homeless Women: Safety and Social Policy," *Australian Social Work* 64 (3): 346–360.

O'Flaherty, Brendan. 2009. *What Shocks Precipitate Homelessness?* Department of Economics Discussion Paper Series. New York: Columbia University.

State of Victoria. 2016. *Royal Commission Into Family Violence: Summary and Recommendations*. Parl. Paper No. 132, 2014–2016.

Tually, Selina, Debbie Faulkner, Cecile Cutler, and Michele Slatter. 2008. *Women, Domestic and Family Violence and Homelessness: A Synthesis Report*. Canberra: Commonwealth of Australia.

U.S. Department of Housing and Urban Development (HUD). 2016. *Family Options Study: 3-Year Impacts of Housing and Service Interventions for Homeless Families—Summary Report*. Washington, DC: U.S. Department of Housing and Urban Development.

Watson, Juliet. 2018. *Youth Homelessness and Survival Sex: Intimate Relationships and Gendered Subjectivities*. London; New York: Routledge.

International Commentary: Eliminating Family Homelessness and the Family Options Study

Geoffrey Nelson

Wilfrid Laurier University

Introduction

For this commentary, I reviewed the report on the 3-year outcomes of the Family Options Study (Gubits et al., 2016a, 2016b) and two articles (Shinn, Brown, and Gubits, 2016; Shinn et al., 2016) published on this study. In this commentary, I discuss the interventions and their underlying theories of change, the target group, methodological issues, the findings, and the policy implications of the study. The Family Options Study is an evaluation of different program options for families experiencing homelessness. The study was conducted in 12 communities, enrolled 2,282 participants, and used a randomized controlled trial (RCT) design. This study is, by far, the largest, most rigorous comparative evaluation of interventions for homeless families ever conducted anywhere. As such, it has important policy implications for how homeless families are best served.

I come to this commentary as a member of the national research team of the recently completed At Home/Chez Soi (hereafter, At Home) project in Canada. Similar to the Family Options Study, At Home was its nation's largest-scale (5 communities, 13 programs, 2,148 participants) RCT evaluation of housing and service interventions for adults experiencing homelessness and mental illness (Goering et al., 2014). Although the populations and interventions in the Family Options Study and At Home were different, these two research demonstration projects, their findings, and their policy implications have some parallels that I note in this commentary.

Interventions and Theory of Change

The Family Options Study examined the effectiveness and costs of three different options, each with its own underlying theory of change. A theory of change identifies the program components, presumed short-term and long-term outcomes, and the causal mechanisms linking program activities and outcomes (Riemer and Bickman, 2011). First, the subsidized housing option provides participants with a housing voucher (or rent supplement) and assistance finding housing but, importantly, no other support services. The theory of change for this Housing First intervention is that families lack the financial resources to access housing and that providing a housing voucher helps to overcome the problem of housing affordability, enables families to use more of their

income for other necessities, and reduces stressors to families related to poverty and housing instability. Second, community-based rapid re-housing provides short-term (up to 18 months) housing vouchers and low-intensity case management. The theory guiding this approach is that of crisis intervention, with services providing immediate, but time-limited, intervention to help families resolve their housing crises. Third, project-based transitional housing emphasizes time-limited (up to 2 years) congregate housing with other homeless families and onsite intensive case management (ICM). This “treatment-first” approach strives to prepare families for housing readiness based on the theory that families must first address other issues (for example, substance use or lack of job skills) before they can achieve stable housing.

The Family Options Study is valuable because it compares these different options and clearly articulates the theories underlying each approach. Similarly, the At Home project had a clear theory of change for its Housing First programs based on several principles, including consumer choice, a recovery orientation, and an emphasis on community integration (Tsemberis, 2015), which is visually depicted in a program logic model that links principles and program components with outcomes (Aubry, Nelson, and Tsemberis, 2015; Nelson and MacLeod, 2017). One of the advantages of having a theory of change is that it then becomes possible to develop methods to assess the implementation of program components and the intended outcomes. Assessing implementation is important to understanding how programs do or do not lead to intended outcomes.

At Home used a Housing First fidelity scale (Stefancic et al., 2013). The 13 programs across the 5 communities had 2 different fidelity assessments conducted, 1 during the first year of operation and another after a year of operation. For each evaluation, a team of fidelity reviewers spent 1 full day reviewing charts and interviewing staff and consumers of the programs. Near the end of the day of each fidelity assessment, the fidelity reviewers came together to assign numerical ratings on a 4-point scale to each of the 38 items on the scale that covered 5 fidelity domains: Housing Choice and Structure, Separation of Housing and Services, Service Philosophy, Service Array, and Program Structure. A consensus process was used after discussion and input from all reviewers. Reviewers discussed their ratings for each item and came to a consensus on a single score for the item. These preliminary results were then shared with program staff and consumers, who were given a chance to provide input on the ratings. Following the fidelity visit, the assessment team put together a report that included the numerical ratings for each item and domain; a narrative description of each item; and more general comments, conclusions, and recommendations. Importantly, the fidelity data and reports were used for program improvement and further training by the programs.

High levels of fidelity to the model (benchmarked at scores of 3.5 out of 4 or higher for each of the fidelity domains) were found in the programs across sites at two different periods (early and later implementation), and scores also improved over time (Macnaughton et al., 2015). Moreover, the At Home research found that program fidelity was significantly correlated with program outcomes: the higher the fidelity, the better the outcomes (Goering et al., 2016). It would be valuable to include fidelity evaluations in the Family Options Study, as implementation could have been uneven across the 148 programs in the 12 cities. Moreover, fidelity evaluations could be used to improve these programs and to demonstrate which fidelity dimensions are most important for program outcomes.

Target Group

The Family Options Study targeted families that spent at least 7 days in a shelter with at least one child 15 years of age or younger. The rationale for the minimum of 7 days in shelter criterion is that families with shorter stays are much more likely to resolve their homelessness without intervention. To this point, a study of shelter use in four jurisdictions in the United States found that 80 percent of families resolve their homelessness quickly, and the remaining 20 percent of chronic or episodic shelter users cycle in and out of shelters and are more likely to be involved with child welfare and intensive behavioral health treatment services (Culhane et al., 2007). For the same reason, At Home also served families experiencing lengthy periods of homelessness, with participants averaging 4.8 years of lifetime homelessness (Goering et al., 2014).

Methodological Issues

The methodology and findings of the Family Options Study are meticulously described in a 275-page report with several appendices (Gubits et al., 2016a) and a more accessible 13-page summary (Gubits et al., 2016b).

Research Design

Participants in the Family Options Study were randomly assigned to conditions, including a usual care (UC) control group. Although criticisms invariably arise about the ethics of randomization, RCTs provide powerful evidence about the effectiveness and cost-effectiveness of different program options that are very important for policymakers (Shinn, 2016). Within the Family Options Study, constraints on this design included the fact that not all communities had all three program options available, and different eligibility criteria sometimes restricted access of participants to program options.

The study used an intention-to-treat approach. Participants randomized to a particular condition were offered priority access to that particular option, but not everyone took advantage of the particular option to which they were assigned. Although 83 percent of the subsidized housing group used that option, only 59 and 53 percent took up the rapid re-housing and transitional housing options, respectively. This finding is remarkably consistent with a meta-analysis of eight studies on housing preferences of more than 3,000 adults with mental illness, including those experiencing homelessness; 84 percent of these adults want to live independently in normal market rental housing (Richter and Hoffmann, 2017). The researchers also documented the types of housing support that were used by the UC group. During the course of the study, 20 percent used rapid re-housing, 30 percent used transitional housing, and 37 percent used a permanent housing subsidy.

Likewise, At Home used a RCT design in which Housing First was compared with a UC control group at two levels: for individuals with high needs who received Assertive Community Treatment and for those with moderate needs who received ICM. In addition, communities could develop site-specific interventions, and these interventions were also compared using randomization. For example, culturally specific adaptations of Housing First with ICM were created for Aboriginal participants in one city and for ethno-racial participants in another city (Goering et al., 2011).

Data Collection

Another strength of the Family Options Study was that it gathered data at baseline, 20 months, and 37 months on both parents and children, using both interviews and administrative data. The study used a range of different measures related to housing, parent well-being, self-sufficiency, child well-being, and family preservation. During the At Home demonstration phase, data were collected at 6-month intervals for up to 2 years, and recently 4-year followup data were gathered. Measures included scales to assess outcomes in housing, health, community functioning, quality of life, and service use (Goering et al., 2011).

The overall retention rate for the Family Options study after 3 years was 78 percent. As might be expected, the retention rate was greatest for families receiving the housing subsidy (84 percent) and lowest for those in usual care (75 percent). The overall 2-year retention rate in At Home was 83 percent, with similar differences between Housing First (89 percent) and UC (77 percent).

In the Family Options study, qualitative interviews were conducted with 80 participants (20 in each of the 4 conditions) 3 to 10 months after randomization to address several questions. RCTs seldom include qualitative research (Lewin, Glenton, and Oxman, 2009), but such data can be used quite profitably to understand different facets of housing and service interventions for persons experiencing homelessness. At Home had an extensive qualitative component that included focuses on project conception, program implementation, consumer narrative outcomes, sustainability, and expansion (Nelson, Macnaughton, and Goering, 2015). Together, the indepth qualitative study of these topics enabled researchers to tell the story about At Home and to provide important lessons that will be of benefit to others striving to implement Housing First programs for adults experiencing homelessness in their communities.

Findings

The Family Options Study reports many findings in great detail. The main finding is that the subsidized housing option was the only program that impacted housing and well-being outcomes at a reasonable and often cheaper cost than other program options.

Housing

At the 3-year followup, relative to usual care, the subsidized housing option led to significant and large reductions in homelessness or doubling up (34 percent for usual care versus 16 percent for subsidized housing) and shelter stays (19 percent for usual care versus 5 percent for subsidized housing).

The Canadian At Home research also found positive impacts on housing stability over a 2-year followup period. On a measure of housing instability, 27 percent of the Housing First group was unstably housed compared with 68 percent of the UC control group (Aubry et al., 2015). The high rates of housing instability for both groups in the At Home study likely reflects the higher level of needs among the sample of participants with lived experience of homelessness, mental illness, and often substance use.

Child, Parent, and Family Well-Being Outcomes

Relative to usual care, subsidized housing also led to significant reductions in parents' psychological distress, intimate partner violence, the number of schools the focal child attended, behavior problems of the focal child, and food insecurity at the 3-year followup in the Family Options Study.

In At Home, significant positive impacts of Housing First were detected on measures of community functioning and quality of life in the first year, but these impacts were attenuated at the 2-year followup (Aubry et al., 2015; Stergiopoulos et al., 2015). However, more positive impacts for Housing First were observed through an analysis of qualitative data on life changes after 18 months for a representative subsample of the total sample (Nelson et al., 2015). Overall, the Family Options Study reported more beneficial impacts on nonhousing outcomes, which again is likely related to differences in the populations served in the two studies.

Costs

Although some cost studies examine a wide range of costs, the Family Options Study focused solely on housing costs. The average monthly costs of subsidized housing (\$1,172) and community-based rapid re-housing (\$880) were much lower than those for project-based transitional housing (\$2,706) and emergency shelter (\$4,819). At the 3-year followup, the costs of all programs used by the subsidized housing group were \$45,902 compared with \$42,134 for the usual care group. Thus, the costs for the subsidized housing group were 9 percent higher than those for the usual care group. At Home examined a wider range of costs and found that every \$10 invested in Housing First was offset by \$6.81 in costs (Ly and Latimer, 2015). Thus, the Family Options Study reported greater cost offsets than was found in At Home.

Policy Implications

The policy implications of the Family Options Study are important, just as they are for the Canadian At Home research. The At Home research was coming to an end at the same time the Canadian federal government was undertaking a review of the federal Homelessness Partnering Strategy (HPS) program. HPS provides funding to 61 Canadian communities for programs addressing homelessness. Federal funding for HPS was due to expire in 2014, and the government had to decide if it would renew the program and, if so, how it might change funding parameters. At the same time, At Home leaders and researchers held a series of discussions with the Prime Minister's office about the findings of the At Home project and the need for assistance in sustaining the Housing First programs.

The evidence from the At Home research was very important for the government's decision to renew HPS funding and to change the emphasis of that funding to promote the Housing First approach. More specifically, as of 2015, the 10 largest Canadian communities were to allocate 65 percent of their federal funding to Housing First for chronically and episodically homeless persons, and the remaining 41 communities and Aboriginal communities were to allocate 40 percent of their funding to Housing First. This major shift in Canadian homelessness policy came about as

a result of rigorous RCT research, researchers' framing of that evidence in a way that provided a solution to a major policy issue, strong relationships between researchers and decisionmakers, and fortuitous timing of the review of the HPS program, which coincided with the conclusion of the At Home research (Macnaughton et al., 2017). Following the At Home research, the Mental Health Commission of Canada and now the Canadian Alliance to End Homelessness provided training and technical assistance in Housing First to help communities across Canada make the transition to the Housing First approach (Worton et al., in press).

The success of the Housing First approach and its rigorous research base has also led to its spread across the world, particularly in the United States and European countries (Padgett, Henwood, and Tsemberis, 2016). RCT evaluations of Housing First are under way in France and Spain, and Housing First programs are in place in Australia, Belgium, Ireland, Italy, and Portugal, to name a few countries.

Similarly, the Family Options Study has important policy implications. Using an RCT design enabled the researchers to compare different policy options for addressing family homelessness. Across multiple settings during a 3-year period, this study convincingly underscores the importance of subsidized housing as the one approach that reduces family homelessness and promotes child, parent, and family well-being, all at a reasonable cost that is only 9 percent higher than usual care. Community-based rapid re-housing and project-based transitional housing options do not yield the same level of positive outcomes. Recent research has also underscored the importance of rent supplements for adults experiencing chronic homelessness (Pankratz, Nelson, and Morrison, 2017). Rent supplements loom large in effective approaches to ending homelessness for families and adults and reinforce theories of change that emphasize economic resources over skills training or other "treatment first" approaches.

In this era of evidence-based policy, one might expect the findings of this study to be taken up and widely implemented across the United States. However, as the At Home research found, timing and the political context are important factors in determining the uptake of innovative, evidence-based approaches (Macnaughton et al., 2017).

Conclusions

The Family Options Study was an important policy experiment in family homelessness. One strength of this study, relative to the Canadian At Home project, was that three different policy options, each with distinctive theories of change, were compared with usual care. In At Home, only the Housing First approach, and various adaptations of it, were examined. The study provides strong evidence that subsidized housing, with very minimal services, can reduce family homelessness and promote other positive outcomes at a reasonable cost over 3 years. Moreover, the Family Options Study provides the best evidence to date about the most and least effective options for addressing family homelessness.

The subsidized housing approach deserves to be widely disseminated and studied on a broader scale and to be tried out in other countries, hopefully including Canada. However, the Family Options Study is an unfinished story at this point in time. What will the legacy be of this important

study? Will the findings fall on deaf ears of policymakers and be washed away with governments that want to have a smaller footprint in housing and assisting vulnerable people? Will the findings instead get some traction among policymakers as a sound way to help families restore their lives and dignity, as they move off the streets and out of shelters and give their children better chances of achieving the American dream? I am very interested in reading the next chapter in this exciting story about family homelessness and policy change, and I urge researchers and advocates in the United States to carry this important work forward.

Acknowledgments

The author acknowledges the support of the Mental Health Commission of Canada for the At Home research on Housing First.

Authors

Geoffrey Nelson is emeritus professor of psychology at Wilfrid Laurier University.

References

- Aubry, Tim, Geoffrey Nelson, and Sam Tsemberis. 2015. "Housing First for People With Severe Mental Illness Who Are Homeless: A Review of the Research and Findings From the At Home/Chez Soi Demonstration Project," *Canadian Journal of Psychiatry* 60: 467–474.
- Culhane, Dennis P., Stephen Metraux, Jung Min Park, Maryanne Schretzman, and Jesse Valente. 2007. "Testing a Typology of Family Homelessness Based on Patterns of Public Shelter Utilization in Four U.S. Jurisdictions: Implications for Policy and Program Planning," *Housing Policy Debate* 18: 1–28.
- Goering, Paula, Scott Veldhuizen, Geoffrey Nelson, Ana Stefancic, Sam Tsemberis, Carol Adair, Jino Distasio, Tim Aubry, Vicky Stergiopoulos, and David Streiner. 2016. "Further Validation of the Pathways Housing First Scale," *Psychiatric Services* 67: 111–114.
- Goering, Paula, Scott Veldhuizen, Aimee Watson, Carol Adair, Brianna Kopp, Eric Latimer, Geoffrey Nelson, Eric Macnaughton, David Streiner, and Tim Aubry. 2014. *National At Home/Chez Soi Final Report*. Calgary, Alberta: Mental Health Commission of Canada.
- Goering, Paula N., David L. Streiner, Carol Adair, Tim Aubry, Jayne Barker, Jino Distasio, Stephen W. Hwang, Janina Komaroff, Eric Latimer, Julian Somers, and Denise M. Zabkiewicz. 2011. "The At Home/Chez Soi Trial Protocol: A Pragmatic, Multi-Site, Randomised Controlled Trial of a Housing First Intervention for Homeless Individuals With Mental Illness in Five Canadian Cities," *BMJ Open* 1.
- Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016a. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

———. 2016b. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families—Summary Report*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Lewin, Simon, Claire Glenton, and Andrew D. Oxman. 2009. “Use of Qualitative Methods Alongside Randomised Controlled Trials of Complex Healthcare Interventions: Methodological Study,” *BMJ Research* 339: b3496.

Ly, Angela, and Eric Latimer. 2015. “Housing First Impacts on Costs and Associated Cost Offsets: A Review of the Literature,” *Canadian Journal of Psychiatry* 60: 475–487.

Macnaughton, Eric, Geoffrey Nelson, Paula Goering, and Myra Piat. 2017. “Moving Evidence Into Policy: The Story of the At Home/Chez Soi Initiative’s Impact on Federal Homelessness Policy in Canada and Its Implications for the Spread of Housing First in Europe and Internationally,” *European Journal of Homelessness* 11: 109–130.

Macnaughton, Eric, Ana Stefancic, Geoffrey Nelson, Rachel Caplan, Greg Townley, Tim Aubry, Scott McCullough, Michelle Patterson, Vicky Stergiopoulos, Catherine Vallée, Sam Tsemberis, Marie-Josée Fleury, Myra Piat, and Paula Goering. 2015. “Implementing Housing First Across Sites and Over Time: Later Fidelity and Implementation Evaluation of a Pan-Canadian Multi-Site Housing First Program for Homeless People With Mental Illness,” *American Journal of Community Psychology* 55: 279–291.

Nelson, Geoffrey, and Timothy MacLeod. 2017. “Theory and Research on Housing Programs for People With Serious Mental Illness.” In *Housing, Citizenship, and Communities for People With Serious Mental Illness: Theory, Research, Practice, and Policy Perspectives*, edited by John Sylvestre, Geoffrey Nelson, and Tim Aubry. New York: Oxford University Press: 155–185.

Nelson, Geoffrey, Eric Macnaughton, and Paula Goering. 2015. “What Qualitative Research Can Contribute to a Randomized Controlled Trial of a Complex Community Intervention: Lessons Learned From the At Home/Chez Soi Project for Homeless Persons With Mental Illness,” *Contemporary Clinical Trials* 45: 377–384.

Nelson, Geoffrey, Michelle Patterson, Maritt Kirst, Eric Macnaughton, Corinne Isaac, Danielle Nolin, Christopher McAll, Vicky Steriopoulos, Greg Townley, Timothy MacLeod, Myra Piat, and Paula Goering. 2015. “Life Changes Among Homeless Persons With Mental Illness: A Longitudinal Study of Housing First and Usual Treatment,” *Psychiatric Services* 66: 592–597.

Padgett, Deborah K., Benjamin F. Henwood, and Sam J. Tsemberis. 2016. *Housing First: Ending Homelessness, Transforming Systems, and Changing Lives*. New York: Oxford University Press.

Pankratz, Courtney, Geoffrey Nelson, and Marie Morrison. 2017. “A Quasi-Experimental Evaluation of Rent Assistance for Individuals Experiencing Chronic Homelessness,” *Journal of Community Psychology* 2017 (00): 1–15.

Richter, Dirk, and Holger Hoffmann. 2017. “Preference for Independent Housing of Persons With Mental Disorders: Systematic Review and Meta-Analysis,” *Administration and Policy in Mental Health and Mental Health Services Research*. DOI: 10.1007/s10488-017-0791-4.

Riemer, Manuel, and Leonard Bickman. 2011. "Using Program Theory To Link Social Psychology and Program Evaluation." In *Social Psychology of Evaluation*, edited by Melvin M. Mark, Stewart I. Donaldson, and Bernadette Campbell. New York: Guilford: 104–138.

Shinn, Marybeth. 2016. "Methods for Influencing Social Policy: The Role of Social Experiments," *American Journal of Community Psychology* 58: 239–244.

Shinn, Marybeth, Scott R. Brown, and Daniel Gubits. 2016. "Can Housing and Service Interventions Reduce Family Separations for Families Who Experience Homelessness?" *American Journal of Community Psychology*. DOI: 10.1002/ajcp.12111.

Shinn, Marybeth, Scott R. Brown, Michelle Wood, and Daniel Gubits. 2016. "Housing and Service Interventions for Families Experiencing Homelessness in the United States: An Experimental Evaluation," *European Journal of Homelessness* 10: 13–30.

Stefancic, Ana, Sam Tsemberis, Peter Messeri, Robert Drake, and Paula Goering. 2013. "The Pathways Housing First Fidelity Scale for Individuals With Psychiatric Disabilities," *American Journal of Psychiatric Rehabilitation* 16: 240–261.

Stergiopoulos, Vicky, Stephen W. Hwang, Agnes Gozdzik, Roseane Nisenbaum, Eric Latimer, Daniel Rabouin, Carol E. Adair, Jimmy Bourque, Joe Connelly, James Frankish, Lawrence Y. Katz, Kate Mason, Vachin Misir, Kristen O'Brien, Jitender Sareen, Christian G. Schutz, Arielle Singer, David L. Streiner, Helen-Maria Vasiliadis, and Paula N. Goering. 2015. "Effect of Scattered-Site Housing Using Rent Supplements and Intensive Case Management on Housing Stability Among Homeless Adults With Mental Illness: A Randomized Controlled Trial," *Journal of the American Medical Association* 313: 905–915.

Tsemberis, Sam. 2015. *Housing First: The Pathways Model To End Homelessness for People With Mental Illness and Addiction*. Center City, MN: Hazelden Publications.

Worton, S. Kathleen, Julian Hasford, Eric Macnaughton, Geoffrey Nelson, Timothy MacLeod, Sam Tsemberis, Vicky Stergiopoulos, Paula Goering, Tim Aubry, Jino Distasio, and Tim Richter. In press. Understanding Systems Change in Early Implementation of Housing First in Canadian Communities: An Examination Of Facilitators/Barriers, Training/Technical Assistance, and Points of Leverage. *American Journal of Community Psychology*.

U.S. Commentary: The Family Options Study and Family Well-Being Outcomes

Marah A. Curtis

University of Wisconsin–Madison

Introduction

The Family Options Study, a U.S. Department of Housing and Urban Development-sponsored longitudinal randomized study evaluating homeless service interventions for families with children, is the focus of this symposium. This study enrolled participant families between 2010 and 2012 and followed them for at least 3 years. Nearly 2,300 families experiencing homelessness, in 12 sites across the nation, were assigned to one of four conditions after spending 7 or more nights in a homeless shelter. The 12 participating sites recruited for the study varied across size, geography, and housing markets to capture variation in conditions associated with homelessness. Although sites were not randomly selected, at study entrance, Family Options Study participants shared characteristics similar to families experiencing homelessness across the nation (Gubits et al., 2016).

Random assignment was constructed such that families were assigned to one of four different groups. The four groups were (1) UC—access to the usual care available in the homeless and housing assistance system in a family's locality absent any priority preference for a specific service; (2) SUB—priority access to a long-term housing subsidy; (3) CBRR—priority access to a temporary housing subsidy made available for up to 18 months; and (4) PBTH—priority access to a temporary, service-intensive stay in a project-based transitional housing facility for up to 24 months. The study design allows for comparison between offering a priority preference for each housing option (SUB, CBRR, or PBTH) and UC and between one another.

The unique study structure is particularly useful for housing policy, as each option typifies an approach to housing homeless families based on both explicit and implicit theory about why families become homeless and, therefore, the most effective service model. Comparing outcomes between the SUB and UC groups is the clearest examination of the effect of subsidies on the well-being of similarly situated homeless families. Families who had access to usual care could also receive housing subsidies through their local homeless assistance agencies.

The UC-to-SUB comparisons evaluate the impact of choosing a policy model that prioritizes an initial offer of housing subsidies to homeless families versus the circuitous navigation of local

homeless service providers wherein a subsidy is a potential, but uncertain, outcome. Three years after random assignment, 37 percent of families who did not have priority preference for a subsidy secured permanent housing subsidies (Gubits et al., 2016). As noted previously, Family Options Study-enrolled families who had been in a homeless shelter for 7 or more days—those who could exit homelessness relatively quickly—were not in the study. Concerns that potential differences in the severity of challenges facing families experiencing homelessness might necessitate a differential service model to be effective were not supported. Intervention impacts did not vary appreciably across comparisons according to either the housing barriers or the number of psychosocial challenges reported at baseline (Gubits et al., 2016).

This commentary focuses on several of the psychological and well-being outcomes the study revealed for participating families in the SUB group (compared with UC) that persisted at both the 20- and 37-month followups. At both 20 and 37 months after random assignment, household heads reported decreases in psychological distress, intimate partner violence, the number of schools the focal child attended, and the proportion of families who report food insecurity compared with those assigned to UC.

Reductions in Psychological Distress and Interpersonal Violence: Family Well-Being

At the 37-month followup, 17.3 percent of the UC group reported symptoms of serious psychological distress, 22.9 percent reported symptoms of post-traumatic stress disorder (PTSD) in the past 30 days, and 10.5 percent reported having experienced intimate partner violence in the past 6 months. Rates of both serious psychological distress and PTSD are markedly higher than national rates for homeless families, and this is also evidenced in this sample (Gubits et al., 2016). Having priority preference to a long-term housing subsidy reduced psychological distress by around one-tenth of a standard deviation compared with usual care. A reduction in psychological distress for the household head (91.8 percent in the sample are female and all had at least one child with them in the shelter upon group assignment) is an important and consequential finding for family well-being.

The Family Options Study measured psychological distress with the Kessler Psychological Distress Scale (K6), a six-item psychological screening instrument intended to capture individuals with potentially severe mental illness. Clinical validation studies comparing the K6 with structured diagnostic instruments find the screener consistently distinguishes DSM-IV (that is, *Diagnostic and Statistical Manual of Mental Disorders*) cases and is particularly effective for population-level health surveys (Furukawa et al., 2003; Kessler et al., 2002). For context, at 37 months, adults in the UC group reported a mean value of 7.42 on the distress scale (0–24), wherein higher scores denote more distress while the SUB group adults reported a mean value of 6.69. To get a sense of the implication of this reduction in reported psychological distress, we can look to a large body of research that examines the relationship between mother's mental health and child outcomes.

Mother's mental health, depression in particular, is associated with a host of negative child outcomes across a number of studies and populations ranging from reductions in the quality of

interactions, safety, and development (Connors-Burrow et al., 2014, 2012; Hwa-Froelich, Cook, and Flick, 2008; Surkan et al., 2014). Eligibility for the Family Options Study required families to have at least one child age 15 or younger at baseline, and one-half of the families were in shelter with a child younger than 3 years old (Gubits et al., 2016). Studies have found that young children with depressed mothers are at risk of inadequate preventative care (Chung et al., 2004; Flynn et al., 2004; Logan, Riley, and Barker, 2008) and less-effective management of childhood asthma (Perry, 2008). Using longitudinal data from the Fragile Families and Child Well-Being Study (FFCWS), Corman et al. (2015) found that maternal depression is associated with experiences of multiple hardships in the domains of housing inadequacy, housing instability, and food insecurity. Research focusing on mother's depression is instructive. Reductions in reported psychological distress for those with a priority preference for a long-term housing subsidy, compared with those without specific access to any particular service, is noteworthy. A significant reduction in psychological distress, given the evidence previously, may result in improved well-being for homeless families, particularly those with younger children. The Family Options Study also found reductions in reported interpersonal violence (IPV) by household heads in the SUB group compared with the UC group. Breiding et al. (2017), using data from the National Intimate Partner and Sexual Violence Survey and controlling for personal characteristics, found associations between housing and food insecurity for both women and men (associations are larger for women) and suggested that economic scarcity creates the conditions for vulnerability to violence. These cross-sectional data cannot disentangle the directionality of the association but are suggestive of the role housing and food insecurity may play in vulnerability to violence. Using the FFCWS, Suglia et al. (2010) found that children of mothers experiencing chronic IPV, compared with those not exposed, had a twofold increased risk of developing asthma. Taken together, these studies suggest that, beyond the health benefit of reductions in experiences of personal violence, less obvious health impacts may also radiate from reductions in IPV. Further, the one-third reduction in IPV experienced by the SUB group 37 months after random assignment is convincing evidence that policies that reduce economic insecurity via a long-term housing subsidy reduce the incidence of IPV.

Increases in Food Security: Family Well-Being

Priority preference to a long-term subsidy versus usual care appears to be associated with improved financial well-being for families. Although no difference in income is evident between the SUB and UC groups 3 years after random assignment, the percentage of households that are food secure increased among the SUB group, from 51.5 to 61.1 percent (Gubits et al., 2016). Household food insecurity is associated with negative physical, developmental, and health outcomes for both children and adults (Ashiabi, 2005; Belsky et al., 2010; Seligman, Laraia, and Kushel, 2010; Whitaker, Phillips, and Orzol, 2006; Zaslou et al., 2009). Gundersen et al. (2003) found lower levels of food insecurity among low-income, stably housed families relative to homeless families. The Family Options Study results provide support that offering a priority preference for long-term subsidies reduces the incidence of food insecurity for families compared with usual care.

Conclusion

This commentary has attempted to look at some of the nonhousing outcomes found in the Family Options Study that persisted 3 years after random assignment. Specifically, this commentary addressed reductions in psychological distress reported by the household head, decreases in experiences of IPV, and increases in food security for those assigned to the SUB group compared with those accessing usual care (37 percent of whom secured housing subsidies by the followup). Contextualizing these results, within the larger bodies of related research, can provide some insight into the nonhousing benefits potentially associated with a policy regime that prioritizes initial access to a long-term subsidy. Several caveats are important to mention. Measuring psychological distress with the K6 is not the same as measuring maternal depression. Much of the literature in this area distinguishes quite carefully among post-partum depression and depression more generally. Note also that general reductions in psychological distress may differ in their impact on family functioning. In sum, however, the positive impacts reported by families with priority preference to a long-term subsidy versus usual care evidence increased well-being, in a number of important health domains, that decrease distress and increase personal safety and food security, which are all associated with positive family outcomes across studies.

Acknowledgments

The author thanks Anne Fletcher, Beth Shinn, and Michelle Wood for their skillful editorial suggestions.

Author

Marah A. Curtis is an associate professor in the School of Social Work and faculty affiliate at the Institute for Research on Poverty at the University of Wisconsin–Madison.

References

- Ashiabi, Godwin. 2005. "Household Food Insecurity and Children's School Engagement," *Journal of Children and Poverty* 11 (1): 3–17.
- Belsky, Daniel W., Terrie E. Moffitt, Louise Arseneault, Maria Melchior, and Avshalom Caspi. 2010. "Context and Sequelae of Food Insecurity in Children's Development," *American Journal of Epidemiology* 172 (7): 809–818.
- Breiding, Matthew J., Kathleen C. Basile, Joanne Klevens, and Sharon G. Smith. 2017. "Economic Insecurity and Intimate Partner and Sexual Violence," *American Journal of Preventive Medicine*. <http://dx.doi.org/10.1016/j.amepre.2017.03.021>.
- Chung, Esther K., Kelly F. McCollum, Irma T. Elo, Helen J. Lee, and Jennifer F. Culhane. 2004. "Maternal Depressive Symptoms and Infant Health Practices Among Low-Income Women," *Pediatrics* 2004 (113): e523–e529.

- Conners-Burrow, Nicola A., Patti Bokony, Leanne Whiteside-Mansell, Shashank Kraleti, Lorraine McKelvey, and Angela Kyzer. 2014. "Low-Level Depressive Symptoms Reduce Maternal Support for Child Cognitive Development," *Journal of Pediatric Health Care* 28 (5): 404–412.
- Conners-Burrow, Nicola A., Jill J. Fussell, Danya L. Johnson, Lorraine McKelvey, Leanne Whiteside-Mansell, Patti Bokony, and Shashank Kraleti. 2012. "Maternal Low- and High-Depressive Symptoms and Safety Concerns for Low-Income Preschool Children," *Clinical Pediatrics* 52 (2): 171–177.
- Corman, Hope, Marah A. Curtis, Kelly Noonan, and Nancy E. Reichman. 2015. "Maternal Depression as a Risk Factor for Children's Inadequate Housing Conditions," *Social Science and Medicine* 149: 76–83.
- Flynn, Heather A., Matthew Davis, Sheila M. Marcus, Rebecca Cunningham, and Frederic C. Blow. 2004. "Rates of Maternal Depression in Pediatric Emergency Department and Relationship to Child Service Utilization," *General Hospital Psychiatry* 26: 316–322.
- Furukawa, Toshiaki A., Ronald C. Kessler, Tim Slade, and Gavin Andrews. 2003. "The Performance of the K6 and K10 Screening Scales for Psychological Distress in the Australian National Survey of Mental Health and Well-Being," *Psychological Medicine* 33: 357–362.
- Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.
- Gunderson, Craig, Linda Weinreb, Cheryl Wehler, and David Hosmer. 2003. "Homelessness and Food Insecurity," *Journal of Housing Economics* 12: 250–272.
- Hwa-Froelich, Deborah A. Loveland Cook, and Louise H. Flick. 2008. "Maternal Sensitivity and Communication Styles: Mothers With Depression," *Journal of Early Intervention* 31: 44–66.
- Kessler, Ronald C., Gavin Andrews, Lisa J. Colpe, Eva Hiripi, Daniel K. Mroczek, Sharon-Lise Normand, Ellen E. Walters, and Alan M. Zaslavsky. 2002. "Short Screening Scales To Monitor Population Prevalences and Trends in Non-Specific Psychological Distress," *Psychological Medicine* 32: 959–976. DOI: 10.1017/S0033291702006074.
- Logan, Joseph E., Anne W. Riley, and Lawrence E. Barker. 2008. "Parental Mental and Pain-Related Health and Pediatric Ambulatory Care Sensitive Emergency Department Visits and Hospitalizations," *Health Services Research* 43 (2): 656–674.
- Perry, Cynthia D. 2008. "Does Treating Maternal Depression Improve Child Health Management? The Case of Pediatric Asthma," *Journal of Health Economics* 7 (1): 157–173.
- Seligman, Hilary K., Barbara A. Laraia, and Margot B. Kushel. 2010. "Food Insecurity Is Associated With Chronic Disease Among Low-Income NHANES Participants," *Journal of Nutrition* 140 (2): 304–310.

Suglia, Shakira F, Cristiane S. Duarte, Megan T. Sandel, and Rosalind J. Wright. 2010. "Social and Environmental Stressors in the Home and Childhood Asthma," *Journal of Epidemiology and Community Health* 64 (7): 636–642.

Surkan, Pamela J., Anna K. Ettinger, Rebecca S. Hock, Saifuddin Ahmed, Donna M. Strobino, and Cynthia S. Minkovitz. 2014. "Early Maternal Depressive Symptoms and Child Growth Trajectories: A Longitudinal Analysis of a Nationally Representative U.S. Birth Cohort," *BMC Pediatrics* 14 (1): 185.

Whitaker, Robert C., Shannon M. Phillips, and Sean M. Orzol. 2006. "Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavior Problems in Their Preschool-Aged Children," *Pediatrics* 118 (3): 859–868.

Zaslow, Martha, Jacinta Bronte-Tinkew, Randolph Capps, Allison Horowitz, Kristin A. Moore, and Debra Weinstein. 2009. "Food Insecurity During Infancy: Implications for Attachment and Mental Proficiency in Toddlerhood," *Maternal and Child Health Journal* 13 (1): 66–80.

U.S. Commentary: The Family Options Study and Food Insecurity

Elaine Waxman
Urban Institute

Introduction

Housing and food insecurity often coexist in the same household and reflect tradeoffs between basic needs that families grapple with when facing limited and often unstable income (Cutts et al., 2011; Heflin, 2006; Joyce et al., 2012). Unfortunately, research often fails to examine the intersection of material hardships (Ziliak, 2015) or fully explore how strategies intended to address one domain may influence outcomes in another. The Family Options Study breaks new ground, not only because of the insights it provides into strategies for improving family housing outcomes, but also because it illuminates the role of housing subsidies in reducing other material hardships like food insecurity (Gubits et al., 2016). For policymakers, practitioners, and researchers interested in strengthening low-income communities, the Family Options Study is a powerful reminder of the importance of rigorously evaluating interventions with an eye firmly focused on how they contribute to overall family well-being.

The Intersecting Nature of Housing and Food Insecurity

Prior research has shown that low-income households often struggle with multiple kinds of material hardship, including both housing and food insecurity (Heflin, 2006; Joyce et al., 2012; Sandel et al., 2014). When families experience housing cost burden, food budgets are often among the first expenses to be cut. An analysis of 2012 consumer expenditure data among renters within the lowest quartile of incomes (about \$15,000 annually) shows that food expenditures were reduced by more than one-third among households facing severe rent burden (spending more than 50 percent of their income on shelter) when compared with renters with more affordable housing costs (JCHS, 2013). Tradeoffs between housing and food costs are frequently reported among households visiting food pantries and other charitable feeding programs. A 2014 Feeding America study of more than 60,000 charitable feeding clients revealed that more than one-half of client households (57.1 percent) reported trading off between housing costs and food budgets at least once in the prior 12 months; 27.2 percent reported doing so every month (Weinfield et al., 2014).

The consequences of both housing insecurity and food insecurity for overall family well-being are concerning. Food insecurity is associated with a variety of poor health outcomes in individuals of all ages. Children living in food-insecure households are more likely to be in fair or poor health, to

be hospitalized, to suffer from asthma, and to experience cognitive challenges, anxiety, depression, and aggression (Gundersen and Ziliak, 2015). Among adults, food insecurity is associated with increased risk of maternal depression (Casey et al., 2004); higher rates of chronic diseases, such as hypertension and diabetes among adults (Seligman et al., 2007; Seligman, Laraia, and Kushel, 2010); and higher annual healthcare expenditures (Tarasuk et al., 2015). Similarly, housing insecurity has also been associated with negative health outcomes among children and adults (Burgard, Seefeldt, and Zelner, 2012; Cutts et al., 2011). Taken together, housing and food insecurity have been associated with delaying needed medical care and medications and with increased emergency department visits and inpatient hospitalizations (Kushel et al., 2006). As a result of poorer health and greater utilization of more expensive healthcare settings, individuals struggling with material hardship may face an escalating series of financial pressures (Seligman and Schillinger, 2010). Therefore, identifying effective strategies that can reduce material hardship and disrupt cycles of economic instability is a high priority for improving the health and well-being of vulnerable families.

Assessing the Impact of Family Options Study Housing Interventions on Food Insecurity

As reported elsewhere, the Family Options Study has provided a unique opportunity to examine the relative effectiveness of multiple strategies for improving housing outcomes for families who spent at least 7 days in emergency shelter before enrolling in the study. A large sample of families across 12 communities were randomly assigned to priority access to one of four interventions: long-term housing subsidies (the SUB group), project-based transitional housing (the PBTH group), temporary community-based rapid re-housing (the CBRR group), and usual care (the UC group; that is, families left to navigate various options available in their communities). The results at the two primary points of observation—20 and 37 months—showed significant improvements in housing outcomes for those families who were given priority access to long-term housing subsidies when compared with usual care. Reported use of shelters or doubling up declined by more than one-half, and families were more likely to be residing in their own place and to have experienced fewer moves in the prior 6 months.

The Family Options Study researchers were intentional in their inclusion of multiple measures of family well-being and what the researchers defined as indicators of self-sufficiency; both types of indicators were assessed at baseline, 20 months (the point at which temporary housing support typically ended), and 37 months. Measures of food security were grouped under the indicators of self-sufficiency, along with indicators of work activity, education/training receipt, income, and economic hardship. The researchers employed the validated short form of the U.S. Department of Agriculture's Core Food Security Module (CFSM), which consists of six items (Blumberg et al., 1999). The short-form survey offers an alternative to the standard 18-item survey module for households with children to reduce respondent burden in survey research. Scoring of the short-form survey is typically used to designate a binary status for households—households with zero or one affirmative responses to the questions are designated as food secure; households with affirmative responses to two or more questions results in the household being characterized as food insecure. Although the published results also report an average cumulative item score for households in each intervention

group, the inclusion of both food-secure and food-insecure households in the average scores makes it difficult to interpret if interventions were more effective in helping families become food secure or reducing the severity of their food insecurity. Additional future analyses can more fully exploit the available data for insights into depth and severity of food insecurity (see Gundersen [2008] for more on this approach). This commentary focuses on the prevalence results.

The CFSM assesses a condition that is economic in nature—meaning a food-insecure household's access to adequate food is limited by a lack of money and other resources (Coleman-Jensen et al., 2016). However, as discussed previously, the association between food insecurity and compromised health and well-being is well documented and, thus, food insecurity can also be thought of as important indicator of adult and child well-being.

In reviewing the results of the Family Options Study with respect to food security measures, it is helpful to remember that food security tends to be a recurrent, albeit episodic, condition. Prior research has indicated that, on average, a food-insecure household experiences food-related hardship about 7 months in a year (Coleman-Jensen et al., 2016). Families likely vary somewhat in their individual household experiences; for example, some may be food insecure for a few days each month when resources run low after covering basic needs, whereas others may have persistent periods of food insecurity, especially when unemployed or unable to work and without access to food assistance programs.

It is also important to note that, across all intervention groups, uptake of the Supplemental Nutrition Assistance Program (SNAP), the primary federal nutrition safety net program, was already quite high (more than 80 percent), as might be expected for very vulnerable families. As discussed in the following sections, research has previously documented the positive impact of SNAP on reducing food insecurity; thus, the rates of food insecurity reported throughout the study would have been expected to be much higher in the absence of that program.

The researchers have reported pairwise results, providing the opportunity to examine each intervention against usual care and to compare options against each other. Results are reported as intention-to-treat (ITT) effects (the outcomes for all individuals originally randomized to a given intervention, regardless of subsequent engagement).

Food Insecurity Prevalence and Usual Care

Given the Family Options Study participation criterion that families must have spent at least 7 days in emergency shelter prior to enrollment, it is not surprising that the prevalence of household food insecurity among participating households was very high. Families in the UC arm—meaning that they were not given priority access to any intervention and were left to navigate any available options on their own—had a household food security rate of 46.8 percent at 37 months. During the period of 2012 to 2015, when most participating families would have completed their time in the study, the average household food security rate in the United States ranged from 14.5 percent in 2012 (Coleman-Jensen, Nord, and Singh, 2013) to 12.7 percent in 2015 (Coleman-Jensen et al., 2016). Nationally, families with incomes below the federal poverty level are those most comparable to Family Options Study families—the rates among these families ranged from 40.9 percent in 2012 to 38.3 percent in 2015 (with a high of 42.1 percent in 2013).

Food Insecurity Prevalence and Community-Based Rapid Re-housing

In the Family Options Study, the CBRR intervention offered participants priority access to temporary rental assistance (usually for 7 to 8 months) and limited services focused on housing search assistance, self-sufficiency, and basic services coordination (Gubits et al., 2016). In the case of the CBRR group, when compared with the UC group, the short-term ITT effects at 20 months showed some statistically significant improvement in household food insecurity rates at the 0.10 level—6 percent fewer families were food insecure. However, the improvements were no longer apparent at the 37-month mark, suggesting that, although temporary household assistance that in effect boosted household income for a limited period might have provided some respite to economic pressures, it was not sufficient to position families on a more economically stable path for the longer term. Interestingly, housing outcomes were also largely insignificant at 20 and 37 months.

Food Insecurity Prevalence and Project-Based Transitional Housing

The PBTH intervention in the Family Options Study offered priority access to a place for families to stay for a finite period of time and paired that placement with a wide array of supportive services, including case management and either direct provision of or referral to services based on a family needs assessment (Gubits et al., 2015). The level of service support is designed to be far more extensive than what may be provided through CBRR. The theory behind PBTH models is that combining short-term housing placement with significant social service support can help families stabilize and assist them in overcoming barriers that would prevent them from moving to a permanent housing solution. PBTH interventions may be of particular interest to those concerned with improving food insecurity, because referrals to community-based services (for example, charitable feeding programs) and assistance with benefit applications for federal nutrition programs are typically components of the package of services offered to clients, alongside intensive case management. However, results at both 20 and 37 months showed no impact on rates of food insecurity, rates of uptake of SNAP benefits, or any of the other self-sufficiency measures included in the study. The finding that temporary housing support with an intensive service component did not appear to have an impact (in contrast to the short-term improvement in food insecurity and some other measures in the CBRR group, which had access to more limited support services) is somewhat puzzling. The lack of impact might be partly explained if screening for these services tended to engage highly vulnerable families who were already connected to other services that might ameliorate food insecurity (for example, the uptake rates for SNAP were already quite high, and they may already have been familiar with charitable feeding programs, having spent time in emergency shelter). It is also possible that the quality of case management supports and other services in these programs was variable, making it difficult to detect any impact. However, given the striking findings on the impact of a permanent housing subsidy on food insecurity and many other outcomes, as discussed in the following subsection, it is also likely that the length of assistance was simply insufficient to help these families overcome the multiple material hardships they faced and that the associated services were not able to compensate for the resource constraints these families faced.

Food Insecurity and Permanent Housing Subsidies

The findings of the Family Options Study with respect to the impact of the SUB initiative, in contrast to the other interventions, on household food insecurity are striking. Priority access to a permanent housing subsidy significantly reduced the rates of household food insecurity among families when compared with usual care. Food insecurity rates were nearly 10 points lower than those in the UC group, a large effect that was statistically significant at the 0.01 level, a very strong finding. This impact was achieved despite the fact that vouchers were not accompanied by any supportive services.

Comparing the SUB Effect Size With Targeted Strategies To Reduce Food Insecurity

Ascertaining the effects of interventions targeted directly at food insecurity are challenging for a number of reasons. The choice to participate in food assistance programs such as SNAP often reflects a greater level of need on the part of those who seek out benefits than others who might also meet program eligibility criteria (referred to in econometrics as a problem of endogeneity). As a result, without further scrutiny, program participation can often have the perverse appearance of exacerbating food insecurity. In addition, underreporting of program participation in surveys may also create a problem of measurement that is not random. In recent years, rigorous scholarship has sought to correct for these challenges, allowing for greater confidence in the assessment of the positive benefits of nutrition program participation for reducing food insecurity. Kreider et al. (2012) developed one of the strongest of these analyses. Using plausible assumption, they estimate that SNAP participation may reduce child food insecurity prevalence by as much as 12.8 percentage points (28 percent); under other models allowing for misclassified program participation status, the average treatment effect is a reduction of approximately 2.7 points (6 percent). By comparison, the estimated effect size (standardized) for the reduction in household food security rates in the Family Options Study SUB intervention is 17 percent. Although more exploration of the data is warranted, the published Family Options Study results indicate that the effect of permanent housing subsidies may compare favorably with other research on the impact of SNAP in the potential reduction of household food security.¹

Both SNAP and permanent housing subsidies operate to expand the family's economic resources, enabling for more food purchases (and potentially food of higher quality). Although SNAP augments food purchasing power directly, permanent housing subsidies reduce the need to trade off among basic needs by freeing resources that can be used for food and other household purchases. With more resources, families may be better positioned to invest in their children, their family's health, and in attaining new skills that may lead to better employment prospects.

¹ Note that uptake of SNAP among families in all arms of the study was quite high, typically exceeding 80 percent. Based on other research, we would expect that, in the absence of SNAP, these families would have had even higher rates of food insecurity.

Implications

Although national food insecurity trends have improved since the record levels recorded during and shortly after the Great Recession, in 2016, 15.6 million U.S. households were still struggling with food insecurity at least some portion of the year (Coleman-Jensen et al., 2017). At least part of the explanation for the insufficient progress in boosting food security lies within the findings of the Family Options Study. This landmark research shows that, when financial pressures created by housing costs are alleviated, the cycle of tradeoffs between paying for basic needs like housing and food can be disrupted, resulting in multiple improvements in individual and communal well-being. Unfortunately, without adequate policy investment in affordable housing, the prospects for reducing material hardship are not good. Among U.S. renters in 2014, 21.3 million households were cost burdened, with a record 11.4 million households facing severe burdens (paying more than 50 percent of income for housing; JCHS, 2016). Among the nation's 9.6 million lowest-income renters (earning less than \$15,000), on average, housing costs absorb nearly three-fourths of income (72 percent) (JCHS, 2016). Moreover, housing affordability issues have begun to affect those with moderate incomes as well, increasing the potential pool of those renters who may face insufficient resources to meet basic needs, especially during economic downturns. Those interested in improving the ability of families to afford an adequate healthy diet must consider how the lack of affordable housing options is undermining their existing efforts to reduce hardship and improve outcomes for vulnerable families.

The insights provided by the Family Options Study are particularly critical for the current policy and practice environment for a number of reasons. First, at a time when various safety net programs may be at risk of significant cuts, it is necessary to elevate evidence that suggests how underinvesting in rigorously evaluated policies in one domain—for example, housing subsidies—can contribute to negative consequences for other essential areas of family well-being, like food security. These potential consequences are easily lost when federal agencies or congressional committees construct budgets focused on reducing expenditures within a single department or set of programs, without consideration of how budgetary choices may undermine the efforts of other federal programs (for example, SNAP) and the communities those programs are designed to serve. Second, the attention of service providers can be equally siloed (Allard, 2009). Although providers on the ground are often aware of the multifaceted challenges their clients face, they are also often struggling with their own resource constraints and typically focused on maximizing the set of tools in their specific domain. Although they may sometimes seek partnerships that connect clients with services provided by other programs (for example, low-income housing developments may invite food banks to distribute food to residents on site, or food pantries may make referrals to housing services coordinators), they rarely operate with a clear understanding of how policy and program investments in one domain can create significant improvements in their own. Finally, although the results of the Family Options Study in improving both housing and food security outcomes are impressive, it is instructive to remember that many of these families remain quite vulnerable. Even when evidence-based programs, such as permanent housing subsidies and federal nutrition programs like SNAP, are available and taken up, many households and communities continue to struggle, which makes it all the more imperative that alternative policy proposals be closely scrutinized to determine whether they can do at least as well, if not better, for low-income families and communities.

Acknowledgments

The author thanks Mary Cunningham and Josh Leopold for their helpful comments and Meg Thompson for assistance with manuscript preparation.

Author

Elaine Waxman is a senior fellow in the Income and Benefits Policy Center at the Urban Institute.

References

- Allard, Scott. 2009. *Out of Reach: Place, Poverty, and the New American Welfare State*. New Haven, CT: Yale University Press.
- Blumberg, Stephen J., Karil Bialostosky, William L. Hamilton, and Ronette R. Briefel. 1999. "The Effectiveness of a Short Form of the Household Food Security Scale," *American Journal of Public Health* 89: 1231–1234.
- Burgard, Sarah A., Kristin S. Seefeldt, and Sarah Zelner. 2012. "Housing Instability and Health: Findings From the Michigan Recession and Recovery Study," *Social Science & Medicine* 75 (12): 2215–2224.
- Casey, Patrick, Susan Goolsby, Carol Berkowitz, Deborah Frank, John Cook, Diana Cutts, Maureen M. Black, Nieves Zaldivar, Suzette Levenson, Tim Heeren, and Alan Meyers. 2004. "Maternal Depression, Changing Public Assistance, Food Security, and Child Health Status," *Pediatrics* 113: 298–304.
- Coleman-Jensen, Alisha, Mark Nord, and Anita Singh. 2013. *Household Food Security in the United States in 2012*. ERR-155. Washington, DC: U.S. Department of Agriculture, Economic Research Service.
- Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. 2017. *Household Food Security in the United States in 2016*. ERR -237. Washington, DC: U.S. Department of Agriculture, Economic Research Service.
- Cutts, Diana Becker, Alan F. Meyers, Maureen M. Black, Patrick H. Casey, Mariana Chilton, John T. Cook, Joni Geppert, Stephanie Ettinger de Cuba, Timothy Heeren, Sharon Coleman, Ruth Rose-Jacobs, and Deborah A. Frank. 2011. "US Housing Insecurity and the Health of Very Young Children," *American Journal of Public Health* 101 (8): 1508–1514.
- Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Gundersen, Craig. 2008. "Measuring the Extent, Depth, and Severity of Food Insecurity: An Application to American Indians in the United States," *Journal of Population Economics* 21 (1): 191–215.

Gundersen, Craig, and James P. Ziliak. 2015. "Food Insecurity and Health Outcomes," *Health Affairs* 34 (11): 1830–1839.

Heflin, Colleen. 2006. "Dynamics of Material Hardship in the Women's Employment Study," *Social Service Review* 80 (3): 377–397.

Joint Center for Housing Studies of Harvard University (JCHS). 2016. *State of the Nation's Housing 2016*. Cambridge, MA: Harvard College.

———. 2013. *America's Rental Housing—Evolving Markets and Needs*. Cambridge, MA: Harvard College.

Joyce, Katherine M., Amanda Breen, Stephanie Ettinger de Cuba, John T. Cook, Kathleen W. Barrett, Bianca Pullen, Deborah A. Frank, Grace Paik, Natasha Rishi, and Ashley Schiffmiller. 2012. "Household Hardships, Public Programs and Their Associations With the Health and Development of Very Young Children: Insights From Children's HealthWatch," *Journal of Applied Research on Children* 3 (1): Article 4.

Kreider, Brent, John V. Pepper, Craig Gundersen, and Dean Jolliffe. 2012. "Identifying the Effects of SNAP (Food Stamps) on Child Health Outcomes When Participation Is Endogenous and Misreported," *Journal of the American Statistical Association* 107: 499, 958–975.

Kushel, Margot B., Reena Gupta, Lauren Gee, and Jennifer S. Haas. 2006. "Housing Instability and Food Insecurity as Barriers to Health Care Among Low-Income Americans," *Journal of General Internal Medicine* 21: 71–77.

Sandel, Megan, Diana Cutts, Alan Meyers, Stephanie Ettinger de Cuba, and Sharon Coleman. 2014. "Co-Enrollment for Child Health: How Receipt and Loss of Food and Housing Subsidies Relate to Housing Security and Statutes for Streamlined, Multi-Subsidy Application," *Journal of Applied Research on Children: Informing Policy for Children at Risk* 5: 2.

Seligman, Hillary K., Andrew B. Bindman, Eric Vittinghoff, Alka M. Kanaya, and Margot B. Kushel. 2007. "Food Insecurity Is Associated With Diabetes Mellitus: Results From the National Health Examination and Nutritional Examination Survey (NHANES) 1999–2002," *Journal of General Internal Medicine* 22 (7): 1018–1023.

Seligman, Hillary K., Barbara A. Laraia, and Margot B. Kushel. 2010. "Food Insecurity Is Associated With Chronic Disease Among Low-Income NHANES Participants," *Journal of Nutrition* 140 (2): 304–310.

Seligman, Hillary K., and Dean Schillinger. 2010. "Hunger and Socioeconomic Disparities in Chronic Disease," *New England Journal of Medicine* 363: 6–9.

Tarasuk, Valerie, Joyce Cheng, Claire de Oliveira, Naomi Dachner, Craig Gundersen, and Paul Kurdyak. 2015. "Association Between Household Food Insecurity and Annual Health Care Costs," *Canadian Medical Association Journal* 187 (14): E429–436.

Weinfield, Nancy S., Gregory Mills, Christine Borger, Maeve Gearing, Theodore Macaluso, Jill Montaquila, and Sheila Zedlewski. 2014. *Hunger in America 2014: National Report*. Rockville, MD: Westat; Urban Institute.

Ziliak, James. 2015. "Income, Program Participation, Poverty and Financial Vulnerability: Research and Data Needs," *Journal of Economic and Social Measurement* 40: 27–68.

U.S. Commentary: Insights From the Family Options Study Regarding Housing and Intimate Partner Violence

Nicole E. Allen

University of Illinois at Urbana-Champaign

Abstract

The Family Options Study examines four approaches to addressing homelessness: permanent housing subsidy, rapid re-housing, transitional housing, and usual care (Gubits et al., 2016). Importantly, the study finds that, at a 3-year followup, a smaller percentage of permanent housing subsidy recipients reported experiencing intimate partner violence (IPV) in the past 6 months when compared with those receiving usual care; these differences were not observed for the transitional housing or rapid re-housing groups. Further, being a survivor of IPV at the baseline assessment is positively correlated with leaving a partner at 37 months, and survivors with permanent housing subsidies were more likely to separate from partners than those in usual care. Finally, families with more complex psychosocial needs compared with those families with fewer needs may have a greater reduction in the experience of IPV when in transitional housing. Although the Family Options Study offers important findings to inform housing policy for survivors of IPV, the study also points to important avenues for future research. These avenues include (1) measurement issues in the assessment of IPV, (2) the complexity of examining separation from one's partner as a desirable outcome, and (3) the importance of survivor-centered practice when considering housing policy for survivors of IPV.

Introduction

Many women and children who experience homelessness also report intimate partner violence (IPV; Baker, Cook, and Norris, 2003; Browne and Bassuk, 1997; Pavao et al., 2007; Zorza, 1991). In a nationwide survey of mayors, IPV was identified as a primary cause of homelessness, even

more frequently a cause than poverty and unemployment (U.S. Conference of Mayors, 2006). Indeed, the availability of emergency and transitional housing has been fundamental to the safety of women and children fleeing abusive partners, and housing is a common unmet need for women seeking support services following abuse (Allen, Bybee, and Sullivan, 2004; Allen, Larsen, and Walden, 2011; Schechter, 1982; Sullivan, and Gillum, 2001). Survivors' efforts to find and maintain housing are complicated by systemic discrimination from landlords because of the abuse they have experienced (for example, Lapidus, 2003); policies which resulted in the loss of welfare benefits and the subsequent loss of housing for many IPV survivors (for example, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996;¹ Roschelle, 2008); and immigration, race or ethnicity, sexual orientation, and disability status, which can further complicate survivors' experiences of housing stability and access to resources (Sokoloff and Dupont, 2005). Not surprisingly, housing instability is implicated in the health and well-being of IPV survivors, even when controlling for the severity of abuse against them (Rollins et al., 2012). Efforts to understand how to effectively meet survivors' housing needs and encourage housing stability are essential.

The Family Options Study (see Gubits et al. [2016] for a full report) should be lauded for its comprehensive effort to follow families during a relatively long period of time—3 years—to better understand which approaches to housing yield the greatest benefits. Fortunately, the study attended to IPV as an outcome worth examining. Indeed, for families interviewed at the 37-month followup, 50 percent had reported IPV at baseline. The Family Options Study offers promising findings regarding the housing response to IPV survivors and also raises important questions and considerations for future inquiry.

Importantly, preliminary findings from the Family Options Study suggest that IPV may abate for some survivors as a result of permanent housing subsidies. In addition, this study demonstrates that separations from partners may become more likely when permanent housing subsidies are provided. It also demonstrates that when provided with project-based transitional housing, a greater proportion of families with higher levels of psychosocial need (relative to those with fewer psychosocial needs) experienced reductions in IPV experiences at 37 months. However, we should also be cautious given measurement issues in the assessment of IPV, the complexities of treating separations from partners as a desirable outcome, and the importance of maintaining an orientation to survivor-centered advocacy as we consider policy change.

Exploring the Implications of Key Findings Regarding Intimate Partner Violence

The Family Options Study finds that the permanent housing subsidies condition (SUB group) in particular, demonstrates promising findings regarding IPV. Heads of household assigned to the SUB group were less likely than their counterparts in the usual care condition (UC group) to report IPV at 37 months and were more likely to report separation from a partner (which was correlated with baseline reports of IPV). These findings did not emerge for either the community-based rapid re-housing (CBRR) or project-based transitional housing (PBTH) conditions when each was compared

¹ Pub. L. 104–193, 110 Stat. 2105. August 22, 1996.

with UC (without attention to levels of psychosocial need). Although SUB did not produce significant differences regarding IPV when compared with CBRR or PBTH, SUB was the only condition that outperformed UC regarding the proportion of heads of household reporting IPV. It makes sense that a permanent housing subsidy that makes housing more financially viable in the long term would produce positive outcomes. A permanent housing subsidy may avoid an unrealistic timeline for achieving stable housing without a subsidy. Rapid re-housing may move too quickly toward independence and outpace the needs of survivors, not offering sufficient time to work through the longer-term effects of chronic trauma, some of which may emerge more acutely once a survivor has stable housing (Sullivan and Olsen, in press). Finally, a permanent housing subsidy addresses the persistent challenges of living with limited financial resources, an unmet need that can be compounded by having an abusive partner (Roschelle, 2008). Indeed, these findings are consistent with previous research on housing and IPV. A study of the housing first model by the Washington State Coalition Against Domestic Violence (WSCADV) found that survivors who were provided with permanent housing for up to 18 months reported greater perceived safety and were also able to focus on goals and needs other than housing, including, for example, education and employment (Mbilinyi, 2015).

Interestingly, the Family Options Study found that transitional housing was more effective for families with higher psychological needs (including IPV) than for families with lower levels of need, and it resulted in a greater reduction of IPV than even the SUB condition. For families experiencing acute crisis, transitional housing services may be particularly important. It is not uncommon for survivors of IPV to face many complex needs as they flee an abusive partner. These challenges may include, for example, navigating the legal system and child protection, seeking affordable and safe housing (which may involve moving to a different community), and addressing the acute effects of trauma. For some survivors, transitional housing may be important because it can provide intensive support to address these and other challenges. Further, survivors may have acute safety concerns. Moving out of transitional housing may pose significant safety risks if an abusive partner can readily access a survivor's housing without the safeguards that some shelter-based transitional housing can provide.

Comprehensive Assessment of Intimate Partner Violence

Although the Family Options Study highlights some important findings, good reasons exist to view these findings as preliminary and in need of further investigation. The first issue to consider is the assessment of IPV in the study. Many controversies surround how to best assess IPV (for example, Grych and Hamby, 2014). Typically, behavioral, act-based assessments are employed that ask about a variety of physical, psychological, and coercive behaviors that together approximate experiences of IPV (for example, the Conflict Tactics Scale; see Straus et al., 1996). These measures are often critiqued as acontextual; that is, they often fail to capture the circumstances in which different forms of force were used and the extent to which issues of power and control were imbued in those actions (Lehmer and Allen, 2014). Still, these measures have the benefit of asking specific behavioral questions (for example, “My partner punched or kicked or beat me up”) to assess potentially abusive experiences rather than relying on summary judgments about whether or not someone believes they have experienced abuse (that is, “Have you been physically abused in the last 6 months?”).

It is always a challenge in a comprehensive study to ask about everything that would be of potential interest regarding the health and well-being of families. The Family Options Study used, rather than a behavior-based measure, a one-item, binary assessment of IPV in the past 6 months. The item asks the adult respondent if he or she has been “physically abused or threatened with violence by a person with whom he/she was romantically involved” (Gubits et al., 2016: Appendix B, page 6). Thus, although a smaller percentage of heads of household interviewed report IPV at 37 months, it is possible that the study missed some facets of the abuse respondents experienced. When we are using global items that assess physical abuse and threats of violence, we rely on the participant to encode their experience as abusive, threatening, or violent. Undoubtedly, some participants will do this as an accurate reflection of their lived experience. However, some will not label their experiences as abusive or threatening, although those behaviors may constitute abuse if they were assessed via a behavior-based measure. Thus, using global items may miss some experiences of IPV.

In the Family Options Study, the item employed did not vary across conditions or time, so no reason exists to believe that cross-condition or cross-time differences in how the item was understood would occur. This method preserves the value of the pairwise comparisons between conditions, but it also raises questions about the reductions observed in heads of household reporting IPV. The global item used in the Family Options Study focuses on physical abuse and threats of violence. These terms may not capture nonphysical forms of abuse and ongoing patterns of coercive control that do not include physical assault but can have profound implications for well-being and housing stability. As an example, imagine a survivor whose abusive partner has never physically assaulted her or overtly threatened her. Instead, her abusive partner carefully regulates her schedule, including when she gets up in the morning, what she eats, where she goes, and so on. He monitors her and makes it clear that deviations from her routine will have consequences. His behavior constitutes coercive control, even in the absence of threats to her physical safety, that can have consequences for psychological health and well-being (Stark, 2009). These types of abusive patterns can be hard to assess even with the best measurement tools available and are especially difficult to discern when a one-item assessment is employed.

Further, forms of abusive behavior may vary over time, and a single-item measure may not capture that evolution (for example, a shift from physical abuse to psychological abuse). Thus, when we observe a reduction in IPV, it may also represent a shift in tactics rather than the absence of abuse. For some survivors, physical violence may desist, but stalking and other forms of harassment (for example, unwanted contact) may continue.

Finally, the single-item measure may miss important findings regarding the frequency and severity of abuse. We know that the percentage of heads of household reporting IPV declined, but we do not know much about the intensity of that abuse. The best housing options for survivors may depend on how nature of the abuse they are experiencing, and how acute the experience of violence is. Thus, although the Family Options Study points us to the potential value of permanent housing subsidies, targeted research with survivors will be essential to better understanding how to meet their varied circumstances and needs. As research in this area continues, future studies will, ideally, examine abuse experiences over time with attention to a comprehensive assessment of the various forms of violence survivors experience, how those forms of violence may change over time, and the frequency and severity of the violence.

Partner Separation as a Complex Outcome

Partners who had abusive partners at baseline were more likely to separate from partners at 37 months ($r = .42$). Those in the SUB group were more likely to have separated from partners than those in the UC group. On the one hand, for those survivors who wanted to separate, this outcome is positive. However, it is at best a complicated outcome. First, separation can create a period of acute risk for survivors. This risk could actually require short-term adjustments that could jeopardize stable housing. For example, given acute safety risks, emergency shelter may be warranted following a separation from an abusive partner. Separation from a partner could actually complicate housing stability, at least in the short term, and housing policy should accommodate these disruptions as they are caused by the perpetration of abusive behavior, not the survivor. Second, sometimes leaving a partner is framed as a naturally desirable endpoint, but, in fact, many survivors who have separated from an abusive partner continue to experience abuse (Fleury, Sullivan, and Bybee, 2000). Also, survivors may not choose to remain separated as they negotiate their safety and well-being. It is essential that remaining with or leaving a partner never become a condition of services rendered or housing benefits offered or maintained. The decision to stay or go should be entirely the survivors', as only they can navigate the specific risks they face in their relationships.

Centering Survivors' Experiences, Wants, and Needs in Housing Policy

To date, much of the research on housing policy has been established with homeless men experiencing serious mental illness (SMI; Sullivan and Olsen, in press; Sylvestre, Nelson, and Aubry, 2017). Historically, housing support in response to IPV has been provided via shelter-based programs offering emergency or transitional housing and comprehensive supports (for example, advocacy and counseling). As best practices in the response to homelessness men have evolved, expectations for domestic violence shelter programs, and thus homelessness services for survivors (who are disproportionately women), have changed. For example, some domestic violence programs report reduced funding for transitional housing due to policy changes that followed empirical support for best practices. However, it is important to advance with caution when best housing practices for one population—homeless men with chronic SMI—are being applied to another population—survivors of IPV. Building on research in one area creates the opportunity to advance policy for homeless women with abusive partners but will also lead to areas of conflict or incompatibility (see Sullivan and Olsen [in press] for a thoughtful and comprehensive comparison of guiding principles in the response to homelessness and the response to IPV).

Given the varied needs and goals of IPV survivors, best practices require a survivor-centered approach (Allen, Bybee, and Sullivan, 2004); such an approach centers the experiences and expertise of survivors and provides options that follow from the self-identified priorities and needs and the unique circumstances of survivors (Goodman and Epstein, 2008; Sullivan and Olsen, in press). A survivor-centered process aims to empower women and honor their central decisionmaking role as

they navigate their safety and well-being. Thus, although it is promising that access to a permanent housing subsidy seemed to be an effective intervention in the reduction of IPV, it is unlikely that this approach would have a wholesale, positive effect for all survivors. That is, of course, endemic to the challenge of informing policy-level change. Wholesale changes may provide a poor fit for some survivors and, in the case of IPV, can actually increase risk of harm. In their review of the many policy changes that emerged following the Violence Against Women Act,² Messing et al. (2015) concluded that some of these policy changes have threatened survivors' capacity for self-determination and may actually increase rather than decrease survivor risk for assault (particularly with regard to criminal justice remedies). Netto, Pawson, and Sharp (2009) highlighted this potential in their examination of an emerging housing policy in the United Kingdom that narrowed IPV survivors' choices (by encouraging them to remain within their current homes) and inadvertently placed some survivors at greater risk of assault.

Additional research must be done to better understand the conditions under which particular approaches to housing IPV survivors are optimal and what additional supports may be important. For example, in their study of housing and IPV, Sullivan, Bomsta, and Hacskaylo (2016) found that cash assistance helped survivors remain in housing that was already stable for them but was currently in jeopardy because of the abuse against them. Thus, a permanent subsidy for new housing would not be well-suited to their needs, whereas flexible financial support may keep survivors stably housed without an ongoing subsidy.

Sullivan and Olsen (in press) also noted that, once survivors are stably housed, the effects of trauma might compound. That is, housing stability may allow for the emotional strain of experiencing trauma to surface. Thus for some, not all, women, support may be essential to successfully maintaining housing. Flexible processes that enable that support when survivors want it may be more prudent than pushing survivors into a particular approach to housing. Indeed, following their pilot study of housing first with domestic violence survivors, WSCADV emphasized flexible engagement and flexible funding in their lessons learned (Sullivan and Olsen, in press).

The Family Options Study reinforces the importance of such a flexible approach. The study finds that, under conditions of high acute psychosocial need, transitional housing may be a critical first step. Under conditions of lower psychosocial need, permanent housing subsidy may be a better approach. Indeed, previous research suggests that survivors with multiple barriers, including, for example, mental health issues, substance use, or engagement in prostitution, find it more difficult to access needed resources and may require more initial support (Zweig, Schlichter, and Burt, 2002). Along the same lines, proponents of housing first also emphasize that the model works best when the match between individuals presenting needs and the housing model employed is strong (Gaetz, Scott, and Gulliver, 2013). Future research must continue to examine the specific conditions that may warrant one approach to facilitating housing stability more than another, but a good general rule is to center survivors' experiences and maximize the fit between their presenting wants and needs and the form of housing support they are offered.

² Pub. L. 103-322, 42 U.S.C. 13701-14040. September 13, 1994.

Conclusion

The Family Options Study is an important large-scale research effort to inform housing policy to respond effectively to homelessness. More accessible permanent housing subsidies appear to have promise, and transitional housing may be valuable for those with greater initial psychosocial needs. Importantly, such shifts in housing policy represent structural changes rather than individual-level changes. As Sokoloff and Dupont (2005: 44) noted, the “the lack of adequate institutional support in the form of social services and public housing... is another level of violence experienced by battered women, which occur in ways that are racialized as well as gendered and classed.” Providing permanent housing subsidies takes a step in the direction of increasing the accessibility of housing and addressing housing as a problem of affordability rather than individual-level deficits. Still, additional research with survivors of IPV is warranted to better understand the conditions under which particular approaches to housing may be most beneficial. Survivors of IPV may require special considerations in this process given their varied and often complex needs. Taking a survivor-centered, flexible approach is warranted, particularly as the evidence for the most effective housing policy is still in development.

Acknowledgments

The author thanks Cris M. Sullivan for providing papers in press that pertained to this important topic and informed this review.

Author

Nicole E. Allen is a Julian Rappaport Professorial Scholar and Associate Head/Director of Graduate Studies in the Department of Psychology at the University of Illinois at Urbana-Champaign.

References

- Allen, Nicole E., Deborah I. Bybee, and Cris M. Sullivan. 2004. “Battered Women’s Multitude of Needs: Evidence Supporting the Need for Comprehensive Advocacy,” *Violence Against Women* 10 (9): 1015–1035.
- Allen, Nicole E., Sadie E. Larsen, and Angela L. Walden. 2011. “An Overview of Community-Based Services for Battered Women.” In *Sourcebook on Violence Against Women*, edited by Claire M. Renzetti, Jeffrey L. Edleson, and Raquel Kennedy Bergen. Thousand Oaks, CA: SAGE Publications: 245–264.
- Baker, Charlene K., Sarah L. Cook, and Fran H. Norris. 2003. “Domestic Violence and Housing Problems: A Contextual Analysis of Women’s Help-Seeking, Received Informal Support, and Formal System Response,” *Violence Against Women* 9 (7): 754–783.

Browne, Angela, and Shari S. Bassuk. 1997. "Intimate Violence in the Lives of Homeless and Poor Housed Women: Prevalence and Patterns in an Ethnically Diverse Sample," *American Journal of Orthopsychiatry* 67 (2): 261–278.

Fleury, Ruth E., Cris M. Sullivan, and Deborah I. Bybee. 2000. "When Ending the Relationship Doesn't End the Violence: Women's Experiences of Violence by Former Partners," *Violence Against Women* 6 (12): 1363–1383.

Gaetz, Stephen, Fiona Scott, and Tanya Gulliver. 2013. *Housing First in Canada: Supporting Communities To End Homelessness*. Toronto: Canadian Homelessness Research Network Press.

Goodman, Lisa A., and Deborah Epstein. 2008. *Listening to Battered Women: A Survivor-Centered Approach to Advocacy, Mental Health, and Justice*. Washington, DC: American Psychological Association.

Grych, John, and Sherry Hamby. 2014. "Advancing the Measurement of Violence: Challenges and Opportunities," *Psychology of Violence* 4 (4): 363–368.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Lapidus, Leonora. 2003. "Housing Crisis for Victims of Domestic Violence: Disparate Impact Claims and Other Housing Protection for Victims of Domestic Violence," *American University Journal of Gender Social Policy and Law* 11: 377–381.

Lehrner, Amy, and Nicole E. Allen. 2014. "Construct Validity of the Conflict Tactics Scales: A Mixed-Method Investigation of Women's Intimate Partner Violence," *Psychology of Violence* 4 (4): 477–490.

Mbilinyi, Lyungai. 2015. *The Washington State Domestic Violence Housing First Program: Cohort 2 Agencies Final Evaluation Report*. Seattle: Washington State Coalition.

Messing, Jill Theresa, Allison Ward-Lasher, Jonel Thaller, and Meredith E. Bagwell-Gray. 2015. "The State of Intimate Partner Violence Intervention: Progress and Continuing Challenges," *Social Work* 60 (4): 305–313.

Netto, Gina, Hal Pawson, and Cathy Sharp. 2009. "Preventing Homelessness Due to Domestic Violence: Providing a Safe Space or Closing the Door to New Possibilities?" *Social Policy and Administration* 43 (7): 719–735.

Pavao, Joanne Jennifer Alvarez, Nikki Baumrind, Marta Induni, and Rachel Kimerling. 2007. "Intimate Partner Violence and Housing Instability," *American Journal of Preventive Medicine* 32 (2): 143–146.

- Rollins, Chiquita, Nancy E. Glass, Nancy A. Perrin, Kris A. Billhardt, Amber Clough, Jamie Barnes, Ginger C. Hanson, and Tina L. Bloom. 2012. "Housing Instability Is as Strong a Predictor of Poor Health Outcomes as Level of Danger in an Abusive Relationship: Findings From the SHARE Study," *Journal of Interpersonal Violence* 27 (4): 623–643.
- Roschelle, Anne R. 2008. "Welfare Indignities: Homeless Women, Domestic Violence, and Welfare Reform in San Francisco," *Gender Issues* 25 (3): 193–209.
- Schechter, Susan. 1982. *Women and Male Violence: The Visions and Struggles of the Battered Women's Movement*. Boston: South End Press.
- Sokoloff, Natalie J., and Ida Dupont. 2005. "Domestic Violence at the Intersections of Race, Class, and Gender: Challenges and Contributions to Understanding Violence Against Marginalized Women in Diverse Communities," *Violence Against Women* 11 (1): 38–64.
- Stark, Evan. 2009. *Coercive Control: The Entrapment of Women in Personal Life*. Oxford, United Kingdom: Oxford University Press.
- Straus, Murray A., Sherry L. Hamby, Sue Boney-McCoy, and David B. Sugarman. 1996. "The Revised Conflict Tactics Scales (CTS2) Development and Preliminary Psychometric Data," *Journal of Family Issues* 17 (3): 283–316.
- Sullivan, Cris M., Heather D. Bomsta, and Margaret A. HacsKaylo. 2016. "Flexible Funding as a Promising Strategy To Prevent Homelessness for Survivors of Intimate Partner Violence," *Journal of Interpersonal Violence*. DOI: 0886260516664318.
- Sullivan, Cris M., and Tamkea Gillum. 2001. "Shelters and Other Community-Based Services for Battered Women and Their Children." In *Sourcebook on Violence Against Women*, edited by Claire M. Renzetti, Jeffrey L. Edleson, and Raquel Kennedy Bergen. Thousand Oaks, CA: SAGE Publications: 247–260.
- Sullivan, Cris M., and Linda Olsen. In press. "Adapting the Housing First Model for Domestic Violence Survivors," *Housing and Society*.
- Sylvestre, John, Geoffrey Nelson, and Tim Aubry, eds. 2017. *Housing, Citizenship, and Communities for People With Serious Mental Illness: Theory, Research, Practice, and Policy Perspectives*. Oxford, United Kingdom: Oxford University Press.
- U.S. Conference of Mayors. 2006. *A Status Report on Hunger and Homelessness in American Cities: A 23-City Survey*. Washington, DC: U.S. Conference of Mayors.
- Zorza, Joan. 1991. "Woman Battering: A Major Cause of Homelessness," *Clearinghouse Review* 25: 421–430.
- Zweig, Janine M., Kathryn A. Schlichter, and Martha R. Burt. 2002. "Assisting Women Victims of Violence Who Experience Multiple Barriers to Services," *Violence Against Women* 8 (2): 162–180.

U.S. Commentary: Implications From the Family Options Study for Homeless and Child Welfare Services

Patrick J. Fowler

Washington University in St. Louis

Abstract

The Family Options Study provides an unprecedented opportunity to investigate the troubling link between family homelessness and child maltreatment. The rigorous design uses multiple methods to probe the impact of housing interventions on family preservation and reunification and the underlying mechanisms. Results show that ending homelessness keeps families together; however, once separated, families continue to struggle to reunify with children. Permanent housing subsidies represent a more efficient approach to promoting family stability among homeless families compared with temporary housing with supportive services. Results introduce a new phase of family homeless research, practice, and policy; further investigation must consider broad scale approaches to keep families affordably housed in inclusive communities that protect child safety and well-being.

Homelessness and Child Welfare

The link between family homelessness and child separation represents an ongoing concern for practice and policy. Well-designed observational studies estimate that approximately one in five families entering homeless shelters for the first time subsequently receive child welfare services (Culhane et al., 2003; Park et al., 2004). A similar proportion of families rely on informal placements with family and friends to shield children and adolescents from homelessness (Cowan et al., 2002; Gubits et al., 2016). Moreover, a connection exists between child welfare involvement and homelessness in the transition to adulthood; one study estimates that one-half of young adults seeking homeless services had prior contact with the child protective services (Putnam-Hornstein et al., 2017).

The child welfare system struggles to keep up with demand for housing assistance. National estimates suggest approximately one in six families investigated for child abuse and neglect experience housing problems that threaten child safety (Fowler et al., 2013), whereas more than one-fourth of

adolescents previously in contact with child welfare report housing insecurity and homelessness in the transition to adulthood (Fowler, Marcal, et al., 2017; Shah et al., 2017). Thus, the child welfare system annually serves more than 400,000 families whose housing threatens child separation and discharges 7,500 adolescents immediately at risk for homelessness. Housing assistance provided through the child welfare system tends to be minimal and fails to promote stability (Fowler, Taylor, and Rufa, 2011). Given the negative life course implications associated with child maltreatment and homelessness, a need exists for effective and wide-scale approaches that address housing problems among vulnerable families (Fowler, Farrell, et al., 2017).

The Family Options Study provides an unprecedented opportunity to test theory that directly informs practice and policy. A limited and inconclusive body of evidence guides service delivery for homeless, child welfare-involved families. An experimental evaluation (Fowler, et al., in preparation) of the Family Unification Program (FUP)—an initiative that provides permanent rent subsidies for child welfare-involved families whose housing threatens child separation—randomly assigned families to receive housing case management plus FUP vouchers ($n = 89$) or housing case management alone ($n = 89$). Findings demonstrate a significant yet small reduction of foster placement 3 years after random assignment in Chicago, Illinois (Fowler et al., in preparation); however, caregiver-reported child maltreatment remains high over time regardless of treatment condition (Fowler and Schoeny, 2017a). Quasi-experimental evaluations of FUP provide conflicting results on whether the intervention promotes family stability (Pergamit, Cunningham, and Hanson, 2017). Study design limitations, including small and local samples with limited comparison groups, preclude clear recommendations for child welfare programming.

Similarly, a dearth of evidence exists for services received through the homeless system. A relatively small experiment of homeless mothers with mental health problems in Westchester, New York, shows little impact on keeping families together (Shinn et al., 2015). The study randomly assigned mothers to time-limited case management plus immediate access for permanent housing vouchers or to homeless services that typically led to permanent housing. Although some benefits emerged on family and child well-being, no effects emerged on caregiver report of separation from children over a 2-year followup (Shinn et al., 2015). Evidence also provides some support for *housing first* approaches, whereby homeless families use and retain permanent housing in the community without engaging in traditional treatment requirements (Samuels et al., 2015). A quasi-experimental study of chronically homeless families showed that provision of permanent housing, plus intensive case management focused on harm reduction, promotes reunification with children removed from the home compared with similar families in homeless shelters ($n = 172$), and rates are comparable with similar families receiving public housing ($n = 172$; Rog et al., 2017). The studies illustrate the feasibility of housing first without requiring additional child welfare involvement for homeless families; however, the evidence fails to address a number of key questions on how best to protect the safety and well-being of children experiencing homelessness.

The rigorous design of the Family Options Study advances understanding of the impact of housing assistance on stabilizing homeless families. The multisite randomized controlled trial of more than 2,000 families entering homeless shelters disentangles the impact of housing assistance from plausible alternative explanations, such as prior experiences of homelessness and child welfare involvement. Multiple intervention arms enable simultaneous testing of theoretically different

housing approaches compared with homeless services as usual. Two arms test housing first approaches with long-term (subsidy) versus short-term (rapid re-housing) rental assistance, whereas a third treatment (transitional housing) first makes housing conditional on engagement in services. Essentially, the Family Options Study represents six experiments in 12 different settings that probe the intensity of services needed to promote stability. Adequate sample size enables detection of even small group differences, as observed in prior research. Repeated assessments of caregiver and family functioning at 20 and 37 months following random assignment, with high retention, inform the sustainability of effects and enable examination of potential mechanisms that account for intervention effects. Moreover, availability of child welfare records for 5 of the 12 sites provides another important indicator of family separation. The well-implemented experiment enables a series of tests regarding the theory of homelessness and connection with family separation.

Homelessness and Family Preservation

The Family Options Study demonstrates partial support for housing first approaches to addressing the connection between homelessness and keeping families together. Permanent housing subsidies reduce family separations; 10 percent of families referred for permanent housing had at least one child removed from home within the past 6 months at the 20-month followup compared with 17 percent of families receiving homeless services as usual (Gubits et al., 2015). Likewise, only 2 percent of caregivers referred for subsidies reported a child placed in fostercare, whereas 5 percent of families referred for services as usual did. Thus, permanent housing reduces the average probability of family separations by approximately three-fifths during the first 1 1/2 years following intervention compared with services as usual. The differences between treatment conditions diminish over time; families referred for subsidies continued to experience similar rates of separation at the 37-month followup, whereas the rate of separation among families referred for homeless services as usual dropped to comparable levels between conditions (Gubits et al., 2016). In addition, child welfare administrative records show no differences in the probability of fostercare placement across the 37-month followup between families referred for subsidies and services as usual (Gubits et al., 2016). No other differences emerge between housing interventions and services as usual, or between housing interventions, on family separation.

Exploratory analyses provide additional insight into the effects of housing on family stability. To help understand the drivers of treatment effects, Shinn, Brown, and Gubits (2017) examined whether family characteristics account for differences in child out-of-home placement at the 20-month followup. Findings show that reductions in parent-child separations correlated with permanent housing relate with decreases in homelessness, caregiver alcohol abuse, domestic violence, and economic disadvantage. However, improvements in housing stability represent the primary driver of treatment differences on family separation. Although these analyses fall outside of the experiment and do not infer causality, the evidence provides further support for housing first approaches toward addressing family separation associated with homelessness. Permanent housing without supportive services improves multiple dimensions of family functioning, especially reductions in homelessness that are intimately linked with family separations.

Interpretation of the Family Options Study findings on family preservation requires careful consideration. Foremost, permanent housing subsidies promote keeping families together, and appear to do so through housing stability. This finding is important in context of positive effects on other outcomes associated with subsidies. Caregivers exhibit reductions on psychological distress and exposure to domestic violence that endure at 20- and 37-month followups, whereas children on average also demonstrate improvement in psychosocial well-being (Gubits et al., 2016, 2015). Thus, children who remain in a home with permanent housing subsidies experience better family settings, on average, that are key for healthy child development. Although it remains untested whether housing and family stability account for improvements in child well-being, the evidence supports housing first approaches for keeping families together.

Restricted effects on family stability dampen enthusiasm for permanent housing as a solution to co-occurring child maltreatment. Small effects are observed on prevention of out-of-home placements at the 20-month followup. One way to interpret the effect is to consider randomly picking a family referred for permanent subsidies; the probability the family has a lower chance of child separation compared with a randomly chosen family referred for services as usual falls between 0.52 and 0.54, which is slightly better than a 50-50 chance. Moreover, the effects decrease to 50-50 at 37 months, likely because so many families receiving services as usual rehouse. The effects are similarly small in studies that focus on homeless families at greater risk for child welfare involvement (Fowler et al., in preparation; Shinn et al., 2015). Permanent housing addresses some but not all risks for family separation.

Risks for out-of-home placement associated with homelessness likely occur at multiple levels. Shinn et al. (2017) demonstrated the importance of family-level risks on separation, especially experiences of homelessness. Mixed methods explore systems-level risks for child welfare involvement associated with entering homeless shelters (Mayberry et al., 2014; Rodriguez and Shinn, 2016). Studies probe the fishbowl hypothesis that suggests contact with homeless and associated services adds scrutiny to parenting, which in turn triggers child welfare investigations (Park et al., 2004). Qualitative interviews with 80 caregivers from 4 of the 12 sites at the time of random assignment suggest perceptions of scrutiny across different housing interventions (Mayberry et al., 2014). Caregivers express the challenges in maintaining family routines and rituals when parenting in unstable accommodations, and parents feel covertly and overtly scrutinized by others. Several parents report direct threats of child welfare referral from program staff and family, even with permanent housing subsidies.

Using linked child welfare and homeless services administrative records from the Family Options Study site in Alameda County, California, Rodriguez and Shinn (2016) estimated the probabilities associated with child welfare involvement before and after random assignment ($n = 289$). Rates of referrals to child protective services increased sharply after entry into homeless shelters, and the increases in referrals appear marginally greater ($p < .10$) among African-American families compared with White families, whereas no differences exist in substantiated accounts of child maltreatment. Substantiated reports of abuse receive ongoing child welfare services, and thus findings suggest homeless shelter staff unnecessarily refer African-American children for child welfare services. The findings point to potential racial bias within the homeless system.

However, it is difficult to tease apart the role of bias associated with homeless service usage. Substantiation represents a poor indicator of child maltreatment because it often reflects penal code instead of true risk (Kohl, Jonson-Reid, and Drake, 2009). Moreover, careful studies show that overrepresentation of minorities in the child welfare system better reflects concentrated poverty than bias (Drake et al., 2011). A similar process could explain referral rates from homeless shelters; homeless shelters may disproportionately serve families living in areas of concentrated poverty that make families more vulnerable (Fowler and Schoeny, 2017b). Study findings on family reunification also raise concerns about the home environments of formerly homeless families.

Homelessness and Family Reunification

The Family Options Study shows that most children placed out of home at the time of random assignment fail to return home. Nearly one-fourth of caregivers report separations from children at randomization with less than 1 percent said to be in fostercare (Abt Associates, 2013). Approximately one-third of these families reunite at 20 months (Gubits et al., 2015), which increases slightly to two out of five by 37 months (Gubits et al., 2016). No differences exist in family reunification at either followup for housing interventions compared with services as usual, nor between housing interventions. Thus, permanent housing subsidies reduce new parent-child separations compared with homeless services, and rehousing generally helps some but not all homeless families reunify.

It remains unclear why so many children fail to return home after families rehouse. The stress of out-of-home placements before and during homelessness may strain family dynamics. Prior research shows inadequately housed families with a child removed from home immediately following child welfare investigation exhibit greater barriers (Fowler, Taylor, and Rufa, 2011), whereas temporary housing interventions that provide extensive supports fail to reduce caregiver and family distress (Gubits et al., 2016, 2015). It may be that housing alleviates stress without sufficiently repairing parent-child relationships to enable reunification. Moreover, the Family Options Study does not assess the well-being of separated children, and any potential benefits for child safety and well-being remain unknown. Housing may be necessary but not sufficient to reunify families.

More intensive interventions that pair housing with appropriate supportive services may be necessary for families with children already removed from home. A recent quasi-experiment of permanent housing plus intensive case management with homeless families promotes family reunification over 12 months compared with families receiving homeless services as usual (Rog et al., 2017). Fortunately, an ongoing federal demonstration will greatly inform the utility of permanent supportive housing models applied with child welfare-involved homeless families. Through a federal and philanthropic partnership, five communities across the United States receive funding to develop and test local interagency collaborations that connect chronically homeless families with housing and trauma-informed case management (HHS, 2012). Careful evaluations test hypotheses that intensive services promote preservation and reunification, whereas null effects or potentially increases in child welfare involvement would point to needed corrections to theory underlying housing interventions.

Lack of reunification could also reflect constraints of ongoing poverty. The Family Options Study shows little appreciable differences in household earnings after entry into shelters, regardless of housing interventions (Gubits et al., 2016, 2015). Many families continue to struggle meeting basic needs. Although not directly tested by the Family Options Study, another experiment that randomized inadequately housed families involved in the child welfare system to permanent housing subsidies shows that families remain in low-income neighborhoods marked by concentrated disadvantage and community violence (Fowler and Schoeny, 2017b). Moreover, qualitative interviews suggest caregivers feel considerable pressure to move into the first available unit to avoid homelessness and child separation, which often results in less than ideal accommodations (Rufa and Fowler, in press). Families may not perceive situations as sufficiently stable for return of separated children.

Implications for Future Policy and Research

Findings from the Family Options Study introduce a next phase of homelessness practice and research. Results clearly demonstrate how to end family homelessness: provide immediate access to long-term affordable housing. Moreover, stable housing prevents informal out-of-home placements but provides little support after families separate. Evidence emphasizes the importance of initiatives to make affordable housing accessible for low-income households.

Expansion of permanent housing subsidies represents an immediate opportunity to stabilize families and protect millions of vulnerable children. The demand for rental assistance greatly exceeds the supply, with long waitlists in nearly every community. Investments that expand coverage to more families offer cascading benefits on family and child well-being. The Family Options Study indicates that prioritization of homeless families that expedites connection to permanent housing provides a cost-neutral opportunity to improve the social safety net.

The continuing strain on the child welfare system associated with homelessness indicates an ongoing need to emphasize prevention. Systemic approaches to end homelessness need to reconsider approaches to keeping at-risk families housed (Fowler, Farrell, et al., 2017). Unaffordable housing markets generate constant demand for housing assistance that strains families and undermines service delivery (Fowler, Farrell, et al., 2017). The housing first approaches tested in the Family Options Study triage resources to the neediest households and provide little guidance for early intervention. Homelessness prevention represents a complementary approach that provides time-limited supports to families at imminent risk for homelessness (Cunningham et al., 2015). Programs vary by community but emphasize partnerships between local homeless providers and community-based agencies to stabilize families, including child welfare agencies. By keeping families housed, prevention efforts relieve pressure on homeless services and child welfare.

Fortunately, rigorous evaluations demonstrate the effectiveness of homelessness prevention on reducing rates of homelessness at the household and community levels. An experiment conducted in New York City indicates households randomly assigned for homelessness prevention ($n = 150$) use shelters at significantly lower rates more than 2 years later compared with families referred for community services as usual ($n = 145$; Rolston et al., 2013). Although significant differences fail to emerge on child welfare services, limited sample size and poor targeting of services may obscure

potential benefits (Shinn et al., 2013). Moreover, a quasi-experiment that leverages staggered rollout of the programming across New York City neighborhoods shows reductions in community-level rates of family homelessness after introduction of homelessness prevention (Goodman, Messeri, and O'Flaherty, 2016). Similar effects on homelessness appear in a rigorous evaluation conducted with all households using homelessness prevention in Chicago (Evans, Sullivan, and Wallskog, 2016).

The promising results of homelessness prevention hold especially important implications for sustainable efforts to end homelessness and associated risks for child maltreatment. The approach appears scalable; an investment of \$1.5 billion enabled local homeless provider networks to develop prevention programs and serve nearly 1 million people within 2 years during the Great Recession (Cunningham et al., 2015). Communities now face challenges in maintaining programs with local resources after the end of federal funding. Findings from the Family Options Study indicate limited impact of rapid rehousing and transitional housing interventions for already homeless families. Homelessness prevention could provide a needed alternative to stabilize families and address the intersection between housing and child welfare services.

Housing policies that promote affordable and equitable housing represent another necessary component for keeping families housed and children safe. Despite the promise of permanent housing and prevention, expanded access to housing may reduce household emotional and financial strain without limiting exposure to violence and concentrated disadvantage; these community-level risks continue to drive rates of child maltreatment (Coulton et al., 2007). A need exists for local, state, and federal policy initiatives that ensure access to preferred housing options for low-income families. Evidence supports the use of tools such as inclusionary zoning, low-income rental assurance for landlords, tax incentives to provide low-income housing, and expansion of housing subsidies (for example, Freeman and Schuetz, 2017; O'Flaherty, 2011). Flexible policies that create incentives for the provision of affordable housing and disincentives for poor quality housing promise to strengthen communities.

In sum, the Family Options Study definitively illustrates that timely provision of affordable housing ends homelessness and strengthens families. Research and practice now must identify efficient strategies that address overwhelming demand for housing assistance among low-income and marginalized families. Homeless services focused only on housing will fail to protect children. Investments in permanent housing and homelessness prevention represent complementary approaches, whereas public and programmatic policies must incentivize the provision of affordable housing in preferred communities. The Family Options Study represents the beginning of the end of family homelessness and associated child maltreatment.

Author

Patrick J. Fowler is an associate professor in the George Warren Brown School of Social Work at Washington University in St. Louis.

References

- Abt Associates. 2013. *Interim Report: Family Options Study*. Washington, DC: U.S. Department of Housing and Urban Development.
- Coulton, Claudia J., David S. Crampton, Molly Irwin, James C. Spilsbury, and Jill E. Korbin. 2007. "How Neighborhoods Influence Child Maltreatment: A Review of the Literature and Alternative Pathways," *Child Abuse and Neglect* 31: 1117–1142.
- Cowal, Kirsten, Marybeth Shinn, Beth C. Weitzman, Daniela Stojanovic, and Larissa Labay. 2002. "Mother-Child Separations Among Homeless and Low-Income Mothers: A Five-Year Birth Cohort Study," *Journal of Sociology and Social Welfare* 30: 79–95.
- Culhane, Jennifer F., David Webb, Susan Grim, Stephen Metraux, and Dennis Culhane. 2003. "Prevalence of Child Welfare Services Involvement Among Homeless and Low-Income Mothers: A Five-Year Birth Cohort Study," *Journal of Sociology and Social Welfare* 30: 79–95.
- Cunningham, Mary, Martha R. Burt, Molly Scott, Gretchen Locke, Larry Buron, Jacob Klerman, Nicole Fiore, and Lindsey Stillman. 2015. *Homelessness Prevention Study: Prevention Programs Funded by the Homelessness Prevention and Rapid Re-Housing Program*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/sites/default/files/pdf/HPRP-report.pdf>.
- Drake, Brett, Jennifer M. Jolley, Paul Lanier, John Fluke, Richard P. Barth, and Melissa Jonson-Reid. 2011. "Racial Bias in Child Protection? A Comparison of Competing Explanations Using National Data," *Pediatrics* 127: 471–478.
- Evans, William N., James X. Sullivan, and Melanie Wallskog. 2016. "The Impact of Homelessness Prevention Programs on Homelessness," *Science* 353: 694–699.
- Fowler, Patrick J., Derek S. Brown, Michael Schoeny, and Saras Chung. In preparation. Homelessness in the Child Welfare System: A Family-Based Randomized Trial To Assess the Impact of Permanent Housing on Foster Care Placements and Costs.
- Fowler, Patrick J., Anne F. Farrell, Katherine E. Marcal, Saras Chung, and Peter S. Hovmand. 2017. "Housing and Child Welfare: Emerging Evidence and Implications for Scaling Up Services," *American Journal of Community Psychology* 60: 134–144.
- Fowler, Patrick J., David B. Henry, Michael Schoeny, John Landsverk, Dina Chavira, and Jeremy J. Taylor. 2013. "Inadequate Housing Among Families Under Investigation for Child Abuse and Neglect: Prevalence From a National Probability Sample," *American Journal of Community Psychology* 52: 106–114.
- Fowler, Patrick J., Katherine E. Marcal, Jinjin Zhang, Orin Day, and John Landsverk. 2017. "Homelessness and Aging Out of Foster Care: A National Comparison of Child Welfare-Involved Adolescents," *Children and Youth Services Review* 77: 27–33.
- Fowler, Patrick J., and Michael Schoeny. 2017a. "Permanent Housing for Child Welfare-Involved Families: Impact on Child Maltreatment," *American Journal of Community Psychology* 60: 91–102.

———. 2017b. “The Family Unification Program: A Randomized-Controlled Trial of Housing Stability,” *Child Welfare* 94: 167–187.

Fowler, Patrick J., Jeremy J. Taylor, and Anne Rufa. 2011. “Evaluation of Housing Support in Child Welfare: The Impact on Family Preservation,” *Child Welfare* 90: 107–126.

Freeman, Lance, and Jenny Schuetz. 2017. “Producing Affordable Housing in Rising Markets: What Works?” *Cityscape* 19: 217–236.

Goodman, Sarena, Peter Messeri, and Brendan O’Flaherty. 2016. “Homelessness Prevention in New York City: On Average, It Works,” *Journal of Housing Economics* 31: 14–34.

Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Kohl, Patricia L., Melissa Jonson-Reid, and Brett Drake. 2009. “Time To Leave Substantiation Behind: Findings From a National Probability Study,” *Child Maltreatment* 14: 17–26.

Mayberry, Lindsay S., Marybeth Shinn, Jessica G. Benton, and Jasmine Wise. 2014. “Families Experiencing Housing Instability: The Effects of Housing Programs on Family Routines and Rituals,” *American Journal of Orthopsychiatry* 84: 95–109.

O’Flaherty, Brendan. 2011. “Rental Housing Assistance for the 21st Century,” *Cityscape* 13 (2): 127–145.

Park, Jing M., Stephen Metraux, Gabriel Brodbar, and Dennis P. Culhane. 2004. “Child Welfare Involvement Among Homeless Families,” *Child Welfare* 83 (5): 423–436.

Pergamit, Michael, Mary Cunningham, and Devlin Hanson. 2017. “The Impact of Family Unification Housing Vouchers on Child Welfare Outcomes,” *American Journal of Community Psychology* 60: 103–113.

Putnam-Hornstein, Emily, Bridgette Lery, Jonathan Hoonhout, and Susana Curry. 2017. “A Retrospective Examination of Child Protection Involvement Among Young Adults Accessing Homelessness Services,” *American Journal of Community Psychology* 60: 44–54.

Rodriguez, Jason M., and Marybeth Shinn. 2016. “Intersections of Family Homelessness, CPS Involvement, and Race in Alameda County, California,” *Child Abuse and Neglect* 57: 41–52.

Rog, Debra J., Kathryn A. Henderson, Laurel M. Lunn, Andrew L. Greer, and Mei Ling Ellis. 2017. “The Interplay Between Housing Stability and Child Separation: Implications for Practice and Policy,” *American Journal of Community Psychology* 60: 114–124.

- Rolston, Howard, Judy Geyer, Gretchen Locke, Stephen Metraux, and Daniel Treglia. 2013. *Evaluation of the Homebase Community Prevention Program: Final Report*. Bethesda, MD: U.S. Abt Associates. <http://www.abtassociates.com/AbtAssociates/files/cf/cf819ade-6613-4664-9ac1-2344225c24d7.pdf>.
- Rufa, Anne K., and Patrick J. Fowler. In press. "Housing Decisions Among Homeless Families Involved in the Child Welfare System," *Housing Policy Debate*.
- Samuels, Judith, Patrick J. Fowler, Andrea Ault-Brutus, Dei-In Tang, and Katherine E. Marcal. 2015. "Time-Limited Case Management for Homeless Mothers With Mental Health Problems: Effects on Maternal Mental Health," *Journal of the Society for Social Work and Research* 6 (4): 515–539.
- Shah, Melissa F., Qinghua Liu, J. Mark Eddy, Susan Barkan, David Marshall, David Mancuso, Barbara Lucenko, and Alice Huber. 2017. "Predicting Homelessness Among Emerging Adults Aging Out of Foster Care," *American Journal of Community Psychology* 60: 33–43.
- Shinn, Marybeth, Scott R. Brown, and Daniel Gubits. 2017. "Can Housing and Service Interventions Reduce Family Separations for Families Who Experience Homelessness?" *American Journal of Community Psychology* 60: 79–90.
- Shinn, Marybeth, Andrew L. Greer, Jay Bainbridge, Jonathan Kwon, and Sara Zuiderveen. 2013. "Efficient Targeting of Homelessness Prevention Services for Families," *American Journal of Public Health* 103 (S2): S324–S330.
- Shinn, Marybeth, Judith Samuels, Sean N. Fisher, Amanda Thompkins, and Patrick J. Fowler. 2015. "Longitudinal Impact of a Family Critical Time Intervention on Children in High-Risk Families Experiencing Homelessness: A Randomized Trial," *American Journal of Community Psychology* 56: 205–216.
- U.S. Department of Health and Human Services (HHS). 2012. *Partnerships To Demonstrate the Effectiveness of Supportive Housing for Families in the Child Welfare System*. HHS-2012-ACF-ACYF-CA-0538. Washington, DC: U.S. Department of Health and Human Services. https://ami.grantsolutions.gov/files/HHS-2012-ACF-ACYF-CA-0538_0.htm.

U.S. Commentary: Effects of Housing Subsidies on the Well-Being of Children and Their Families in the Family Options Study

Aletha C. Huston
University of Texas at Austin

Introduction

Homelessness and housing instability are bad for children and families—a fact that is obvious to any reasonable individual but is also well documented by social science research. Children who are homeless or who move often have poorer school achievement and more behavioral problems than comparably poor children who live in more stable housing situations (Buckner, 2008; Mehana and Reynolds, 2004). Public policy solutions for these problems are less obvious, but the Family Options Study provides some clear guidance about what does and does not work. In the Family Options Study (Gubits et al., 2016), the effects of four types of policy interventions on homeless families with children were compared in a random assignment design. Families were followed for 3 years after the interventions were introduced.

The big message from this study is that permanent, reliable, and consistent housing subsidies promote housing stability for homeless families and their children's well-being. Short-term housing programs, whether they are rapid re-housing or project-based housing with social services, have nearly no long-term effects on housing stability or on the many measures of families' physical, social, and economic well-being included in the study when compared with the usual practices of shelters for the homeless.

Subsidies Reduced Chaos in Families' Lives

One of the many reasons that homelessness is so harmful is the chaos it creates in every aspect of family life. Chaos includes instability or turbulence (frequent changes in the people and places that surround the child) and the disorganization that often results from crowded and noisy housing, clutter, and lack of family routines for school, work, sleep, and meals. Children and adults living in chaotic circumstances cannot predict or control their environments. They literally do not know what to expect or when to expect it. A child might come home from school to find the family possessions on the street. Parents in chaotic environments suffer from the stress of trying to cope with

unpredictable circumstances, which reduces the time and energy available to be supportive and nurturing to their children. Although poor families experience more chaos than affluent families do, the effects of chaos on children go beyond the overall impacts of poverty. Poverty leads to limited resources, but chaos results in lack of access to the resources that are available (Wachs and Evans, 2010).

In the Family Options Study, permanent housing subsidies (hereafter, SUB) reduced some of the chaos in the families' environments. SUB reduced instability in children's lives—it increased not only the continuity of housing, but also the stability of childcare and school and some indicators of family stability. Families receiving long-term subsidies spent less time being homeless and had fewer moves during the 3-year followup period. The SUB policy reduced the number of childcare settings and the number of schools that children attended but did not affect the likelihood that children would be in Head Start¹ or center-based preschools. By contrast, the other two policies tested may have increased instability because families were often required to move after short-term interventions. Finally, SUB reduced the likelihood that children would be separated from their parents (for example, placed in foster care) in the first 20 months of the study. The one exception was that SUB parents were more likely to have separated from their spouse or partner at the 3-year followup. Given the fact that SUB reduced experiences of domestic violence at both time periods, it is quite possible that having their own housing enabled some women to separate from abusive men, an outcome that could represent an improvement for children.

SUB reduced disorganization. In that group, housing was less crowded than housing used by members of the other groups. They were more likely to live in their own home or apartment and less likely to be doubled up than were other groups in the study.

Long-Term Subsidies Improved Children's Physical and Social Environments

Many of the effects of homelessness and poverty on children are a result of parents' levels of stress and their efforts to cope with difficult circumstances (McLoyd, 1998). In the SUB group, parents were less psychologically stressed, less economically stressed, and, after 20 months, less likely to use or abuse alcohol or drugs. Parents were less likely to experience violence from an intimate partner. This change is especially noteworthy because, at baseline, one-half of the parents reported having experienced intimate partner violence. As a result of these changes, family conflict may have been less frequent, and parents were probably more likely to offer positive care and support to their children.

Homelessness and poverty also affect children through unsafe and dangerous physical environments (Evans, 2006). Children in low-income families are at risk for exposure to lead, air pollution, and other toxins. In an earlier study of housing vouchers for families on welfare, subsidies enabled families to live in housing with better physical quality and in better neighborhoods (Abt

¹ Head Start is the free federally funded program to provide high-quality early education for preschool children from low-income families. Center-based childcare is more likely to improve young children's school-related skills than are other forms of early childcare.

Associates, 2006). Unfortunately, the Family Options Study does not include neighborhood quality, but at the 20-month followup, SUB families were less likely than the other groups to live in poor-quality housing; no difference was found after 3 years.

Long-Term Subsidies Improved Children's Well-Being

Given the beneficial environmental changes produced by the SUB policy, it was surprising that virtually no effects were found on any aspect of child development or child functioning at the 20-month followup. The picture was different at 36 months. Children in SUB families were better off in several respects, although not on all the indicators measured. Changes in cognitive skills and behavior take time.

Behavior and emotional well-being improved. SUB led to significant improvements in children's behavior. Children in the SUB group had fewer behavior problems, more prosocial behavior, and fewer sleep problems than those children in the control condition. This change is consistent with the idea that introducing stability and some level of organization into young lives reduces anxiety, aggression, and negative behavior, and the increase in prosocial behavior (for example, being helpful, considerate, and kind) is particularly noteworthy. Too often, we look only for deficiencies in behavior when studying children in poverty, but increases in positive behavior reflect improved well-being and better ability to succeed in many social settings.

Achievement did not change. SUB parents reported more positive attitudes to their children's preschool and school experiences, and children were less likely to move from school to school, but no effects were found on cognitive skills of young children or school achievement for those of elementary and high-school age. In fact, the young children in SUB families scored lower than those in the control families on a test of executive functioning. Why? Although national data show clearly that homeless children perform less well in school than comparable housed children, even those who are poor, that does not mean that an intervention to prevent homelessness will alter the achievement trajectories that began early in life.

The wide age range (1 to 17 years old) in the sample analyzed may have obscured impacts on children of different ages. Interventions to counteract the conditions of poverty have more positive effects on younger than on older children, and housing experiences probably have different effects on younger children than on adolescents. In the Moving to Opportunity experiment, for example, moves to neighborhoods with relatively low poverty levels before age 13 had positive effects on adult attainment, but moves during adolescence had slightly negative effects (Chetty, Hendren, and Katz, 2016). The same pattern appears consistently in random control trials testing various employment-based welfare and anti-poverty policies—positive effects on achievement for younger children but neutral or slightly negative effects on adolescents (Morris et al., 2009). For example, the New Hope intervention, which provided wage supplements, healthcare, and childcare supports to parents who worked full time, led to lasting positive effects, including better school performance, more positive behavior and less problem behavior for younger children (roughly ages 1 to 10 years old when the intervention began), but not for those who were already adolescents when their parents entered the program (Huston et al., 2011). At a more distal level, family income during the preschool years predicts adult attainment better than family income after age 6 (Huston and Bentley, 2010).

It is not surprising, then, that virtually no impacts were discovered on adolescents' self-reports. By the time children reach early adolescence, their school trajectories are well established. If they have not gained basic skills or kept up with their grade level, it is very difficult to catch up. Behavioral patterns are somewhat more malleable, but are nevertheless well established by early adolescence.

At the other end of the age continuum, theory and research on the first few years of life suggest that very young children may be especially vulnerable to chaos and disorganization in their environments. Recall that more than one-half of families had a child under age 3 and nearly 10 percent of the women were pregnant when they were recruited at homeless shelters. Both social and cognitive development in the early years are strongly affected by the inconsistency of people and places experienced in homeless families. For all these reasons, examining the Family Options Study data for children in different age ranges would yield a better understanding of the impacts on young people.

Children were healthy and food sufficiency improved. It is encouraging that the great majority of children in all groups had access to regular healthcare and were in good or excellent health. When recruited in the homeless shelters, most children were receiving Medicaid, and about one-third of the families received Special Supplemental Nutrition Program for Women, Infants, and Children, or WIC, benefits. Most families in all treatments were receiving Supplemental Nutritional Assistance Program, or SNAP, benefits 3 years after random assignment, yet one-half of control families still reported food insecurity. SUB families were less likely to be food insecure; their children were more apt to get enough to eat.

Understanding Homelessness in the Context of Deep Poverty

Stepping back from the specifics of the data, this study provokes some thoughts about families living in extreme poverty in the United States and extant theories underlying public policies designed to help them. Homelessness is the extreme end on a continuum of poverty. Most of the families had long histories of being poor and struggling with housing. Many had doubled up or became homeless before reaching the shelter where they were recruited for the study; some of them were homeless, in fostercare, or both as children. They had spotty histories of paid work, and the median family income was well below one-half of the poverty threshold for a family of three in 2011. These families were in deep, chronic poverty.

“Self-sufficiency” is a long road for poor families. Many policymakers and policy analysts promote the goal of self-sufficiency when designing programs for low-income people. They seem to believe that a set of incentives and sanctions will lead adults to find jobs that can fully support themselves and their families within a relatively short time period. The underlying theory appears to be that, with a little temporary help, parents in these families have the personal and community resources to earn a reasonable living. That idea guided the community-based rapid re-housing and, to some extent, project-based transitional housing components of the Family Options Study, but none of the programs (or the control “usual” treatment) led to jobs or incomes that were remotely sufficient to get families out of poverty or to eliminate their need for housing subsidies, food assistance, and other public programs.

Theories assuming that extremely poor families can be self-sufficient with only a short-term boost in housing subsidies or some short-term services in a supervised setting turned out to be wrong. The families continued to need supplements to the cost of housing; 60 percent of the people in the SUB group used the subsidies for the full 3 years. This result is not surprising considering the depth and duration of poverty in which they had lived.

Many of the parents faced numerous barriers to gaining and keeping employment. A minority had felony convictions or a history of rental problems, and they all had family responsibilities. Close to 40 percent had a disability or a family member with a disability. About one-half had very young children, and nearly 10 percent were pregnant when they were recruited into the study. Most were single mothers, and a disproportionate number were African-American or Latina. One-half of the parents had experienced domestic violence, and a substantial number reported serious mental health problems. It is unclear what work supports were available to them. Only about one-fourth were receiving Temporary Assistance for Needy Families, or TANF, and no information was provided about childcare assistance or availability. However, most preschool children were not enrolled in Head Start or childcare centers at the followup. Similarly, more than one-third lacked a high school degree or its equivalent, and it is likely that most parents had minimal job-related skills. In short, the odds of most parents becoming self-sufficient financially in the short term were low.

Implications for Public Policy

The big message emerging from the Family Options Study is that long-term permanent housing subsidies help to stabilize families and to improve the lives and future prospects of their children. Children in homeless families face risks above and beyond those posed by poverty. A policy that enables families to have stable housing helps to reduce chaos and churning—the constant turnover of places and people in children’s lives. As a consequence, children’s behavior is less troubled and more positive, and parents are less stressed. Child well-being should be an important policy goal in its own right, but it is also reasonable to believe that these improvements in behavior and family well-being will have economic benefits.

Some policymakers may be concerned that the parents receiving long-term supplements worked fewer hours and were less likely to be in educational programs than the control group, but the earnings and family incomes of the two groups did not differ significantly. I would argue that the benefits of the policy for family well-being outweigh the drawbacks of very slight differences in work, making the investment in the program worthwhile.

Author

Aletha C. Huston is the Priscilla Pond Flawn Regents Professor Emerita of Child Development in the Department of Human Development and Family Sciences at the University of Texas at Austin, College of Natural Sciences.

References

- Abt Associates. 2006. *The Effect of Housing Choice Vouchers on Welfare Families: An Experimental Evaluation*. Bethesda, MD: Abt Associates.
- Buckner, John C. 2008. "Understanding the Impact of Homelessness on Children: Challenges and Future Research Directions," *American Behavioral Scientist* 51: 721–736.
- Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence From the Moving to Opportunity Experiment," *American Economic Review* 106 (4): 855–902.
- Evans, Gary W. 2006. "Child Development and the Physical Environment," *Annual Review of Psychology* 57 (1): 423–451.
- Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.
- Huston, Aletha C., and Alison C. Bentley. 2010. "Human Development in Societal Context," *Annual Review of Psychology* 61 (7): 7.1–7.27.
- Huston, Aletha C., Anjali E. Gupta, Jessica T. Walker, Chantelle J. Dowsett, Sylvia R. Epps, Amy E. Imes, and Vonnie C. McLoyd, 2011. "The Long-Term Effects on Children and Adolescents of a Policy Providing Work Supports for Low-Income Parents," *Journal of Policy Analysis and Management* 30 (4): 729–754.
- McLoyd, Vonnie C. 1998. "Socioeconomic Disadvantage and Child Development," *American Psychologist* 53: 185–204.
- Mehana, Magida, and Arthur J. Reynolds. 2004. "School Mobility and Achievement: A Meta-Analysis," *Children and Youth Services Review* 26 (1): 93–119.
- Morris, Pamela A., Lisa A. Gennetian, Greg J. Duncan, and Aletha C. Huston. 2009. "How Welfare Policies Affect Child and Adolescent School Performance: Investigating Pathways of Influence With Experimental Data." In *Welfare Reform and Its Long-Term Consequences for America's Poor*, edited by James P. Ziliak. New York: Cambridge University Press: 255–289.
- Wachs, Theodore D., and Gary W. Evans. 2010. "Chaos in Context." In *Chaos and Its Influence on Children's Development: An Ecological Perspective*, edited by Gary W. Evans and Theodore D. Wachs. Washington, DC: American Psychological Association: 3–13.

Lessons for Conducting Experimental Evaluations in Complex Field Studies: Family Options Study

Michelle Wood
Abt Associates

Anne Fletcher
U.S. Department of Housing and Urban Development

The views expressed in this article are those of the authors and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. government.

Abstract

This article examines lessons learned from the implementation of the Family Options Study, a multisite randomized controlled trial designed to measure the relative impacts of various housing and services interventions for homeless families. The study team addressed several challenges in executing the experimental design adopted for the study, including identifying interventions for study, selecting study sites, addressing ethical considerations, and implementing random assignment. The article highlights four key lessons that emerged as the study team addressed these challenges that can inform future experimental research. First, the study illustrates the importance of flexibility in research design when studying existing assistance models rather than testing a demonstration program in which the interventions are uniformly executed. Second, site selection can be a lengthy iterative process that requires creativity and adaptations to local constraints. Third, the Family Option Study shows that ethical considerations can and must drive experimental research design decisions, particularly when studying programs that serve vulnerable programs. Finally, the study design demonstrates that participant intake and random assignment can be adjusted to account for varying program rules, while still allowing for rigorous impact analysis.

Introduction and Study Objectives

The U.S. Department of Housing and Urban Development (HUD) sponsored the Family Options Study to develop evidence to inform policy decisions about the best ways to resolve homelessness for families with children. The study was also intended to help community planners and local practitioners examine homeless assistance systems to optimize limited resources for assisting families.

When the Family Options Study launched in 2008, previous research was limited by lack of direct comparisons of different housing and services interventions for homeless families. Prior studies had explored the characteristics and needs of homeless families and some observational studies contributed lessons about program implementation and outcomes for families who use specific types of programs. To our knowledge, no evidence existed prior to the Family Options Study about the relative effectiveness of alternative types of programs on the outcomes of interest, including housing stability, family preservation, self-sufficiency, and adult and child well-being. A systematic review of literature on family homelessness completed before the results of the Family Options Study were available highlighted the paucity of rigorous studies and lack of evidence about intervention effects. The author of that review noted, “substantial limitations in research underscore the insufficiency of our current knowledge base for ending homelessness” (Bassuk et al., 2014: 457).

This article examines lessons learned from the implementation of the Family Options Study. The study team addressed several challenges in executing the experimental design adopted for the study, including identifying interventions for study, selecting study sites, addressing ethical considerations, and implementing random assignment. The strategies applied to overcome these challenges can inform future experimental research.

Why Random Assignment?

Considerations of feasibility and ethics led initial study designers at HUD to favor an observational, rather than an experimental study design. An observational study would examine outcomes for the families who participated in the different types of assistance selected for study. The results of an observational study would describe the program models and outcomes for families who participated but would not produce unbiased estimates of the relative effects of the alternative types of assistance. In an observational study, people choose to enroll in a particular intervention or are assigned by program staff. These processes result in different interventions being applied to groups of people who may differ from one another in both observed and unobserved ways.

An alternative to an observational study design is experimental design, which uses random assignment to determine which type of assistance is offered to which families. The strength of the random assignment design is that it produces equivalent families receiving different intervention models, isolating the effect of the interventions separate from all other factors. Randomized controlled trials are viewed as the gold standard in policy research and the preferred method for program evaluation (Orr, 1999). Although observational and quasi-experimental study designs suffer from selection bias, experimental study designs minimize systematic differences between

experimental groups that could bias impact estimates. In large samples, the preexisting differences, both observed and unobserved, among two or more groups that are randomly assigned approach zero. Thus, significant differences in group outcomes will reflect the influence of the interventions. Results from an experimental evaluation therefore offer decisionmakers strong evidence about the causal effects of policy interventions. Designing and executing an experimental evaluation, particularly in a heterogeneous service delivery environment with a highly vulnerable population, can pose challenges however.

In particular, carrying out the experimental design adopted for the Family Options Study posed four specific challenges that are the focus of this article. First, the study was not conducted as a demonstration that tested a new assistance model, therefore the study team and HUD needed to define the housing and service interventions to examine based on the kinds of assistance operating when the study was implemented. This approach offered several advantages, but also some disadvantages, and required adaptations along the way. Second, the random assignment plan imposed several requirements on the service providers and their communities that agreed to participate in the study. The study team had to employ an iterative process to identify communities and determine which met the study selection criteria. The team then engaged in extensive negotiations to encourage candidate sites to participate and to develop intake procedures that complied with the study's requirements. Third, research ethics considerations were of particular concern given the vulnerability of the study population. The approaches used to address ethical considerations offer lessons for future experimental research with similar populations. Finally, the Family Options Study faced substantial challenges implementing random assignment given the variation in homeless assistance program availability and participant eligibility requirements. Despite these challenges, the study team believed that a randomized impact study could be achieved and that the substantial advantages of experimental evidence far outweighed the added complexity and the implementation adjustments that were needed to carry out the study design.

Defining the Housing and Service Interventions To Examine

Varying implicit theories and hypotheses about the different types of assistance offered to families experiencing homelessness, coupled with a lack of evidence about program effects, left policymakers uncertain about which type of assistance to prioritize. HUD chose to examine existing models of housing assistance to homeless families, rather than experimenting with new models. Studying existing models offered several advantages. For example, the study results, although not obtained from a representative sample of communities, are likely to apply to homeless services as actually implemented in communities. Further, unlike demonstration programs, existing programs have already demonstrated their acceptability in communities and would be easier to expand if proven effective. On the other hand, because the study examined a program already operating, the study team had to define the core features of each model as commonly operated and to recruit programs that fit those definitions. Participating service providers agreed to continue providing the services with their existing resources but to allocate services to families on the basis of random assignment.

The study team and HUD canvassed communities across the country to assess the range of homeless and housing assistance available to families who experience homelessness. This review

highlighted variation in the level and time period for rental subsidies, presence and type of social services, type of housing and setting, and program requirements. The study team and HUD defined interventions for the study based on the distinguishing features hypothesized to affect family outcomes, prevalence of alternative models, and feasibility of securing adequate numbers of program slots to provide sample sizes needed to conduct the study.

What Kinds of Assistance Did the Homeless Assistance System Provide When the Family Options Study Was Initiated?

The 1987 McKinney-Vento Homeless Assistance Act¹ established the foundation for the current homeless assistance systems. The act funded HUD to develop more sophisticated services than were previously available for people experiencing homelessness (Burt et al., 2002). Shelter conditions improved, and many programs added services to address homeless families' barriers to maintaining housing. The McKinney-Vento Act was amended in 2009 to consolidate former homeless assistance grant programs into the Continuum of Care (CoC) program. Both the amended act and the CoC Program regulations formally define the CoC, a group of representatives from organizations within a specified geographic area, and the CoC responsibilities, including homeless services system design, resource allocation, and system management.

CoC program-funded homeless assistance programs have residential and service components but are generally grouped according to their residential component rather than the types of nonresidential supportive services offered. The residential programs that were part of the homeless assistance system in 2008, when the Family Options Study began, were categorized as emergency shelter, transitional housing, or permanent supportive housing. Emergency and transitional housing programs are time limited and rely on families moving on to stable housing situations, either subsidized or unsubsidized. Permanent supportive housing programs offer permanent rent subsidies coupled with intensive services but are available to families only when a parent has a qualifying disability.

Emergency Shelters

Emergency shelters typically serve as the first response to homelessness. Shelters for families frequently are open 24 hours per day and provide shelter in congregate settings with communal sleeping and eating spaces. In some emergency shelters, however, families may have individual rooms or apartments. Shelters vary in the amount and type of services they provide. Some shelters provide only basic services (such as meals, showers, clothing, and transportation), whereas other shelters provide basic services plus case management and referrals to specialized services (such as employment services or mental health and substance abuse treatment). Throughout the country in 2013 (shortly after enrollment was completed), 118,104 emergency shelter beds were available for people in homeless families (HUD, 2013).

Transitional Housing

Transitional housing programs offer homeless families places to stay or rent subsidies with supportive services for longer periods, generally 6 to 24 months. Often families are referred to transitional

¹ Pub. L. 100-77. 101 Stat. 482, 42 U.S.C. § 11301 et seq. July 22, 1987.

housing from emergency shelter when shelter workers determine they need more intensive or longer-term assistance and meet eligibility criteria. Transitional housing programs may be rooms or apartments offered to several families in the same building, termed *project-based* transitional housing, or PBTH. Sometimes the housing is in clustered or scattered locations where the program maintains the lease and program participants must leave on completion of the program. This model is referred to as *scattered-site* transitional housing. Sometimes the housing is in scattered locations where families rent their own apartments with temporary financial assistance from the program and where they can stay after the transitional program ends, paying rent on their own. This model is called *transition in place*.² The 2013 Annual Homeless Assessment Report (AHAR) reports a total of 101,843 transitional housing beds for people in homeless families. This number represents the sum of beds in project-based programs and scattered-site programs. Separate counts for the number of beds in the three types of transitional housing—project based, scattered site, and transition in place—do not exist. As expected, AHAR data show that stays in transitional housing are longer than those in emergency shelter. The median value for a family's stay in transitional housing during a single year was 151 nights in 2013 compared with 32 nights for emergency shelter (HUD, 2013).³

As is the case for emergency shelters, services provided through transitional housing vary substantially from one program to another. Services offered in transitional housing may be more intensive than the services offered in shelters and may include case management and referrals, benefit acquisition and retention, education and employment services, and mental health and substance abuse treatment. Transitional housing programs may sometimes include family reunification, childcare, and children's services, as well. The goal of most transitional housing programs is to help families resolve psychosocial challenges or housing barriers so that they will be able to maintain stable housing at program completion. Some transitional housing programs also help families to access mainstream housing assistance funded outside the homeless assistance system.

Permanent Supportive Housing

Permanent supportive housing programs are often similar to the more independent forms of transitional housing, except that no time limits are associated with the housing or services. Permanent supportive housing programs funded by HUD require participants to have severe and persistent chronic disabilities to be eligible. Housing models in permanent supportive housing vary from scattered site apartment units or single-family homes to small-scale group homes to multiunit developments, such as those funded through the Low-Income Housing Tax Credit Program.

The study team initially proposed studying an intervention consisting of programs that offered a long-term subsidy in conjunction with social services to provide a test of the incremental effects of services compared with long-term subsidy without services. However, information gathered during site recruitment showed that this model of assistance for families was primarily funded by HUD, thus including this intervention would have required most communities in the study to develop a new model that served families who did not have a qualifying disability. The experimental design

² Burt (2006) offered a thorough description of the range of transitional housing programs.

³ AHAR uses a 1-year reporting period; therefore, PBTH stays that last longer than 1 year are truncated. As a result, the actual median length of stay is likely higher than the figure reported.

would also have required communities to make this more resource-intensive assistance available to all families randomly assigned to receive it, even if the families were not perceived to need it. In essence, including this model would have reallocated this type of assistance from families who were perceived to need it, something that the team concluded would have been difficult to achieve and would have posed ethical concerns. The judgment of the study team was that a long-term subsidy plus services intervention was unlikely to be implemented by CoCs nationally on a large scale for all families. As a result, findings about the effects of this type of assistance would be less relevant for policy than findings about the relative effects of the other interventions that were available to families in shelter.

The team also noted that most HUD expenditures for services were made through the transitional housing program model. Thus, project-based transitional housing intervention was an appropriate way to test the impact of services expenditures. Because of all these factors, the study team modified the initial study design to omit a long-term subsidy plus services intervention. Families eligible for permanent supportive housing programs in study sites where that type of assistance was available were excluded from the study and referred to permanent supportive housing programs instead. If families were eligible for permanent supportive housing, but none existed, or there were no openings in the community, they were offered the opportunity to enroll in the study.

Short-Term Rental Subsidies

The Homelessness Prevention and Rapid Re-Housing Program (HPRP), funded through the American Recovery and Reinvestment Act (ARRA) of 2009,⁴ provided short-term rent subsidies to families experiencing homelessness.⁵ ARRA was signed into law during the design phase of the Family Options Study and infused communities across the country with a significant amount of new resources. Initially, the study team did not plan to investigate short-term rent subsidies, as prior to HPRP; this type of assistance was not available on a large scale. However, when HPRP entered the homeless assistance landscape on a large scale, the study team and HUD modified study plans to include this type of assistance as one of the active interventions while site recruitment was in progress. The advent of HPRP also contributed to the team's decision to omit the long-term rent subsidy plus services intervention initially contemplated.

The short-term subsidies that the Family Options Study analyzed typically lasted up to a maximum of 18 months, with quarterly recertification of eligibility. These short-term rent subsidies provided some services, usually limited to assistance locating housing, maintaining tenancy, and increasing self-sufficiency. The goal was to offer each family the level and length of assistance needed only until the family could pay market rent. Toward that goal, subsidies were individually structured and could be shallow (that is, not necessarily reducing families' housing costs to as low as 30 percent of income) and short term in duration.

Short-term rent subsidies continue to be offered as a component of rapid re-housing programs that operate with funding from HUD's CoC program and Emergency Solutions Grants program, the U.S. Department of Veterans Affairs' Supportive Services for Veteran Families Program, and other

⁴ Pub. L. 111-5. 123 Stat. 115. February 17, 2009.

⁵ In Boston, a state program that offered assistance very similar to HPRP provided the short-term rent subsidies.

sources. Current requirements allow for up to 24 months of assistance and permit communities to set the period for recertification. Rapid re-housing programs also offer case management and short-term financial assistance in addition to short-term rent subsidies.

Long-Term Rental Subsidies

Federally funded long-term rent subsidies for low-income households are operated outside the homeless assistance system, but families experiencing homelessness when the Family Options Study was initiated might, if on waiting lists for this type of assistance, have gained access to a long-term rent subsidy. This type of housing assistance is typically provided in one of three ways. First, some households live in housing developments that are owned and operated by public housing agencies (PHAs) and are known as public housing. Second, some households receive housing assistance through the Housing Choice Voucher (HCV) program. The HCV program provides tenant-based rent subsidies that families can use to rent market-rate housing in the community. Third, housing assistance is sometimes provided in privately owned housing developments for which HUD provides rental assistance through contracts with private owners. All three of these forms of housing assistance (1) are indefinitely renewable, as long as the family remains eligible, and (2) have a common benefit structure that caps families' monthly costs for rent and utilities at approximately 30 percent of income. This form of housing assistance is often referred to as a deep rent subsidy.⁶ In an experimental study of the effects of vouchers for a sample of households on voucher waiting lists, Mills et al. (2006) showed positive effects of voucher assistance in reducing and preventing homelessness. Evidence from that study, coupled with open questions about the extent to which families who experience homelessness could qualify for voucher assistance, lease up with a voucher according to regular HCV program rules, and maintain housing assistance without specialized services, made this type of assistance an important focus for the Family Options Study. To include long-term rent subsidies in the study, one or more PHAs in each community had to commit up to 50 turnover vouchers to the study. More specifically, PHAs were required to amend their administrative plans to establish a limited preference for study families who were randomly assigned access to this type of assistance through the study.

Interventions Studied

Taking into account the types of assistance available at the time the study was initiated, the Family Options Study examined three active interventions distinguished by the duration of rental assistance, housing setting, and services offered, contrasted with the usual care available in the community. Priority access to particular types of programs meant that families were given immediate access to a program slot reserved for them in a particular program.

- **Long-term rent subsidy (SUB)**, in which families have priority access to a long-term rental subsidy for housing in the conventional market, typically an HCV. Priority access to long-term rental subsidy could include assistance to find a unit that qualified for the HCV program but no other supportive services.

⁶ The term *deep rent subsidy* distinguishes this type of housing assistance from the shallow rent subsidy provided in housing developments funded by the Low-Income Housing Tax Credit Program or the HOME Investment Partnerships Program.

- **Short-term rent subsidy (CBRR)** in which families have priority access to a rent subsidy lasting up to 18 months. The short-term subsidies were paired with limited, housing-focused services to help families find and rent conventional, private-market housing.
- **Project-based transitional housing (PBTH)**, in which families have priority access to a temporary, service-intensive stay, lasting up to 24 months, in a project-based transitional housing facility owned or managed by the transitional housing program. The project-based transitional housing included comprehensive social services such as assessments, job-related services, counseling, substance use treatment, and family- and child-oriented services.⁷
- **Usual care (UC)**, in which families do not have priority access to any particular program. Usual care consisted of whatever housing or services a family accessed in the absence of immediate referral to the programs offered to families assigned to the other interventions. Because all families were recruited from emergency shelter, usual care typically consisted of continued stays in the emergency shelter until families were able to make other arrangements on their own or with the assistance of service providers. Families in shelters also received case management and services similar to those received by families assigned to the project-based transitional housing intervention.

Study Sample

National data show that nearly one-fourth of families leave emergency shelter in 1 week or less, and the study was intended to examine the experiences of families who were not able to resolve a housing crisis in this period.⁸ The intensive interventions analyzed in the study were not deemed appropriate for families with transitory needs that could be resolved with shelter stays lasting fewer than 7 days, thus the study recruited families who had stayed in emergency shelter for 7 or more days. Altogether, 2,282 families enrolled in the Family Options Study in 12 communities.

Identifying and Recruiting Sites

The experimental study design made fairly substantial demands on providers in the local homeless assistance system. In addition, broad participation among the emergency shelters, rapid re-housing programs, transitional housing programs, and PHAs in a community was necessary to provide a rigorous test of the interventions in the experimental framework. The study team thus had to negotiate with a large group of stakeholders and program providers to gain the cooperation of the entire homeless assistance service system in a community—the definition of a site. The team then negotiated with each provider to develop participant intake, random assignment, and program referral procedures that fit with the random assignment design needed to produce experimental evidence, while also addressing program staff concerns to the greatest extent possible. This section describes the iterative process used to select study sites and the adjustments made when initial expectations changed.

⁷ Transition-in-place transitional housing shares many of the same characteristics as short-term rental subsidies. Therefore, the study did not refer families to transition-in-place type transitional housing programs in order to provide a stronger contrast between the offer of project-based transitional housing and short-term rent subsidies provided by rapid re-housing programs.

⁸ Data, which are from the 1-year period from October 1, 2011, to September 30, 2012, show that, in 2012, 25 percent of people in families stayed 7 days or fewer in emergency shelter, 53 percent stayed from 1 to 6 months, and 10 percent stayed more than 6 months in the reporting period (HUD, 2013).

Initial plans anticipated 12 sites and a sample of up to 2,400 families enrolled during a 12-month period, evenly allocated by site and random assignment arm.⁹ After the study interventions were defined and short-term rent subsidies replaced the long-term rent subsidy plus services intervention, the study team proposed expanding the sample to 3,000 families. However, about 6 months after enrollment began, the team reduced the enrollment target to 2,550 based on the actual numbers of families who entered emergency shelter in the participating sites. The study team and HUD also agreed to extend the enrollment period to 16 months in order to maximize enrollment. Altogether, 2,282 families enrolled in the study after extending the enrollment period.

Recruiting 12 communities in which it was feasible to implement the study proved to be a lengthy and difficult process. During the initial study design, the study team developed five site-selection criteria. These preliminary site selection criteria are—

1. The four interventions had to be operational in the community or it had to be feasible to develop the interventions.
2. A sufficient number of homeless families had to seek assistance from the emergency shelters and remain in shelter for at least 7 days, such that it would be possible to enroll 200 to 250 families in about 1 year.
3. Communities had to have a mechanism to identify families who entered emergency shelter and remained for 7 or more days.
4. The homeless assistance community, including CoC decisionmakers, other key stakeholders, and homeless assistance and PHAs had to be willing to participate in the study and to comply with random assignment as the method for determining which assistance families would receive after the shelter stay.
5. The geography of the site had to be such that it was feasible to conduct participant intake, baseline data collection, and random assignment efficiently.

The objective of site selection was to obtain a set of 12 communities in which it appeared feasible to conduct the study and that, taken together, provided a reasonable cross section of the range of characteristics in which homeless service systems operated.¹⁰ Although the sites were not a nationally representative sample of communities, the 12 communities selected to participate provided a good deal of variation in housing market conditions, population, and labor markets characteristics. Gubits et al. (2015) provides information about the characteristics of the sites.

Achieving the established enrollment targets meant that the study had to be conducted in the largest CoCs in the country. Using data from Housing Inventory Count Reports about the number

⁹ The initial specifications for the study's sample size (2,400) and number of sites (12) were included in the request for proposals for the Family Options Study, published in May 2008. During the study design phase, HUD and the study team considered increases to the sample size (to a total of 3,000) as design options were reviewed and modified. In 2011, the final sample size was reduced to 2,550.

¹⁰ For the most part, the study defined a site as an entire local homeless assistance system. Most sites covered a single metropolitan area or urban county that encompassed one or more CoCs and metropolitan areas. The exception was the Connecticut site that included multiple CoCs in the state covering the Bridgeport and New Haven regions, as well as other smaller metropolitan areas.

of emergency shelter units for families and information about typical lengths of stay in emergency shelter from AHAR, the study team estimated that, to enroll 200 families within 1 year, a CoC would need at least 295 families to enter emergency shelter during the course of a year. The team identified 60 CoCs that appeared to meet this threshold (HUD, 2013). Extensive conversations with stakeholders in these communities reduced the number of potential communities to 45 that were targeted for more intensive recruitment efforts in early 2009.

Some communities that had sufficient numbers of families entering emergency shelter were not good candidates for the study for other reasons. For example, some communities with large numbers of families entering shelter, such as New York City, operated service delivery systems that did not align with the study design. In New York City, emergency shelters operated as transitional housing programs and would not have allowed for a test of transitional housing that was intended in the design. Other communities were phasing out emergency shelter in favor of a diversion model with direct placement in transitional housing. Still others did not operate publicly funded transitional housing, and alternative assistance models did not comport with the definition of transitional housing established for the study. Some large CoCs operated decentralized, dispersed systems that would have proven difficult to coordinate study enrollment and referrals. The team found it challenging to locate communities in which all the necessary components were present or could be developed. The team conducted more extensive data collection and recruitment with the 45 communities, reducing the number of potential sites further to 19 that were targeted for final recruitment. The team conducted visits to each of these communities and ultimately selected 10 sites in which to begin enrollment in fall 2010. External challenges, including effects of the severe economic recession at the time that site recruitment took place in 2009 and 2010, and the quick startup of HPRP in 2009 made it difficult for some communities to agree to participate. Two final sites were secured in 2011. The biggest lesson from site recruitment was the need for flexibility, as well as the need for multiple visits and conversations with a large number of stakeholders.

During site recruitment, the study team spoke with the CoC and local homeless system leaders to collect information about the number of families experiencing homelessness and the types of homeless assistance programs that were operating. By definition, all sites were assumed to have usual care. The study team initially sought to select sites that had all three of the other defined interventions (long-term subsidy, short-term subsidy, and project-based transitional housing) available. In late 2009, when it became clear that it would not be possible to secure the target number of sites and enrollment unless this requirement was relaxed, the study team and HUD agreed to include some sites in which only two of the other defined interventions were available. In the end, three sites did not offer all four interventions. Atlanta and Baltimore did not offer the long-term subsidy, and Boston did not offer project-based transitional housing. This compromise was necessary to ensure that an adequate sample of families could be enrolled, and the team adjusted the random assignment process to allow for fewer than four randomization options, while preserving the integrity of each pairwise comparison (see the section titled *Implementing Random Assignment*).

The study team met with staff who operated emergency shelters, transitional housing programs, and rapid re-housing programs to collect information about the structure of programs, type of housing offered, duration and depth of rent subsidies offered, eligibility requirements, services offered, and other features of program operations. The team used this information to identify

programs that conformed to the intervention definitions established for the study. The team also met with local PHAs to secure agreements for voucher set-asides. HUD officials were instrumental in negotiations with the PHAs and also secured administrative funding for vouchers that PHAs issued to families in the study.

The study team selected programs based on an independent assessment of the nature of the housing and services offered, rather than on programs' self-descriptions. The challenge in this endeavor was that shorthand terms used by practitioners and researchers, such as transitional housing or supportive housing, do not necessarily reflect uniform approaches. In reality, as Rog and Randolph (2002) noted, even when programs of a particular "type" are specifically chosen for study, their characteristics can overlap considerably with other programs that nominally use an approach labeled in a different way. Therefore, during initial site selection, the team visited potential study programs (and interviewed some by phone), collected data on their operations, and completed an assessment for each candidate program. This process was intended to ensure that programs conformed to the intervention definition and would provide consistency in program features across sites. The process the study team used to assess and categorize programs is similar to analyzing fidelity to a model, a practice commonly done when studying a demonstration program to ensure that a program is implemented as intended according to a specified model. The objective for the Family Options Study was to ensure that families who enrolled in the study would receive comparable levels of housing assistance and service support within an intervention regardless of site differences and that the rental assistance and services received would differ according to the intended contrasts. Given the number of programs and sites, some variation exists in implementation practices among the final set of 148 programs selected for the study. Gubits et al. (2015, 2013) described the assistance offered by programs in each site for each intervention. Although the study found some program-to-program variation, most notably in case management ratios, overall, the study team concluded that participating programs matched the definitions of the interventions and that the programs representing the interventions were distinct from each another in the ways intended in the study's design to allow for a test of long-term rent subsidies compared with short-term subsidies and the incremental effects of services.

Emergency shelters were the typical entry point for families in the homeless assistance system, and the emergency shelter was also the place where the Family Options Study recruited study participants. In each site, nearly all emergency shelters that served as the primary entry points to the homeless assistance system participated in the study. The study team developed agreements about the expected number of families who would enroll, approximate timeframe for enrollment, and expectations for all participating emergency shelters, transitional housing providers, rapid re-housing programs, and PHAs. The homeless assistance program providers in selected communities had to be willing commit program slots to families in the study and to comply with random assignment as the method of determining which families would be referred to their programs from participating emergency shelters. The study team codified these expectations in a site-specific memorandum of understanding and provided a modest stipend, up to \$20,000 (and contingent on meeting enrollment projections), to help offset the administrative burden of participation for the CoC and service providers.

Exhibit 1 shows the number of providers of each type of program that agreed to participate in the study at each site.

Exhibit 1**Study Sites—Number of Programs by Site and Intervention**

Site	CBRR	PBTH	SUB	UC
Alameda County	1	7	3	9
Atlanta	4	7	NA	4
Baltimore	2	5	NA	3
Boston	2	NA	1	8
Connecticut	2	3	3	10
Denver	1	3	2	5
Honolulu	6	7	2	6
Kansas City	5	3	1	3
Louisville	1	4	1	3
Minneapolis	1	2	1	1
Phoenix	1	4	2	4
Salt Lake City	1	1	2	1
Total	27	46	18	57

CBRR = priority access to community-based rapid re-housing. NA = not available at this site. PBTH = priority access to project-based transitional housing. SUB = priority access to permanent housing subsidy. UC = usual care.

Source: Family Options Study site recruitment data and program data

Ethical Considerations

The Family Options Study offers lessons for addressing ethical considerations when studying a highly vulnerable population staying in emergency shelter. Because observational studies do not attempt to alter which families receive different types of assistance, they typically do not raise ethical issues beyond voluntary participation and privacy and confidentiality of any data that are collected. Access to assistance in an observational study would follow customary practices—first come, first served, or case manager judgment about which families should receive which type of assistance. By contrast, an experimental study design often raises questions about the ethics regarding referrals to services in ways that might deviate from the best judgment of providers, and about assigning families to a usual care group that receives no special referral to any type of program.

To maintain the contrasts in program offers produced by random assignment, the study team attempted to obtain a good faith effort of emergency shelters and service providers to abide by the random assignment process for assigning families to assistance after the shelter stay. The study team attempted to obtain the shelter's agreement not to refer participants to, or provide them with, assistance that was inconsistent with their randomly assigned group. The study team also asked that emergency shelter staff not send families assigned to usual care to one of the tested active interventions. Some staff may not have abided by this request in all cases, and as reported in Gubits et al. (2016, 2015) families assigned to the usual care group used a variety of programs similar to those tested in the study.

The study also took several steps to mitigate ethical concerns raised by the random assignment design. First, enrollment in the study was voluntary, and the study team communicated clearly the voluntary nature of participation to all potential participants. All families were enrolled in the study from emergency shelter and all families were free to remain in shelter regardless of the result of random assignment. Thus, families assigned to usual care were not denied access to emergency shelter or any other programs and services they could access on their own without special offers

of assistance. Second, if families were already on waiting lists for other types of assistance when they entered emergency shelter, they were free to remain on those waiting lists and to accept any assistance that might be offered should it become available, regardless of their study assignment. Third, although families were encouraged to enroll in the program to which they were given priority access, they were not required to do so and were free to take up whatever type of assistance they might locate on their own. Fourth, the study did not impose embargoes on nonparticipating providers and did not ask participating providers to turn away families who found assistance on their own, even if the provider's services would be inconsistent with the participant's randomly assigned group. The study found that during the 3-year followup period, although families used a range of assistance, including assistance in conflict with their random assignment, program usage patterns were strongly influenced by random assignment.

Importantly, the study did not reduce the total number of families receiving homeless and housing assistance in a community. In fact, by offering access to long-term rent subsidies that would not typically have been available to families exiting shelter unless already on waiting lists, the study increased the availability of this type of assistance and enriched the set of programs available to the community as a whole.

The study team also addressed ethical considerations in designing intake and random assignment. The study procedures, including study descriptions, informed consent forms, and data collection instruments were reviewed by institutional review boards at Abt Associates and Vanderbilt University to ensure proper human subjects protections were in place. Prior to enrollment, the study team explained random assignment and the risks and requirements of study participation to potential volunteers. Altogether, a small number of families (13) chose not to enroll in the study.

Family Eligibility for Available Assistance

Program information gathered during site recruitment revealed that homeless assistance programs often targeted assistance to families with particular characteristics. The study team also learned that programs with different services models select the families they believe will benefit from those models. Programs in general were not willing to change eligibility requirements or screening in order to participate in the study. This discrepancy between family characteristics and program's eligibility requirements created a challenge for implementing the random assignment design, because not all families who stayed 7 or more days in emergency shelter would be accepted by the programs to which they might be referred after random assignment. For example, some programs imposed minimum income requirements and others required families to demonstrate sobriety, and others would accept only families with certain minimum incomes or who agreed to participate in mandatory services, or who met citizenship requirements. Still others required that families pass health tests such as tuberculosis testing or bed bug screening. The original plan was to randomly assign all families who consented to participate to one of the three active interventions or to usual care, so that all families would have a chance of assignment to the any one of the four groups. The study team was also concerned about the ethical implications that would arise from randomizing and referring families to programs that would not accept them. However, if families were assigned to programs that would not accept them (or to programs that did not have availability), it would

compromise the experiment and its capacity to detect relative effects of the interventions. To address this challenge, the study team developed pre-random-assignment screening procedures.¹¹

We collected each program's eligibility requirements and developed approximately 100 eligibility screening questions across all participating programs.¹² After informed consent but before random assignment, the study team administered the eligibility screening questions pertaining to programs that had openings, using automated procedures in the study's secure enrollment algorithm. The screener questions improved the likelihood that families would be eligible for the assigned intervention. An example of the type of question asked related to sobriety is—

Some programs will only accept families in which the head of household is clean and sober and who can demonstrate at least 30 days of sobriety. Would you like to be considered for programs with this requirement?

The pre-random-assignment screening relied on respondents' responses to questions about whether they wanted to be considered for programs with the designated requirements. The study team encouraged families to respond honestly to maximize the chances of being able to use the assistance that would be offered but did not attempt to verify responses. The study's informed consent contained this language to explain the purpose of the screening and to encourage candid responses.

Of course, you do not have to take any offer that you do not want. You will need to go through the normal application process at that program. The staff at the shelter and the housing program we offer you can help you with that application process. You should know that it is also possible that the housing program that we offer you will not accept you. You can help to reduce that possibility by answering all the questions honestly, so that the computer only looks for housing for which you are eligible.

After random assignment and referral to a program, families were required to complete the program's regular eligibility determination process, including, in some cases, criminal background checks, drug testing, and income verification. Some families were determined ineligible for a program after random assignment even after passing the prescreening conducted before random assignment.

The analysis plan adopted compensated for the fact that all families did not have all interventions available to them. All analyses were conducted between a pair of interventions, for example long-term subsidies versus usual care, and only families who were eligible for both interventions in a pairwise comparison and were randomized to one of them were included in the comparison. Hence, each comparison is as an experiment between two well-matched groups that differ only in the intervention to which they were assigned.¹³

¹¹ Families were not required to use the program to which the study gave them priority access. They were free to use the offered assistance or to make other arrangements. The study examines the programs that the families use and families' outcomes when offered different types of programs. It was important, however, to maximize the likelihood that families would be able to take up the offered assistance if they chose to do so; otherwise, the study would not provide a strong test of the offered assistance.

¹² See Gubits et al. (2013) for details about the eligibility questions.

¹³ Gubits et al. (2013) analyzed the baseline characteristics of the samples in the pairwise comparisons and verified the baseline equivalence of the groups.

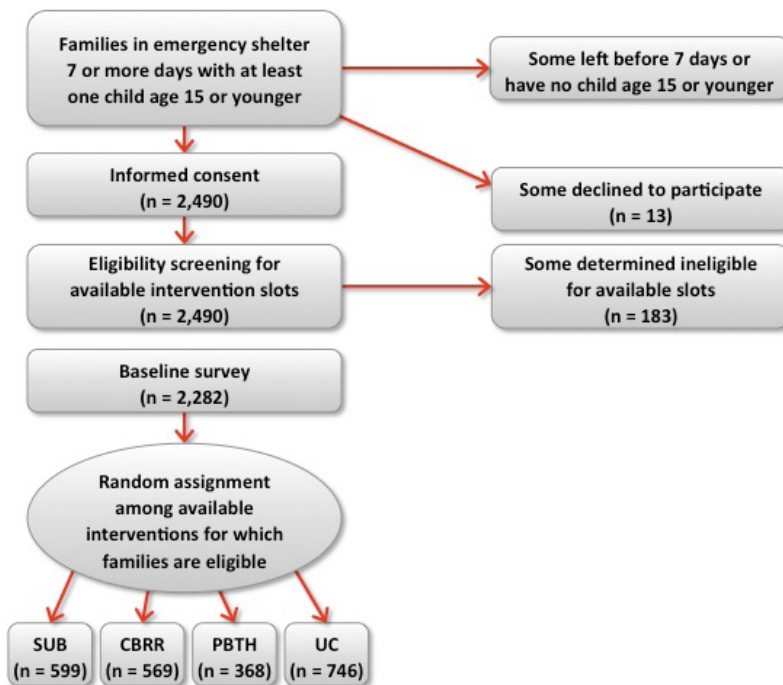
In addition to maximizing the likelihood that families would be able to use their assigned assistance, the results of pre-random-assignment eligibility screening produced important evidence about the match between the families in shelter and the assistance available in the homeless system in the participating sites. Shinn et al. (2017) explore this mismatch in detail. The study found that both availability of interventions and family eligibility were most constrained for project-based transitional housing programs. The short-term rent subsidies provided by rapid re-housing programs were more available than long-term subsidies but had slightly more restrictive eligibility requirements. Thus, it was more difficult for families to meet the eligibility requirements of programs that are ordinarily part of the homeless assistance system than for the programs not targeted to families who experience homelessness.

Implementing Random Assignment

The objective of random assignment was to establish groups of families who, at the time of enrollment, differed only in their assignment to different types of programs. The intake and random assignment process is illustrated in exhibit 2. The study defined a family as at least one parent and at least one child age 15 or younger. The reason for restricting families to those with at least one

Exhibit 2

Steps in the Random Assignment Process



CBRR = priority access to community-based rapid re-housing. PBTH = priority access to project-based transitional housing. SUB = priority access to permanent housing subsidy. UC = usual care.

child 15 or younger was, at the outset of the study, when the followup period was expected to be 18 months, to allow for 18 months of followup with at least one focal child who would not be expected to reach age 18 before the 18-month followup period ended. During the longer, 3-year followup, approximately 100 focal children in the sample had reached age 18 by the time of the followup survey data collection. In those cases, parents reported about these older focal children's experiences. Importantly, a pregnant woman without another child in the shelter was not considered a family for the purposes of the study nor was a parent if all children were separated from her at the time of intake.

If two parents were present in the family at baseline, the mother was preferred as the primary respondent and head of household for subsequent tracking, because in most cases children tend to follow the mother. In such cases, the study team attempted to track both parents, but the mother was the primary respondent for followup interviews. Participation in the study was voluntary. Families who met the eligibility criteria were offered the opportunity to be a part of the study. Families who agreed to participate were administered a survey, and then randomly assigned to one of the three active interventions or to usual care.

Enrollment and random assignment was a multistep process (exhibit 2). In most sites, multiple service providers offered the project-based transitional housing, short-term rent subsidies, and long-term rent subsidy programs examined in the study. Each week, a team of site monitors contacted all the emergency shelters and all program providers in each site by phone to determine whether families in shelter were eligible for study enrollment and whether participating programs had slots available to serve families who might be referred by the study. The site monitors recorded information about availability in the study's enrollment tracking data system. The study team developed customized random assignment software that tracked the availability of families in shelter, the availability of slots in programs and interventions, and indicated whether random assignment could be conducted at any time. An intervention was deemed available if at least one slot at one provider of that intervention in the site was available at a given time.

Usual care was always available in all sites, but other interventions were not always available. For example, project-based transitional housing programs were only available when a vacancy existed or was about to become available in one of the participating programs. In some sites, short-term rent subsidies were not always available because of funding limitations in the rapid re-housing programs. PHAs that provided the long-term rent subsidies through turnover in their regular HCV program had only a designated number of vouchers available each month, so at times vouchers were not available. Without weekly monitoring of availability, the study team might have assigned families to interventions for which it would have taken several months for a slot to become open.

After an intervention was determined available, the interviewer asked the family the eligibility screening questions that pertained to the programs available at the time. A family was considered eligible for a particular intervention if the household head's responses to the prescreening questions showed that the family met the eligibility requirements for at least one provider of the intervention that currently had an available slot.

To undergo random assignment, initially a family needed to be eligible for at least two available interventions in addition to usual care. The study team relaxed this requirement about half way through the enrollment period in order to maximize enrollment. After that point, families had to be eligible for at least one intervention in addition to usual care.¹⁴

This approach to random assignment resulted in each family having a *randomization set* defined as the set of interventions to which it was possible for a family to be assigned, considering both the availability of the intervention *and* the assessed eligibility of the family. Each family had one of seven possible randomization sets.

1. {PBTH, SUB, CBRR, UC}.
2. {PBTH, SUB, UC}.
3. {PBTH, CBRR, UC}.
4. {SUB, CBRR, UC}.
5. {PBTH, UC}.
6. {SUB, UC}.
7. {CBRR, UC}.

The randomization set of each family determines the pairwise comparisons in which the family is included. A family is included in the pairwise comparisons of its assigned intervention with the other interventions in its randomization set. For example, families assigned to the PBTH intervention with randomization set {PBTH, SUB, UC} are included in these two pairwise comparisons—PBTH versus UC and SUB versus PBTH.

The composition of the pairwise comparisons also means that the analysis samples (or groups of families representing the interventions) differ for each comparison. Consider for example the SUB versus UC comparison. In the entire study, 746 families were randomly assigned to the usual care group. However, only 540 of those families also had the SUB intervention available to them as a randomization option. Therefore, only those 540 usual care families are included in the SUB versus UC comparison. All 599 families randomly assigned to the SUB group had usual care available to them when they were randomized, so they are all part of the SUB-versus-UC comparison sample. Therefore, the *full* sample would include a total of 1,139 families (540 UC families and 599 SUB families). However, the *analysis* sample includes only those families who responded to the followup surveys. Exhibit 3 shows sample sizes for each of the six pairwise comparisons based on the response to the 37-month followup survey. As shown in the second column, titled SUB versus UC, the 3-year impact analysis sample includes 501 SUB and 395 UC who had the SUB intervention available as a randomization option and who responded to the followup survey.

¹⁴ This change allowed for two-way random assignment and was made to maximize opportunities to enroll families in the study. Altogether, 183 of the screened families were not eligible for any available interventions besides usual care. These families were not enrolled in the study.

Exhibit 3**Sample Sizes in the Six Pairwise Comparisons for the 3-Year Impact Analysis**

Assigned Intervention	SUB Versus UC	CBRR Versus UC	PBTH Versus UC	SUB Versus CBRR	SUB Versus PBTH	CBRR Versus PBTH
SUB	501	—	—	362	215	—
CBRR	—	434	—	290	—	180
PBTH	—	—	293	—	201	184
UC	395	434	259	—	—	—
Total	896	868	552	652	416	364

CBRR = priority access to community-based rapid re-housing. PBTH = priority access to project-based transitional housing. SUB = priority access to permanent housing subsidy. UC = usual care.

Note: Sample sizes are numbers of families who responded to the 37-month followup survey.

Source: Family Options Study 37-month followup survey

Most families did not have all four options available to them at the time of random assignment. Of the 2,282 families enrolled in the study, 264 families had two randomization options, 1,544 families had three randomization options, and 474 had all four randomization options available.

Gubits et al. (2016) provided details about the impact estimation methods, covariates, weighting, adjustment for multiple comparisons, and construction of outcomes variables. The approach provided findings about the relative impacts of the interventions on housing stability, family preservation, adult well-being, child well-being, and self-sufficiency 3 years after random assignment.

The study also examined the costs of the programs offered to families in the study and the total costs incurred by families in each pairwise comparison during the 3-year followup period. Information on the relative costs of the active interventions and usual care is a crucial complement to findings about their relative impacts. To assess the relative costs, the study analyzed the cost per month of each type of program and the overall cumulative cost of the housing and service programs families in each assignment group actually used during the 20- and 37-month study periods. Gubits et al. (2016) provided details about the methods used to collect and analyze intervention costs. The study did not attempt to monetize other costs or benefits, for example, the cost of foster care placements.

Policy Questions Answered by the Study

In the 3 years after random assignment, a substantial number of families did not use the program to which they were given priority access, and some used other programs. The full experimental sample for a given intervention collectively shows how different forms of housing assistance are used when families are given priority access to one particular program type while simultaneously having the freedom to use other forms of assistance available in their communities. Including all the families randomly assigned to the usual care group similarly reveals the range of programs used when no priority access is provided. The kinds of programs that the usual care families accessed would continue to exist in communities, even with federal or local prioritization of one particular intervention or another. Thus, the full-sample comparisons between randomly assigned interventions—known as *intention-to-treat*, or ITT, impact estimates—provide the best guide to

policymakers in a complex world. All this said, evidence of the effects of a particular program type on families who actually use that approach (for example, the effect of short-term rent subsidies on the families who use that assistance compared with equivalent families who do not use the approach would have high value to the homeless assistance field. The study is unable to isolate the effects of a particular program type on those families who actually use the program, compared with equivalent families who do not use the program. Evidence from such local average treatment effect or effects of treatment on the treated (TOT) would be important, not because any federal or local policy action could actually create such a contrast for the population of families who experience homelessness, but because efforts to improve a particular intervention model need to be based on knowledge of what participating in that model actually does for families compared with not participating. The assumptions necessary to calculate TOT effects do not appear to hold true for the study sample. For example, such calculations would need to assume that interventions have the same impact for people that take them up with priority access and people that use them even without priority access. In the Family Options Study, we cannot make that assumption, because priority offers affected not only whether families used an assigned intervention but also how soon and for how long, two factors that could easily influence the intervention's impact.

Conclusion

The Family Options Study used an experimental design in order to provide the strongest possible evidence about the relative effects of alternative policy emphases for families who experience homelessness. Conducting the study as an experiment posed challenges and required flexibility at all phases. The study offers lessons and can inform future experimental research.

First, when designing a study of currently operating programs, researchers need to allow for adequate time to assess the program service landscape and to define key characteristics and points of contrast to be tested, particularly if multiple interventions are to be tested. The study team spent several months working with HUD and collecting information from local homeless assistance stakeholders to define the features of the housing assistance and services to be tested in the study. A significant change in the homeless assistance environment occurred early in the design when HPRP was funded, necessitating a change in the specifications of interventions. Flexibility enabled the study to examine short-term rent subsidies that were implemented on a large scale as the study enrollment got under way.

The Family Options Study required broad participation of a wide range of service providers and homeless assistance leaders in the communities. Communities had to satisfy a number of criteria to meet the requirements of the study. Site recruitment was, by necessity a lengthy, iterative process focused first on identifying communities with adequate sample sizes. Communities with adequate numbers of families entering shelter also had to operate a service delivery system that was compatible with the design in which families would be enrolled in the study after a 7-or-more-day stay in an emergency shelter and then referred to transitional housing, long-term rent subsidies, or short-term rent subsidies provided by rapid re-housing programs. Service providers had to agree to abide by random assignment as the mechanism for assigning families to assistance after the shelter stay

and also were asked to make a good faith effort to avoid referring families to assistance that conflicted with their random assignment. Obtaining the group of 12 sites that ultimately conducted the study required modifications of initial criteria, particularly allowing for sites with fewer than the three active interventions and with lower projected sample sizes.

Limitations in program availability and family eligibility required adaptations to the study design. The study also had to adjust random assignment procedures to include a detailed prescreening prior to random assignment to assess potential eligibility for available programs. This prescreening was essential to ensure that families would be randomized to programs likely to accept them. The study team conducted the analysis using pairwise comparisons that included only families eligible for assignment to both of the interventions in a comparison (and assignment to one of them) to ensure the internal validity of the experiment.

Taken together, the implementation of the Family Options Study demonstrates the advantages of flexibility and modifications to research design and procedures, while maintaining the integrity of the experimental design. The results of this flexibility can yield strong evidence while responding to real world constraints.

Acknowledgments

This study was supported by U.S. Department of Housing and Urban Development contracts C-CHI-00943, Task Orders T-0001 and T-0003, and DU206SF-13-T-00005 to Abt Associates. The authors acknowledge the contributions to the conceptual framework for this article of Daniel Gubits, Jill Khadduri, Marybeth Shinn, and Mark Shroder. They also give special thanks to the families participating in the Family Options Study, who have continued to share their experiences and open their lives to the study team. The authors also acknowledge the dedication of local service providers, Continuum of Care leaders, and public housing agencies in the 12 participating communities: (1) Alameda County, California; (2) Atlanta, Georgia; (3) Baltimore, Maryland; (4) Boston, Massachusetts; (5) the Bridgeport and New Haven regions of Connecticut; (6) Denver, Colorado; (7) Honolulu, Hawaii; (8) Kansas City, Missouri; (9) Louisville, Kentucky; (10) Minneapolis, Minnesota; (11) Phoenix, Arizona; and (12) Salt Lake City, Utah. The study team is grateful for their many contributions and continued commitment to the study.

Authors

Michelle Wood is a principal associate at Abt Associates.

Anne Fletcher is a social science analyst at the U.S. Department of Housing and Urban Development.

References

- Bassuk, Ellen L., Carmela J. DeCandia, Alexander Tsertsvadze, and Molly K. Richard. 2014. "The Effectiveness of Housing Interventions and Housing and Service Interventions on Ending Family Homelessness: A Systematic Review," *American Journal of Orthopsychiatry* 84 (5): 457–474. <http://dx.doi.org/10.1037/ort0000020>.
- Burt, Martha R. 2006. *Characteristics of Transitional Housing for Homeless Families: Final Report*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office.
- Burt, Martha R., Dave Pollack, Abby Sosland, Kelly S. Mikelson, Elizabeth Drappa, Kristy Greenwalt, and Patrick Sharkey. 2002. *Evaluation of Continuums of Care for Homeless People*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: The Urban Institute; ICF Consulting.
- Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office.
- Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Ustav Kattel. 2016. *Family Options Study: Three-Year Impacts of Housing and Services Interventions for Homeless Families*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office.
- Gubits, Daniel, Brooke Spellman, Lauren Dunton, Scott Brown, and Michelle Wood. 2013. *Interim Report: Family Options Study*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office.
- Mills, Gregory, Daniel Gubits, Larry Orr, David Long, Judith Feins, Bubul Kaul, Michelle Wood, and Amy Jones. 2006. *Effects of Housing Vouchers on Welfare Families: Final Report*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office.
- Orr, Larry L. 1999. *Social Experiments: Evaluating Programs With Experimental Methods*. Thousand Oaks, CA: Sage Publications.
- Rog, Debra J., and Frances L. Randolph. 2002. "A Multisite Evaluation of Supported Housing: Lessons Learned From Cross-Site Collaboration," *New Directions for Evaluation* 2002 (94): 61–72.

Shinn, Marybeth, Scott R. Brown, Brooke E. Spellman, Michelle Wood, Daniel Gubits, and Jill Khadduri. 2017. "Mismatch Between Homeless Families and the Homelessness Service System," *Cityscape* 19 (3): 293–307.

U.S. Department of Housing and Urban Development (HUD). 2013. *The 2013 Annual Homeless Assessment Report (AHAR) to Congress: Part 1—Point-in-Time Estimates of Homelessness*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.hudexchange.info/resource/3300/2013-ahar-part-1-pit-estimates-of-homelessness/>.

Mismatch Between Homeless Families and the Homelessness Service System

Marybeth Shinn
Scott R. Brown
Vanderbilt University

Brooke E. Spellman
Michelle Wood
Daniel Gubits
Jill Khadduri
Abt Associates

Abstract

The enrollment phase of the Family Options Study provides information about the mismatch of the homeless service system and the needs and desires of families experiencing homelessness in 12 communities. One-fourth (25.8 percent) of the 2,490 families screened for the study after shelter stays of a week were deemed ineligible for one or more of the interventions at initial screening, with ineligibility highest for those screened for transitional housing programs (28.9 percent) and lower for short- and long-term rental subsidies (9.2 and 4.1 percent). Families given priority offers of housing and service interventions for which they appeared eligible faced additional screening by programs and made decisions about whether to enroll. Considering all stages of this process, families were least likely to be eligible for and subsequently choose to enroll (within 9 months) in transitional housing programs (32.5 percent of those initially screened) and most likely to be eligible for and subsequently lease up with long-term subsidies (73.4 percent) with short-term subsidies in between (51.0 percent). Homeless system interventions systematically screen out families with housing and employment barriers, despite the presumption that these families are the families who need interventions in order to achieve housing and economic stability.

Introduction

The U.S. Department of Housing and Urban Development (HUD) requires communities that seek federal funding for homeless services to organize a *Continuum of Care*—a “community-based homeless assistance program planning network . . . intended to increase the efficiency and effectiveness of coordinated, community-based systems that provide housing and services” to people experiencing homelessness.¹ The term “Continuum of Care” is used in a variety of contexts, mostly within health systems, to emphasize connections among components of care to assure that no patient is lost to followup (Kerber et al., 2007; Lefkowitz, 1995; McBryde-Foster and Allen, 2005). The idea that care will be available to all members of the community is generally implied, and HUD “defined the minimum planning requirements for a Continuum so that it coordinates and implements a system that *meets the needs of the homeless population* within its geographic area” (emphasis added).² In this article, we use the term “homeless service system” because, in the context of homelessness, the term Continuum of Care is used to refer to the governance structure for the system as well as the system, the geography it covers, the grants that fund it, and sometimes a philosophy in which participants earn their way to increasing independence by successfully meeting system requirements.

This article uses data from the enrollment phase of the Family Options Study to examine how well the homeless service system in 12 sites around the United States meets the needs of families experiencing homelessness. The fact that more than half a million people in families experienced homelessness during the course of 2015 and have done so every year but 1 since 2008 (Solari et al., 2016) suggests at a minimum that the homeless service system faces resource constraints. However, our question is different. We examine the fit between homeless assistance programs and the families they intend to serve, with respect to programs’ capacity and willingness to accommodate families and families’ willingness to participate in programs they are offered. We also observe the reasons that each party sometimes rejects the other. More specifically, we catalogue the criteria that programs use to screen families for admission, the extent to which those criteria serve to exclude families living in homeless shelters, and the extent to which families enroll in programs after being given a priority offer of an open slot reserved for them. Enrollment reflects a combination of additional screening of families by programs, decisions by families as to whether programs were acceptable, and, in the case of subsidies for the private rental market, families’ ability to find landlords who accept the subsidies and lease up. Findings predate the advent of coordinated entry systems now used by many communities to allocate people experiencing homelessness among programs but suggest some of the challenges facing those systems, why it is sometimes difficult to get programs to accept their allocations, and why families often turn down programs.

The homeless service system in most communities consists of four types of programs—emergency shelter, transitional housing, short-term rental subsidies, and permanent supportive housing. Emergency shelters are typically the point of entry to the system and the place where we recruited families

¹ “Homeless Emergency Assistance and Rapid Transition to Housing: Continuum of Care Program: Interim Final Rule,” 24 CFR Part 578. *Federal Register* 77 (147) July 31, 2012. <https://www.hudexchange.info/resources/documents/CoCProgramInterimRule.pdf>.

² “Homeless Emergency Assistance and Rapid Transition to Housing: Continuum of Care Program: Interim Final Rule,” 24 CFR Part 578. *Federal Register* 77 (147) July 31, 2012. <https://www.hudexchange.info/resources/documents/CoCProgramInterimRule.pdf>.

for this study. Because all study families had spent at least 7 days in an emergency shelter at the time of enrollment, we have limited information about the extent to which families were able to access this first step in the homeless service system. Permanent supportive housing—subsidized housing with supportive services—is intended to help people with disabilities to live independently in the community. Because its target clientele is limited to individuals and families with disabilities, the Family Options Study did not include it. However, in addition to transitional housing and short-term rental subsidies, the study did include long-term rental subsidies without supportive services largely in the form of housing choice vouchers (HCVs). Thus, the study also provides insights into a particularly vulnerable group of families' eligibility for and ability to use HCVs.

In the remainder of this introduction, we describe the three interventions compared with each other and with usual care by the Family Options Study, focusing on their role in the homeless service system and the families they might be expected to serve.

Interventions Studied

At the time that families enrolled in the study in 2010 and 2011, transitional housing was a mainstay of the homelessness assistance system, with more than 200,000 beds including both individuals and families nationwide—only slightly fewer than the number of beds in emergency shelters. The stock of transitional housing has decreased by one-fourth since then, but, with 75,599 transitional housing beds dedicated to families in 2016, the model remains an important part of the service system (Henry et al., 2016). Families receive a place to stay for up to 2 years, along with case management and an array of supportive services designed to address barriers to housing and to help them become self-sufficient. Most families experiencing homelessness are homeless only briefly and do not return to shelters (Culhane et al., 2007). Transitional housing programs evolved to help families who were unable to leave shelter on their own and needed more assistance to cope with trauma, overcome mental health or substance problems, develop job skills, and so on. Thus, one might assume that transitional housing would serve the neediest families and be attractive to families they were designed to serve. Across the multiple transitional housing programs in any community, one would expect most families to be accommodated, although programs often specialize in serving families with particular characteristics. To provide greater contrast between transitional housing and short-term rental subsidies in the study, only *project-based* or (to a lesser extent) *scattered-site* transitional housing programs were included; *transition-in-place* programs that allow for families to live in community-based rental housing and remain there at the conclusion of the program were not included.

Short-term rental subsidies became widely available on a temporary basis when Congress appropriated \$1.5 billion for the Homelessness Prevention and Rapid Re-Housing Program (HPRP), as part of the American Recovery and Reinvestment Act (ARRA) of 2009,³ although the model has since grown to supply 56,589 beds for families in 2016 (Henry et al., 2016). Families received short-term and sometimes declining rental subsidies along with limited case management focused on finding housing and achieving economic self-sufficiency. Families could receive assistance for up to 18 months, although the programs to which families in this study were assigned lasted 6 to 8 months

³ Pub. L. 111–5. 123 Stat. 115. February 17, 2009.

on average. The aim was to provide only enough assistance to help families become re-housed and enable them to pay the rent after the program ended, combined with light case management focused on housing and employment. HUD suggested but did not require communities to use HPRP funds for households that would be able to pay for housing on their own once the assistance ended, leading some communities to focus eligibility on households with stable employment histories or future prospects (Cunningham et al., 2015).

The third intervention—long-term rental subsidies without dedicated supportive services—is neither part of the homeless service system nor ordinarily available to families in shelters, unless they have previously secured places on waiting lists. Rental subsidies are not an entitlement, and only one in four households that are eligible for them by reason of income do not receive them (JCHS, 2016). Public housing agencies (PHAs) that agreed to allot HCVs to the study provided most subsidies in our study. Vouchers cover the difference between 30 percent of families' income and a housing unit's rent and utilities.

Past studies show that such subsidies are successful both in preventing homelessness (Wood, Turnham, and Mills, 2008) and ending it (Cragg and O'Flaherty, 1999; Shinn et al., 1998; Wong, Culhane, and Kuhn, 1997). Further, the experimental results of the Family Options Study show that long-term subsidies resolved homelessness, enhanced other forms of residential stability, and had positive radiating impacts for other aspects of life for both parents and children (Gubits et al., 2016, 2015). However, this study asks whether families who have been homeless in shelters at least a week meet minimum eligibility requirements for PHAs, which check for criminal backgrounds and exclude undocumented households and whether, when given vouchers, families are able to use them by leasing up private-market housing units. Past studies show that about one-third of families issued vouchers (most of whom are not experiencing homelessness) do not use them. Documented reasons for low lease-up rates include difficulty in locating landlords who will accept vouchers and getting units inspected and approved in the time allotted (Bacon, 2005; Basolo and Nguyen, 2005; Daniel, 2010; Edin, DeLuca, and Owens, 2012; Finkel and Buron, 2001; Gubits et al., 2009; Jacob and Ludwig, 2012; Kennedy and Finkel, 1994; Mills et al., 2006; Sard, 2001; Sterken, 2009), challenges one might expect to be exacerbated for families experiencing homelessness. Alternatively, such families might lease up at higher rates, given their strong motivation to achieve stable housing. Finkel and Buron (2001) observed higher lease-up rates among the lowest-income renters, who had the most to gain from using vouchers.

Methods

Families enrolled in the Family Options study from September 2010 to January 2012, with dates varying by community.⁴ We screened 2,490 families who had been in one of 57 homeless shelters for at least 7 days to determine their eligibility for programs that had slots available at that time. We screened families at times when programs representing at least two of the

⁴ Participating sites were Alameda County, California; Atlanta, Georgia; Baltimore, Maryland; Boston, Massachusetts; Denver, Colorado; Honolulu, Hawaii; Kansas City, Missouri; Louisville, Kentucky; Minneapolis-Hennepin County, Minnesota; Phoenix-Maricopa County, Arizona; Salt Lake City, Utah; and the combined site of Bridgeport and New Haven, Connecticut.

interventions—transitional housing, short-term subsidies, and long-term subsidies—had openings in their community. Near the end of the enrollment period in some communities this availability requirement was relaxed to one intervention, which could still be compared with usual care.

This article is based on five sources of data from the enrollment period and shortly thereafter. First, as part of the enrollment process, we monitored the availability of interventions by calling participating programs regularly to determine whether they had openings. Across all sites, 51 transitional housing programs, 18 long-term subsidy programs, and 28 short-term subsidy programs participated in the study.

Second, we screened families to determine their eligibility for available programs, based on criteria the programs supplied. This process mimicked the usual, although less-structured, process for families attempting to find housing, where eligibility criteria for programs that have no openings also are irrelevant. Eligibility questions took this form, varying according to the specific program rule—

Some programs will only accept families in which the head of household is clean and sober and who can demonstrate at least 30 days of sobriety. Would you like to be considered for programs with this requirement? (Gubits et al., 2013)

Thus, we have data on the extent to which families were screened out of particular programs or an entire intervention, because they reported themselves ineligible for all programs that had openings in that intervention at the time of screening.

Third, we have data from the study's intake interviews with the 2,307 families who passed the screening and were randomly assigned to an intervention.⁵ These data include information about family members living elsewhere and provide a window into the extent to which the 57 participating shelters were able to accommodate families in their entirety.

Fourth, we have multiple types of data about 2,282 families' enrollment in the programs to which they were randomly assigned. Although we screened families based on program-specific questions, we did not verify family responses before making assignments to programs. Programs conducted their own intake processes and could reject families who did not meet their criteria. For example, we asked families about criminal convictions, but PHAs conducted criminal background checks; we asked about sobriety, but transitional housing programs might require drug testing. Families could also drop out of the process, declining to accept the programs they were offered. Information on enrollment was obtained by calling programs to determine whether they had openings (to the end of August 2012 only), information from the HUD Public and Indian Housing Information Center, or PIC, and the HUD Tenant Rental Assistance Certification System, or TRACS, about leasing up with long-term subsidies, along with tracking surveys and a 20-month followup survey with families. All these data sources were combined into a data set on program usage.⁶

Finally, we have data from qualitative interviews with a nonrandom subsample of 80 families from four sites about their reasons for taking up or declining intervention programs.

⁵ This number includes 25 families later deemed not to have met the entry criterion of having a child age 15 or under and so were excluded from followup.

⁶ Note that for this article, we include all 2,282 families eligible for followup, whereas Solari and Khadduri (2017) examine enrollment for only those families reinterviewed at 20 months.

Results

We report first on the extent to which enrollment was constrained because programs representing an intervention did not have an opening at the time a family entered the study. Then we examine the percentage of families who were screened out of programs and entire interventions and the reasons for ineligibility. Finally, using both quantitative and qualitative data, we explore the fact that many families referred to interventions did not participate.

Effects of Availability

Access to interventions in the study communities was quite constrained by lack of availability of slots in participating programs. In all, 53.8 percent of the 2,490 families screened for the study lost access to at least one intervention, because no openings were available or expected within the next month in any program representing that intervention at the time of the screening. This figure does not include families who did not have access, because transitional housing and long-term subsidies were never available to the study at their site.

Effects of Ineligibility

Exhibit 1 shows the percentage of families who, by self-report, failed to meet specified eligibility criteria for at least one program that had an opening in the appropriate geographic locale, and the percentage who lost access to a program, or to an entire intervention, as a consequence. Numbers do not sum to 100 percent, because a family could fail more than one criterion. More than one-fourth (25.8 percent) of the 2,490 families screened for available interventions failed to pass the eligibility screening for at least one, including 183 families who were screened out of the study altogether.

Families were most likely to lose access to transitional housing programs—50.9 percent of those screened lost access to at least one transitional housing program, and 28.9 percent did not meet the criteria for any transitional housing program with an opening at the time they were screened. This percentage varied widely from site to site, with only 1 percent of families in Honolulu and 2 percent in Salt Lake City excluded from this intervention compared with 60 percent in Connecticut and 93 percent in Minneapolis. Because the transitional housing programs offered units in agency-controlled housing (either project based or scattered site), families needed to have appropriate size and composition for the available units—a large family could not fit into a studio, a mother with an infant would not be eligible for a two-bedroom unit, and families with fathers or teenage boys were often excluded. More than one-fifth of families failed to meet the employment or income requirements imposed by a transitional housing program. For example, the minimum income category includes programs that required monthly incomes of \$500, \$1,000, \$1,200, and even \$2,000. No family was excluded for having too much income. Questions about sobriety were frequently asked but rarely failed (2.6 percent). That is, families were happy to be assigned to programs that required them to verify their sobriety. Conversely, few programs required family heads to have a mental health issue or other disability or to be in recovery from substance use, but this requirement excluded somewhat more families (5.9 percent). Not having lived in the municipality prior to entering shelter or not having family, employment, or residential ties to the area

Exhibit 1**Percent of Families Who Failed To Satisfy Specified Eligibility Criteria for at Least One Program, by Intervention Type**

Question Type	Intervention Type (%)		
	Transitional Housing (n = 1,700)	Short-Term Subsidies (n = 2,067)	Long-Term Subsidies (n = 1,745)
Unit size	26.6	NA	1.1
Minimum income or employment	20.9	7.4	NA
Family composition	18.1	NA	NA
Disability requirement	5.9	NA	NA
Geographic location	2.8	3.4	1.7
Required sobriety or treatment	2.6	0.5	NA
Credit history	2.5	0.3	1.8
Able to pay some rent	1.8	0.0	NA
Education or work experience	1.6	0.7	NA
Lack of criminal conviction	1.4	0.3	2.5
Mandatory participation in services or activities	0.5	NA	NA
Health screening	0.2	0.0	NA
Citizenship or documentation of status	0.2	0.3	0.3
Domestic violence	0.1	NA	NA
Maximum income	0.0	NA	NA
Lack of housing authority arrears	0.0	0.0	0.4
Recent drop in income	NA	0.5	NA
Housing stability history	NA	0.8	NA
Percent lost at least one program	50.9	13.3	7.0
Percent lost intervention	28.9	9.2	4.1

NA = no program of this type asked question.

Notes: N = 2,490 families screened. Questions were asked only for programs with openings. Numbers differ from those in Gubits et al. (2013) because they reflect all families who were screened, not only families eligible for the study, with the exception of Honolulu, where information on reasons for exclusion from the long-term subsidy condition is not available.

excluded some families. Despite their mission to assist families who need additional services to escape homelessness, transitional housing programs were more likely than programs that did not provide psychosocial services to exclude families for lack of income, substance issues, poor credit history, and lack of education or work experience. Few families lost access because they declined to participate in mandatory services.

Families were less likely to lose access to short-term rental subsidies (13.3 percent of those screened lost access to at least one short-term rental subsidy program and 9.2 percent lost access to the entire intervention), but most frequently did because they did not meet minimum income requirements. A history of housing instability or lack of education and work experience also excluded a few. Site-to-site variation was less extreme than for transitional housing but bimodal. One-half the sites had ineligibility rates of 3 percent or less, and the other one-half between 10 and 20 percent.

Families were least likely to fail the screening questions for long-term rental subsidies (7.0 percent lost access to a specific program and 4.1 percent to the intervention). The most common reasons were presuming they would fail the criminal background check, poor credit history, and lack of ties to the location. Unit-size restrictions applied to Connecticut, where one of the three providers

used project-based vouchers with a resulting screenout rate of 10 percent; otherwise screenout rates ranged from 0 to 6 percent. Interestingly, very few families lost access to any of the interventions because of their immigration status.

We do not have information on the percentage of families who failed to get into the shelters where the study began; however, we can infer from the data that eligibility requirements similarly affected family members' access to shelter. Of the 2,307 families who were ultimately randomly assigned to an intervention in the study, 10.1 percent had an adult partner living elsewhere and 23.9 percent had a minor child living elsewhere. Of the 80 enrolled families who participated in qualitative interviews, 7 reported separations from partners in shelter, 5 because of shelter rules regarding men and 2 for other reasons. Nine families separated from children on shelter entry or during a shelter stay so that the child could avoid shelter conditions. One family was separated from an adult child, and two others from minor children due to shelter rules, and in a third, three-generational family, the family split up with the grandmother taking one child and the mother the other so that both adults were eligible for a family shelter (Shinn, Gibbons-Benton, and Brown, 2015). It is possible that shelters screened families for other criteria such as immigration status or sobriety.

Effects of Program and Family Choice on Enrollment and Takeup

Based on the initial screening, 2,307 eligible families were enrolled in the study and randomly assigned to programs that had availability and for which the families appeared to be eligible. Referrals for the assigned interventions were provided to the family and communicated to the program, which reserved a slot for the family. Families were responsible for pursuing the referrals, and the programs conducted their normal intake process to verify family eligibility. Family preferences also affected program enrollment. Not all families pursued the referrals, in some cases because they suspected they would be found ineligible. It is difficult to distinguish exclusions by programs from families' decisions not to pursue offers, not least because perceptions of programs and families are sometimes at odds. For example, during the time that study staff called short-term rental subsidy programs to ascertain availability of slots, program staff reported that only 9.3 percent of the referred families failed to meet eligibility requirements, but in qualitative data, 9 of 19 families assigned to short-term subsidies during this period reported that the program to which they were referred found them ineligible (Fisher et al., 2014). Families given priority offers of short-term rental subsidies or long-term HCVs also had to find landlords who would accept the vouchers for units that passed inspection and lease up.

Exhibit 2 shows the end results of the two stages of screening by programs (before and after priority offers were made) and of the choices made by families. Row A shows the number of families screened for each intervention, because slots were available, and Row B shows the percentage of families who passed initial screening prior to randomization. These same numbers are shown in or derived from exhibit 1. Row C shows the numbers of families randomly assigned to receive priority offers of each intervention, and Row D shows the percentage of families given priority offers who moved into units of the offered type within 9 months, based on program usage data. Although only a subset of the families screened received priority offers, the percentages in Rows B and D can be multiplied to give a percentage who passed both stages of screening, accepted programs, found units if required to do so, and moved in.

Exhibit 2**Percentage of Families Who Survived Two Stages of Program Enrollment, by Intervention Type**

	Transitional Housing	Short-Term Subsidy	Long-Term Subsidy
A. Number screened for available slot	1,700	2,067	1,745
B. Percent passed initial screening	71.1	90.8	95.9
C. Number given priority offer	368	569	599
D. Percent passed any additional screening, accepted offer, and moved in within 9 months	45.7	56.1	76.5
E. Final percent who moved in (B * D)	32.5	51.0	73.4

Notes: Rows A and B include all 2,490 families initially screened for the study. Information on eligibility screening for Honolulu long-term subsidy providers is not available. Row C reflects 2,282 families enrolled in the study at baseline, and Row D shows the percentage that moved in within 9 months, based on the program use and living situation data.

As shown in exhibit 2, only slightly more than one-half of the families given priority offers of transitional housing passed any additional screening by programs and chose to move in. In conjunction with the high screen-out rates prior to randomization, we estimate that only about a one-third of families who stayed at least a week in emergency shelter in the 12 jurisdictions both found transitional housing acceptable and were acceptable to transitional housing programs. Nearly three-fifths of families given priority offers of short-term rental subsidies passed additional screening and moved in, so we estimate that short-term subsidy programs and families were mutually acceptable about one-half of the time. More than three-fourths of families given priority offers of long-term subsidies passed any additional screening, found units if necessary, and moved in. Given the very low rate at which families were screened out of long-term subsidies, nearly three-fourths of families in shelter were acceptable to and made use of such subsidies. This figure includes some families given offers of public housing or project-based vouchers. Among families given priority offers of HCVs, where families had to find a landlord and unit, 82.3 percent passed PHA screening and leased up within by the 20-month followup (Solari and Khadduri, 2017).⁷ Even this figure underestimates the “success rate” among families to whom the PHA actually issued a voucher.

Qualitative Information Regarding Family Preferences

Qualitative interviews with 80 families (19 to 22 assigned to each of the three interventions or usual care across four sites) provide some insight into the reasons that families in the study may have turned down the interventions made available to them through the study in favor of staying in shelter or finding housing on their own (Fisher et al., 2014).

Location was a key issue that worked in favor of private-market leases and against project-based transitional housing. In the qualitative interviews, families indicated they wanted to live in familiar locations close to family, friends, jobs, transportation, and their children’s schools. Families offered short-term rental subsidies could live anywhere the subsidy enabled them to afford. Families offered HCVs were sometimes restricted for a year to the city or county served by the housing

⁷ The cited figure from Solari and Khadduri (2017) includes only families given priority offers of HCVs who were reinterviewed at 20 months and look at lease ups during the full 20-month period. Analyses for this article include all families given priority offers of long-term rental subsidies and examine leaseups during the first 9 months.

agency that issued the voucher but then could later move, or *port*, to another area of their choice. In contrast, families offered transitional housing, like those offered project-based subsidies, had to move into the project or unit to which they were assigned.

Other factors influenced decisions. Concern about time limits of short-term subsidies, along with uncertainty about how long they would last, engendered considerable anxiety for families. Some families felt that they could not generate the requisite income fast enough to retain the housing units after the program ended. Families sometimes felt that transitional housing was not a good environment in which to raise children, and several families had left early or planned to do so in search of better environments. Maintaining family integrity was important but sometimes competed with housing opportunities. One respondent turned down an offer of transitional housing because her partner was not allowed, but another respondent accepted a long-term subsidy despite the fact that her partner's criminal conviction meant that he could not be housed with her and her children.

Families clearly preferred long-term subsidies and often expressed palpable relief at having their own place. Families encountered some of the barriers to using subsidies that are in the literature, but they persisted. For example, four families encountered landlords who did not accept their vouchers but ultimately found other landlords who did.

Discussion

The enrollment phase of the Family Options Study revealed a mismatch between the availability and targeting of homeless system resources and the characteristics and preferences of families in shelter who are intended to use those resources to return to permanent housing. Policymakers should consider the ways in which the mismatch affects communities' ability to assist homeless families.

It is important to understand our results in the context in which they were obtained. Participants in our study had access to resources not usually available to families experiencing homelessness. With the cooperation of PHAs, the study made long-term rental subsidies, typically in the form of HCVs, available to the experiment, and ARRA made short-term subsidies more available than they had been previously.

Despite these resources, one-half (53.8 percent) of the families who were willing to participate in the study lost access to at least one intervention due to availability. Access to transitional housing, the intervention of the three that was typically available for homeless families at the time of the study, was particularly constrained; 26.2 percent of families in communities with project-based transitional housing could not even be screened for it, because no units were expected to become available at the time of recruitment for the study. In the case of rental subsidies, availability meant the availability of a subsidy, not of a unit. Families still needed to find units, sometimes with help from programs.

Availability of transitional housing was constrained by turnover—a new family cannot move in until the previous family has vacated—which is not inherently aligned with the seasonal surges that have been documented for families in shelter (Colburn, 2017). Many times in the enrollment process, transitional housing programs had families but no openings, and at other times, the

programs had open units but no families to screen for them. Further, given the constraints of project-based programs, at times the physical size of the available units did not align with the size of the eligible families. For rental subsidies, family size may have entered into the process later if large families had trouble finding units that would accommodate them.

As policymakers urge central intake of families and individuals into homeless services systems and require communities to establish coordinated assessment systems, localities must consider the impact of limited availability on their triage processes. For instance, if a community has an assessment process that dictates referral to a specific kind of program, it must have a plan B—either another referral option or a way to create flexible capacity within the system. Providing transitional housing in units rented on the open market could alleviate some of the problems related to the project-based nature of transitional housing but would not address the overall resource constraint.

The study transpired during the great recession, when economic factors rather than psychosocial factors probably played an especially large role in shelter entry. Given this likely bias, it is of special concern that only 71.1 percent of families passed initial screening criteria for transitional housing and that programs found additional families ineligible after the study made priority offers. Transitional housing, which is the most service-intensive intervention, would be expected to accommodate families with both economic and psychosocial needs, but that was not the case. It is understandable that particular programs select families that they think will benefit most from those programs, but policymakers should examine the extent to which service-intensive programs are excluding families with the greatest needs for services.

The finding that less than three-fifths of families given priority offers enrolled in either transitional housing or short-term rental subsidy programs should also give pause to policymakers. The Family Options Study enrolled families who had spent at least a week in emergency shelters, who presumably had few options, yet many of them nevertheless found the offered programs unattractive.

Across shelters, and the transitional housing and long-term subsidy interventions, programs frequently required the separation of families who wanted to stay together—most often because men were not permitted in congregate programs, but also because some family members were excluded from housing based on their criminal backgrounds. It is reasonable that congregate facilities like shelters and project-based transitional housing programs exclude men if they cannot guarantee some level of privacy to families. In the qualitative interviews, we found families who feared for the safety of their daughters in programs that admitted men and older boys, as well as families who lamented forced separation. Again, a mismatch exists between the service system and family needs if families must choose between housing and family integrity. Scattered-site transitional housing models may have some advantage over project-based transitional housing models here. Policymakers should consider whether rules excluding some family members from long-term subsidy programs do more harm than good.

Conclusion

This study documents that the homeless service system, despite being augmented for this study, does not fully accommodate the characteristics and desires of the families it is designed to serve.

Without that augmentation by long-term rental subsidies and ARRA funds, it would fall further short of meeting family needs. HUD is gradually switching resources from transitional housing to short-term rental subsidies and urging communities to reduce entry criteria for programs under the rubric of housing first. This study suggests that such moves will reduce but not eliminate the mismatch between family characteristics and homeless service programs.

The fact that the vast majority of families passed screening for long-term subsidy programs, found units, and leased up at higher rates than in other studies of poor families has additional implications for policy. Families' lease-up success and their clear preference for the HCV program, along with evidence from the Family Options Study of the salutary effects of subsidies across domains of housing, family preservation, self-sufficiency, and adult and child well-being suggests that long-term subsidies are an important tool to end family homelessness (Gubits et al., 2016, 2015). The Housing Opportunity Through Modernization Act of 2016⁸ gives PHAs greater flexibility to use project-based vouchers to house families experiencing homelessness, particularly in areas where tenant-based vouchers may be more difficult to use (Fischer, 2016). Other provisions streamlining unit inspection rules may also help vulnerable families who are offered vouchers to move into housing more quickly. Expansion of the subsidy program and deeper targeting of subsidies (to needier families) might avert or put an early end to much family homelessness (Early, 2004).

Acknowledgments

This study was supported by U.S. Department of Housing and Urban Development contract C-CHI-00943, Task Orders T-0001 and T-0003, to Abt Associates and the National Institute of Child and Human Development 5R01HD066082 to Vanderbilt University.

Authors

Marybeth Shinn is a professor of Human and Organizational Development at Vanderbilt University.

Scott R. Brown is a doctoral student in the Community Research and Action program at Vanderbilt University.

Brooke E. Spellman is a principal associate at Abt Associates.

Michelle Wood is a principal associate at Abt Associates.

Daniel Gubits is a principal associate at Abt Associates.

Jill Khadduri is a senior fellow and principal associate at Abt Associates.

References

Bacon, Laura. 2005. "Godinez v. Sullivan-Lackey: Creating a Meaningful Choice for Housing Choice Voucher Holders," *DePaul Law Review* 55 (4): 1273–1308.

⁸ Pub. L. 114–201, § 1 et seq., 130 Stat. 782.

- Basolo, Victoria, and Mai Thi Nguyen. 2005. "Does Mobility Matter? The Neighborhood Conditions of Housing Voucher Holders by Race and Ethnicity," *Housing Policy Debate* 16 (3–4): 297–324. DOI: 10.1080/10511482.2005.9521546.
- Colburn, Gregg. 2017. "Seasonal Variation in Family Homeless Shelter Usage," *Housing Policy Debate* 27 (1): 80–97. DOI: 10.1080/10511482.2016.1158200.
- Cragg, Michael, and Brendan O'Flaherty. 1999. "Do Homeless Shelter Conditions Determine Shelter Population? The Case of Dinkins Deluge," *Journal of Urban Economics* 46 (3): 377–414.
- Culhane, Dennis P., Stephen Metraux, Jung Min Park, Maryann Schretzman, and Jesse Valente. 2007. "Testing a Typology of Family Homelessness Based on Patterns of Public Shelter Utilization in Four U.S. Jurisdictions: Implications for Policy and Program Planning," *Housing Policy Debate* 18 (1): 1–28.
- Cunningham, Mary, Martha R. Burt, Molly Scott, Larry Buron, Jacob Klerman, Nicole Fiore, and Lindsey Stillman. 2015. *Prevention Programs Funded by the Homelessness Prevention and Rapid Re-Housing Program*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/publications/affhsg/HPRP-homeless-prevention-report.html>.
- Daniel, Tamica H. 2010. "Bringing Real Choice to the Housing Choice Voucher Program: Addressing Voucher Discrimination Under the Federal Fair Housing Act," *The Georgetown Law Journal* 98 (3): 769–794.
- Early, Dirk W. 2004. "The Determinants of Homelessness and the Targeting of Housing Assistance," *Journal of Urban Economics* 55 (1): 195–214. DOI: 10.1016/j.jue.2003.09.005.
- Edin, Kathryn, Stefanie DeLuca, and Ann Owens. 2012. "Constrained Compliance: Solving the Puzzle of MTO's Lease-Up Rates and Why Mobility Matters," *Cityscape* 14 (2): 181–194.
- Finkel, Meryl, and Larry Buron. 2001. *Study on Section 8 Vouchers Success Rates: Volume 1 Quantitative Study of Success Rates in Metropolitan Areas*. Report prepared for the U.S. Department of Housing and Urban Development. Cambridge, MA: Abt Associates.
- Fischer, Will. 2016. "Housing Bill Unanimously Passed by House Would Build on Effectiveness of Rental Assistance." <http://www.cbpp.org/research/housing/bipartisan-housing-bill-would-build-on-effectiveness-of-rental-assistance>.
- Fisher, Benjamin W., Lindsay S. Mayberry, Marybeth Shinn, and Jill Khadduri. 2014. "Leaving Homelessness Behind: Housing Decisions Among Families Exiting Shelter," *Housing Policy Debate* 24 (2): 364–386. DOI: 10.1080/10511482.2013.852603.
- Gubits, Daniel, Jill Khadduri, and Jennifer Turnham. 2009. *Housing Patterns of Low Income Families With Children: Further Analysis of Data From the Study of the Effects of Housing Vouchers on Welfare Families*. Working paper. Cambridge, MA: Joint Center for Housing Studies of Harvard University.

Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development. http://www.huduser.org/portal/portal/sites/default/files/pdf/FamilyOptionsStudy_final.pdf.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department Of Housing and Urban Development. <https://www.huduser.gov/portal/sites/default/files/pdf/Family-Options-Study-Full-Report.pdf>.

Gubits, Daniel, Brooke Spellman, Lauren Dunton, Scott Brown, and Michelle Wood. 2013. *Interim Report: Family Options Study*. Washington, DC: U.S. Department of Housing and Urban Development. https://www.huduser.gov/publications/pdf/HUD_503_Family_Options_Study_Interim_Report_v2.pdf.

Henry, Meghan, Rian Watt, Lily Rosenthal, and Azim Shivji. 2016. *The 2016 Annual Homeless Assessment Report (AHAR) to Congress. Part 1: Point-in-Time Estimates of Homelessness*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Community Planning and Development.

Jacob, Brian A., and Jens Ludwig. 2012. “The Effects of Housing Assistance on Labor Supply: Evidence From a Voucher Lottery,” *American Economic Review* 102 (1): 272–304.

Joint Center for Housing Studies of Harvard University (JCHS). 2016. *State of the Nation's Housing 2016*. Cambridge, MA: Joint Center for Housing Studies of Harvard University.

Kennedy, Stephen, and Meryl Finkel. 1994. *Section 8 Rental Voucher and Rental Certificate Utilization Study: Final Report*. Report prepared for the U.S. Department of Housing and Urban Development. Cambridge, MA: Abt Associates.

Kerber, Kate J., Joseph E. de Graft-Johnson, Zulfiqar A. Bhutta, Pius Okong, Ann Starrs, and Joy E. Lawn. 2007. “Continuum of Care for Maternal, Newborn, and Child Health: From Slogan to Service Delivery,” *The Lancet* 370 (9595): 1358–1369.

Lefkowitz, Paul M. 1995. “The Continuum of Care in a General Hospital Setting,” *General Hospital Psychiatry* 17 (4): 260–267.

McBryde-Foster, Merry, and Toni Allen. 2005. “The Continuum of Care: A Concept Development Study,” *Journal of Advanced Nursing* 50 (6): 624–632.

Mills, Gregory, Daniel Gubits, Larry Orr, David Long, Judie Feins, Bulbul Kaul, Michelle Wood. 2006. *Effects of Housing Vouchers on Welfare Families: Final Report*. Report prepared for the U.S. Department of Housing and Urban Development. Cambridge, MA: Abt Associates.

Sard, Barbara. 2001. “Housing Vouchers Should Be a Major Component of Future Housing Policy for the Lowest Income Families,” *Cityscape* 5 (2): 89–110.

Shinn, Marybeth, Jessica Gibbons-Benton, and Scott R. Brown. 2015. "Poverty, Homelessness, and Family Break-Up," *Child Welfare* 94 (1): 105–122.

Shinn, Marybeth, Beth Weitzman, Daniela Stojanovic, James Knickman, Lucila Jimenez, Lisa Duchon, Susan James, and David Krantz. 1998. "Predictors of Homelessness Among Families in New York City: From Shelter Request to Housing Stability," *American Journal of Public Health* 88 (11): 1651–1657.

Solari, Claudia D., and Jill Khadduri. 2017. "Family Options Study: How Homeless Families Use Housing Choice Vouchers," *Cityscape* 19 (3): 387–412.

Solari, Claudia D., Sean Morris, Azim Shivji, and Tanya de Souza. 2016. *The 2015 Annual Homeless Assessment Report (AHAR) to Congress. Part 2: Estimates of Homelessness in the United States*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Community Planning and Development.

Sterken, Krista. 2009. "A Different Type of Housing Crisis: Allocating Costs Fairly and Encouraging Landlord Participation in Section 8," *Columbia Journal of Law and Social Problems* 43 (2): 214–243.

Wong, Yin-Ling Irene, Dennis P. Culhane, and Randal Kuhn. 1997. "Predictors of Exit and Reentry Among Family Shelter Users in New York City," *Social Service Review* 71 (3): 441–462.

Wood, Michelle, Jennifer Turnham, and Gregory Mills. 2008. "Housing Affordability and Family Well-Being: Results From the Housing Voucher Evaluation," *Housing Policy Debate* 19 (8): 367–412.

Risk Models for Returns to Housing Instability Among Families Experiencing Homelessness

Zachary Glendening
Marybeth Shinn
Vanderbilt University

Abstract

This study developed risk models for returns to housing instability (that is, homelessness and unstable doubling-up situations) among families exiting emergency shelter. Participants included 446 families randomly assigned to receive priority offers of long-term housing subsidies and 578 families randomly assigned to usual care in the Family Options Study, a multisite experiment designed to test the impact of various housing and service interventions for homeless families. Relationships between family features recorded at shelter entry and returns to housing instability 20 months later were examined empirically. Correlation, hierarchical logistic regression, and receiver operating characteristic curves were used to combine family features into predictive risk models. Results indicated that few observable family features beyond previous housing instability offered predictive utility. Access to long-term housing subsidies appears to reduce housing instability. Further research should examine whether disability benefits, reliable employment, or effective substance dependence treatment reduce housing instability.

Introduction

Family homelessness has been a persistent concern in the United States since the 1980s (Bassuk et al., 2014). Today, more than one-third of individuals experiencing homelessness live in families with children, and they face substantial challenges (Henry et al., 2016). Adults in homeless families have elevated rates of HIV/AIDS and tuberculosis (Kerker et al., 2011). Homeless mothers experience high rates of depression (Bassuk et al., 1998; Weinreb et al., 2006). Homeless children are more likely than others to experience asthma (Cutuli et al., 2010), obesity (Schwarz et al., 2007),

and cognitive and behavioral difficulties (Yu et al., 2008). Both homeless and highly mobile youth have poor academic performance (Cutuli et al., 2013; Fantuzzo et al., 2012; Obradović et al., 2009; Voight, Shinn, and Nation, 2012).

Doubling up, defined in this article as living with family or friends out of economic necessity, can also be harmful for families, although that is not always the case. Doubling up may be particularly harmful for families exiting emergency shelter, whose doubling-up options may be last resorts. Bush and Shinn (2017) find that family heads who doubled up after leaving emergency shelter reported mostly negative doubling-up experiences. Although doubling up improved some respondents' quality of life relative to emergency shelter, many respondents indicated feelings of impermanence, lack of autonomy, lack of privacy, and interpersonal conflict. Other negative experiences included exploitation, residential mobility, and unhealthy physical and social environments.

Family housing instability, defined here as experiencing homelessness or doubling up, is also costly to the American public, although Kertesz et al. (2016) highlighted the moral and strategic limits of addressing the issue on financial rather than humanitarian grounds. For example, emergency shelter is a major cost among families experiencing homelessness. Culhane et al. (2007) found that short-term and long-term shelter stays for families in Massachusetts cost \$10,900 and \$48,500, respectively. Gubits et al. (2016, 2015) reported that families who received usual care in the Family Options Study (that is, those not immediately referred to another housing intervention) used housing and service assistance costing approximately \$30,000 and \$41,000 over 20 and 37 months, respectively. A third study found that families experiencing first-time homelessness accrued homeless system costs between \$3,184 and \$20,031 (Spellman et al., 2010).

Other social costs of housing instability include child protection and health expenses. Children experiencing homelessness enter foster care at higher rates than their peers, and doubling up may draw attention from child protection services concerned about overcrowding, frequent moves, or domestic violence (Shdaimah, 2009; Zlotnick, 2009). Children in homeless families also receive more emergency room healthcare than do their housed counterparts (Shinn et al., 2008). To the extent that doubling up results in residential crowding, it may increase psychological distress (Evans, Lercher, and Kofler, 2002) and childhood asthma (Weitzman, Gortmaker, and Sobol, 1990), both of which might require emergency care.

Given the personal and social costs of housing instability, it is important to prevent not only first-time instability but *returns* to instability among families already in emergency shelter. However, allocating limited resources to families who will experience housing instability after leaving shelter is difficult. For example, of the minority of low-income families who experience homelessness, most experience single episodes (Culhane et al., 2007). Furthermore, families receiving long-term housing subsidies are even less likely to return to homelessness or to double up after leaving shelter than families without subsidies (Gubits et al., 2016, 2015). Directing limited housing assistance to sheltered families who need it most requires knowing which families will return to housing instability without that assistance. It also requires understanding why some families return to instability despite the advantage of long-term housing subsidies.

This study attempts to address the following questions concerning returns to housing instability after an initial shelter stay. First, can observable family features explain why some families return

to housing instability after exiting emergency shelter? Second, do families who return to housing instability after having used long-term housing assistance differ observably from families who return without having used such assistance? Because previous studies show large associations between long-term subsidies and housing stability, it is important to understand whether families receiving such assistance face housing barriers above and beyond housing affordability. Second, can family features be used to better allocate housing or other resources to families most likely to return to housing instability? Improved allocation does not replace the need to address structural drivers of housing instability like unaffordable housing or limited employment opportunities (Shinn, Baumohl, and Hopper, 2001). However, more efficient allocation could create a better fit between households' apparent needs and the assistance they receive.

Literature Review

Policymakers seeking to prevent families from experiencing housing instability face a dilemma. Most families at risk for losing housing at any given time avoid it. Thus, assuming families who experience housing instability share identifiable, internal qualities that set them apart from housed families offers the appeal of predictability. If groups of families who share distinctive features disproportionately experience housing instability, prevention resources could be targeted more efficiently by directing them toward households that possess those features. This goal is supported modestly by studies demonstrating some predictive utility of actuarial predictions in homelessness research (Greenberg et al., 2006; Greer et al., 2016; Hudson and Vissing, 2010; Shinn et al., 2013, 1998). It is also supported by correlations between housing instability and family features like previous homelessness (Shinn et al., 2013; Smith and Flores, 2005; Weitzman, Knickman, and Shinn, 1992), threatened or actual domestic violence (Smith and Flores, 2005; Weitzman, Knickman, and Shinn, 1992; Wood et al., 1990), and limited social support (Bassuk et al., 1997; Wood et al., 1990). Although fewer family features have been associated with doubling up, heads of doubled-up families are more likely to be younger and have less education and work experience (Winkler, 1993).

However, some researchers challenge the notion that families nearing housing instability can be identified by observable features. They argue that political-economic factors leave all poor families precariously housed, and that events like homeless episodes result from "bad luck" or unpredictable events endemic to poverty (O'Flaherty, 2010). According to this perspective, resources needed to identify highly vulnerable families are better used removing structural barriers to housing stability among all low-income families. This position is supported by inefficiencies in multivariate prediction models for homeless entry (Shinn, Baumohl, and Hopper, 2001) and similarities between homeless and housed low-income families (Bassuk et al., 1998; Goodman, 1991).

The search for observable risk factors extends beyond first-time housing instability to include *returns* to instability. This distinction is important, because one could argue that, although single episodes of housing instability reflect economic circumstances, multiple episodes reflect family features. Family features that are correlated with homeless reentry include pregnancy, eviction, or low income prior to shelter entry (Lin and Smith, 2004a; Wong, Culhane, and Kuhn, 1997) and younger heads of household (Lin and Smith, 2004b; Shinn et al., 1998; Wong, Culhane, and Kuhn, 1997). Variables with inconsistent relationships to repeated homelessness include

number of children (Lin and Smith, 2004b; Rodriguez, 2013; Wong, Culhane, and Kuhn, 1997) and minority racial status (Lin and Smith, 2004b; Wong, Culhane, and Kuhn, 1997). Receiving subsidized housing is consistently reported as a protective factor after a homeless episode (Lin and Smith, 2004b; Stojanovic et al., 1999; Wong, Culhane, and Kuhn, 1997). To our knowledge, no study explicitly examines characteristics of families who double up *after* exiting emergency shelter. However, Shinn et al. (1998: 1652) defined stability as living in “one’s own residence” for a year without a move nearly 5 years after shelter entry.

Noting the potential benefits of targeting prevention resources based on observable risk, researchers attempted to combine features correlated with family homeless entry into risk models. Such models enable researchers to determine the ability of a combination of variables to efficiently predict an outcome based on hit rates (that is, sensitivity) and false alarm rates (that is, 1-specificity). The hit rate is the proportion of correct predictions of an outcome among those who actually experience that outcome. The false alarm rate is the proportion of incorrect predictions of an outcome among those who do not experience it. Each model has multiple hit rates and corresponding false alarm rates, depending on the stringency of the risk cutoff used. That is, when returns to housing instability are predicted even for families with few risk factors, both hit rates and false alarm rates are high. Conversely, when the cutoff is set at higher levels of risk, both hit rates and false alarm rates decrease.

In one study of families using welfare in New York City, Shinn et al. (1998) correctly predicted shelter entry for 66 percent of families although incorrectly predicting entry for 10 percent of families. In a similar study, Shinn et al. (2013) developed a screening model to help prevention programs allocate resources to New York City families at risk for homelessness. Allocating services according to the model rather than worker decisions improved the correct prediction rate from 71.6 to 90.4 percent while serving the same percentage of clients. However, this model incorrectly predicted shelter entry for 65.7 percent of families who remained housed. Achieving the previous study’s 10 percent false prediction rate using this model would require reducing the rate of correct predictions to approximately 33 percent. Together, these studies suggest that predicting housing instability is possible but limited.

Studies rarely organize correlates of returns to housing instability into risk models. In one exception, Shinn et al. (1998) found subsidized housing and age to be the most potent predictors of housing stability after shelter entry. Lin and Smith (2004a) also modeled family risk factors for shelter reentry but noted imperfect measures of substance use, public assistance, and domestic conflict as study limitations. Because both studies focused on data from New York City, models for other locations can help to generalize their results.

Hypotheses

This study examines risk factors for family returns to housing instability after shelter exit and attempts to create risk models for such returns. Based on previous findings, we propose the following four hypotheses. First, we hypothesize that several family features measured at shelter entry will predict returns to housing instability 20 months later. This hypothesis follows the assumption that some groups face increased barriers to stable housing after a homeless episode. Second, we hypothesize that risk factors will not consistently include internal characteristics such as substance dependence or psychological distress.

Third, we hypothesize that protective factors *will* include economic supports like disability income and long-term housing subsidies. Finally, we hypothesize that predictive models composed of family features will add weak predictive utility over and above chance among families *not* using a long-term form of housing subsidies. Because families returning to housing instability after using these subsidies may have more acute challenges, models in this group may have stronger predictive power. Weak predictive models would extend support for O’Flaherty’s (2010) “bad luck” thesis beyond homeless entry to repeated housing instability in general. If strong models are created, they can be used to better allocate resources to families exiting shelter.

Methods

This study analyzes data from the Family Options Study (Gubits et al., 2015), an experimental evaluation of housing and service interventions for families experiencing homelessness. Researchers randomly assigned 2,282 families to usual care or to priority offers of long-term housing subsidies, project-based transitional housing, or short-term rapid re-housing subsidies. They also recorded family features through surveys administered at shelter entry and housing stability outcomes through surveys administered 20 months later. Intermediate surveys administered 6 and 12 months after shelter entry supported housing stability outcome data. Public and Indian Housing Information Center (PIC) data also provided information on housing assistance received through the U.S. Department of Housing and Urban Development’s Housing Choice Voucher and public housing programs. Tenant Rental Assistance Certification System (TRACS) data provided information on housing assistance received through project-based Section 8 programs (Gubits et al., 2015).

Participants

Families enrolled in the Family Options Study as they entered emergency shelter between September 2010 and January 2012 in 1 of 12 communities: Alameda County, California; Atlanta, Georgia; Baltimore, Maryland; Boston, Massachusetts; Denver, Colorado; Honolulu, Hawaii; Kansas City, Missouri; Louisville, Kentucky; Minneapolis, Minnesota; New Haven and Bridgeport, Connecticut; Phoenix, Arizona; and Salt Lake City, Utah. Study eligibility required families to be in shelter for at least 7 days with at least one child age 15 or younger. Participants in this study come from the set of 1,857 Family Options Study households that completed surveys at *both* shelter entry (the point of random assignment) and the 20-month followup (81 percent of original sample). This analysis focused on two groups of families who enrolled in the study. To examine predictors independent of housing intervention effects, the first group included families randomly assigned to the usual care group. Usual care was defined as “any housing or services that a family accesses in the absence of immediate referral to the other interventions” (Gubits et al., 2015: 11). Of the 746 families assigned to usual care, 578 families (77.5 percent) completed followup surveys and were included in this study. The second participant group included families who were randomly assigned to the long-term subsidy group *and* were able to successfully lease a housing unit using that assistance. This group was included in order to examine why some families returned to housing instability after accessing long-term subsidies, which have been shown to decrease the odds of such an outcome (Gubits et al., 2015). Of the 599 families assigned to priority offers of long-term subsidies, 530 families (88.5 percent) completed the 20-month followup survey. The final subsidy-only group

included 446 participants who leased up using subsidies, or 84.2 percent of long-term subsidy families who completed the followup survey. Demographic information for both participant groups is provided in exhibit 1.

Exhibit 1

Baseline Features of Participating Families: 12 U.S. Communities, September 2010 to October 2013

	Usual Care (n = 578)	Long-Term Housing Subsidies (n = 446)
Demographics		
Median age	29.0	28.0
Female (%)	93.1	93.2
Race ^a (%)		
Black non-Hispanic	41.6	36.5
Hispanic	21.7	25.1
Asian/Pacific Islander	7.5	6.4
Mixed or other	9.1	11.7
Marriage-like situation ^b (%)	28.3	25.0
Median number of children	2.0	2.0
Child 1–5 years old (%)	63.4	66.4
Multiple adults in shelter (%)	30.0	26.0
Human capital (%)		
Education level ^c (%)		
High school	32.7	40.8
Greater than high school	27.4	25.1
No work in 24 months (%)	33.0	32.1
Receives TANF (%)	40.4	47.6
Receives SSI/SSDI (%)	12.3	9.8
Median annual income (\$) (SD)	2,315 (6,213)	1,619 (4,837)
Psychosocial profile		
Fair or poor health (%)	30.9	29.9
Health problem (%)	64.5	56.9
Behavioral health problem (%)	8.6	6.1
Personal disability (%)	17.1	16.2
Family disability (%)	16.8	16.2
Psychological distress (%)	24.2	23.1
Post-traumatic stress disorder (%)	24.0	2.8
Substance dependence (%)	21.1	16.9
Felony history (%)	13.7	12.1
Mean Psychosocial Challenge Index (SD)	2.3 (2.1)	2.2 (2.0)
Interpersonal disruption (%)		
Interpersonal violence	50.1	48.9
Separation from child	23.2	24.9
Separation from partner	9.5	9.6
Childhood experiences (%)		
Foster care in childhood	24.0	27.7
Homeless in childhood	16.1	16.7
Housing security history and barriers		
Previously homeless (%)	62.8	63.5
Previously doubled up (%)	84.9	84.2
Eviction or landlord problems (%)	45.0	42.0
Mean Housing Barriers Index (SD)	6.5 (2.8)	6.6 (2.9)

SD = standard deviation. SSI/SSDI = Supplemental Security Income or Social Security Disability Insurance. TANF = Temporary Assistance for Needy Families.

^a Reference group is White non-Hispanic.

^b Reference group is respondents who are divorced, widowed, or single and never married.

^c Reference group is less than high school education.

Measures

Study variables were chosen based on their importance in the literature and their availability in Family Options Study data. Although using these data enabled us to examine nearly all key variables, we were unable to examine social support.

Family Features: Family Options Baseline Survey

Respondents reported on family features in the Family Options baseline survey. Family features are organized here according to categories provided in exhibit 1.

- **Demographics.** Dummy variables in this category included sex; a series of race and ethnicity variables comparing those identifying as Black non-Hispanic, Hispanic or Latino, Asian or Pacific Islander, or multiple or other races with White non-Hispanics; a variable for respondents who were married or living in a marriage-like situation; baseline pregnancy status; the presence of a child between 1 and 5 years old; and the presence of more than one adult in shelter. Respondents' age and number of children in shelter were measured continuously. After determining that individual racial categories did not significantly predict outcomes, we collapsed the race and ethnicity variables into a dummy variable comparing all minority race and ethnicity groups with White non-Hispanics.
- **Human capital.** Dummy variables in this category included two education variables comparing those with high school or greater than high school education with those with less than a high school education; a variable indicating long-term unemployment (more than 24 months); and two public assistance variables indicating receipt of Temporary Assistance for Needy Families benefits or disability benefits (Supplemental Security Income [SSI] or Social Security Disability Insurance [SSDI]). Annual family income was measured continuously.
- **Psychosocial profile.** Dummy variables in this category included a variable comparing respondents reporting poor or fair health with those reporting good health; a variable indicating the respondent reported a health problem; a variable indicating the respondent reported a behavioral health problem, including attention deficit disorder and attention deficit hyperactivity disorder, depression, or bipolar; two disability variables indicating the respondent reported a personal disability or reported caring for a family member with one; and a variable indicating the respondent had a past felony conviction.

Several dummy variables were adapted from standard measures of behavioral health issues. A psychological distress variable adapted from the Kessler 6 Psychological Distress Scale indicated the respondent reported serious psychological distress (Kessler et al., 2003). This scale ranges from 0 to 24, with higher scores indicating more distress, and scores of 13 or higher indicating serious distress. In a sample of 155 respondents, Kessler 6 displayed a Cronbach α of 0.89 and predicted serious distress with a sensitivity of 0.36 and a specificity of 0.96 (Kessler et al., 2003). A variable indicating the respondent experienced post-traumatic stress symptoms in the previous month was adapted from the Posttraumatic Diagnostic Scale (Foa et al., 1997). This scale is based on diagnostic criteria for post-traumatic stress disorder. Its internal consistency is 0.92, and its kappa test-retest reliability is 0.74 (Foa et al., 1997). Scores are positively associated with measures of depression (that is, Beck Depression Inventory) and anxiety (that is, State-Trait Anxiety Inventory).

An alcohol dependence variable was adapted from the Rapid Alcohol Problems Screen (Cherpitel, 2000). In a sample of emergency room users, positive responses to any item on this scale identified alcohol dependence with 93 percent sensitivity and 87 percent specificity (Cherpitel, 2000). Finally, a drug dependence variable was adapted from the Drug Abuse Screening Test (Skinner, 1982; Yudko, Lozhkina, and Fouts, 2007). This test is correlated with the theoretically related Addiction Severity Index Psychiatric Composite Score ($r = 0.40$; Cocco and Carey, 1998). It also displays sensitivity scores between 41 and 95 percent and specificity scores between 68 and 99 percent (Carey, Carey, and Chandra, 2003).

In the interest of model parsimony, measures of alcohol and drug dependence were combined into a single substance dependence dummy variable. The Psychosocial Challenge Index was measured continuously. This index is a count of psychological and social circumstances related to housing instability. Such circumstances include health, mental health, and substance use challenges, intimate partner violence, felony history, and institutional experience (Gubits et al., 2015).

- **Interpersonal disruption.** Dummy variables in this category included a variable indicating the respondent experienced interpersonal violence during adulthood and two family separation variables indicating the respondent was currently separated from a child or a partner.
- **Childhood experiences.** This category included two dummy variables for any homeless episode in childhood and any foster care experience in childhood.
- **Housing stability history and barriers.** Dummy variables in this category included any homeless episode in the previous 5 years, any previous doubling-up experience, and past eviction or landlord problems. The Housing Barriers Index was measured continuously. This index was a count of 15 factors that families entering shelter might perceive as impediments to stable housing. Such factors included unemployment, insufficient income, previous evictions or lease violations, insufficient transportation, and family composition (Gubits et al., 2015).

Outcomes: Returns to Housing Instability

Three dummy variables were used to measure returns to housing instability. The first was a variable indicating that a family spent a night in emergency shelter in the 12 months preceding the followup survey. Data for this variable came from program usage data based primarily on homeless management information systems at participating sites. Homeless management information systems are community-level electronic databases that collect basic information on households that access homeless assistance programs in a given community. In this study, data from these systems were supplemented by Family Options 6- and 12-month tracking surveys, PIC files, and TRACS files (Gubits et al., 2015). The second and third housing instability dummy variables measured self-reported homelessness in the 6 months preceding followup and self-reported doubling up during those 6 months. Data for both variables came from the Family Options Study 20-month followup survey.

Analyses

Three risk models were created for each housing instability outcome by regressing outcomes on the family features in exhibit 1. Predictor variables were entered into a given outcome model if they correlated to that outcome at $p < .1$.

Model Reduction via Backward Regression

After developing full models, final trimmed models were created using backward logistic regression. In this method, nonsignificant variables were removed from full models until only predictors that were significant at $p < .05$ remained. To account for differences between intervention sites, all logistic regressions were two-level hierarchical models with intercepts varying randomly between sites. Next, each eliminated variable was individually reintroduced to its final model to verify its nonsignificance in the context of other variables. All previously excluded variables remained nonsignificant. The final models for families assigned to usual care and those who leased up with long-term housing subsidies are shown in exhibits 2 and 3, respectively.

Exhibit 2

Predictors of Returns to Homelessness Among Participants Randomly Assigned to Usual Care: 12 U.S. Communities, September 2010 to October 2013

Predictor	Prevalence in Full Sample (%)	Emergency Shelter (AUC = 0.71)			Self-Report (AUC = 0.67)			Doubled Up (AUC = 0.69)		
		Group Prevalence Deviation (%)	Individual OR	Final Model OR CI	Group Prevalence Deviation (%)	Individual OR	Final Model OR CI	Group Prevalence Deviation (%)	Individual OR	Final Model OR CI
SSI/SSDI	12.27	-5.73	0.39**	0.32*** [0.16, 0.61]	-2.38	0.73		-2.86	0.61†	
Previously homeless	62.82	+6.63	1.69**	1.71** [1.18, 2.49]	+4.08	1.14		-1.16	0.90	
Previously doubled up	84.87	-1.45	0.84		+0.26	1.03		+6.21	2.53***	2.16** [1.27, 3.67]
Substance abuse	21.07	-0.18	1.11		+3.30	1.10		+7.41	1.59*	1.52* [1.03, 2.25]
Any child not with family	23.19	+3.19	1.30		+11.31	2.11***	2.10*** [1.42, 3.10]	+5.37	1.30	
No work in 24 months	33.03	+4.76	1.31		+7.58	1.59*	1.58* [1.10, 2.27]	-0.08	1.03	
Fair or poor health	30.89	-5.19	0.79		+0.88	1.05		+2.93	1.14	
Two or more adults in shelter	29.98	+1.22	0.91		-3.49	0.74		-1.64	0.86	
Any felony	13.70	+0.04	1.23		+3.57	1.13		+3.32	1.14	
Mean age (SD)	31.27 (10.41)	+1.58 (+0.93)	1.03**	1.04*** [1.02, 1.06]	+0.37 (-0.27)	1.01		-1.48 (-0.95)	0.97***	0.97** [0.95, 0.99]
Mean Psychosocial Challenge Index (SD)	2.25 (2.10)	-0.18 (+0.02)	0.99		+0.19 (+0.16)	1.03		+0.34 (+0.10)	1.12*	

AUC = area under the curve. CI = confidence interval. OR = odds ratio. SD = standard deviation. SSI/SSDI = Supplemental Security Income or Social Security Disability Insurance. Notes: N = 578. † p < .10; * p < .05; ** p < .01; *** p < .001. All analyses weighted for survey nonresponse. Psychosocial Challenge Index score significantly contributes to the final doubled-up model when substance abuse is excluded. In this scenario, doubled-up AUC remains 0.69, and OR for age, previous doubling-up experiences, and Psychosocial Challenge Index score are 0.97** [0.95, 0.99], 2.10** [1.23, 3.56], and 1.12* [1.02, 1.23], respectively.

Exhibit 3

Predictors of Returns to Homelessness Among Participants Leased Up With Long-Term Subsidies: 12 U.S. Communities, September 2010 to October 2013

Predictor	Prevalence in Full Sample (%)	Emergency Shelter (AUC = 0.91)			Self-Report (AUC = 0.77)			Doubled Up (AUC = 0.82)			
		Group Prevalence Deviation (%)	Individual OR	Final Model OR CI	Group Prevalence Deviation (%)	Individual OR	Final Model OR CI	Group Prevalence Deviation (%)	Individual OR	Final Model OR CI	
SSI/SSDI Previously	9.82 63.54	-2.26 -2.80	0.81 1.08	[0.13, 0.77]	+3.16 +15.20	1.25 2.26 [†]	[1.01, 54.00]	+1.52 +19.64	1.06 2.89*	2.67*	[1.10, 6.44]
Previously homeless doubled up	84.15	-11.63	0.30**	[0.13, 0.77]	+12.98	7.32*	[1.01, 10.04]	+10.04	2.63		
Substance abuse	16.87	-1.90	1.11		+5.25	1.62		+2.36	1.12		
Any child not with family	24.89	+1.86	1.84		+18.06	2.50**	[1.05, 4.54]	+14.91	1.88 [†]		
No work in 24 months	32.09	+9.88	1.86 [†]		+8.41	1.47		+17.84	2.26*	2.29*	[1.15, 4.54]
Fair or poor health	29.92	+17.30	3.03**	[1.65, 7.72]	+10.96	1.35		+4.69	1.06		
Two or more adults in shelter	26.00	+19.46	4.08***	[1.97, 9.51]	-3.79	0.88		+0.82	1.18		
Any felony	12.09	+3.61	2.61 [†]		+14.34	2.88*	[1.08, 5.87]	3.90	1.07		
Mean age (SD)	30.07 (8.86)	+1.20 (-0.25)	1.02		+0.77 (-0.72)	1.01		+0.69 (+0.83)	1.01		
Mean Psychosocial Challenge Index (SD)	2.17 (1.99)	-0.19 (+0.38)	1.08		+0.74 (+0.21)	1.15		+0.81 (+0.23)	1.24*		

AUC = area under the curve. CI = confidence interval. OR = odds ratio. SD = standard deviation. SSI/SSDI = Supplemental Security Income or Social Security Disability Insurance. Notes: N= 446. [†] p < .10; * p < .05; ** p < .01; *** p < .001. All analyses weighted for survey nonresponse.

Testing Model Efficiency

Next, we examined the efficiency of the final trimmed models using receiver operating characteristic (ROC) curves that show each model's hit rates against false alarm rates for all possible decision thresholds (cutoff points for predicted values in the model). Comparing the height of a curve on the vertical axis (that is, hit rate) with its corresponding position along the horizontal axis (that is, false alarm rate) determines efficiency. Curves approaching the upper-left corner of the figure, where hit rates are high even when false alarm rates are low reflect, strong predictive models. The area under the curve (between the curve and a diagonal line representing chance, or zero diagnosticity, indicates the overall efficiency in the model.

ROC curves enable policymakers to decide the hit rate that can be achieved if a given false alarm rate is tolerable, or alternatively the proportion of a population that would need to receive a perfectly successful intervention in order to avert a given proportion of adverse outcomes (Swets, 1988, 1973).

Results

The following section describes final predictive models for self-reported returns to homelessness, emergency shelter returns, and doubling-up experiences. ROC curves for both the usual care sample and the long-term housing subsidy sample are also presented.

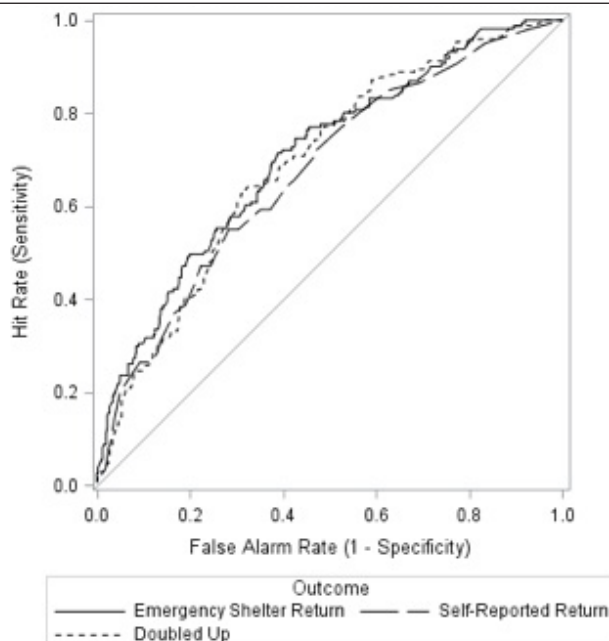
Usual Care Sample

Exhibit 2 reports risk factors for the three housing instability outcomes in the usual care sample ($N = 578$). Each predictor's final model odds ratio is adjusted to include other family features predicting that outcome at $p < .05$. Exhibit 2 also provides the prevalence of each feature in the total usual care sample and among respondents experiencing each outcome. Exhibit 4 shows ROC curves for each final model.

Three variables predicted returns to emergency shelter in the final model ($n = 161$). Odds of returning to shelter were higher for heads of household who were older or had previous homelessness experiences. Receiving SSI or SSDI benefits was associated with a lower chance of returning to shelter. Two variables contributed to self-reported returns to homelessness in the final model ($n = 140$). Odds of this outcome were higher for families who had a child separated from the family or whose head of household had not worked in the previous 24 months at study outset. Three variables contributed to self-reported doubling up ($n = 171$). As for emergency shelter returns, age mattered. However, in this case younger respondents were more likely to double up. Variables associated with higher odds of doubling up included previous doubling-up experiences and substance dependence. The Psychosocial Challenge Index score was associated with higher odds of doubling up as an individual variable but did not contribute in the context of other variables. As exhibit 4 shows, the areas under the curve for the final emergency shelter returns, self-reported homelessness returns, and doubled-up models were 0.71, 0.67, and 0.69, respectively. Together, they indicate that one could correctly predict between 25 and 30 percent of returns to housing instability if accepting the 10 percent false positive rate from Shinn et al. (1998). The appropriateness of using that rate in the present study is discussed in the following section.

Exhibit 4

Final Model ROC Curves for Usual Care Outcomes



ROC = receiver operating characteristic.

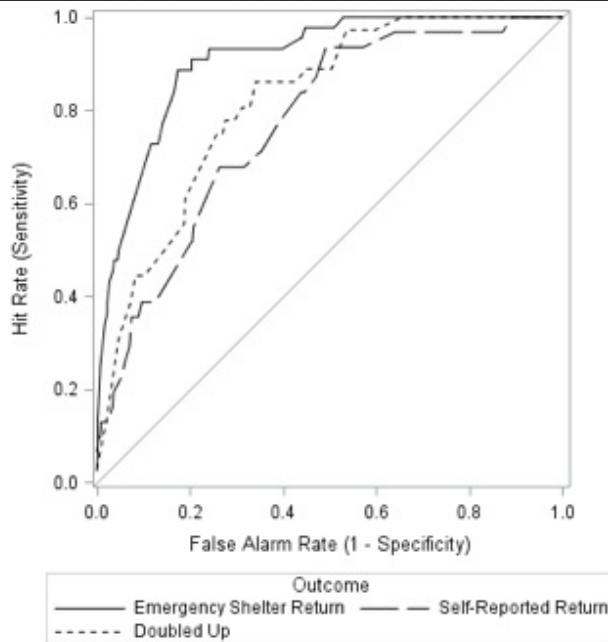
Long-Term Housing Subsidy Sample

Exhibit 3 presents parallel models for participants who were assigned to and leased up with long-term housing subsidies (N = 446). Importantly, each housing instability outcome was relatively rare among families who had leased up with long-term subsidies, affecting under 10 percent of the sample.

Three variables contributed to returns to emergency shelter in the final model (n = 44). Odds of returning to shelter were lower for respondents who had previously doubled up and higher for respondents reporting poor or fair health or multiple sheltered adults in the family. Three variables contributed to self-reported returns to homelessness in the final model (n = 31). As with emergency shelter returns, previous doubling-up experiences were associated with higher odds of return. However, past felonies and separation from a child in shelter were also associated with higher odds of return. Two variables contributed to self-reported doubling up in the final model (n = 36). Once again, previous homelessness was associated with higher odds of experiencing the outcome. Odds of doubling up were also higher among respondents who had not worked in the previous 24 months. The Psychosocial Challenge Index score was associated only with higher odds of doubling up as an individual variable, not in the final model. As exhibit 5 shows, the areas under the curve for the final emergency shelter returns, self-reported returns, and doubled-up models were 0.91, 0.77, and 0.82, respectively. Together, the models indicate that one could

Exhibit 5

Final Model ROC Curves for Long-Term Housing Subsidy Outcomes



ROC = receiver operating characteristic.

correctly predict approximately 38 percent of self-reported returns to homelessness and 45 percent of doubling-up experiences if accepting Shinn et al.'s (1998) 10 percent false positive rate. One could predict nearly 70 percent of returns to emergency shelter with the same false positive rate.

Discussion

Overall, findings suggest that observable features of low-income families are weak predictors of future housing instability findings, supporting O’Flaherty’s (2010) “bad luck” argument. Among the group of families who were assigned to receive usual care, few family features predicted returns to housing instability. ROC curves for the usual care sample indicate that one can correctly predict only about one-fourth of returns to housing instability while maintaining a false alarm rate of 10 percent. One could use this study’s models to predict more returns to housing instability by also accepting a higher false alarm rate. Conversely, one could preserve resources by predicting fewer returns to housing instability, although doing so would result in a lower hit rate. Deciding where to place a prediction cutoff in models like these is a political, moral, and practical act. Those who determine where to place such cutoffs must consider the personal and social costs of housing instability, as well as competing spending priorities.

The findings from the usual care group suggest that past experiences of a particular type of housing instability predict future experiences of that same type. For example, families with homeless

episodes prior to their enrollment in the Family Options Study returned to shelter more frequently than other families, and those who had previously doubled up were more likely than other families to double up again. These findings add to previous research that suggests past housing instability predicts future instability (Greer et al., 2016; Shinn et al., 1998), along with a vast social science literature suggesting that past behavior is a good predictor of subsequent behavior.

Age predicted both returns to emergency shelter and doubling-up experiences, although in opposite directions. The finding that younger heads of household doubled up more frequently is consistent with previous research (Pilkauskas, Garfinkel, and McLanahan, 2014). As heads of household get older, access to reasonable doubling-up options may decline, leading them to return to shelter instead of staying with family or friends. Although both age effects were statistically significant, each had a limited influence on housing instability outcomes. A 10-year increase in age was associated with 48 percent higher odds of returning to emergency shelter and 26 percent lower odds of doubling up.

Findings suggested a relationship between economic assistance and housing stability. Receiving SSI or SSDI was associated with a lower likelihood of returning to emergency shelter. Also, as reported previously (Gubits et al., 2015) and seen again here, housing subsidies reduced all forms of housing instability dramatically. Although substance dependence predicted doubling up and long-term unemployment predicted self-reported returns to homelessness, these relationships should be understood within the context of systemic influences like limited job opportunities and low wages (O'Connor, 2001).

The finding that families with children separated at shelter entry experienced more self-reported returns to homelessness may highlight the challenges of “invisible mothers.” This term refers to mothers who attempt to remain connected with separated children while also navigating homelessness (Barrow and Laborde, 2008). Previous research notes that family homelessness may be a strong contributor to child separations (Cowal et al., 2002). Furthermore, caregivers living away from one child at shelter entry may also be more likely to become separated from more children during the course of housing instability. Caregivers who are separated from all children may become ineligible for services reserved for families with children, increasing their likelihood of returning to homelessness.

Predictive power was somewhat greater for families who had leased up with a long-term housing subsidy. It is possible that the few families who returned to homelessness and doubled-up situations after using long-term subsidies had clearer family-level housing barriers than families who returned without access to subsidies. In this study, each long-term subsidy model, especially the one predicting emergency shelter returns, improved on its usual care counterpart. Nevertheless, the modest predictive power of these models taken together is consistent with O’Flaherty’s (2010) “bad luck” argument.

Findings in the long-term subsidy group may also support economic strategies for addressing housing instability. One example is the disappearance of the protective effect of disability income among families receiving long-term subsidies. In an economic construction of poverty, disability income reduces returns to housing instability by increasing the ratio of income to housing cost.

However, subsidies hold families' housing costs to 30 percent of income irrespective of source, making disability income less important. Although long-term unemployment influenced doubling-up experiences, it failed to predict other outcomes.

Some results of this study were unexpected. The reasons why previous doubling-up experiences were associated with lower odds of returning to emergency shelter among families receiving long-term subsidies are not clear. However, one explanation is that returns to other forms of housing instability served as alternatives to returns to emergency shelter, lowering the odds of that outcome. Previous doubling-up experiences were significantly correlated with self-reported returns to homelessness, $r = 0.10$, $p = 0.04$, and marginally correlated with subsequent doubling-up experiences, $r = 0.08$, $p = 0.09$. Also, the reason that reporting a felony at shelter entry predicted self-reported returns to homelessness for families who randomly received and subsequently used priority access to long-term subsidies but not for those randomly assigned to receive usual care is not clear. One explanation is that those with felonies at shelter entry may be more likely to violate publicly subsidized leases (Housing Authority of the City of Alameda, 2016).

Also, the finding that families with multiple adults were more likely to return to emergency shelter was interesting. This outcome is reported in previous studies and merits further discussion (Lin and Smith, 2004b; Rog et al., 2017; Shinn et al., 1998; Wood et al., 1990). Although Wood et al. (1990) reported similar findings, they attributed these findings to a set of policies that are no longer operational. At the time of their publication, the authors noted that two-parent families often did not qualify for programs like Medicaid, Homeless Assistance Program, and Aid to Families with Dependent Children (AFDC). However, in 1996, the Personal Responsibility and Work Opportunity Act replaced AFDC with Temporary Assistance for Needy Families, or TANF, which treats one- and two-parent families similarly in most states (Hahn et al., 2016). The data in Shinn et al. (1998) were also collected while AFDC was still operational.

Partners in shelter with mothers experiencing homelessness may serve as a destabilizing force. Partners may increase the likelihood of returning to shelter by increasing the number of family members capable of committing a lease violation. Lease agreements are often written such that terminations can result from the activity of any household member (Housing Authority of the City of Alameda, 2016). Additional adults may also be more difficult for mothers to support financially if those adults do not contribute to household earnings. A recent report reviewing family homelessness in one state observes that the average size of homeless families is growing due to an increasing number of spouses and partners living with the family (Rog et al., 2017). The same report suggests that larger families experience longer shelter stays and more returns to shelter.

Policy Recommendations

Inconsistency among predictive variables in this study raises the possibility of spurious results, making broad policy conclusions difficult to draw. However, findings still suggest potential policy directions for increasing housing stability among families leaving homelessness. The small number of families experiencing housing instability after using long-term housing subsidies suggests that these subsidies may help prevent homelessness and unstable doubling-up experiences among families leaving shelter. Making reliable employment and effective substance dependence treatment

available on shelter exit may reduce returns to housing instability, although this conclusion is extremely tentative. Our finding that long-term unemployment and substance dependence each predicted housing instability is tempered by the fact that neither predictor was consistent across outcomes or study groups.

Our finding that families assigned to usual care and receiving SSI or SSDI income had fewer returns to emergency shelter suggests this income may protect against sheltered homelessness. However, our results provide no evidence that this income protects against other forms of housing instability or assists families already receiving comparable economic support. The SSI/SSDI Outreach, Access, and Recovery program sponsored by the Substance Abuse and Mental Health Services Administration has a successful history of improving access to SSI and SSDI income among individuals experiencing homelessness. This program should be explicitly evaluated among families who are homeless or doubled up (Dennis et al., 2011). Ultimately, this study indicates that targeting resources based on predicted risk of future housing instability may be a limited endeavor. Although our findings suggest caseworkers should assess families' housing histories when deciding who most needs prevention resources, assessing other family features seems unlikely to improve resource allocation.

Acknowledgments

This study was supported by the National Institute of Child and Human Development grant 5R01HD066082 to Vanderbilt University and U.S. Department of Housing and Urban Development contract C-CHI-00943 Task Orders T-0001 and T-0003 to Abt Associates.

Authors

Zachary Glendening is a doctoral student in Community Research and Action at Vanderbilt University.

Marybeth Shinn is a professor of Human and Organizational Development at Vanderbilt University.

References

- Barrow, Susan M., and Nicole D. Laborde. 2008. "Invisible Mothers: Parenting by Homeless Women Separated From Their Children," *Gender Issues* 25 (3): 157–172. DOI: 10.1007/s12147-008-9058-4.
- Bassuk, Ellen L., John C. Buckner, Jennifer N. Perloff, and Shari S. Bassuk. 1998. "Prevalence of Mental Health and Substance Use Disorders Among Homeless and Low-Income Housed Mothers," *American Journal of Psychiatry* 155 (11): 1561–1564. DOI: 10.1176/ajp.155.11.1561.
- Bassuk, Ellen L., John C. Buckner, Linda F. Weinreb, Angela Browne, Shari S. Bassuk, Ree Dawson, and Jennifer N. Perloff. 1997. "Homelessness in Female-Headed Families: Childhood and Adult Risk and Protective Factors," *American Journal of Public Health* 87 (2): 241–248. DOI: 10.2105/AJPH.87.2.241.

Bassuk, Ellen L., Carmela J. DeCandia, Corey A. Beach, and Fred Berman. 2014. *America's Youngest Outcasts: A Report Card on Child Homelessness*. Washington, DC: American Institutes for Research.

Bush, Hannah, and Marybeth Shinn. 2017. "Families' Experiences of Doubling Up After Homelessness," *Cityscape* 19 (3): 331–356.

Carey, Kate, Michael Carey, and Prabha Chandra. 2003. "Psychometric Evaluation of the Alcohol Use Disorders Identification Test and Short Drug Abuse Screening Test With Psychiatric Patients in India," *Journal of Clinical Psychiatry* 64 (7): 767–774. DOI: 10.4088/JCP.v64n0705.

Cherptel, Cheryl J. 2000. "A Brief Screening Instrument for Problem Drinking in the Emergency Room: The RAPS4," *Journal of Studies of Alcohol* 61 (3): 447–449.

Cocco, Karen, and Kate Carey. 1998. "Psychometric Properties of the Drug Abuse Screening Test in Psychiatric Outpatients," *Psychological Assessment* 10 (4): 408–414. DOI: 10.1037/1040-3590.10.4.408.

Cowal, Kirsten, Marybeth Shinn, Beth C. Weitzman, Daniela Stojanovic, and Larissa Labay. 2002. "Mother-Child Separations Among Homeless and Housed Families Receiving Public Assistance in New York City," *American Journal of Community Psychology* 30 (5): 711–730. DOI: 10.1023/A:1016325332527.

Culhane, Dennis P., Stephen Metraux, Jung Min Park, Maryanne Schretzman, and Jesse Valente. 2007. "Testing a Typology of Family Homelessness Based on Patterns of Public Shelter Utilization in Four US Jurisdictions: Implications for Policy and Program Planning," *Housing Policy Debate* 18 (1): 1–28. DOI: 10.1080/10511482.2007.9521591.

Cutuli, J.J., Christopher D. Desjardins, Janette E. Herbers, Jeffrey D. Long, David Heistad, Chi-Keung Chan, Elizabeth Hinz, and Ann S. Masten. 2013. "Academic Achievement Trajectories of Homeless and Highly Mobile Students: Resilience in the Context of Chronic and Acute Risk," *Child Development* 84 (3): 841–857.

Cutuli, J.J., Janette E. Herbers, Maria Rinaldi, Ann S. Masten, and Charles N. Oberg. 2010. "Asthma and Behavior in Homeless 4- to 7-Year-Olds," *Pediatrics* 125 (1): 145–151.

Dennis, Deborah, Margaret Lassiter, William H. Connelly, and Kristin Lupfer. 2011. "Helping Adults Who Are Homeless Gain Disability Benefits: The SSI/SSDI Outreach, Access, and Recovery (SOAR) Program," *Psychiatric Services* 62 (11): 1373–1376.

Evans, Gary W., Peter Lercher, and Walter W. Kofler. 2002. "Crowding and Children's Mental Health: The Role of House Type," *Journal of Environmental Psychology* 22 (3): 221–232. DOI: 10.1006/jevp.2002.0256.

Fantuzzo, John W., Whitney A. LeBoeuf, Chin-Chih Chen, Heather L. Rouse, and Dennis P. Culhane. 2012. "The Unique and Combined Effects of Homelessness and School Mobility on the Educational Outcomes of Young Children," *Educational Researcher* 41 (9): 393–402.

Foa, Edna B., Laurie Cashman, Lisa Jaycox, and Kevin Perry. 1997. "The Validation of a Self-Report Measure of Posttraumatic Stress Disorder: The Posttraumatic Diagnostic Scale," *Psychological Assessment* 9 (4): 445–451.

Goodman, Lisa A. 1991. "The Prevalence of Abuse Among Homeless and Housed Poor Mothers: A Comparison Study," *American Journal of Orthopsychiatry* 61 (4): 489–500. DOI: 10.1037/h0079287.

Greenberg, Greg A., Jennifer Hoblyn, Catherine Seibyl, and Robert Rosenheck. 2006. "Housing Outcomes for Hospitalized Homeless Veterans," *Journal of Health Care for the Poor and Underserved* 17 (2): 425–440. DOI: 10.1353/hpu.2006.0061.

Greer, Andrew L., Marybeth Shinn, Jonathan Kwon, and Sara Zuiderveen. 2016. "Targeting Services to Individuals Most Likely To Enter Shelter: Evaluating the Efficiency of Homelessness Prevention," *Social Service Review* 90 (1): 130–155.

Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Hahn, Heather, Linda Giannarelli, David Kassabian, and Eleanor Pratt. 2016. *Assisting Two-Parent Families Through TANF*. Office of Planning, Research and Evaluation Report No. 2016-56. Washington, DC: U.S. Department of Health and Human Services. <http://www.urban.org/sites/default/files/publication/81851/2000837-Assisting-Two-Parent-Families-Through-TANF.pdf>.

Henry, Meghan, Rian Watt, Lily Rosenthal, and Azim Shivji. 2016. *The 2016 Annual Homeless Assessment Report (AHAR) to Congress. Part 1: Point-in-Time Estimates of Homelessness*. Washington, DC: U.S. Department of Housing and Urban Development.

Housing Authority of the City of Alameda. 2016. "Chapter 12: Termination of Assistance and Tenancy." <http://www.alamedahsg.org/common/pages/DisplayFile.aspx?itemid=6223353>.

Hudson, Christopher G., and Yvonne M. Vissing. 2010. "The Geography of Adult Homelessness in the US: Validation of State and County Estimates," *Health and Place* 16 (5): 828–837. DOI: 10.1016/j.healthplace.2010.04.008.

Kerker, Bonnie D., Jay Bainbridge, Joseph Kennedy, Yusef Bennani, Tracy Agerton, Dova Marder, Lisa Forgione, Andrew Faciano, and Lorna E. Thorpe. 2011. "A Population-Based Assessment of the Health of Homeless Families in New York City, 2001–2003," *American Journal of Public Health* 101 (3): 546–553. DOI: 10.2105/AJPH.2010.193102.

- Kertesz, Stefan G., Travis P. Baggett, James J. O'Connell, David S. Buck, and Margot B. Kushel. 2016. "Permanent Supportive Housing for Homeless People—Reframing the Debate," *The New England Journal of Medicine* 375 (22): 2115–2117. DOI: 10.1056/NEJMp1608326.
- Kessler, Ronald C., Peggy R. Barker, Lisa J. Colpe, J.F. Epstein, Joseph C. Gfroerer, Eva Hiripi, Mary J. Howes, Sharon-Lise Normand, Ron Manderscheid, Ellen E. Walters, and Alan M. Zaslavsky. 2003. "Screening for Serious Mental Illness in the General Population," *Archives of General Psychiatry* 60 (2): 184–189. DOI: 10.1001/archpsyc.60.2.184.
- Lin, Jeffery, and Nancy Smith. 2004a. "Section V: An In-Depth Examination of Families Who Exit To Subsidized Housing From Shelter in New York City." In *Understanding Family Homelessness in New York City: An In-Depth Study of Families' Experiences Before and After Shelter*, edited by Nancy Smith, Zaire D. Flores, Jeffery Lin, and John Markovic. New York: Vera Institute of Justice: 14 p.
- . 2004b. "Section IV: Repeat Shelter Use Among Families Who Exit Shelter in New York City." In *Understanding Family Homelessness in New York City: An In-Depth Study of Families' Experiences Before and After Shelter*, edited by Nancy Smith, Zaire D. Flores, Jeffery Lin, and John Markovic. New York: Vera Institute of Justice: 32 p.
- Obradović, Jelena, Jeffery D. Long, J.J. Cutuli, Chi-Keung Chan, Elizabeth Hinz, David Heistad, and Ann S. Masten. 2009. "Academic Achievement of Homeless and Highly Mobile Children in an Urban School District: Longitudinal Evidence on Risk, Growth, and Resilience," *Development and Psychopathology* 21 (2): 493–518. DOI: 10.1017/S0954579409000273.
- O'Connor, Alice. 2001. *Poverty Knowledge: Social Science, Social Policy, and the Poor in Twentieth-Century U.S. History*. Princeton, NJ: Princeton University Press.
- O'Flaherty, Dan. 2010. "Homelessness as Bad Luck: Implications for Research and Policy." In *How to House the Homeless*, edited by Ingrid Gould Ellen and Brendan O'Flaherty. New York: Russell Sage Foundation: 143–182.
- Pilkauskas, Natasha V., Irwin Garfinkel, and Sara S. McLanahan. 2014. "The Prevalence and Economic Value of Doubling Up," *Demography* 51 (5): 1667–1676. DOI: 10.1007/s13524-014-0327-4.
- Rodriguez, Jason. 2013. "Homelessness Recurrence in Georgia: Descriptive Statistics, Risk Factors, and Contextualized Outcome Measurement." www.dca.state.ga.us/housing/specialneeds/programs/downloads/homelessnessrecurrenceingorgia.pdf.
- Rog, Debra J., Kathryn A. Henderson, Andrew L. Greer, Kathryn M. Kulbicki, and Linda Weinreb. 2017. *The Growing Challenge of Family Homelessness: Homeless Assistance for Families in Massachusetts: Trends in Use FY2008-FY2016*. Boston: The Boston Foundation.
- Schwarz, Kathleen B., Beth Garrett, Jenifer Hampsey, and Douglas Thompson. 2007. "High Prevalence of Overweight and Obesity in Homeless Baltimore Children and Their Caregivers: A Pilot Study," *Medscape General Medicine* 9 (1): 48.

Shdaimah, Corey S. 2009. “‘CPS Is Not a Housing Agency’; Housing Is a CPS Problem: Towards a Definition and Typology of Housing Problems in Child Welfare Cases,” *Children and Youth Services Review* 31 (2): 211–218. DOI: 10.1016/j.childyouth.2008.07.013.

Shinn, Marybeth, Jim Baumohl, and Kim Hopper. 2001. “The Prevention of Homelessness Revisited,” *Analyses of Social Issues and Public Policy* 1 (1): 95–127. DOI: 10.1111/1530-2415.00006.

Shinn, Marybeth, Andrew L. Greer, Jay Bainbridge, Jonathan Kwon, and Sara Zuiderveen. 2013. “Efficient Targeting of Homelessness Prevention Services for Families,” *American Journal of Public Health* 103 (S2): S324–S330. DOI: 10.2105/AJPH.2013.301468.

Shinn, Marybeth, Judith S. Scheingart, Nathaniel C. Williams, Jennifer Carlin-Mathis, Nancy Bialo-Karagis, Rachel Becker-Klein, and Beth C. Weitzman. 2008. “Long-Term Associations of Homelessness With Children’s Well-Being,” *American Behavioral Scientist* 51 (6): 789–809. DOI: 10.1177/0002764207311988.

Shinn, Marybeth, Beth C. Weitzman, Daniela Stojanovic, James R. Knickman, Lucila Jiménez, Lisa Duchon, Susan James, and David H. Krantz. 1998. “Predictors of Homelessness Among Families in New York City: From Shelter Request to Housing Stability,” *American Journal of Public Health* 88 (11): 1651–1657. DOI: 10.2105/AJPH.88.11.1651.

Skinner, Harvey A. 1982. “The Drug Abuse Screening Test,” *Addictive Behavior* 7 (4): 363–371. DOI: 10.1016/0306-4603(82)90005-3.

Smith, Nancy, and Zaire Dinzey Flores. 2005. Section III: Struggling To Make Ends Meet Pre-Shelter Experiences of Homeless Families in New York City. In *Understanding Family Homelessness in New York City: An In-Depth Study of Families’ Experiences Before and After Shelter*, edited by Nancy Smith, Zaire D. Flores, Jeffery Lin, and John Markovic. New York: Vera Institute of Justice: 65 p.

Spellman, Brooke, Jill Khadduri, Brian Sokol, and Josh Leopold. 2010. *Costs Associated With First-Time Homelessness for Families and Individuals*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. https://www.huduser.gov/portal/publications/povsoc/cost_homelessness.html.

Stojanovic, Daniela, Beth C. Weitzman, Marybeth Shinn, Larissa E. Labay, and Nathaniel P. Williams. 1999. “Tracing the Path out of Homelessness: The Housing Patterns of Families After Exiting Shelter,” *Journal of Community Psychology* 27 (2): 199–208. DOI: 10.1002/(SICI)1520-6629(199903)27:2<199::AID-JCOP7>3.0.CO;2-G.

Swets, John A. 1988. “Measuring the Accuracy of Diagnostic Systems,” *Science* 240 (4857): 1285–1293.

———. 1973. “The Relative Operating Characteristic in Psychology,” *Science* 182 (4116): 990–1000.

Voight, Adam, Marybeth Shinn, and Maury Nation. 2012. “The Longitudinal Effects of Residential Mobility on the Academic Achievement of Urban Elementary and Middle School Students,” *Educational Researcher* 41 (9): 385–392.

Weinreb, Linda F., John C. Buckner, Valerie Williams, and Joanne Nicholson. 2006. "A Comparison of the Health and Mental Health Status of Homeless Mothers in Worcester, Mass: 1993 and 2003," *American Journal of Public Health* 96 (8): 1444–1448. DOI: 10.2105/AJPH.2005.069310.

Weitzman, Beth C., James R. Knickman, and Marybeth Shinn. 1992. "Predictors of Shelter Use Among Low-Income Families: Psychiatric History, Substance Abuse, and Victimization," *American Journal of Public Health* 82 (11): 1547–1550. DOI: 10.2105/AJPH.82.11.1547.

Weitzman, Michael, Steven Gortmaker, and Arthur Sobol. 1990. "Racial, Social, and Environmental Risks for Childhood Asthma," *American Journal of Diseases of Children* 144 (11): 1189–1194. DOI: 10.1001/archpedi.1990.02150350021016.

Winkler, Anne E. 1993. "The Living Arrangements of Single Mothers With Dependent Children: An Added Perspective," *The American Journal of Economics and Sociology* 52 (1): 1–18. DOI: 10.1111/j.1536-7150.1993.tb02734.x.

Wong, Yin-Ling Irene, Dennis P. Culhane, and Randall Kuhn. 1997. "Predictors of Exit and Reentry Among Family Shelter Users in New York City," *Social Service Review* 71 (3): 441–462. <http://www.jstor.org/stable/30012627>.

Wood, David, R. Burciaga Valdez, Toshi Hayashi, and Albert Shen. 1990. "Homeless and Housed Families in Los Angeles: A Study Comparing Demographic, Economic, and Family Function Characteristics," *American Journal of Public Health* 80 (9): 1049–1052. DOI: 10.2105/AJPH.80.9.1049.

Yu, ManSoo, Carol S. North, Patricia D. LaVesser, Victoria A. Osborne, and Edward L. Spitznagel. 2008. "A Comparison Study of Psychiatric and Behavior Disorders and Cognitive Ability Among Homeless and Housed Children," *Community Mental Health Journal* 44 (1): 1–10. DOI: 10.1007/s10597-007-9100-0.

Yudko, Errol, Olga Lozhkina, and Adriana Fouts. 2007. "A Comprehensive Review of Psychometric Properties of the Drug Abuse Screening Test," *Journal of Substance Abuse Treatment* 32 (2): 189–198. DOI: 10.1016/j.jsat.2006.08.002.

Zlotnick, Cheryl. 2009. "What Research Tells Us About the Intersecting Streams of Homelessness and Foster Care," *American Journal of Orthopsychiatry* 79 (3): 319–325. DOI: 10.1037/a0017218.

Families' Experiences of Doubling Up After Homelessness

Hannah Bush
Marybeth Shinn
Vanderbilt University

Abstract

This study examined experiences of doubling up among families after episodes of homelessness. Doubling up refers to two or more adults or families residing in the same housing unit, which has been an increasing trend in the United States in recent decades. Within the past 14 years, the number of households containing more than one family, related or unrelated, has more than tripled. Although doubling up is increasingly common among families at all income levels, this study seeks to understand the experiences of doubling up among families who have been homeless. Through qualitative interviews with caregivers of 29 families, we analyzed advantages and disadvantages of doubling up with the caregiver's parent, other family, and nonfamily. Experiences were rated on a four-point scale—(1) mostly negative, (2) negative mixed, (3) positive mixed, and (4) mostly positive—and coded for various positive and negative themes. Overall, we found that doubling up was a generally negative experience for families in our sample, regardless of their relationship to their hosts. Common themes included negative effects on children, undesirable environments, interpersonal tension, and feelings of impermanence and instability. For formerly sheltered families in this study, doubling up after shelter did not resolve their period of housing instability and may be only another stop in an ongoing cycle of homelessness.

Introduction

A report prepared for the U.S. Department of Housing and Urban Development (HUD) revealed that, between 2003 and 2009, the rate at which new households formed shrank, and the number of *doubled-up households*—containing an adult other than the householder and the householder's spouse, partner, or children under the age of 21—increased (Eggers and Moumen, 2013). The report used data from the American Housing Survey between 2003 and 2009 to calculate that doubled-up households containing relatives and nonrelatives increased by 7.5 and 12.1 percent

respectively, whereas the total number of households increased only 5.6 percent. Households with an unrelated subfamily increased especially dramatically from 199,000 to 622,000 during the 6-year span. Although data incompatibilities make changes from 2009 to 2011 less certain, it appears that the number of households with related subfamilies continued to climb by 366,000 during this period, but the number with unrelated subfamilies fell by 80,000. The report linked the increase of Americans doubling up with the recent economic recession but suggested the need for further research to follow this trend.

Doubled-up households reflect a wide range of experiences, and doubling up is motivated by many factors. The recession sparked an increase in the number of individuals, particularly young adults ages 18 to 34, doubling up with both family members and nonrelatives (Mykyta and Macartney, 2011). According to Norton and Glick (1986), single-parent families rarely own homes compared with two-parent families and have a higher rate of residential mobility, which may cause single parents to double up more often. Winkler (1993) found that single mothers tend to double up with either other single female relatives or a related married couple, and these mothers tend to be young with little education or work experience. Sharing homes can also be related to ethnic-racial cultural practices of those in the household (Koebel and Murray, 1999). In the United States, Asian and Hispanic households are more likely than non-Hispanic White and Black households to contain more people due to their historically close-contact societies and cultural heritage (Myers, Baer, and Choi, 1996). The experience of families who have been homeless may be less positive than for other groups, because many had already left doubled-up situations they found unsatisfactory or believe emergency shelters preferable to the doubled-up situations that are available to them.

In the Family Options Study of housing and service interventions for families experiencing homelessness, 85 percent of families were doubled up with other households as adults because they could not pay rent, and 45 percent of families reported living with friends or relatives immediately before entering the shelters from which they were recruited to the study (Gubits et al., 2015). The nearly 2,300 families from 12 sites were randomly assigned to special offers of long-term housing subsidies without additional services, short-term subsidies with some services focused on housing and self-sufficiency, transitional housing programs with extensive social services, or usual care. At 20 months after entering shelter, 31 percent of study families assigned to usual care, 12 percent of those offered long-term subsidies, 26 percent of those offered short-term subsidies, and 32 percent of those offered transitional housing reported spending at least 1 night in the past 6 months with a friend or relative because they could not find or afford a place of their own (Gubits et al., 2015). To better understand the implications of doubling up for formerly homeless families, this study looks at different doubled-up situations that a subset of Family Options Study families from all intervention groups experienced after an episode of homelessness.

Review of the Literature

Although little is known specifically about the consequences of doubling up for families experiencing homelessness, research on sharing homes provides insight into possible positive and negative effects (Ahrentzen, 2003).

Potential Positive Effects

Social and instrumental support. As data from the American Housing Survey indicate, many people choose to double up regardless of income, age, race, or marital status. For many experiencing crisis or otherwise life-changing events, doubling up can provide access to emotional and instrumental support (Despres, 1991; Hemmens, Hoch, and Carp, 1996). One study found that formerly homeless mothers in doubled-up living arrangements received more childcare support compared with those in shelter, because more people were available to help with their children (Letiecq, Anderson, and Koblinsky, 1998).

Positive physical environment for child. Doubling up could lead to better physical environments for children. Low-income families that share homes may live in better neighborhoods or reside in better quality homes with fewer problems than those living on their own (Koebel and Murray, 1999; Koebel and Rives, 1993). Safer neighborhoods could allow for children to play outside and contribute to children's mental health (Despres, 1991; Evans, Wells, and Moch, 2003).

Reduced expenses. Relieving the economic burden of owning or renting one's own home is one of the primary reasons for doubling up (Despres, 1993, 1991). Family poverty rates of doubled-up households were lower than those of households not doubled up between 2008 and 2010, following the Great Recession. Additionally, family poverty rates were lower than personal poverty rates for doubled-up households, demonstrating that doubling up provided some economic relief for those in shared households (Mykyta and Macartney, 2011). Single mothers living with their own parents may have access to family income to supplement the costs of food and caring for children (Winkler, 1993).

Potential Negative Effects

Doubling up may also have negative consequences due to instability, overcrowding, interpersonal tension, or chaos.

Instability. Doubling up and not being a leaseholder have been identified as precursors to homelessness (Shinn et al., 2013; Wasson and Hill, 1998; Wright et al., 1998), suggesting the inherent impermanence of many doubled-up situations. Much research suggests the negative consequences of instability on adults and children. In children, residential instability is associated with increased behavioral problems, teenage pregnancy, and drug-related problems and often leads to school mobility (Jelleyman and Spencer, 2008). Both homelessness and residential mobility are associated with decrements in academic achievement (Cutuli et al., 2013; Fantuzzo et al., 2012; Obradović et al., 2009; Voight, Shinn, and Nation, 2012). Frequent school transfers can lead to peer rejection, social withdrawal, and the inability to form intimate relationships as a child and later as an adult (Jason et al., 1994; Purdie and Downey, 2000; Rubin, Coplan, and Bowker, 2009). Unstable housing is also linked to poor health in both adults and children (Evans, Wells, and Moch, 2003). Moving frequently as a child predicted marginally higher mortality rates in adults and generally lower levels of wellbeing (Oishi and Schimmack, 2010). Additionally, frequent movement between homes with short stays can negatively affect feelings of self-efficacy and control (Evans, Wells, and Moch, 2003; Vinsel et al., 1980).

Crowding. Much research has been done on the detrimental effects of crowding on health outcomes. Low-income households containing subfamilies are more likely to live in crowded homes than other home sharers (Koebel and Murray, 1999). Poor quality housing, which is more often found in low-income neighborhoods, increases the effects of crowding on psychological distress (Evans, Lercher, and Kofler, 2002). Children can be particularly affected by crowding in homes where a lack of quiet space can harm concentration on schoolwork, and children in crowded households may be viewed as a burden or nuisance, leading to toxic family environments (Gove, Hughes, and Galle, 1979).

Interpersonal tension. Doubling up can lead to emotional strain and interpersonal tension, particularly for low-income households (Mitchell, 1971). Housing conditions can shape interpersonal interactions and poor housing quality is less likely to protect dwellers from social conditions that cause psychological distress or relationship strain (Altman, 1975; Evans, Wells, and Moch, 2003). Hemmens, Hoch, and Carp (1996) found that shared housing is stigmatized by society, and sharing homes is indirectly linked with negative effects on mental health and self-image. Halpern (1995) also found that negative stigmas surrounding housing affect one's perception of self. Internalization of injurious stereotypes could lead to stress and conflict within the household.

Chaos. Low-income living environments tend to be more chaotic, leading to adverse effects on children's socioemotional development (Evans et al., 2005). Noise, lack of structure, and lack of privacy all affect parents' interactions with their children and can negatively impact parental responsiveness (Evans, Maxwell, and Hart, 1999; Evans, Wells, and Moch, 2003; Wachs and Camli, 1991). In addition to harming crucial parent-child interactions, chaotic environments create instability in children's lives, which also has deleterious, long-lasting effects (Bronfenbrenner and Evans, 2000).

Purpose of the Study

The purpose of this study is to examine the experiences of families who have a doubled-up living situation at some point *after* leaving emergency shelter in 4 of the 12 Family Options Study sites. We reviewed interviews with formerly homeless families for evidence of themes related to doubling up that have been identified previously in the literature or novel themes that arose from the data. We also reviewed the interview transcripts to determine whether it matters with whom a household doubles up. Much of the increase in doubled-up households during the past decade is due to adult children moving back in with their parents or grandparents moving in with their children and grandchildren (Eggers and Moumen, 2013). It is possible that doubling up with a parent would be more stable or more positive than doubling up with someone else. This study seeks to understand whether doubling up is a good solution for families experiencing homelessness. Specifically, we seek to understand—

- What is the quality of doubled-up experiences?
- What were strengths and weaknesses of different doubled-up situations?
- Was doubling up with a parent more salutary than doubling up with other hosts?
- Might a doubled-up situation affect different members of the family differently?

Method

We analyzed a portion of the qualitative data previously collected from 80 families participating in the larger, multisite Family Options Study experiment. To be eligible for the study, families had to have been in emergency shelter for a minimum of 1 week with at least one child age 15 or younger, and families also needed to meet the eligibility criteria for at least one of the active interventions.¹ Semistructured qualitative interviews were conducted with a nonrandom subsample of 80 caregivers from 4 of the 12 sites an average of 6 months after the families entered the study. Participants were approximately evenly distributed across all three active interventions and usual care. Each interview contained questions about the family's residential history after leaving shelter and lasted about an hour. Other topics included how families made housing decisions, how housing and service programs affected family processes, and experiences of separation of children from families (Fisher et al., 2014; Mayberry et al., 2014; Shinn, Gibbons-Benton, and Brown, 2017). Interviews were conducted in private, recorded, and transcribed. Participants received \$50 in payment. Institutional review boards at Vanderbilt University and Abt Associates, which conducted the interviews, approved these procedures.²

Sample

The initial sample for this study consisted of 35 of the 80 interviews in which respondents reported that they and her families lived with another household in the same housing unit at some point after leaving shelter, although only 29 of the interviews had enough information to code. Respondents were from Phoenix, Arizona (n = 7); Alameda County, California (n = 11); Kansas City, Missouri (n = 10); and New Haven or Bridgeport, Connecticut (n = 7). All respondents were female. The average age was 29.2 (standard deviation [SD] = 7.83), and ages ranged between 21 and 47 years. Most respondents (63 percent; n = 22) were Black, 17 percent (n = 6) were White, 14 percent (n = 5) were another race, and 6 percent (n = 2) were Native American. Two-thirds (69 percent; n = 24) of respondents were single and had never married, 17 percent (n = 6) were married or living in a marriage-like situation, and 14 percent (n = 5) of respondents were separated or divorced.

Procedures

Previously, a team of five analysts had coded where respondents were living and with whom they lived for each residence described in the interview (Mayberry et al., 2014). Analysts coded situations as doubled up if the respondent and her family lived with other people the respondent did not consider part of her family. Of the respondents, 44 described sharing living quarters, but we excluded 9 cases in which the doubled-up situation occurred *before* entering shelter. Of the 35 respondents with a postshelter episode of doubling up, 8 reported on more than 1 episode, yielding a total 43 episodes of doubling up. However, because the focus of the interview was not doubling up, 7 of these episodes did not have sufficient information to code. As a result, our final coded sample consisted of 29 interviews and 36 episodes of doubled-up living situations after leaving shelter.

¹ For more information, see Gubits et al. (2016, 2015).

² See Mayberry et al. (2014) for additional detail.

Approach to Data Analysis

To understand these doubled-up situations, two researchers read a subsample of seven interviews independently and did open coding to generate themes. After discussion, the researchers applied and modified the scheme successively in groups of 5 interviews, meeting weekly until 17 total interviews had been coded separately, and the coding scheme was fully developed and agreed on (exhibit A-1). One researcher coded the remaining interviews, returning to the initial interviews to revise and make coding consistent with the final coding scheme. In cases of uncertainty, the main coder consulted with the other researcher to make a joint decision. This researcher also coded with whom the respondent and her family were doubled up. To determine interrater reliability, the two researchers gave an overall rating of the doubled-up episodes on a scale from 1 to 4—(1) mostly negative, (2) negative mixed, (3) positive mixed, and (4) mostly positive. These ratings were based on the researchers’ assessment of participants’ responses to interview questions and not on the participants’ own evaluation of their situation. Agreement across 22 episodes from 17 interviews indexed by Pearson’s $r = 0.88$, indicating strong interrater reliability.

Results

We begin by describing the overall ratings, and we then discuss common themes in the interviews. Each of the doubled-up episodes ($n = 36$) is categorized using our 4-point scale and by the respondent’s relationship to the host.

Ratings

Overall, about one-third of the doubled-up living situations were categorized as mostly negative ($n = 13$). A large group was mixed, favoring more negative ($n = 10$) or more positive ($n = 8$). Only a small number was categorized as mostly positive ($n = 5$). Episodes were also categorized by the respondent’s relation to the person with whom she and her child or children were doubled up, referred to in this study as their host. These three groups were parent ($n = 13$); other family, such as aunts or cousins ($n = 11$); and nonfamily, including friends and boyfriends ($n = 12$). Exhibit 1 shows that the distribution of ratings was remarkably consistent across types of hosts (parent: mean $[M] = 2.17$, $SD = 1.19$; other family: $M = 2.18$, $SD = 1.17$; nonfamily: $M = 2.18$, $SD = 0.94$).

Exhibit 1

Percentage of Episodes With Each Overall Rating by Type of Host

Rating of Doubled-up Episode	Type of Host (%)			Total (n = 36)
	Parent (n = 13)	Other Family (n = 11)	Nonfamily (n = 12)	
(1) Mostly negative	46	42	18	36
(2) Negative mixed	15	25	45	28
(3) Positive mixed	23	17	27	22
(4) Mostly positive	15	17	9	14

Mostly positive. A few participants told stories of doubling-up experiences that were positive overall. One parent moved into her cousin's house after leaving a negative doubled-up situation with a friend and described the experience as being much better for her and her children. She explained that the stability of her cousin's family provided an example to her children of what a comfortable, happy life could look like. She expressed love for her cousin's four children and described celebrating birthdays together. The mother also noted that being in a two-parent home created structure that she was unable to give her children by herself, and that her children's behavior improved while living at her cousin's house because the children respected him.

Another parent left her sister's house to move in with her mother. She identified her mother's support and the positive environment as being better for her and her family than previous living situations. When asked about the benefits of living with her mother compared with living with her sister, the respondent replied—

It's just a lot—it's stable, and it's a little bit more calmer, so I can get back on track with myself.

When asked about the difficult parts of living with her mother, she answered—

Nothing. There's really a lot of help, like, as far as my mom being here to help me with him, and then I can just—no. I don't know why it was so stressful at my sister's house.

Later in the interview, she mentioned that her mother's help and support made it easier for her to be a parent to her children. She also noted that the quiet, calm environment and good neighborhood helped her daughter get caught up in school and concentrate on homework.

Even the mostly positive situations were often last resorts. One parent was able to move in with her boyfriend and his brother after leaving shelter, noting that she had nowhere else to go because she didn't have family in the area. She felt the situation was beneficial to her family because of its positive effects on her daughter. Her daughter was able to stay enrolled in the same school, because her boyfriend's house was in the same area as the shelter, which pleased the respondent. She noted that changing schools was stressful for a child, especially one in the middle of transitioning homes. Her daughter and boyfriend also had a good relationship, and her daughter enjoyed living and spending time with him, even referring to the boyfriend as her father around her friends when he picked her up from school. The mother was particularly appreciative of the space and privacy they had at her boyfriend's house in comparison with shelter, although the situation was temporary. When asked why it was a better living situation, she replied—

He—it was—first of all, at his brother's house and his house, there's more space. [Child] doesn't have to worry about the kids taking her toys and trying to call her names. At the shelter we had a lot of kids that cussed and was violent. She's not like that.

Mostly negative. More than one-third of experiences were mostly negative, sometimes extremely so, endured because parents felt they had no other option. After leaving shelter, one parent moved in with her aunt, noting that she would have stayed in shelter longer if she could have. Her aunt's lifestyle involved alcohol, drugs, and partying with people in her home. She was not used to having children around and yelled at them for normal child play behavior. The parent felt that

her aunt's attitude toward her children made it impossible for the house to feel like their own. Additionally, the parent was paying her aunt as much as she could have paid to rent her own place.

One parent moved back in with her alcoholic father, with whom she had lived prior to entering shelter, because she felt she had no other choice. She described the environment as uncertain and abusive.

... The environment was not good. My dad, he's an alcoholic, and he don't want my kids there. We were like in one foot, and out the next, so we're like either we're going to be homeless again, or we're going to be homeless again because he was throwing us out.... It was every day, so it was hell living there. It was not good.

At one point, she called the police on her father after he asked the owners of his house to kick her out. Additionally, the situation affected her parenting, because she constantly had to discipline her children so they would not interfere with her father's belongings. The constant discipline had negative effects on her children who, in turn, began exhibiting poor behavior.

Another respondent moved to and from her brother and friends' homes, eventually ending up at her mother's house. She and her family stayed in the unfinished basement, which she describes as more of an open storage space with a bathroom. The mother would lock the door at the top of the basement stairs, keeping them out of the main part of the house. When the mother was not home, the respondent and her children could not enter the house at all.

Once I leave out, I'm out until she comes home. It's not really consistent. And if she decides she's not coming home for the night, then I have to go somewhere else.

She said that this environment, lacking in privacy and stability, had detrimental effects on her children's behavior. She found it hard to gain her children's respect as a parent, in part because of her mother's interference in her parenting style. The mother threatened to kick her out if she disagreed with her.

One respondent was even forced to move back in with her abusive ex-husband. This experience was negative not only for her but also for her children. They began acting out and asking when they could leave the home and their father. She described him as butting in and talking down to her children, calling her daughter fat and lazy. Additionally, her mother-in-law and eight other relatives who lived downstairs interfered with her parenting. She felt the need to protect and defend her children from both the father and the other relatives. When asked in what ways living in this environment was better for her and her family, she responded that the only way in which it was better was that it kept her and her children together. After moving to her own place, she compared the two situations.

I don't have to look at him. I don't have to serve him. I don't have to listen to him... It was just all around horrible. But here it's just us. And that makes all the difference.

Mixed. Episodes classified as mixed contained references to both positive and negative aspects of doubling up. Some parents felt their living situations to be negative experiences for them but positive for their children. One parent moved back and forth between her boyfriend and mother's houses because of her relationship with her mother, describing her situation—

Well my mother. It's straight for now, but I know I'm gonna reach a boiling point and I don't want to be there. So I'm grateful that I do have somewhere to stay and supporting people. I'm not out on the street where I really have to do something crazy, so I'm really grateful and blessed for what I have; somewhere to lay me and my kids at. My mother, she would never push me away or tell me now.

Although she and her mother did not get along, she did appreciate her mother's help with her daughter and the safe environment, surrounded by family. She also mentioned that her child's social life had improved since living with her grandmother. Despite the interpersonal tension, this parent saw the situation (classified as positive-mixed) as positive because of its effects on her children.

In several cases, doubling up was better than shelter in some regards but still lacking in others. These situations were also classified as positive mixed. One parent was appreciative of the autonomy she gained once out of shelter but felt that the environment at her cousin's house was very crowded with her and her cousin's families, with as many as 13 children under one roof. She was able to put her own rules and structure back in place, which was beneficial for her children. However, she noted that living with her cousin was not better than living in shelter because her cousin's house did not have enough space for everyone.

We also encountered numerous cases that were more negative than positive but in which respondents were grateful to be out of shelter and thus made the best of their situations. One respondent did not get along with her mother, disagreed about parenting styles and felt her own parenting was getting worse because of doubling up. She did not know whether living with her mother was an improvement for her daughter's wellbeing; only when compared with shelter did doubling up with her mother appear somewhat positive.

I don't know. I really don't know... But at the shelter—you can tell that she was ready to go. That wasn't her cup of tea. You could say at the shelter she was kind of stressed.

These episodes were classified as negative mixed. Similarly, one respondent moved in with a friend whose lifestyle did not agree with her family and who complained about her children so much she had to leave; however, she mentioned the privacy and space she gained after leaving shelter as a positive aspect of that situation. Another parent appreciated having support around childcare when she left shelter to move in with a friend but could not tolerate the lack of space and feeling that it was not her own place.

Themes

The most common themes in the interviews were issues of autonomy, conflicting parenting styles, positive and negative effects on children, and feelings of impermanence. Exhibit 2 is a complete list of themes and their presence overall and by type of host. No chi-square test for differential endorsement of a theme across different hosts was significant at $p < .05$.

Children

Consistently across the three types of situations, parents were concerned about the effect of doubling up on their children. These effects, both positive and negative, were mentioned more

Exhibit 2

Percent of Episodes in Which Themes Were Present by Type of Host

Theme of Doubled-up Episode	Type of Host (%)			Total (n = 36)
	Parent (n = 13)	Other Family (n = 11)	Nonfamily (n = 12)	
Presence of autonomy	15	27	17	19
Lack of autonomy	31	55	42	42
Limbo	8	0	8	6
Child positive	69	55	42	56
Child negative	46	45	67	53
Environment positive	8	9	17	11
Environment negative	23	36	33	31
Physical space positive	15	27	33	25
Physical space negative	23	27	25	25
Exploitation	0	9	8	6
Family	46	9	17	25
Impermanence	54	27	42	42
Interpersonal positive	15	18	0	11
Interpersonal negative	38	36	58	44
Interpersonal mixed	46	18	8	25
Outside parenting positive	8	0	8	6
Outside parenting negative	54	36	8	33
Ownership positive	8	9	0	6
Ownership negative	31	55	33	39
Parenting positive	15	9	0	8
Parenting negative	38	18	17	25
Privacy positive	31	27	33	31
Privacy negative	23	9	33	22
Support	54	18	33	36

frequently than any other theme. In general, mothers described more negatively the situations that were negative for children (M = 1.68, SD = 0.82) and described more positively situations that were positive for children (M = 2.60, SD = 1.10), but with the small sample size, this difference was not statistically significant.

Positive effects on children. A slight majority of respondents (56 percent) reported the doubled-up situations as beneficial for their child in some way. One mother noticed that her child’s behavior improved after leaving shelter because she was no longer exposed to bad influences.

Because when we stayed in the shelter, she was picking up bad habits from other kids. Wanted to go back into that baby stage. And my daughter, I knew she was way more mature than that, and she wanted to go back in that baby stage, goo-goo, ga-ga, ‘cause she’s looking at the other kids. And that’s kinda like I—we were kinda like stayed in our room because it was like—we kinda did it to ourselves. We were like, we’re just gonna stay in here because she’s picking up habits, she’s doing things. But now, at the cousin’s house, she’s the only kid.

One parent attributed her child’s improved behavior to the stability provided by living with her mother.

[My daughter] used to hit me but she’s not physical because there is no kids around and we’re more stable for temporarily, like family. We’re with her grandma.

Another mother appreciated her cousin's parenting style and family structure, as well as the freedom of living there offered her children.

Positive, because, like I said, [my children] could be more free in what they were doing and they had their independence and they could help us cook, they could help us clean and they didn't have to be confined to one room, playing in one little apartment. They could go outside at freewill and they could go run upstairs at freewill and not making a big mess.

Negative effects on children. Instances of parents reporting negative aspects of their doubled-up residence in regards to their children were equally common (53 percent). Moving between impermanent doubled-up situations could have negative implications for child's social life. One parent described it, regarding her son—

It's not bad, but it's making friends with somebody, and getting to know them, and then having to move, and not see them.

Interpersonal issues and tension in households also had negative effects on children. One parent stated that her negative relationship with her father affected her children's behavior when they moved in with him.

I'd say it does, because the way the kids acted over there was much worsen. They could feel the tension in the house; they know. And I felt really bad for them.

Rules and restrictions put in place by the host household also affected children negatively. When asked about her sons being exposed to good or bad influences while living at her mother's house, one parent said—

I'll say the bad influence is he's less social because my mother's house is like a no talk house... I know it's a very—I mean to me it's a bad thing because he doesn't get to be a kid.

Parenting

Parents also discussed how these episodes affected their own parenting style or ability to parent their children around other household members, who often attempted *outside parenting*, or asserting themselves into a parent role. Common issues involved a lack of privacy and conflicts about how and when to discipline children. However, several parents identified the doubled-up situation as providing support around childcare and parenting, making it easier to be a parent to their children when compared with living in shelter.

Outside parenting. Parents often complained of others trying to discipline their children in ways they did not like or offering unsolicited parenting advice (33 percent). Although these complaints were reported with all hosts, it seemed particularly salient when respondents moved in with their own parents. One mother felt she had no choice but to let her own mother be the parent, for fear of getting kicked out of her house.

Like if [my mother] disagrees with what I'm doing or if she can't parent my kids, then she'll say okay, well you can leave.... It's difficult because I have to let her parent the way she wants to parent. Like I said, I have to abide by her parenting style.

Another mother disagreed with the way her cousin treated her children, which led to arguments.

And then sometimes the way my cousin would talk to him. I'm a very protective mom and if you talk to my child in a certain way I get very upset. And so we would fight about that a lot because she would talk to [child] in a derogatory way and I'm like okay—or I really don't like [child], how can you tell a 6-year-old you don't like them.

Most often, outsiders disagreed with how or when parents chose to discipline their children. One participant said—

Even now [mom] still says stuff about the discipline, discipline is always going to be an issue and how I handle it.

Individual parenting style. Doubling up also affected some participants' parenting more positively. This mother felt she could finally act as a parent compared with living in shelter.

We had the independence and I could choose what they were doing, when they were doing it, what they ate and more open.

However, other parents felt that their situations led to more negative changes in the way they parented their children. One mom felt forced to discipline her children more often while living with her father.

There was hardly—I disciplined them and everything, but they only got disciplined, because it was [my father's] refrigerator; it was his door; it was his life; it's his bathroom. So, the discipline came to where I had to tell them, 'No, no, no, no, no,' because it's not your house.

Another parent felt her ability to parent slipping when doubling up.

The parenting skills—if you are in an environment where you don't want to be, but you have to suck it up and deal with it anyway. I think if parenting skills kind of fall off a little bit... I can tell I have been slacking.... So I think that parenting does fall off when you are in an environment that you don't want to be in.

Support. Many participants (36 percent) found that they felt supported by their doubled-up situation, receiving extra help with their children or to get back on their feet. Instrumental support surrounding childcare was described frequently, as in these three situations.

... Like I'm washing dishes. He'll look after [my child] and play with her for a while.... Yeah. He is very helpful.

No, it's actually easier cause everybody likes to help in their own way like as far as say I'm in the kitchen cooking and I put [my child] on the couch, you know if he's doing

something that he's not supposed to or dangerous somebody will do something. They're not just going to look at him fall [off] the couch and break his neck or something. You know, so it's a lot easier.

My mother, yeah. she'll help me get them ready. And then at that point we are in agreement because you need to get up... so we agree on that. That makes it easier.

This parent appreciated her mother's financial support in addition to the help looking after her daughter while she searched for a job.

Financially I think it has been a big help being that I don't have a job right now. Yes, if I need [my mother] to watch [my child], if I am going out to look for a job, I think that she has pretty much been there 100 percent. I think that is easier for me.

Interpersonal Issues

Positive relationships. A few participants found that their relationships with those in their doubled-up situations were positive. One participant said that the best part about living with her mother was that they got along. Another noted that living in her friend's structured home was comfortable and happy for all parties, including their children. Overall, however, only 11 percent of respondents reported positive interpersonal interactions across the different types of hosts.

Negative relationships. Many participants noted that doubling up involved conflict and tension. One parent described the tension that was created by living with her mother as she tried to take care of her own family.

I was her slave is how I put it, my mother is a really great person but I just didn't like that I already have a family and so I couldn't have that family how I can [in own place]. It was like okay you can't really be a family. You have a kid but no you're still a child so I didn't like that aspect about it, plus how hard she was on me and how much she wanted in need of her own freedom and space.

These two respondents moved out of their situations due to the conflict doubling up created with their hosts.

We bumped heads. Me and this female just bumped heads and I rather keep my friendship than lose it. I was like let me just go. I gotta go.

So you know how when people get really upset and it comes out in an argument? She kind of made it seem like I wasn't helping her at all. So it was kind of a falling out.

Exploitation. Although rare, experiences of feeling taken advantage of or used were expressed during interviews. One person left a doubled-up situation with an acquaintance to move in with another friend after feeling she had been unfairly treated. The respondent said she thought the money she had been giving the acquaintance was helping with bills but later found out the acquaintance had not been using the money properly. In addition, the acquaintance allowed another

individual to move in who did not contribute monetarily to the household, which put extra financial and emotional strain on the respondent. When asked why living in her second doubled-up situation was better, the respondent said—

Because I wasn't feeling like I was being taken advantage of in someone else's household.

Mixed situations. Some respondents told stories that included both positive and negative elements, which we classified as mixed interpersonal. One mother's disagreement with her grandmother about discipline style created conflict, but she still expressed gratitude for her grandmother's help.

Yes, I would take my kids and leave. Like, go to the park or something, because I didn't want to overwhelm [my grandmother], she is old. And I had to be grateful that she let us stay there, you know?

Another respondent found that living with her mother made it difficult to be a parent, because her mom's health issues interfered with her children's sleeping routine. She said—

Well, one of them is my mom's disabled. And she needs help with a lot of different things, and I'm her daughter. I don't care how mad I am at her, I'll help her. I'm not going to just leave her hanging like that.

One respondent noted that although she and her mother did not get along, her daughter loved living with her mother.

She loves my mother. Sometimes I just can't deal with it, but you have got to take the good with the bad.

Family. The idea of being surrounded by family emerged several times throughout interviews, often as a benefit amidst other negative aspects of a situation. Despite one respondent's overwhelmingly negative doubled-up episode, she said that being with and seeing family members more often was the best part of her living situation, as opposed to living in shelter. One parent found benefit in raising her child in an environment surrounded by family.

I just want her to think smart and grow up smart. So she's in a safe environment speaking of me and her family.

Similarly, although one respondent did not have a positive relationship with her mother, when asked the best part about living with her, she responded—

Being with family. Seeing family more often than when I was at the shelter.

Another mother spoke positively about her doubled-up situation living with a friend due to their close relationship.

I consider [my friend] and her husband and kids my family because they treated me and my family like family treats family. And I'm like they didn't have to do that for us. So I would look at them as my family, as my sister and brothers and nieces.

Environment

Physical and social environment. Some parents found that the environments of their doubled-up situations, considering factors like the neighborhood, noise level, and number of people in the house, were positive or benefited them and their families. Despite other negative aspects, when asked if living with her friend has worked out for her family, one mother replied—

It's okay. My son is in a safe environment, that's the main point. It's not very comfortable though... so, it's not the best, but it's a safe, good, clean environment with good people.

Environments also had negative effects on doubled-up experiences. One mother was uncomfortable with the number of people crowding and touching her baby. Another mother felt the drinking and drug habits of her aunt were negatively influencing her children. Rowdy lifestyles of some of the people respondents lived with were also mentioned as negative aspects of their doubling up experiences. One person felt she never had privacy while living in her ex-husband's home.

Either he was there or [his family] were there or the both. And then some of the people from downstairs. And then some of his drinking buddies. It was just always something. Somebody.

Another parent felt the neighborhood in which she lived with her mother was unsafe for her child to play, negatively affecting his social life.

There's some more ghetto kids out here; there really are, a whole bunch of them. And they hang out up front.... I don't really want him playing in the driveway.... They [talk] foul, they throw trash everywhere, and kinds of stuff that I don't agree with at all. So, I really don't want him up there playing unless I'm sitting out there with him.

Physical space. Respondents also mentioned that the physical space of their living situations—such as size of the unit, number of bedrooms, or their sleeping arrangements—affected their overall experiences. Of the 20 respondents who discussed the number of rooms in their doubled-up situations, 15 shared their bedroom or living space with their children.

One respondent mentioned that her daughter enjoyed their doubled-up arrangement because she had access to a bathtub, which she did not have in shelter. However, another respondent discussed the difficulty of sharing a futon with both her husband and her daughter, who often rolled onto her husband's injured leg during the night. Other than the physical pain her husband experienced, the respondent also felt a sense of guilt about their living arrangement as a parent.

I can't give [my child], her own room, her own space, her own bed, her own toys. My daughter's room was decked out with Dora and princess and everything, so she's used to that. And now she's looking like, a futon? What is that? So I'm more concerned with that, trying to give those things back to her, than trying to take some away from her.

One parent did not even have a bedroom to share with her child; instead, she slept in the living room of her friend's house on a couch with her son. She notes that the lack of space prevented any sort of privacy, caused her to worry about her child's wellbeing, and added a feeling of impermanence.

Sleeping on a couch, knowing your son—your child—is not in his own room, in his own house, and it's just another temporary stop.

Privacy. Physical space often led to concerns about privacy for respondents. Overall, about as many people reported feeling like they had adequate privacy in their doubled-up situation as those who said they did not. However, lack of privacy or inability to be alone sometimes led to tension and conflict.

I kind of, I know I did a lot of shouting there cause I was always just, you know, I just didn't have time for myself.

The respondent, who shared a room and a bed with her daughter and her husband, spoke of the way it prohibited them from being able to act like a married couple.

But it's kinda hard to have one-on-one time. Like, sometimes, when we have to have a conversation or we discuss things, we step outside, and we talk outside on the porch, just to have that space, that free time. And it's kinda hard. And then we—how you gonna get romantic when you have your daughter laying in the bed with you.

Sharing space with her son was awkward for another mother.

Well, my son and I have never had separate rooms; we've always shared the same space, but as he gets older it's harder to hide when you're dressing, things like that.

Autonomy

Compared with the rules and curfews of some shelters, some respondents (19 percent) found that their doubled-up living situations provided freedom and the ability to make decisions about their own lives. One respondent describes how living with her cousin was better than shelter.

In some ways, yes, because there was more freedom to do what we needed to do and not so many time constraints and curfew or classes and things that were related to that program, because we could actually focus on what needed to be done and be gone all day if we needed to be.

Considering the restrictions she felt in shelter, another mother appreciated having the freedom to take her child on outings when and to places she wanted.

I couldn't think of one day this summer we weren't at the beach.... And it was like an every day thing. If it wasn't that day we was going to the park.

Lack of autonomy. A larger number of respondents (42 percent), however, felt that living under someone else's roof had negative consequences for their sense of autonomy. One respondent felt this difficulty while living with a friend.

Yeah, not being able to live our own life, and establish our own routine, and be free to be a mom, and cook what I want when I want, and do laundry when I want to, just everything.

Another respondent described the pressure and restrictions her brother put on her.

Hard things is like that [he] didn't want me to work. He just wanted me to be a mother to my child, like he just wanted me to just focus on her schooling, and just being there. He didn't want me to do anything like—not independent, just he didn't want me to make money for myself.

Limbo. Beyond having control of their lives, a few respondents expressed concerns about the uncertainty of their doubled-up living situations. One respondent described her life as being on hold while she was living with a friend and the discomfort it created. Another person described her situation after shelter as hectic and confusing, as she never knew exactly with whom she would stay next.

So I was just like whoever wanted to deal with me and my kids or like whichever room had the space, that's where I went, which wasn't where I wanted to be. It was just because I had to be there.

This uncertainty did not go away even when she lived with her mother. The same respondent referred to the worst part of that situation—

Just the uncertainty. Not knowing if I will be able to—how long I will be able to stay and just access.

Ownership

A small number of respondents (6 percent) expressed feeling a sense of ownership or belonging in their current doubled-up living situations. One respondent described living with her mother positively in this way.

Because this is—this is home. This is where I grew up.

Lack of ownership. A much larger number (39 percent) of respondents lacked a sense of belonging and emphasized that their living arrangements belonged to someone else. One-third of respondents still lacked a sense of ownership when doubled up with parents.

Because at my mom's house, with her boyfriend there, I kind of felt like we had to move aside and hide, whenever they were home. We never felt like we were at home. It was like we were in a stranger's house. You could never feel comfortable to be yourself, and to just live your life. It was weird.

When asked about the worst part of living with her friend, one person responded—

I mean the only difficult thing is like it's not our place. Even though we can, you know we're free to do what we can but when it come down to it it's really not our own place. So that's pretty much it.

One respondent spoke about wanting to have her own space for her children, noting that living between her mother and boyfriend's houses was an unstable way of life.

It's like I am used to—since I experience having my own [place] and my daughter, she had her own room; she—it was fixed up with all her things in it and the apartment was really huge and I'm just used to having my own—I experienced it and for them, they deserve to be somewhere stable and have their own territory.

Another respondent living with her husband's cousin similarly spoke of feelings of instability created by the lack of a sense of ownership, which caused stress and frustration.

Because it's not my own. It's not mine. It's like, you're comfortable, but you can't get too comfortable, because it's not yours. You know that this is just temporary. And I'm tired. I am. I'm like, I'm frustrated, I'm tired, I'm stressed. And in the back of your mind, you're still thinking, my journey is not done yet. I still have to keep going.

Impermanence

Overwhelmingly, respondents emphasized this feeling of impermanence in their doubled-up arrangements, regardless of host or rating, for a variety of reasons. Some respondents expressed a desire for their own space and independence as reasons their stay was temporary. When asked whether she would be allowed to stay at her friend's house for as long as possible, this respondent replied—

I think so, but I wouldn't want to... Just 'cause I want to try get back on to being independent myself. I don't like staying with other people. It's not my thing.

Other respondents mentioned more immediate time limits to their stays that were set by the person with whom they were doubled up. One respondent described her friend permitting her to stay conditionally.

No, we can't stay there as long as we like. We have to actually, be leaving soon in the next few days.... They just—they took us in, and asked that we look for a shelter as soon as possible.

Although she said her friend's family were good people and her family benefited from their church-going habit, she later mentioned that knowing her situation was temporary was the most difficult part of doubling up with her friend. Another respondent described unspoken rules regarding length of doubled-up stays. When she was living with her friend, she felt it was temporary because she and her friend both had children. She ended up moving because their children were bickering. She said—

It was just—When you stay with somebody that has children, it's not always recommended that you stay very long.

One respondent similarly left her father's house to double up with a friend because the number of people in the house made her feel as though she could not stay.

With my father, it wasn't an option to stay there. He had his family and only two bedrooms. He had two sons. So I wasn't going to stay there longer. With my son, it was too many people. So yeah, my dad let me stay there for a while, but I wanted to move.

The greatest proportion of respondents—more than one-half (54 percent)—reported feelings of impermanence while living with their parents. More than one-fourth (27 percent) of respondents with other family hosts and 42 percent of respondents with nonfamily hosts felt similarly. Even these numbers do not fully capture respondents' feelings of instability. Our final count of 36 doubled-up episodes does not include additional brief stays, during which the interviewer deemed the respondent had not moved in. For example, only the doubled-up stay with the mother was included for a respondent who reported—

Well like if I go stay with my friend for a few days, I'll wait a week, and then I'll go to my mother's house... then I'll go stay with my auntie. And I just—how do I go about this homelessness... alternating between my friend and my mama and my sons' daddy... I just had to go where everybody told me to go because I had nowhere to go.

Discussion

We focused this analysis on four research questions: (1) What is the quality of doubled-up experiences? (2) What were strengths and weaknesses of doubled-up situations? (3) Was doubling up with a parent more salutary than doubling up with other hosts? (4) Might a doubled-up situation affect different members of the family differently?

Although a few respondents experienced more positive doubled-up arrangements, our sample reported predominantly negative experiences across all types of hosts. More than one-half of doubled-up episodes were categorized as negative (mostly negative or negative mixed), and negative aspects were also present in situations rated as positive mixed. Respondents reported feeling that they had no option besides returning to abusive relationships, living in chaotic homes dominated by substance abuse, or living in unsafe situations, such as being locked in an unfinished basement or being exploited by the primary tenant. Other examples were less severe but still reflected a predominantly negative experience.

Many negative experiences can be attributed to the housing situation, including lack of one's own space, lack of privacy, and issues related to the physical environment, such as noise, crowding, and neighborhood characteristics. Interpersonal issues also affected respondents' quality of life. Nearly three-fourths of respondents identified some level of negative interpersonal interactions or relationships during doubled-up situations, which caused stress, conflict, and in some cases, ultimately resulted in respondents having to move out. In short, although many respondents expressed gratitude for not being in an emergency shelter, others would have preferred to stay in shelter, and doubling up did not appear to reflect a high-quality housing option for most families. Even in more positive situations, respondents often mentioned feelings of impermanence, lack of autonomy, and lack of a sense of ownership or belonging.

The ratings also showed that families doubled up with their parents were not necessarily better off than families doubled up with either other relatives or nonrelatives. Overall ratings were quite similar across types of hosts; if anything, three-generational families were seen as less stable than others. More than one-half of the doubled-up situations in which the respondent lived with their own parent trended negative. Respondents living with their parents reported lack of autonomy,

impermanence, interpersonal tension, unwanted outside parenting, and negative effects on their own parenting. However, those living with parents also reported support and a benefit from being around family more often than those who were doubled up with others. Even in predominantly negative situations, the value of spending time with family was seen as a benefit or silver lining. For example, even when respondents reported tensions with their own parents, they often felt that their children benefited from living with their grandparents. Most other themes were present in relatively similar proportions across all types of hosts. Given the small sample size, it is difficult to make much of the observed differences.

The most positive aspect of doubling up was a positive effect on children's wellbeing, reported in more than one-half of doubled-up episodes although instances of negative effect on children's wellbeing were equally common. Children were mentioned throughout interviews more often than any other topic. The frequency could be because interviewers asked questions regarding the child's wellbeing in several different ways; it could also be because doubling up as a family poses unique challenges and rewards. Although the relationship was not statistically significant, parents tended to think about whether their situations were good or bad depending on whether they were beneficial or harmful for their children. Situations described as having negative effects on children were rated more negatively on average than situations in which children were affected positively. We observed positively rated instances in which the parent felt that doubling up was undesirable for herself but advantageous for the child.

Strengths and Limitations

This study has several limitations. First, because we looked only at episodes of doubling up after shelter, our sample size was somewhat limited. Additionally, the original 80 interviews included male respondents, but our subsample of respondents was all female, although 6 had a spouse or partner with them. Thus, we are unable to observe whether gender may play a role in the experiences of doubling up. Additionally, an assessment of doubled-up living situations was of the impetus for the original interviews—as a result, we encountered a few situations in which too little information was available to code. Exhibit 2 likely underrepresents the extent of respondents' experiences, because themes could not be coded unless respondents raised them in response to open-ended questions. Finally, although effects on respondents' children were a frequent theme, we have access only to their mothers' perspectives; we do not have the perspectives of the children.

A strength of the study is that our sample came from four disparate geographical areas across the country. Although the sample size is small, the four sites provide diversity of geographies and rental markets. Our sample reported on nearly equal proportions of the three categories of host—parent, other family, and nonfamily—allowing for direct comparison. Finally, the study team achieved strong interrater reliability, verifying the consistency in coding between the two researchers.

Implications for Policy and Further Research

Although many of the mothers who were included in our sample expressed gratitude to be out of shelter, doubled-up living situations were still described as predominantly negative experiences for study families. Although individuals and households from all incomes, races, levels of education, marital, and employment statuses may share dwelling units for a variety of reasons, those who have

been homeless have unique experiences. Our research indicates that doubling up after a shelter episode is not voluntary for most families but is often their last or only option. These situations typically felt temporary to our respondents, although an established end date may not have been determined when they initially entered that living situation or when they were interviewed. Current HUD policy identifies individuals and families that are doubled up as homeless only if their living situations will end within 14 days.³

Nevertheless, for formerly sheltered families in this study, doubling up after shelter has not resolved their period of housing instability. The interviewers in this study did not ask respondents to describe doubling-up situations before shelter, but many people spoke about them anyway. For these families, doubling up represents a return to the kind of instability that led them to shelter in the first place and may be only another stop in an ongoing cycle of homelessness.

In the larger Family Options Study from which our sample is drawn, 31.4 percent of families who received no special offer of assistance reported doubling up in the 6 months before the 20 month followup study, and 28.5 percent reported doubling up in the 6 months prior to the long-term 37 month followup. Had we asked only about doubling up in the full followup period rather than two 6-month windows, those figures would no doubt have been larger. One of the key benefits of priority access to long-term rental subsidies was a dramatic reduction in doubling up and residential mobility relative to both usual care and both of the other interventions (short-term rental subsidies and transitional housing). The qualitative data reported here help to illuminate what those reductions mean in the lives of families who have experienced homelessness.

Appendix

Exhibit A-1

Definitions of Coding Categories (1 of 3)

Code	Definition	Examples
Autonomy (positive or negative)	Having the ability to make decisions for oneself (about what to eat, when to leave, and so on).	Positive: <i>In some ways, yes, because there was more freedom to do what we needed to do and not so many time constraints and curfew or classes and things that were related to that program because we could actually focus on what needed to be done and be gone all day if we needed to be...</i> Negative: <i>Yeah, not being able to live our own life, and establish our own routine, and be free to be a mom, and cook what I want when I want, and do laundry when I want to, just everything.</i>
Limbo	Feeling stuck, out of control (could be considered a combination or impermanence and lack of autonomy).	<i>So I was just like whoever wanted to deal with me and my kids or like whichever room had the space, that's where I went, which wasn't where I wanted to be. It was just because I had to be there.</i>

³ Homeless Emergency Assistance and Rapid Transition to Housing Act of 2009. 111 U.S.C. §§ 896. https://www.hudexchange.info/resources/documents/S896_HEARTHAct.pdf.

Exhibit A-1

Definitions of Coding Categories (2 of 3)

Code	Definition	Examples
Effects on child (positive or negative)	Parent's perception of how the situation has affected her child or children, descriptions of the situation influencing a child's behavior, or interactions between someone and child.	Positive: <i>She used to hit me but she's not physical because there is no kids around and we're more stable for temporarily, like family. We're with her grandma.</i> Negative: <i>I'll say the bad influence is he's less social because my mother's house is like a no talk house... I know it's a very—I mean to me it's a bad thing because he doesn't get to be a kid.</i>
Environment (positive or negative) Physical Space (Positive or Negative)	Parent's perception of the physical space and how it affects them (excluding privacy); issues of crowding, hubbub, or chaos; concerns about child's safety.	Positive: <i>It's okay. My son is in a safe environment, That's the main point. It's not very comfortable though... so, it's not the best, but it's a safe, good, clean environment with good people.</i>
Exploitation	Feeling used or mistreated.	<i>Because I wasn't feeling like I was being taken advantage of in someone else's household.</i>
Family	Explicit statements regarding family's impact on situation; being with family (generally positive, sense of comfort) and its impact on situation.	<i>I just want her to think smart and grow up smart. So she's in a safe environment speaking of me and her family.</i>
Impermanence	Feeling that the situation is temporary or expressing the desire to move.	<i>When you stay with somebody that has children, it's not always recommended that you stay very long.</i>
Interpersonal (positive, negative or mixed)	Positive: Feeling at ease, generally happy or pleased with a situation. Negative: Feeling tension and mental or emotional strain. Mixed: Describing an instance or thought with explicit tension between negative and positive aspects.	Negative: <i>So you know how when people get really upset and it comes out in an argument? She kind of made it seem like I wasn't helping her at all. So it was kind of a falling out.</i> Mixed: <i>She loves my mother. Sometimes I just can't deal with it, but you have got to take the good with the bad.</i>
Outside parenting (positive or negative)	Instances of others (not the parent) parenting or attempting to parent; expressing opinions about a child, or respondent's parenting.	Negative: <i>And then sometimes the way my cousin would talk to him. I'm a very protective mom and if you talk to my child in a certain way I get very upset. And so we would fight about that a lot because she would talk to [child] in a derogatory way and I'm like okay—or I really don't like [child], How can you tell a 6-year-old you don't like them...</i>

Exhibit A-1

Definitions of Coding Categories (3 of 3)

Code	Definition	Examples
Ownership (positive or negative)	Defining or experiencing possession of one's space; lack of ownership might involve feeling like an imposition or lack of sense of belonging.	Positive: <i>I can cook, clean, knock around the house, because it is ours. It's just—it's better here. It's better.</i> Negative: <i>Kind of just 'cause—just pretty much—just our own place and space... I like to be—I do like outside being around people, but when it comes to my own space—my own place—I like my own space.</i>
Parenting (positive or negative)	Parent's perception of how the situation has affected her parenting style or descriptions of parenting episodes or norms.	Negative: <i>There was hardly—I disciplined them and everything, but they only got disciplined, because it was his refrigerator; it was his door; it was his life; it's his bathroom. So, the discipline came to where I had to tell them, 'No, no, no, no, no,' because it's not your house.</i>
Privacy (positive or negative)	Having the ability to be alone, or to have one's own space.	Negative: <i>Well, my son and I have never had separate rooms; we've always shared the same space, but as he gets older it's harder to hide when you're dressing, things like that.</i>
Support	Being aided or assisted in some way (parent only).	<i>No, it's actually easier cause everybody likes to help in their own way like as far as say I'm in the kitchen cooking and I put him on the couch, you know if he's doing something that he's not supposed to or dangerous somebody will do something. They're not just going to look at him fall of the couch and break his neck or something. You know, so it's a lot easier...</i>

Acknowledgments

The authors thank George Carter, Anne Fletcher, and Michelle Wood for their valuable comments that helped influence this article. This study was supported by the National Institute of Child and Human Development grant 5R01HD066082 to Vanderbilt University and U.S. Department of Housing and Urban Development contract C-CHI-00943, Task Orders T-0001 and T-0003, to Abt Associates.

Authors

Hannah Bush received her Bachelor of Science in Human and Organizational Development from Peabody College, Vanderbilt University.

Marybeth Shinn is a professor of Human and Organizational Development at Vanderbilt University.

References

Ahrentzen, Sherry. 2003. "Double Indemnity or Double Delight? The Health Consequences of Shared Housing and "Doubling Up," *Journal of Social Issues* 59 (3): 547–568.

Altman, Irwin. 1975. *The Environment and Social Behavior: Privacy, Personal Space, Territory, Crowding*. Monterey, CA: Brooks/Cole Publishing Company.

Bronfenbrenner, Urie, and Gary W. Evans. 2000. "Developmental Science in the 21st Century: Emerging Questions, Theoretical Models, Research Designs and Empirical Findings," *Social Development* 9 (1): 115–125.

Cutuli, J.J., Christopher D. Desjardins, Janette E. Herbers, Jeffrey D. Long, David Heistad, Chi-Keung Chan, Elizabeth Hinz, and Ann S. Masten. 2013. "Academic Achievement Trajectories of Homeless and Highly Mobile Students: Resilience in the Context of Chronic and Acute Risk," *Child Development* 84 (3): 841–857.

Despres, Carole. 1993. "The Meaning and Experience of Shared Housing: Companionship, Security and a Home." Paper presented at Power by Design: Proceedings of the 24th Annual Conference of the Environmental Design Research Association, March 31–April 4.

———. 1991. *The Form, Experience and Meaning of Home in Shared Housing*. Unpublished Ph.D. diss. University of Wisconsin-Milwaukee.

Eggers, Fredrick J., and Fuoad Moumen. 2013. *Analysis of Trends in Household Composition Using American Housing Survey Data*. Report prepared for U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Bethesda, MD: Econometrica, Inc. https://www.huduser.gov/portal/publications/pdf/AHS_HouseholdComposition_v2.pdf.

Evans, Gary W., Carrie Gonnella, Lyscha A. Marcynyszyn, Lauren Gentile, and Nicholas Salpekar. 2005. "The Role of Chaos in Poverty and Children's Socioemotional Adjustment," *Psychological Science* 16 (7): 560–565.

Evans, Gary W., Peter Lercher, and Walter Kofler. 2002. "Crowding and Children's Mental Health: The Role of House Type," *Journal of Environmental Psychology* 22 (3): 221–232.

Evans, Gary W., Lorraine Maxwell, and Betty Hart. 1999. "Parental Language and Verbal Responsiveness to Children in Crowded Homes," *Developmental Psychology* 35 (4): 1020–1023.

Evans, Gary W., Nancy M. Wells, and Annie Moch. 2003. "Housing and Mental Health: A Review of the Evidence and a Methodological and Conceptual Critique," *Journal of Social Issues* 59 (3): 475–500.

Fantuzzo, John W., Whitney A. LeBoeuf, Chin-Chih Chen, Heather L. Rouse, and Dennis P. Culhane. 2012. "The Unique and Combined Effects of Homelessness and School Mobility on the Educational Outcomes of Young Children," *Educational Researcher* 41 (9): 393–402.

Fisher, Benjamin W., Lindsay S. Mayberry, Marybeth Shinn, and Jill Khadduri. 2014. "Leaving Homelessness Behind: Housing Decisions Among Families Exiting Shelter," *Housing Policy Debate* 24 (2): 364–386. DOI: 10.1080/10511482.2013.852603. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4170684/>.

Gove, Walter R., Michael Hughes, and Omer R. Galle. 1979. "Overcrowding in the Home: An Empirical Investigation of Its Possible Pathological Consequences," *American Sociological Review* 44 (1): 59–80.

Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development. http://www.huduser.org/portal/portal/sites/default/files/pdf/FamilyOptionsStudy_final.pdf.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/sites/default/files/pdf/Family-Options-Study-Full-Report.pdf>.

Halpern, David. 1995. *Mental Health and the Built Environment: More Than Bricks and Mortar?* London: Taylor & Francis.

Hemmens, George C., Charles J. Hoch, and Jana Carp, J., eds. 1996. *Under One Roof: Issues and Innovations in Shared Housing*. Albany, NY: State University of New York Press.

Jason, Leonard A., Olga Reyes, Karen E. Danner, and Georgina De La Torre. 1994. "Academic Achievement as a Buffer to Peer Rejection for Transfer Children," *Journal of Instructional Psychology* 21: 351–352.

Jelleyman, Tim, and Nick Spencer. 2008. "Residential Mobility in Childhood and Health Outcomes: A Systematic Review," *Journal of Epidemiology and Community Health* 62 (7): 584–592.

Koebel, C. Theodore, and Margaret S. Murray. 1999. "Extended Families and Their Housing in the U.S." *Housing Studies* 14 (2): 124–143.

Koebel, C. Theodore, and Mary Ellen Rives. 1993. *Poor Families and Poor Housing: The Search for Decent Housing in Virginia's Private, Unassisted Market*. Blacksburg, VA: Virginia Tech, Center for Housing Research.

Letiecq, Bethany L., Elaine A. Anderson, and Sally A. Koblinsky. 1998. "Social Support of Homeless and Housed Mothers: A Comparison of Temporary and Permanent Housing Arrangements," *Family Relations* 47 (4): 415–421.

Mayberry, Lindsay S., Marybeth Shinn, Jessica G. Benton, and Jasmine Wise. 2014. "Families Experiencing Housing Instability: The Effects of Housing Programs on Family Routines and Rituals," *American Journal of Orthopsychiatry* 84 (1): 95–109. DOI: 10.1037/h0098946. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4089513/>.

Mitchell, Robert E. 1971. "Social Implications of High Density Housing," *American Sociological Review* 36 (1): 18–29.

Myers, Dowell, William C. Baer, and Seong-Youn Choi. 1996. "The Changing Problem of Overcrowded Housing," *Journal of the American Planning Association* 62 (1): 66–84.

- Mykyta, Laryssa, and Suzanne Macartney. 2011. The Effects of Recession on Household Composition: “Doubling Up” and Economic Well-Being. Working paper 2011-4 (March 31–April 2). Washington, DC: U.S. Census Bureau. http://www.norwescap.org/pdf_public/recession-effects.pdf.
- Norton, Arthur J., and Paul C. Glick. 1986. “One Parent Families: A Social and Economic Profile,” *Family Relations* 35 (1): 9–17.
- Obradović, Jelena, Jeffrey D. Long, J.J. Cutuli, Chi-Keung Chan, Elizabeth Hinz, David Heistad, and Ann S. Masten. 2009. “Academic Achievement of Homeless and Highly Mobile Children in an Urban School District: Longitudinal Evidence on Risk, Growth, and Resilience,” *Development and Psychopathology* 21 (2): 493–518.
- Oishi, Shigehiro, and Ulrich Schimmack. 2010. “Residential Mobility, Well-Being, and Mortality,” *Journal of Personality and Social Psychology* 98 (6): 980–994.
- Purdie, Valerie, and Geraldine Downey. 2000. “Rejection Sensitivity and Adolescent Girls’ Vulnerability to Relationship-Centered Difficulties,” *Child Maltreatment* 5 (4): 338–349.
- Rubin, Kenneth H., Robert J. Coplan, and Julie C. Bowker. 2009. “Social Withdrawal in Childhood,” *Annual Review of Psychology* 60: 141–171.
- Shinn, Marybeth, Jessica Gibbons-Benton, and Scott R. Brown. 2017. “Poverty, Homelessness, and Family Break-Up,” *Child Welfare* 93 (6): 105–122.
- Shinn, Marybeth, Andrew L. Greer, Jay Bainbridge, Jonathan Kwon, and Sara Zuiderveen. 2013. “Efficient Targeting of Homelessness Prevention Services for Families,” *American Journal of Public Health* 103 (S2): S324–S330.
- Vinsel, Anne, Barbara Brown, Irwin Altman, and Carolyn Foss. 1980. “Privacy Regulation, Territorial Displays, and Effectiveness of Individual Functioning,” *Journal of Personality and Social Psychology* 39 (6): 1104–1115.
- Voight, Adam, Marybeth Shinn, and Maury Nation. 2012. “The Longitudinal Effects of Residential Mobility on the Academic Achievement of Urban Elementary and Middle School Students,” *Educational Researcher* 41 (9): 385–392.
- Wachs, Theodore D., and Ozlem Camli. 1991. “Do Ecological or Individual Characteristics Mediate the Influence of the Physical Environment Upon Maternal Behavior?” *Journal of Environmental Psychology* 11 (3): 249–264.
- Wasson, Renya R., and Ronald P. Hill. 1998. “The Process of Becoming Homeless: An Investigation of Female-Headed Families Living in Poverty,” *Journal of Consumer Affairs* 32 (2): 320–342.
- Winkler, Anne E. 1993. “The Living Arrangements of Single Mothers With Dependent Children: An Added Perspective,” *The American Journal of Economics and Sociology* 52 (1): 1–18.
- Wright, Bradley R. Entner, Avshalom Caspi, Terrie E. Moffitt, and Phil A. Silva. 1998. “Factors Associated With Doubled-Up Housing—A Common Precursor to Homelessness,” *Social Service Review* 72 (1): 92–110.

Family Options Study: Effects on Family Living Situation

Daniel Gubits
Tom McCall
Michelle Wood
Abt Associates

Abstract

This article uses data from the Family Options Study to address several questions about family living situations after a stay in emergency shelter. (1) What are the families' living situations, month by month, during the first 32 months after random assignment to one of the study's interventions? (2) What are the relative impacts of the interventions on two particular living situations—living in the family's own place and doubled up with a relative or friend? (3) What are the flows out of the status of living in the family's own place over time and what are the impacts of the interventions on these flows?

The Family Options Study randomly assigned 2,282 families staying in emergency shelters in 12 communities to one of four interventions: (1) SUB, priority access to long-term rent subsidies (usually housing choice vouchers); (2) CBRR, priority access to short-term rent subsidies provided by rapid re-housing programs; (3) PBTH, priority access to project-based transitional housing; and (4) usual care, in which families did not receive priority access to any particular type of assistance but were free to pursue whatever assistance they could obtain in their communities. Living situation data are based on five rounds of surveys during the first 3 years after random assignment and on the Homeless Management Information System and the U.S. Department of Housing and Urban Development's Public and Indian Housing Information Center/Tenant Rental Assistance Certification System administrative data.

Results show that, relative to usual care, the offer of a long-term rent subsidy increases the proportion of families living in their own place throughout the followup period. The offer of long-term subsidies also reduced the proportion of families doubling up with family and friends as compared with usual care. For the first several months after random assignment, the offer of short-term rental subsidies also increases the proportion of families living in their own place as compared with usual care. Compared with an offer of a long-term subsidy, priority access to a short-term subsidy moves families into the status of living in their own place faster. Priority offers of short-term subsidies increase exits from the status of living in the family's own place relative to offers of long-term subsidies, to usual care, and to offers of transitional housing. This analysis adds to evidence reported previously about the relative effects of the interventions studied in the Family Options Study.

Introduction

The Family Options Study, sponsored by the U.S. Department of Housing and Urban Development (HUD), is the largest rigorous study to investigate which interventions work best for families who experience homelessness. The study randomly assigned 2,282 families in 12 sites across the country.¹ Families who had stayed at least 7 days in emergency shelter were randomly assigned to one of four groups.

1. **SUB**, in which families were offered priority access to a *long-term rent subsidy*, typically a housing choice voucher (HCV).
2. **CBRR**, in which families were offered priority access to a short-term rent subsidy, lasting up to 18 months, in the form of *community-based rapid re-housing* assistance. The rapid re-housing component of the Homelessness Prevention and Rapid Re-Housing Program (HPRP) funded this assistance in all the sites except one.²
3. **PBTH**, in which families were offered priority access to a temporary, service-intensive stay, lasting up to 24 months, in a *project-based transitional housing* facility.
4. **UC**, in which families had access to *usual care* homeless and housing assistance but did not have priority access to any particular program.

Following random assignment, families were free to take up the programs to which they were given priority access or to make other arrangements on their own, as would be the case for any family given a referral to a program in the absence of the study. Priority access provided families with immediate access to a program slot—for an HCV, a short-term rent subsidy provided by a rapid re-housing program, or a unit in a transitional housing facility—but families still needed to meet the eligibility criteria of the program to which they were referred, complete any required paperwork, and, in some cases, find an acceptable housing unit. Families were not prohibited from using other programs to which they were able to gain access outside the study.

The study analyzed the relative effects of the SUB, CBRR, and PBTH interventions in pairwise comparisons, contrasting assignment to the intervention with assignment to another intervention or with the usual care. Only families who were eligible for both interventions in a pairwise comparison (for example, the SUB and CBRR interventions) and were randomized to one of them were included in each comparison. The intention-to-treat, or ITT, impacts for each comparison estimate the average effect of being offered one intervention rather than another. The average effect is estimated for all families in the comparison regardless of whether families actually participated in the intervention to which they were assigned. In this way, the study evaluates the effect of priority access to a program and thus shows the effect of a policy emphasis on a particular approach—that is, relatively more availability of a given type of program in a community.

¹ See Gubits et al. (2015) for details about the implementation of the study.

² In Boston, the State of Massachusetts funded the short-term rent subsidies offered to families in the CBRR group. The Boston programs offered assistance very similar to HPRP, although rental assistance could be provided for longer periods.

Overview of the Article

This article presents analyses on the living situations of the study families during the 3-year followup period. The analysis uses month-by-month data about the kinds of situations in which families were living during each month after random assignment. The analysis examines two living situations in detail.

1. Living in the family's own place; that is, in an apartment or house that the family head rents or owns.
2. *Doubled up*, defined as living with a relative or friend, somewhere not considered the family's own place.

Gubits et al. (2016, 2015) presented intervention impacts on experiences of doubling up in the 6-month periods before the 20- and 37-month followup surveys. Those reports defined doubled up based on the family's report of having spent *at least 1 night in the 6 months before the 20- or 37-month survey living with a friend or relative because the family could not find or afford a place of their own.*

This article draws on a different data source for doubled up, one with a slightly different definition. At each survey point, family heads were asked to describe their current living situation. Response options included partner's place and a friend's or relative's house or apartment (including parent's or guardian's house), either paying part of the rent or not. This article defines doubled up as living in either the family head's partner's place or in a friend's or relative's house or apartment. These survey response options were administered only if the family head reported that the family was not living in a house or apartment that she (or he) owned or rented, and so indicated a situation in which the family was not living in their own place. This article examines the month-by-month experiences of this type of living situation.

The programs offered to the families assigned to the SUB and CBRR groups seek to restore families to conventional housing in the community as swiftly as possible. This approach, sometimes called "Housing First,"³ stands in contrast to that taken by the transitional housing programs offered to families assigned to the PBTH group. The philosophy of transitional housing emphasizes that many families who become homeless have barriers in addition to poverty that make it difficult for them to secure and maintain housing. PBTH programs are based on the view that addressing these barriers and needs with an array of services in a supervised residential setting lays the best foundation for ongoing stability.

Both of the living situations examined in this article (living in one's own place or doubled up with friends or relatives) are considered a return to conventional housing according to HUD's definition of homelessness.⁴ In general, under HUD's definition, homelessness is deemed to continue until the family's primary nighttime residence is no longer an unsheltered location or in housing owned or controlled by an organization that provides services to people experiencing homelessness

³ Permanent housing is permanent in the sense that if the family is able to pay for the housing, either with or without assistance, they can stay there indefinitely. The Housing First approach is described in USICH (n.d.) and National Alliance to End Homelessness (2006).

⁴ For a comparison of these definitions, see U.S. Department of Health and Human Services, Administration for Children and Families (n.d.).

(emergency shelter, transitional housing, or permanent supportive housing). The transitional housing programs offered to families assigned to the PBTH intervention do not end the current homeless spell according to HUD's definition.

Even though families living in doubled-up situations are not considered homeless according to HUD's definition, these types of living situations are often associated with instability. For example, families who share space with friends or relatives may experience crowding and disruption to children's school and family routines, and in some cases doubled-up situations may be unsustainable. In fact, the U.S. Department of Education defines homelessness to include unstable housing situations—children in families who are sharing other people's housing because of economic hardship are considered homeless.

To analyze the living situations of families enrolled in the Family Options Study, we use the family head's own assessment of the family's situation reported in the study's followup surveys. If the family head considered a place "her own," we record it as such, even if other people were living with the family (family heads were instructed not to consider their parents' homes as their own places). If a family head considered a place to be someone else's, we considered the family as doubled up. The only exception to taking the respondent's perspective on living situation was in cases in which a family was participating in a transitional housing program. The analysis in this article does not consider families staying in transitional housing programs to be living in their own place.⁵

The analyses presented in this article address three questions about the *month-by-month* living situations for study families.

1. What were families' living situations month by month during the first 32 months after random assignment?⁶
2. What were the impacts of group assignment on the living situations of *living in the family's own place* and *doubled up with a relative or friend* over time?
3. What were the flows of families out of the status of *living in the family's own place* over time and what were the impacts of group assignment on these flows?

⁵ Often, families in transitional housing programs live in apartments where they pay rent but from which they must move at the end of the transitional period. To distinguish transitional housing from the short-term rent subsidies provided by rapid re-housing programs in the Family Options Study, the study team did not randomize families to priority access to transitional housing programs in which families could assume the lease for the apartment at the end of the assistance period (referred to as *transition-in-place* programs). However, some families may have found their way into transition-in-place programs on their own. Administrative data from the Homeless Management Information System (HMIS) do not distinguish transition-in-place programs from other transitional housing programs. The analysis presented in this article therefore likely undercounts the extent to which families were living in their own place, because no stay in transitional housing is considered living in one's own place and the data do not permit us to identify instances in which families stayed in transition-in-place programs.

⁶ To have as long a time window as possible to examine living situations, we restricted the sample for this article to the families who responded to the 37-month followup survey. In the remainder of the article, we refer to the 37-month followup survey as "the followup survey." The followup time window is the length of time from random assignment to the calendar month of the followup survey. The length of this period differs for each family. The latest month with data on all respondent families is the 32nd month after random assignment. Therefore, all analyses in this article use the time window of month 0 to month 32 after random assignment.

Given the approaches underlying the SUB and CBRR programs of placing people in conventional housing as quickly as possible, we hypothesized that assignment to SUB and CBRR would initially *increase* the proportion of families living in their own place relative to usual care. Further, given the temporary nature of the subsidies offered by CBRR programs, we hypothesized that assignment to CBRR would increase the proportion, relative to assignment to SUB, of families *exiting* the status of living in their own place when the initial subsidies end. On the other hand, given that time spent in transitional housing programs is not considered living in one's own place, we expected that assignment to PBTH would initially *reduce* the proportion of families living in their own place relative to usual care, assignment to SUB, and assignment to CBRR. Whereas previous study reports presented impacts on being doubled up for reasons of economic hardship in the 6-month periods preceding the followup survey, this article defines doubled up as any situation in which the family lives with friends or relatives. It also provides a first look at how the proportions of families who are doubled up evolve over time within the assignment groups and how the impact evolves within each impact comparison.

Data and Methodology

This section addresses the data used to analyze living situation and the methodology for the analysis. The article uses data collected for the Family Options Study and follows the impact analysis methodology reported in Gubits et al. (2015) and Gubits et al. (2016).

Data

This article utilizes living situation data collected in surveys of the family head. In total, the study conducted five surveys after random assignment—the 6-, 12-, and 27-month tracking surveys and the 20- and 37-month followup surveys. The study team combined these data with Homeless Management Information System administrative records, HUD Public and Indian Housing Information Center/Tenant Rental Assistance Certification System administrative records, and study enrollment verification records to create the study's Program Usage/Living Situation database.⁷ The Living Situation data consist of monthly indicator variables for each of the following living situations.

- Living in own place.⁸
- Living in partner's place.

⁷ See Gubits et al. (2016), appendix A, for more information on the Program Usage data. See appendix A of this article for a further description of how Living Situation data were created and for the survey questions used to measure the living situations. In the short-term and 3-year impact reports, one housing stability outcome measured "living in own house or apartment at followup." This outcome was based on the same survey item as the "living in own place" living situation status. However, the outcome variable used in the impact reports was not checked for consistency with known program use. During subsequent data cleaning, it was discovered that some families using transitional housing responded that they were living in their own place. The Living Situation data do not allow for concurrent status of living in own place for those in transitional housing.

⁸ Family heads who described a living situation as their own place were considered to be living in their own place whether or not partners or spouses were living with them. The living situation indicators thus denote the family head's description of the living situation, rather than family composition.

- Doubled up with a relative or friend and paying part of rent.
- Doubled up with a relative or friend and not paying part of rent.
- Living in hotel or motel paid for by self.
- Living in a place not meant for human habitation (for example, car, abandoned building, anywhere outside).
- Staying in emergency shelter or transitional housing program.
- Staying in domestic violence shelter.
- Staying in other program or institution (indicating separation from other family members)—care facility, residential drug or alcohol treatment program, jail.
- Missing—no information on family's living situation or program use is available for the month.

Of the 2,282 families enrolled in the study, 1,784 (78 percent) families responded to the 37-month followup survey. Among survey respondents, 87 percent spent at least some time in emergency shelter during the followup period and 26 percent spent time in transitional housing programs. By far, the most common types of other living situations were living in own place, doubled up with a relative or friend and paying part of rent, and doubled up with a relative or friend and not paying part of rent. Altogether, 92 percent of families had lived in their own place for at least some time since random assignment, 21 percent had been doubled up paying rent for at least some of the time, and 15 percent had been doubled up not paying rent for at least some of the time. The proportions experiencing each of the other living situations in the preceding list were all less than 3 percent.

Methodology

We conducted several analyses to examine families' living situations during the 3-year followup period. We estimated the relative impacts of the interventions in pairwise comparisons that contrast assignment to an active intervention (SUB, CBRR, and PBTH) with another active intervention or to the UC group. The impact analysis in this article follows the methodology described in Gubits et al. (2016). Only families who were eligible for both interventions in a pairwise comparison and were randomized to one of them were included in the comparison. Hence, each pairwise comparison can be thought of as an experiment between two well-matched groups.

Month-by-Month Distribution of all Possible Living Situations

For each assignment group in each of the impact comparisons, we present an exhibit showing the proportions of families in each possible living situation. To focus the analysis, we aggregate some of the living situations, reducing the number of possible situations. In each month, a family had to have been in at least one of the following living situations or programs.

- Emergency shelter.
- Transitional housing.

- Doubled up (defined as a combination of living in partner's place, doubled up with a relative or friend and paying part of rent, and doubled up with a relative or friend and not paying part of rent).
- Living in own place.
- Other living situations and programs (defined as a combination of living in hotel or motel paid for by self, living in a place not meant for human habitation, other institutional settings indicating separation from other family members, and domestic violence shelter).
- Missing.

For months in which a family changes from one situation to another, the family is counted in each living situation for equal fractions of the month.

Month-by-Month Proportions Living in Own Place and Doubled Up

For each pairwise comparison, we present an exhibit showing the proportions of families by assignment group who are living in their own place and who are doubled up in each month. These exhibits are based on impact estimates shown in tabular form in appendix B of this article, which is published online at <https://www.huduser.gov/portal/periodicals/cityscope/Family-Living-Situation-Appendix.pdf>. The proportions are regression adjusted from an impact regression that controls for study site and randomization ratio. The proportions are shown in the columns labeled "Mean" in the appendix B tables.

Exits From Status of Living in Own Place

Although many families maintain the status of living in their own place once they achieve it, some families are not able to maintain that status. To understand more about the extent to which families' living situations change during the followup period, we analyze the time path of exits from the status of living in one's own place. We limit this analysis of exits from living in own place to comparisons involving families assigned to the SUB and CBRR interventions, the interventions intended to restore families to conventional housing as quickly as possible, and the families assigned to usual care. The analysis of exits excludes comparisons involving families assigned to the PBTH intervention because the families assigned to PBTH who used the offered assistance were, by definition, not living in their own place.

For families assigned to the SUB, CBRR, and UC groups, we examine exits from living in their own place in each 4-month period after random assignment. For each 4-month period, families are coded as exiting from their own place if they were not in their own place in any month in the 4-month period but had been in their own place at the end (in the last month) of the previous 4-month period. For the initial 4-month period (months 1 to 4), the family was coded as exiting from their own place if they were not in their own place at any time during the period subsequent to having lived in their own place.

For the SUB-versus-UC, CBRR-versus-UC, and SUB-versus-CBRR impact comparisons, we examined the percentage of families within an assignment group who exited from the status of living in own place in each 4-month period after random assignment. These results are presented

graphically and in tabular form in appendix B. The analysis of exits presented in appendix B focuses on the percentage of families exiting the status of living in own place within the entire assignment group so that experimental impacts can be reported.

We also examine the *exit rate*, defined as the percentage of families with an exit in a 4-month period divided by the percentage of families living in own place in the last month of the previous period. These exit rates are presented graphically in the article. Exit from living in own place is an outcome that is defined only for families who returned to living in their own place at some point after study enrollment. Because the interventions may differentially affect whether families return to living in their own place, the samples for whom exit from living in own place is defined are not strictly comparable. Therefore, unlike outcomes that are defined for all families in an assignment group, exit from living in own place is not well suited for internally valid impact measurement. Put differently, effects on exit rates are conditional impacts (that is, they can be decomposed into an effect on living in own place and an effect on exit conditional on living in own place), so they are not well defined in an experimental framework.

Long-Term Rent Subsidy (SUB) Compared With Usual Care (UC)

The short-term and 3-year impact reports found substantial differences in program use between families assigned to the SUB and UC groups, with families assigned to the SUB group much more likely to use some form of long-term housing subsidy (88 percent compared with 38 percent). At the 20- and 37-month followup points, the study found that, relative to usual care, priority access to a long-term subsidy (assignment to SUB) increased the proportion of families living in their own place. The study also found that assignment to SUB decreased the proportion of families doubled up with a relative or friend because they could not find or afford a place of their own during the 6-month periods immediately prior to the followup points.

Study data enable us to examine families' living situations at more than the two major followup points. Exhibit 1 shows the living situations of all followup survey respondent families in the SUB-versus-UC comparison during the first 32 months after random assignment. Panel A shows that, within a few months after random assignment, most families assigned to SUB completed the voucher intake, housing search, and lease-up processes and were living in their own place. Throughout the remainder of the followup period, the vast majority of families assigned to SUB continued to live in their own place. In contrast, panel B shows that families assigned to UC had greater proportions staying in emergency shelter, staying in transitional housing, being doubled up, and with missing information during most months of the followup period.

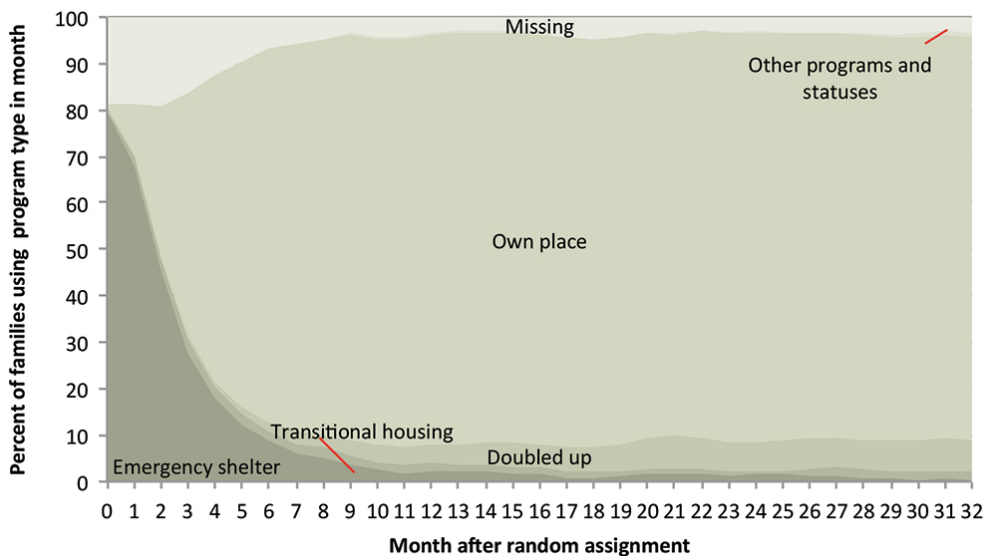
Exhibit 2 focuses only on the two living situations of *living in own place* and *doubled up* for the SUB-versus-UC comparison. We display the SUB and UC groups on the same graph in exhibit 2 to highlight the differences observed between the two groups.⁹ Families assigned to the UC group did not

⁹ The results underlying this exhibit are presented in table form in exhibit B-1 at <https://www.huduser.gov/portal/periodicals/cityscape/Family-Living-Situation-Appendix.pdf>.

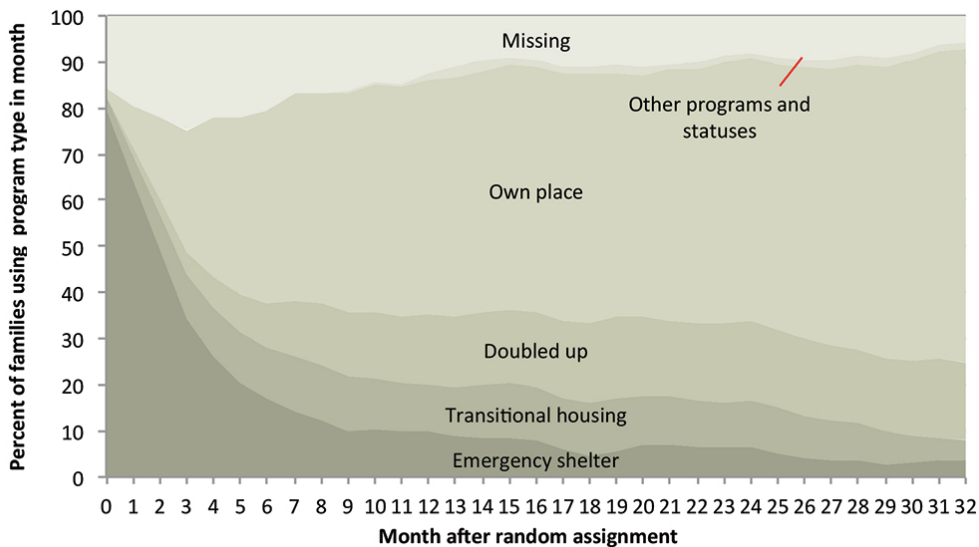
Exhibit 1

SUB Versus UC: Housing Status

Panel A: Housing Status of SUB Families for 32 Months After Random Assignment



Panel B: Housing Status of UC Families for 32 Months After Random Assignment

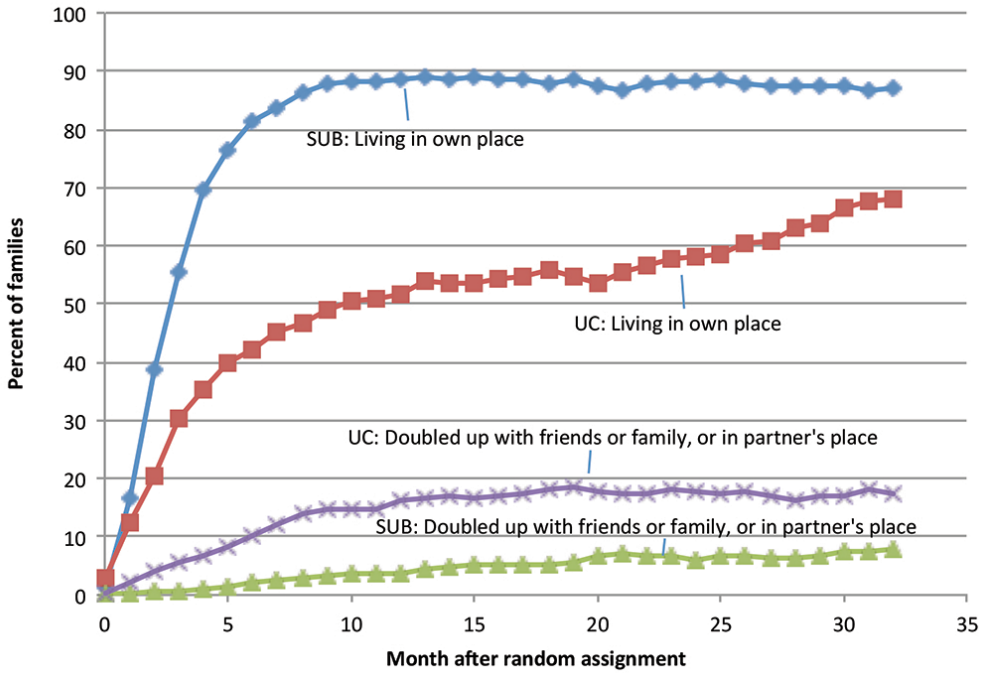


SUB = priority access to long-term rent subsidy. UC = usual care.

receive a referral to any particular program but were free to use whatever assistance they could find on their own. Gubits et al. (2016) reported that families in the UC group used a variety of programs and, by the 37-month followup survey, 30 percent of UC families had used a long-term subsidy.

Exhibit 2

SUB Versus UC: Percent of Families Living in Own Place and Doubled Up, by Month After Random Assignment



SUB = priority access to long-term rent subsidy. UC = usual care.

Exhibit 2 shows that, by month 9 after random assignment, nearly 90 percent of SUB families are living in their own place and that this proportion is maintained throughout the followup period. The proportion of the UC group living in their own place grows relatively quickly in the first 10 months after random assignment and then grows more slowly after that point. By month 32, the proportion of the UC group living in their own place is nearly 70 percent. The differences in proportions between the two groups are statistically significant in all months. The proportions in the families offered priority access to long-term subsidies (SUB group) are about 39 percentage points higher than those in the UC group during months 6 to 9. These impacts gradually decrease to 19 percentage points by month 32 as the UC proportion gradually increases.

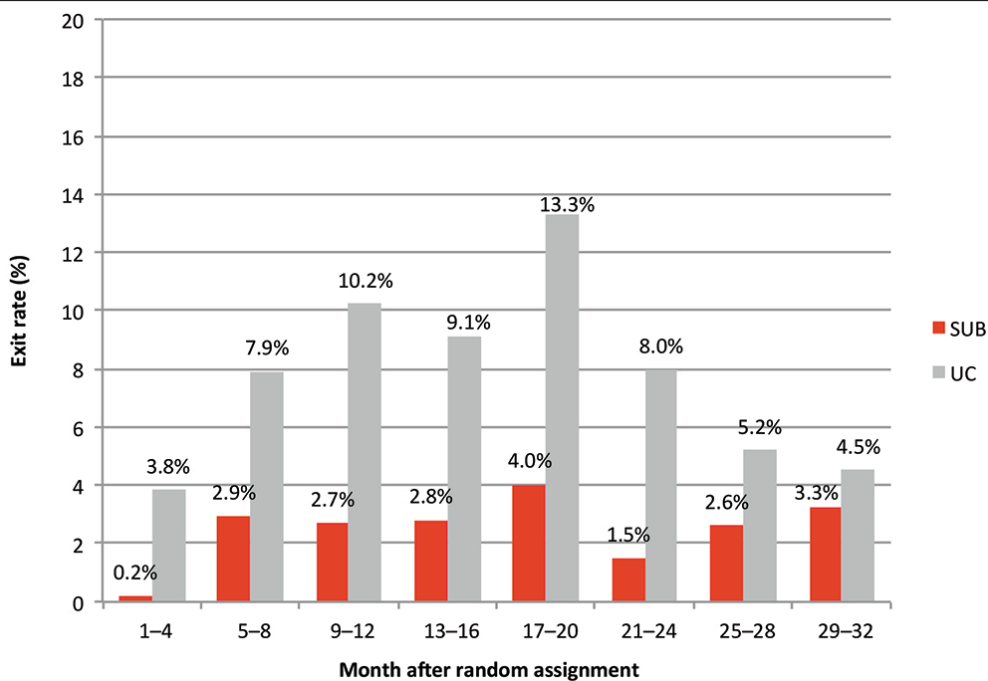
The exhibit also shows the proportion of families in each month who are doubled up. The UC proportion climbs to 17 percent by month 13 and then hovers around that level through month 32. The SUB proportion grows very slowly to about 8 percent in month 32. The differences in all months are statistically significant. About 1 year after random assignment, relative to usual care, assignment to SUB reduces doubling up by about 12 percentage points. We observe this reduction in doubling up through month 32, when the impact is 10 percentage points.

The Living Situation data show that some families do not continue living in their own place over time. The bars in exhibit 3 show the proportion of families in the SUB-versus-UC comparison who exit the status of living in own place in each 4-month period, conditional on having lived in one's

own place at the end of the previous 4-month period. Consistent with higher takeup of long-term subsidies and sustained use of those subsidies relative to usual care, exhibit 3 shows that families assigned to SUB had lower exit rates from living in their own place throughout the followup period. In the first 20 months after random assignment, in any 4-month period, about 2 to 4 percent of families assigned to the SUB group who lived in their own place exit that living situation compared with about 8 to 13 percent of the UC families. Over the entire time period, relative to usual care, priority access to a long-term subsidy (assignment to SUB) reduced the proportion of families with an exit from the status of living in own place from 30 to 16 percent (see exhibits B-2 and B-3 for these impact estimates on exits) and reduced the exit rate for the entire time period from 35 to 16 percent.¹⁰

Exhibit 3

SUB Versus UC: Rate of Exiting Status of Living in Own Place, by 4-Month Period After Random Assignment



SUB = priority access to long-term rent subsidy. UC = usual care.

Sample sizes: SUB = 501. UC = 395.

Notes: Exit rates are the percentage of families with an exit divided by the percentage of families who were living in their own place in the last month of the previous 4-month period. Exit is defined as not living in own place for at least one of the months in the 4-month period after living in own place in the last month of the previous 4-month period. For months 1 to 4, a family is coded as exiting from own place if they had lived in their own place in an earlier month but were no longer doing so. Exit rate for months 1 to 4 uses denominator of those who lived in own place in any month 0 to 3. Underlying percentages for exit rate are regression adjusted, controlling for site and randomization ratio, and are weighted for survey nonresponse to represent full comparison sample.

Source: Family Options Study Program Usage/Living Situation data

¹⁰ The exit rate for the entire time period is defined as the proportion of families who exited from the status of living in own place during months 1 to 32 divided by the proportion of families who ever lived in their own place during months 0 to 31.

Community-Based Rapid Re-Housing (CBRR) Compared With Usual Care (UC)

Families assigned to the CBRR group received priority access to a short-term rent subsidy provided by a rapid re-housing program. On average, families assigned to the CBRR group who used a short-term rent subsidy did so for about 8 months (Gubits et al., 2016). The Family Options Study short-term and 3-year impact reports found a substantial difference in the use of rapid re-housing temporary subsidies between families randomly assigned to the CBRR and UC groups in the CBRR-versus-UC impact comparison (59 percent compared with 23 percent). However, this difference did not lead to detectable differences in either the proportion living in own place or proportion doubled up at either the 20- or 37-month followup points. The analysis of month-by-month impacts on family living situation presented in this section shows that, relative to usual care, priority access to the short-term rent subsidy offered to families in the CBRR group increased the proportion living in their own place during the first 8 to 10 months after random assignment. These month-by-month effects on family living situation suggest that the impact analysis at the 20- and 37-month followup points did not detect impacts on living situation that occurred early during the followup period but that had diminished by the 20- and 37-month followup points.

The two panels of exhibit 4 show the distributions of living situations in the CBRR and UC groups. Families assigned to the CBRR group start living in their own place sooner than families assigned to UC, and lower proportions have missing information during the first 6 to 8 months.¹¹

Exhibit 5 shows the monthly proportions living in own place and doubled up for the two groups. For the CBRR group, the proportion living in their own place quickly rises to 60 percent by month 5 and then levels off through month 18 before a gradual rise begins in month 19. By month 32, 72 percent of the CBRR families are living in their own place. The proportion for the UC group also has its steepest rise in the first few months after random assignment, with a leveling off in months 13 to 20 followed by a gradual rise through month 32.

Priority access to rapid re-housing assistance increased the proportion of families living in their own place through the first year after random assignment.¹² The impacts are substantial in size in the first several months: 17 percentage points in month 1 and 26, 25, and 20 percentage points in the following 3 months. These impacts are consistent with the intention of rapid re-housing programs to move families quickly into their own places. The exhibit also shows positive impacts of 6 to 9 percentage points in months 19 to 24. It is not clear what explains this later period of impacts, after the UC proportion mostly caught up with the CBRR proportion in months 13 and 14

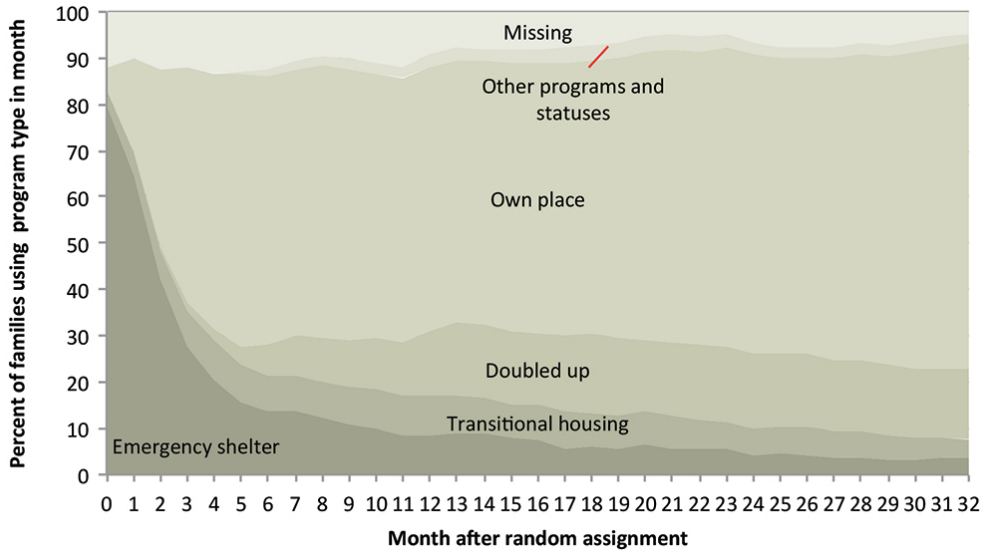
¹¹ The study did not collect retrospective information on living situations, except for living situations that were inferred based on program use (such as emergency shelter, rapid re-housing, transitional housing, and long-term subsidy). The difference in missing information between families assigned to CBRR and to UC might result from the fact that information on use of rapid re-housing (and, by definition, living in own place) was available from HMIS data at the time the family began to receive the assistance. For families assigned to UC (for whom Program Usage data show later takeup of assistance), living situation is not available until either the families responded to a followup survey or took up assistance. Therefore, less use of programs among families assigned to UC in the initial months after random assignment might have resulted in less information about families' living situations.

¹² The differences are statistically significant in every month except month 11. See exhibit B-4 at <https://www.huduser.gov/portal/periodicals/cityscape/Family-Living-Situation-Appendix.pdf>.

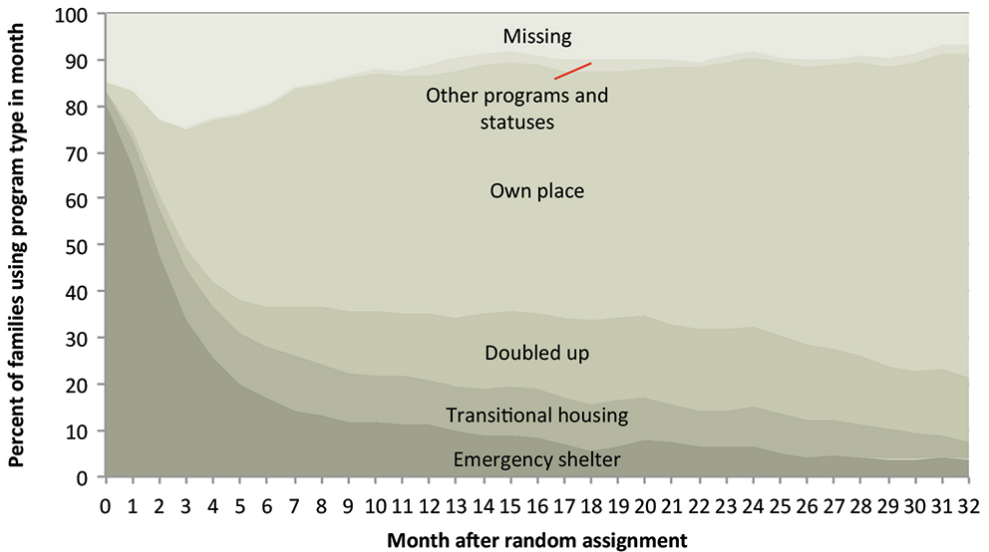
Exhibit 4

CBRR Versus UC: Housing Status

Panel A: Housing Status of CBRR Families for 32 Months After Random Assignment



Panel B: Housing Status of UC Families for 32 Months After Random Assignment

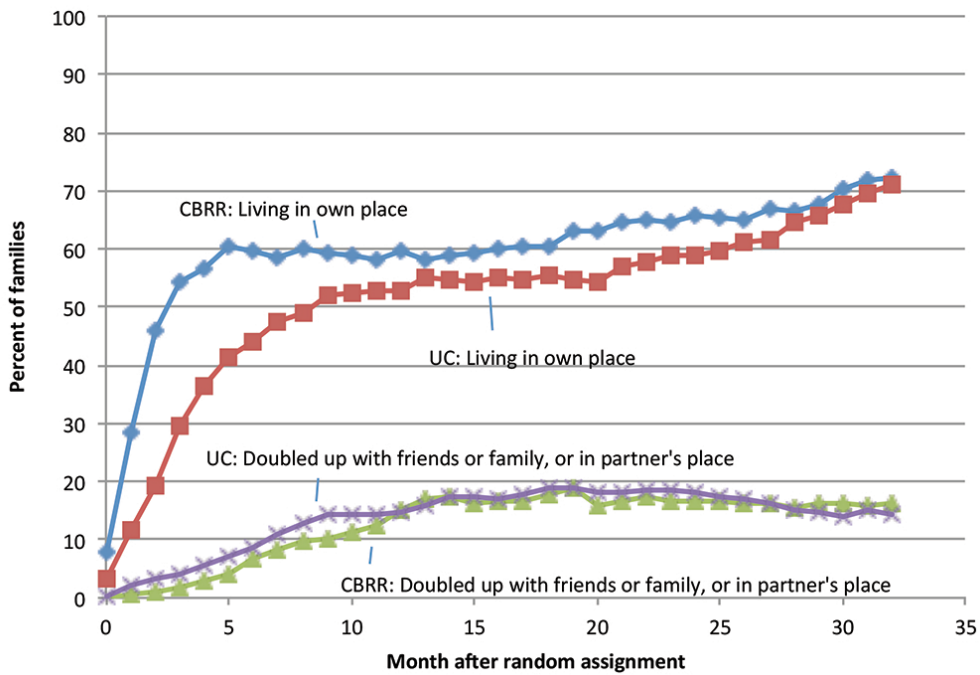


CBRR = priority access to community-based rapid re-housing. UC = usual care.

and presumably after the end of the temporary subsidies offered by the study. This difference might arise from greater use of transitional housing programs among families assigned to UC compared with families assigned to CBRR.

Exhibit 5

CBRR Versus UC: Percent of Families Living in Own Place and Doubled Up, by Month After Random Assignment



CBRR = priority access to community-based rapid re-housing. UC = usual care.

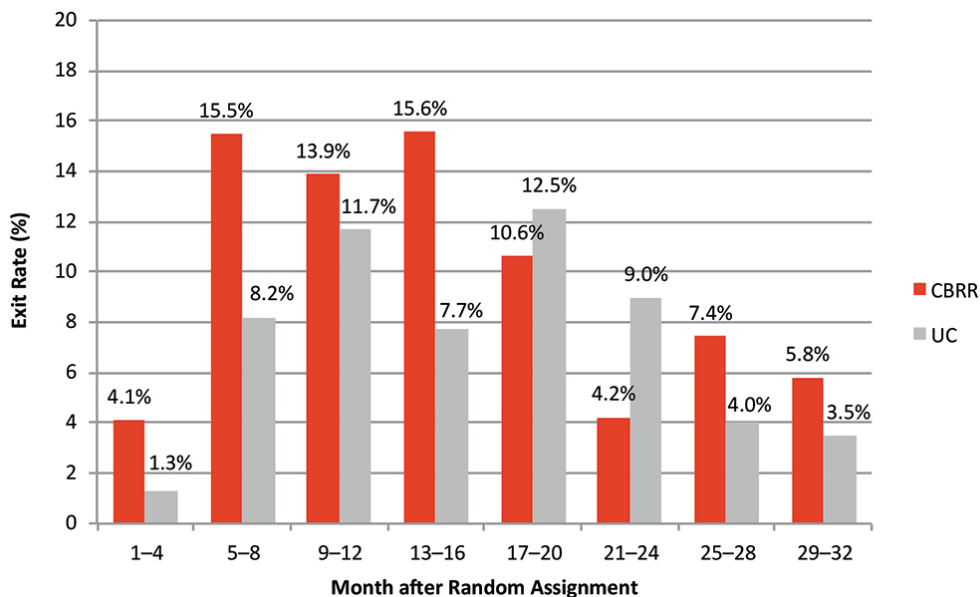
Exhibit 5 also indicates that assignment to CBRR, relative to usual care, reduces the proportion doubled up for a few months after random assignment (statistically significant reductions of 2 to 3 percentage points in months 2 to 5 and of 4 percentage points in month 9). After the first year, the proportions of families doubled up in the CBRR and UC groups are equivalent.

Exhibit 6 displays information on the rates at which families assigned to CBRR and UC exit the status of living in own place after having attained that living situation. This information, combined with information on the month-by-month impacts on exits (see exhibits B-5 and B-6) provides some evidence about whether families using rapid re-housing are able to continue living in their own place after the temporary subsidies end.

Exhibit 6 shows that even though, compared with usual care, assignment to CBRR led to higher proportions of families living in their own place, assignment to CBRR also led to greater movement out of living in their own place (most notably in the first 16 months after random assignment). Take months 5 to 8 after random assignment as an example. Although the vast majority of families assigned to CBRR who were in their own place in month 4 remained in that status, the percentage that exited this status—16 percent—was twice as high as the proportion—8 percent—who left their own place in the UC group. After month 16, exit rates from the status of living in own place are more similar in the CBRR and UC groups and generally lower. Over the entire period,

Exhibit 6

CBRR Versus UC: Rate of Exiting Status of Living in Own Place, by 4-Month Period After Random Assignment



CBRR = priority access to community-based rapid re-housing. UC = usual care.

Sample sizes: CBRR = 434. UC = 434.

Notes: Exit rates are the percentage of families with an exit divided by the percentage of families who were living in their own place in the last month of the previous 4-month period. Exit is defined as not living in own place for at least one of the months in the 4-month period after living in own place in the last month of the previous 4-month period. For months 1 to 4, a family is coded as exiting from own place if they had lived in their own place in an earlier month but were no longer doing so. Exit rate for months 1 to 4 uses denominator of those who lived in own place in any month 0 to 3. Underlying percentages for exit rate are regression adjusted, controlling for site and randomization ratio, and are weighted for survey nonresponse to represent full comparison sample.

Source: Family Options Study Program Usage/Living Situation data

assignment to CBRR, relative to usual care, increases the proportion of families who exited the status of living in own place from 28 to 40 percent and increased the overall exit rate from 33 to 44 percent.

Project-Based Transitional Housing (PBTH) Compared With Usual Care (UC)

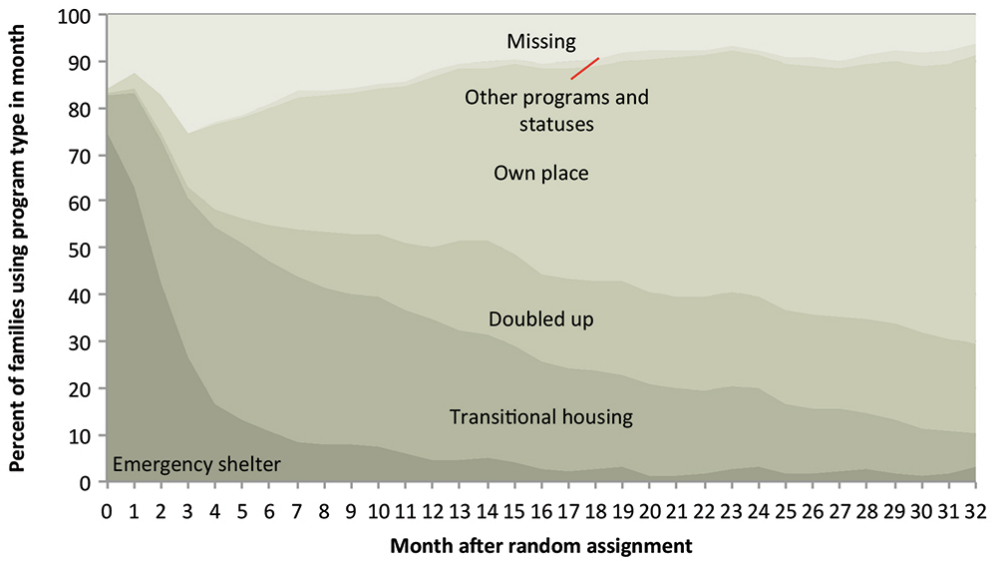
Assignment to the PBTH group offered families priority access to project-based transitional housing. Families who used the offered housing and services stayed in transitional housing for a median of 13 months. The short-term and 3-year impact reports found a difference in the use of transitional housing between the PBTH and UC groups in the PBTH-versus-UC impact comparison (53 versus 35 percent). However, this difference did not lead to detectable differences in either the proportion living in own place or proportion doubled up at either the 20- or 37-month followup points.

Because of the greater use of transitional housing by the PBTH group than by the UC group, we expect to see a lower proportion of PBTH families living in their own place during the first 2 years of the followup period (given that most transitional housing programs can serve a family up to 24 months). Exhibit 7 shows that this result is indeed what happened in this impact comparison.

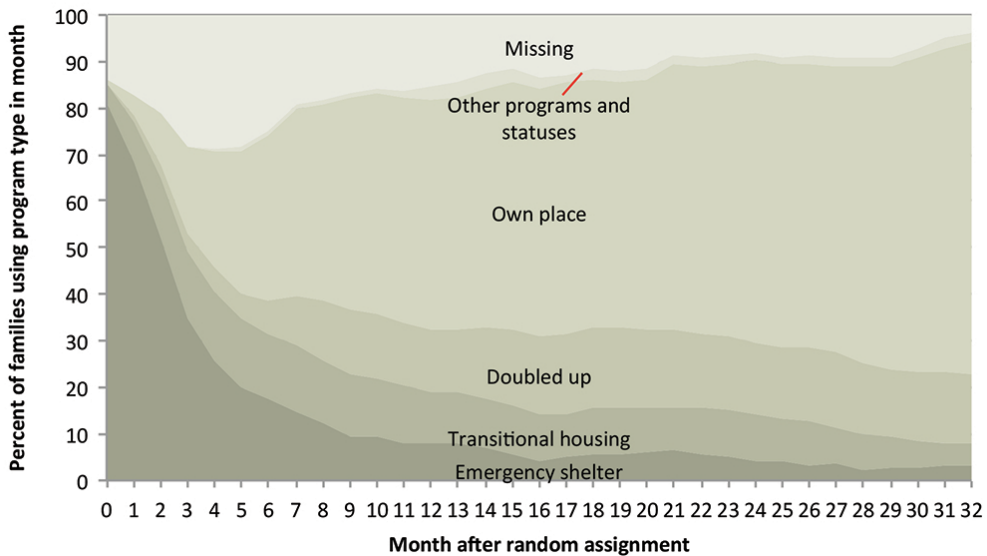
Exhibit 7

PBTH Versus UC: Housing Status

Panel A: Housing Status of PBTH Families for 32 Months After Random Assignment



Panel B: Housing Status of UC Families for 32 Months After Random Assignment



PBTH = priority access to transitional housing. UC = usual care.

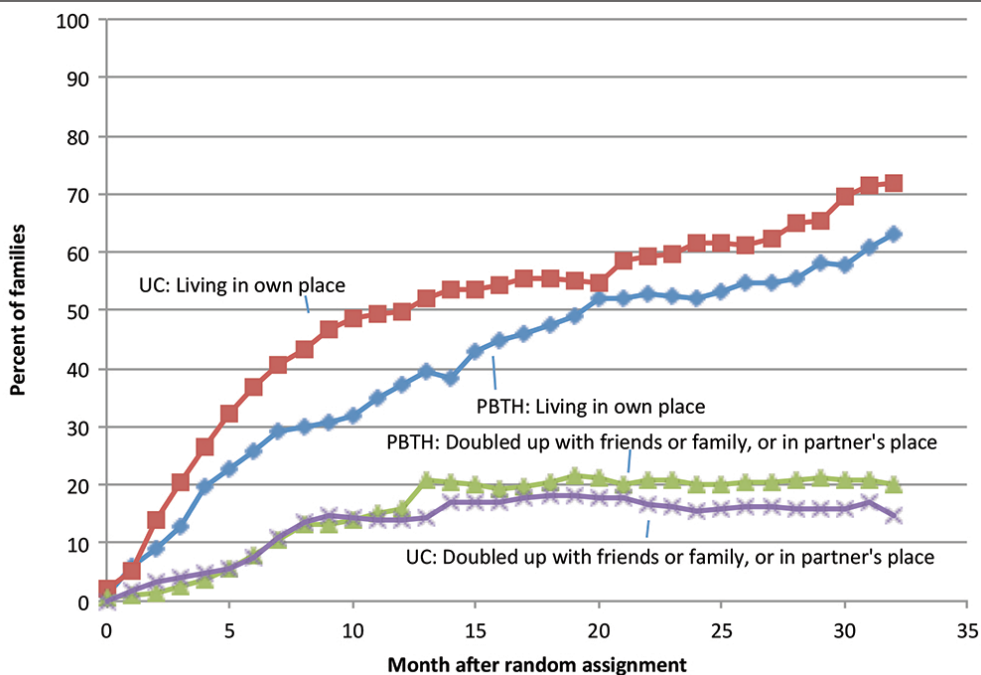
Compared with the UC group, lower proportions of the PBTH group lived in their own place and higher proportions were in transitional housing. Also, lower proportions of the PBTH group stayed in emergency shelter, consistent with findings in the short-term and 3-year impact reports.

Exhibit 8 shows that a lower proportion of members of the PBTH group, relative to the UC group, are living in their own place throughout the first 32 months after random assignment.¹³ Although a lower proportion in the PBTH group was expected, given the transitional housing approach, it is somewhat surprising that this difference continues through month 32. We might have expected that, given the maximum stay of 24 months in transitional housing, the proportions would have equalized after the first 2 years. Instead, we find a difference of 9 percentage points even in month 32.¹⁴

Even though exhibit 8 shows the proportions doubled up in the PBTH group are numerically higher than in the UC group after the first year, the differences are not statistically significant with the exception of a single month (month 13).

Exhibit 8

PBTH Versus UC: Percent of Families Living in Own Place and Doubled Up, by Month After Random Assignment



PBTH = priority access to transitional housing. UC = usual care.

¹³ Results are statistically significant in all months except months 19 to 23 and month 26. See exhibit B-5 at <https://www.huduser.gov/portal/periodicals/cityscape/Family-Living-Situation-Appendix.pdf>.

¹⁴ Gubits et al. (2016) found a statistically nonsignificant 7-percentage-point decrease in living in own house or apartment at the 37-month followup (median followup period equal to 37 months).

Long-Term Rent Subsidy (SUB) Compared With Community-Based Rapid Re-Housing (CBRR), SUB Compared With Project-Based Transitional Housing (PBTH), and CBRR Compared With PBTH

In the next sections, we present results for comparisons of the active interventions with one another. Each pairwise comparison includes only families eligible to be randomized to one of the interventions and who were randomized to one of them.

SUB Versus CBRR

We first examine the SUB-versus-CBRR comparison. The short-term and 3-year impact reports found substantial differences in program use between the SUB and CBRR groups within the SUB-versus-CBRR comparison sample. Families assigned to the SUB group had much higher use of some form of long-term housing subsidy, and families assigned to the CBRR group had much higher use of temporary rapid re-housing subsidies. Families assigned to the CBRR group also had somewhat higher use of transitional housing. At the 20- and 37-month followup points, the study found that, relative to assignment to CBRR, assignment to SUB increased the proportion of families living in their own place and decreased the proportion with recent experience of doubling up because the family could not find or afford a place of their own.

The two panels of exhibit 9 show the distributions of living situations in the SUB and CBRR groups. The exhibit shows that, compared with the CBRR group, the SUB group had higher proportions living in their own place and lower proportions doubled up beginning a few months after random assignment and continuing through the followup period. The exhibit also shows lower proportions of families in the SUB group staying in transitional housing and emergency shelter, as has been noted in the study's prior reports.

Exhibit 10 shows the monthly proportions living in own place and doubled up within the two groups.¹⁵ Immediately after random assignment, the CBRR group, as compared with the SUB group, has a higher proportion of families living in their own place (by 9 percentage points in the month of random assignment and 14 and 10 percentage points in following 2 months). In month 3, the groups have nearly equivalent proportions, and then the SUB group has a higher proportion of families living in their own place for the remainder of the followup period. Although families assigned to both the CBRR and SUB groups received priority access to subsidies to rent private-market housing,¹⁶ the rapid re-housing assistance offered to the CBRR group enabled families to return to living in their own place slightly faster on average in the first 3 months after random assignment. This result suggests that, on average, takeup of the short-term subsidies offered to the CBRR group occurs more quickly than takeup of HCVs, the most common type of long-term subsidy offered to families in

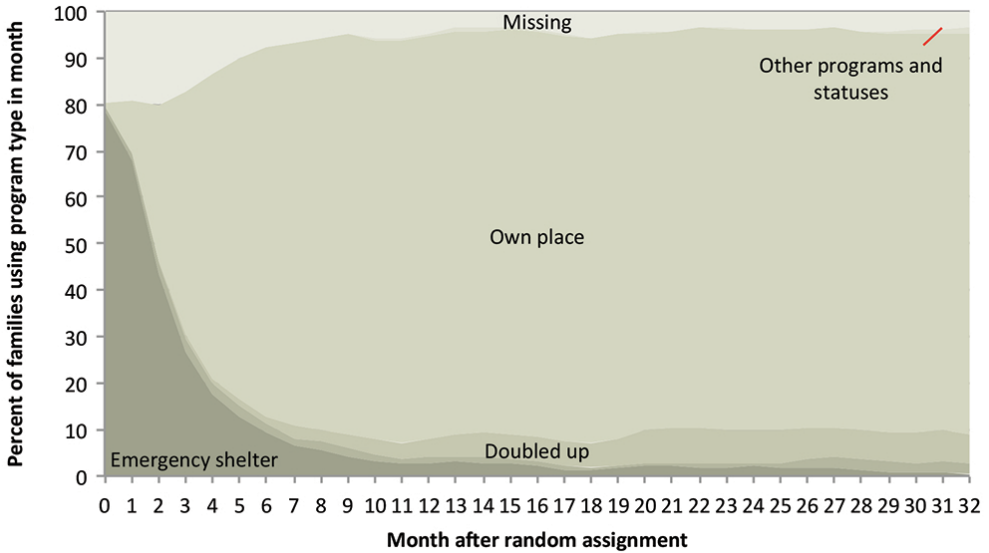
¹⁵ Exhibit B-8, online at <https://www.huduser.gov/portal/periodicals/cityscape/Family-Living-Situation-Appendix.pdf>, shows the data in table form.

¹⁶ Of all families assigned to the SUB group, 92 percent were offered HCVs. The other 8 percent were offered either public housing assistance or project-based vouchers.

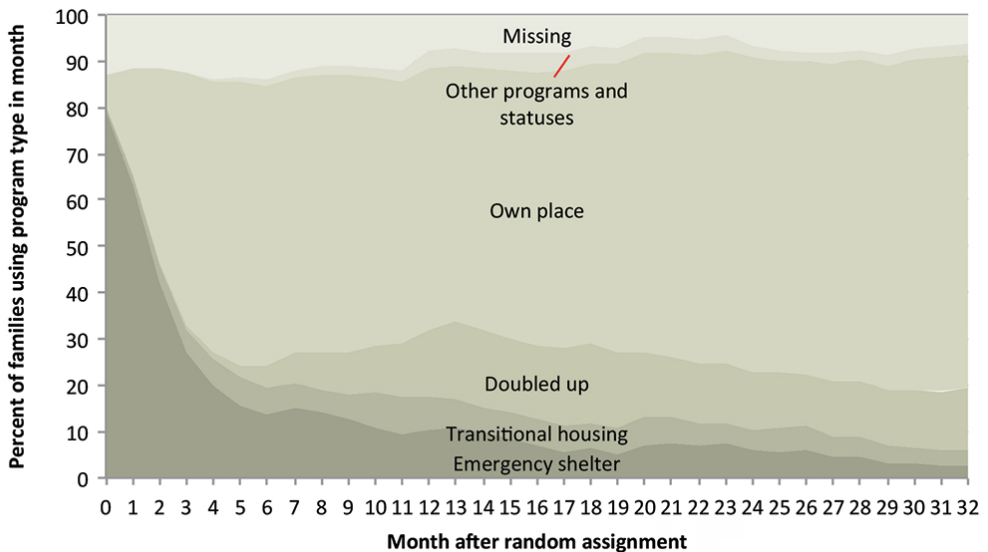
Exhibit 9

SUB Versus CBRR: Housing Status

Panel A: Housing Status of SUB Families for 32 Months After Random Assignment



Panel B: Housing Status of CBRR Families for 32 Months After Random Assignment

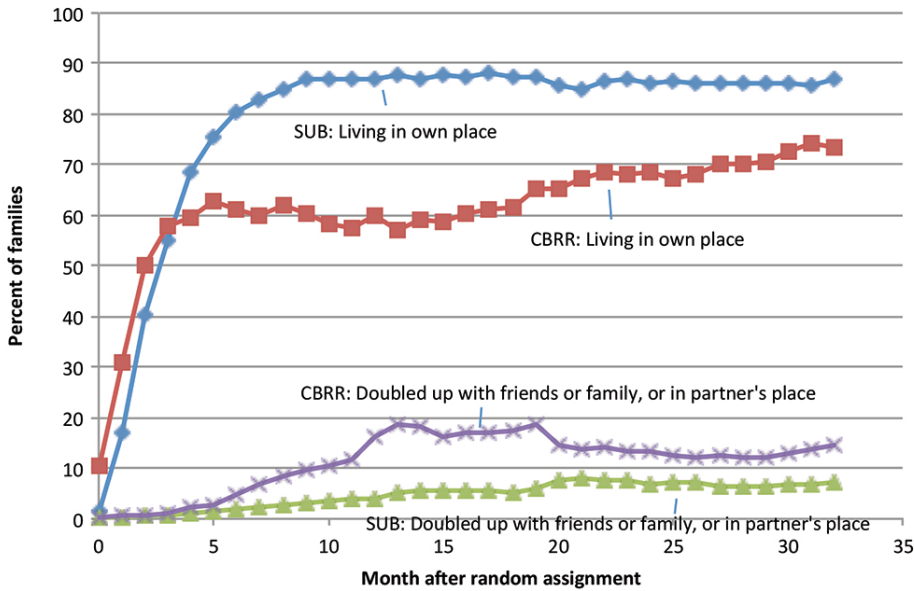


CBRR = priority access to community-based rapid re-housing. SUB = priority access to long-term rent subsidy.

the study. Two differences between short-term rent subsidies and HCVs may explain this finding. First, this finding appears consistent with distinctions between the inspection requirements for the short-term rent subsidies provided by HPRP programs and HCVs (Gubits et al., 2015). Habitability

Exhibit 10

SUB Versus CBRR: Percent of Families Living in Own Place and Doubled Up, by Month After Random Assignment



CBRR = priority access to community-based rapid re-housing. SUB = priority access to long-term rent subsidy.

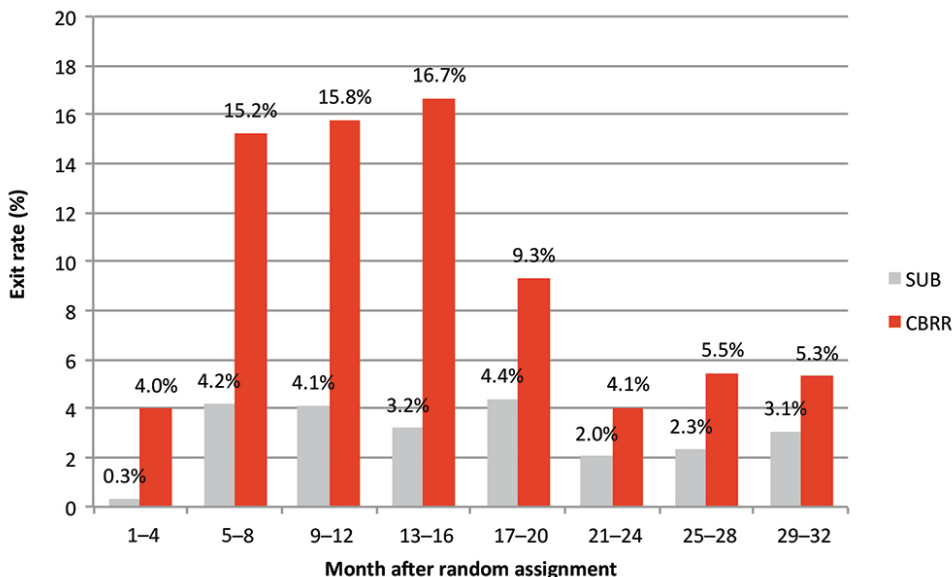
inspection requirements for HPRP were slightly less stringent than for HCV and, thus, might take less time to complete. Second, the short-term rent subsidy may take less time to administer than the HCV because of its simpler determination of subsidy amount. The short-term subsidy provided to families assigned to the CBRR group represented a substantial fraction of monthly rent; however, the short-term subsidy was rarely determined based on participant contribution of a fixed percentage of income, as is the case in the HCV program and other housing assistance programs such as public housing. More than one-half of families were referred to CBRR programs that set the subsidy as a fixed monthly amount, regardless of monthly rent or family income. These operational distinctions in the programs might explain why families assigned priority access to short-term subsidies were able to move to housing of their own more quickly than families assigned to long-term subsidies.

Beginning in month 6, the SUB group had lower proportions doubled up than the CBRR group. Assignment to the SUB group reduced the proportion doubled up by about 11 to 12 percentage points in months 12 to 19 and by about 5 to 6 percentage points in the later months of the followup period. This finding indicates that, over time and relative to assignment to SUB, higher proportions of families assigned to CBRR were living in doubled-up situations.

It might be expected that, given the temporary nature of the rapid re-housing subsidy, a higher proportion of families assigned to priority access to CBRR programs would have exits from the status of living in own place as compared with the SUB group. Exhibit 11 shows that, compared with the SUB group, the CBRR group did indeed have higher exit rates from living in their own place throughout the followup period. Even though assignment to CBRR led to higher proportions

Exhibit 11

SUB Versus CBRR: Rate of Exiting Status of Living in Own Place, by 4-Month Period After Random Assignment



CBRR = priority access to community-based rapid re-housing. SUB = priority access to long-term rent subsidy. Sample sizes: SUB = 362. CBRR = 290.

Notes: Exit rates are the percentage of families with an exit divided by the percentage of families who were living in their own place in the last month of the previous 4-month period. Exit is defined as not living in own place for at least one of the months in the 4-month period after living in own place in the last month of the previous 4-month period. For months 1 to 4, a family is coded as exiting from own place if they had lived in their own place in an earlier month but were no longer doing so. Exit rate for months 1 to 4 uses denominator of those who lived in own place in any month 0 to 3. Underlying percentages for exit rate are regression adjusted, controlling for site and randomization ratio, and are weighted for survey nonresponse to represent full comparison sample. Source: Family Options Study Program Usage/Living Situation data

of families living in their own place sooner than for families assigned to SUB, families assigned to CBRR were less able than families assigned to SUB to sustain this living situation. Over the entire time period, relative to assignment to CBRR, assignment to SUB reduced the proportion with an exit from the status of living in own place from 41 to 17 percent (exhibits B-9 and B-10) and reduced the exit rate from 44 to 18 percent. The pattern of difference in exits during the early followup period provides evidence that some families could not continue living in their own place when their temporary subsidy ended. Most families were able to remain living in their own place, however.

SUB Versus PBTH

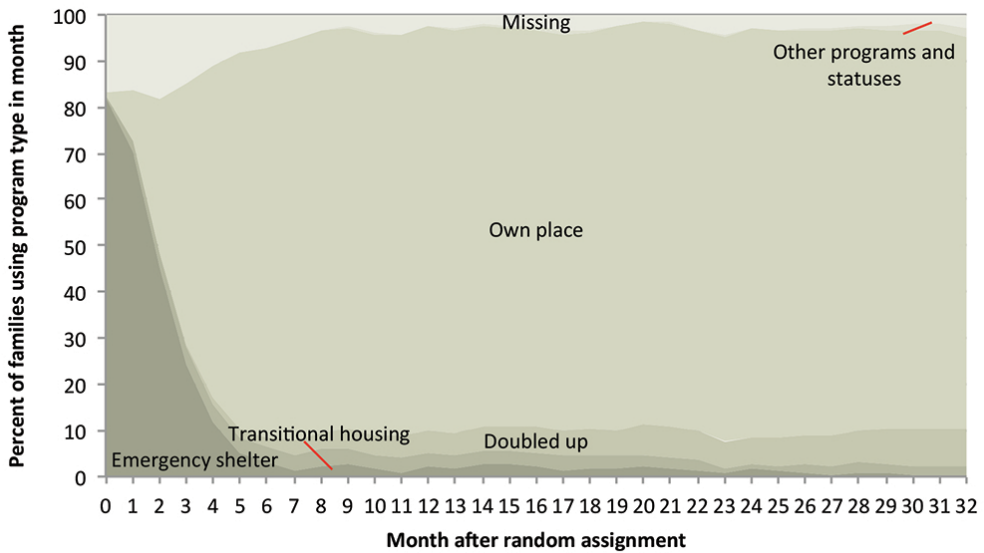
Next, we turn to the SUB-versus-PBTH comparison. In this comparison, the differences in program use were large in the expected ways; use of a long-term rent subsidy was much higher in the SUB group and use of transitional housing was much higher in the PBTH group. Previous reports found that, at the 20- and 37-month followup points and relative to assignment to PBTH, assignment to SUB increased the proportion of families living in their own place and decreased the proportion with recent experience of doubling up.

Exhibit 12 shows the distributions of living situations over time in the SUB and PBTH groups within the SUB-versus-PBTH comparison. Large differences are apparent in proportions living in own place (higher in the SUB group than the PBTH group), doubled up (higher in the PBTH group) transitional housing (higher in the PBTH group), and missing (higher in the PBTH group).

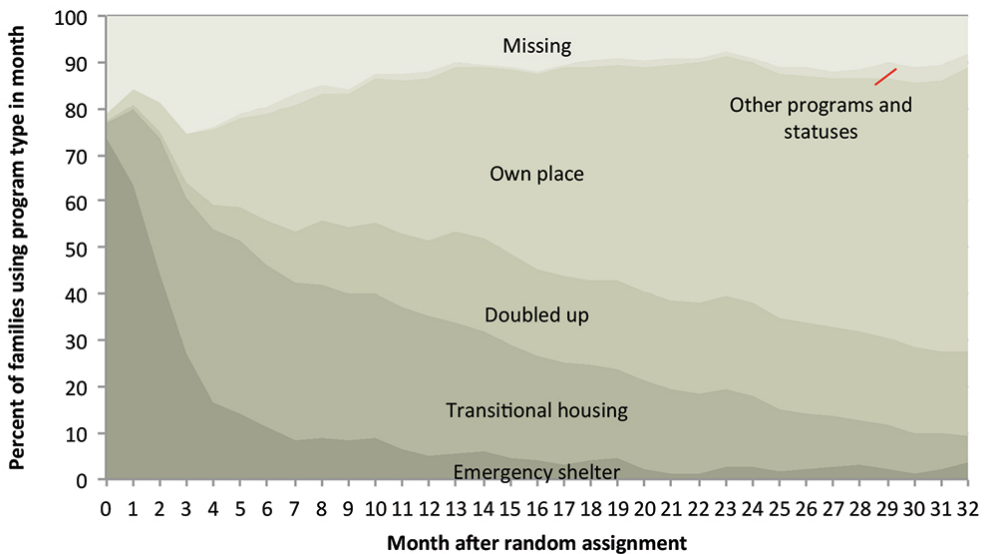
Exhibit 12

SUB Versus PBTH: Housing Status

Panel A: Housing Status of SUB Families for 32 Months After Random Assignment



Panel B: Housing Status of PBTH Families for 32 Months After Random Assignment



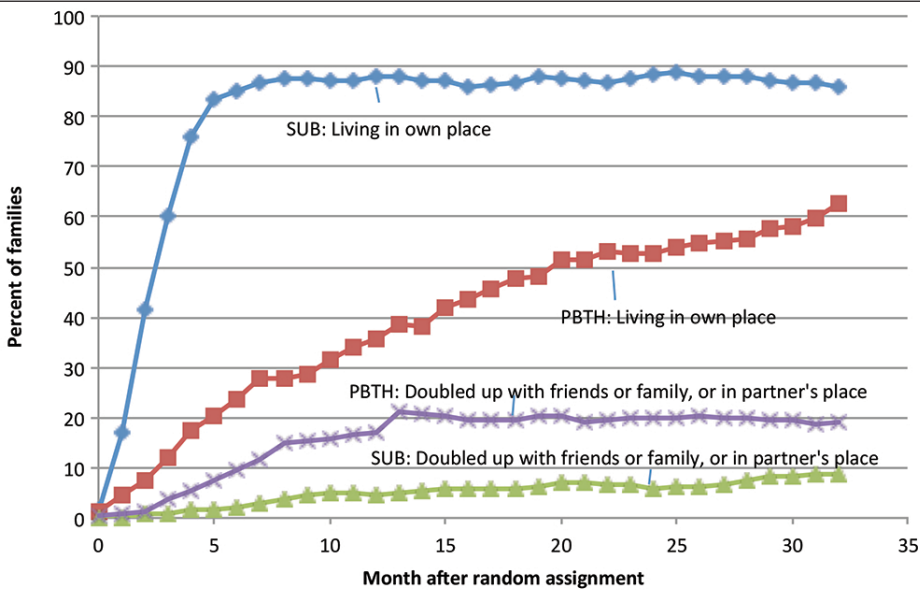
PBTH = priority access to transitional housing. SUB = priority access to long-term rent subsidy.

Exhibit 13 shows the proportions living in own place and doubled up for the SUB and PBTH groups. The SUB group has a much higher proportion of families living in their own place throughout the followup period. In month 32, the difference is 23 percentage points.

The proportion doubled up in the PBTH group remains constant from month 13 forward at about 20 percent. The corresponding SUB proportion is considerably lower but grows over time, to about 9 percent in month 32.

Exhibit 13

SUB Versus PBTH: Percent of Families Living in Own Place and Doubled Up, by Month After Random Assignment



PBTH = priority access to transitional housing. SUB = priority access to long-term rent subsidy.

CBRR Versus PBTH

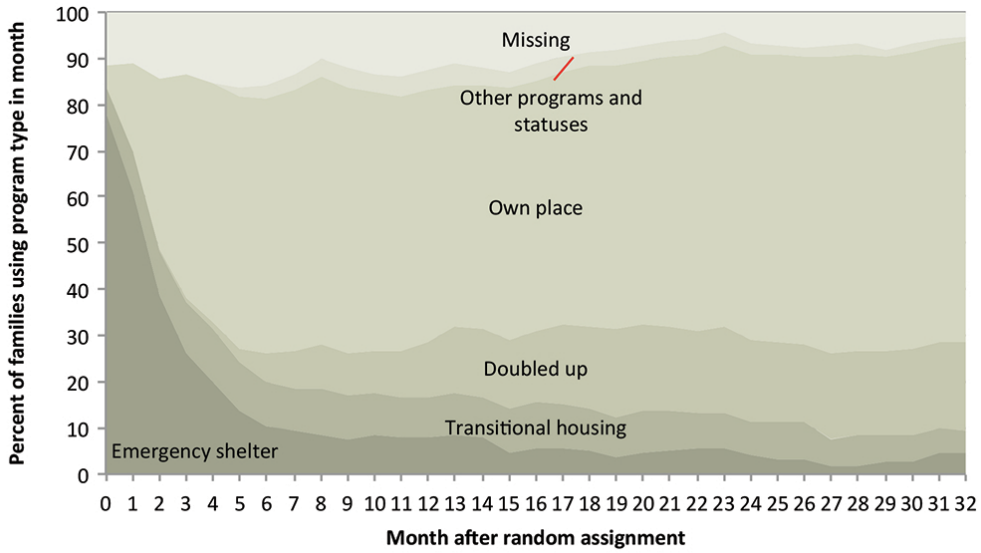
The sixth impact comparison is CBRR versus PBTH. The short-term and 3-year impact reports found that program use in this comparison differed in the expected ways (higher use of rapid re-housing for the CBRR group, higher use of transitional housing for the PBTH group) but detected no differences in living in own place or recent doubling up. The lack of a detected difference in proportions living in own place is surprising, given the philosophical difference between the rapid re-housing and transitional housing approaches.

However, looking at all months, rather than only the two followup points, reveals that the distributions of living situations for the two groups differ markedly in the first 2 years after random assignment (exhibit 14). During this time, the exhibit shows a higher proportion living in own place in the CBRR group and a higher proportion using transitional housing for the PBTH group.

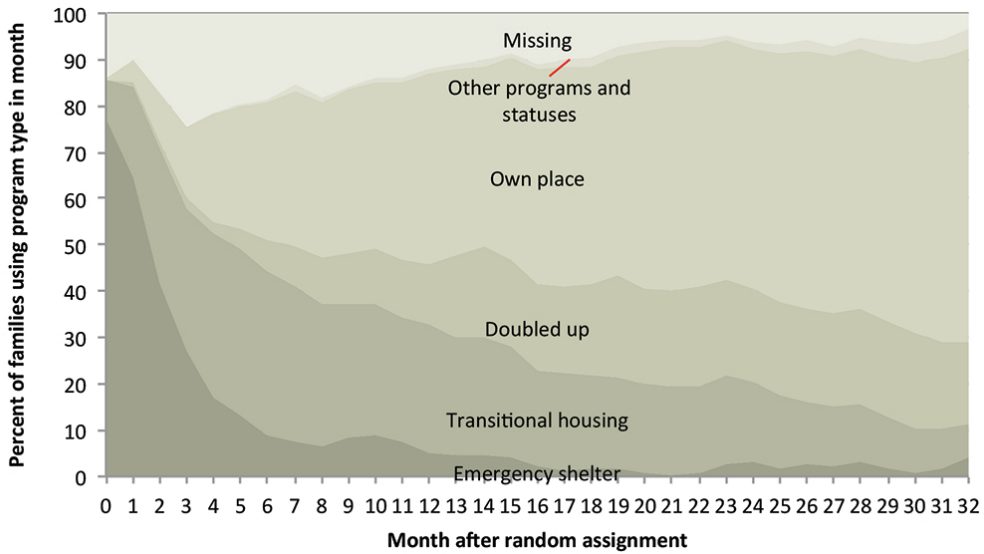
Exhibit 14

CBRR Versus PBTH: Housing Status

Panel A: Housing Status of CBRR Families for 32 Months After Random Assignment



Panel B: Housing Status of PBTH Families for 32 Months After Random Assignment

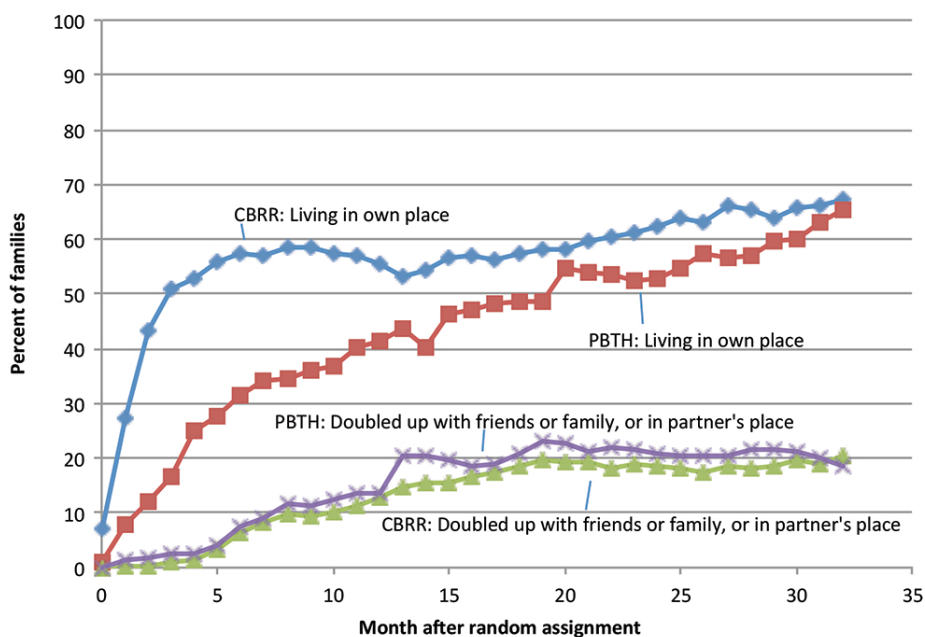


CBRR = priority access to community-based rapid re-housing. PBTH = priority access to transitional housing.

Exhibit 15 shows large differences in the proportion living in their own place between the CBRR and PBTH groups in the first year of the study. These differences gradually become smaller and largely disappear by month 32. This exhibit shows that the 20-month impact analysis that examined living situation in the 6 months before the short-term followup survey could not capture the difference in living in own place that occurred in the first year after random assignment.¹⁷ No differences are detected in the proportion of families in the CBRR and PBTH groups who are doubled up in each month.

Exhibit 15

CBRR Versus PBTH: Percent of Families Living in Own Place and Doubled Up, by Month After Random Assignment



CBRR = priority access to community-based rapid re-housing. PBTH = priority access to transitional housing.

Summary

This article analyzes the living situations of the Family Options Study families, making use of month-by-month Living Situation data. Given the different approaches of programs offered to families in the study, we hypothesized that (1) assignment to SUB or CBRR would initially increase the proportion of families living in their own place relative to usual care; (2) assignment to PBTH would initially reduce the proportion of families living in their own place relative to usual care, assignment to SUB, and assignment to CBRR; and (3) assignment to CBRR would increase the proportion, relative to assignment to SUB, of families exiting the status of living in own place.

¹⁷ The tabular presentation of monthly impact estimates is in exhibit B-12 at <https://www.huduser.gov/portal/periodicals/cityscape/Family-Living-Situation-Appendix.pdf>.

We find evidence supporting all these hypotheses. We find that assignment to SUB and assignment to CBRR both initially increase the proportion of families living in their own place relative to usual care. The proportion of families living in their own place in the SUB group remains higher than in the UC group throughout the followup period. In the CBRR-versus-UC comparison, the proportions of the two groups living in their own place equalize by month 32. In the SUB-versus-CBRR comparison, assignment to CBRR moves families into the status of living in own place faster (higher proportions in months 0 to 2). After that point, high takeup of the offered programs in the SUB group results in that group having higher proportions living in their own place in month 4 and after.

We find that assignment to PBTH does initially lower the proportion of families living in their own place relative to usual care. Surprisingly, the proportion in the PBTH group remains lower than in the UC group at month 32. The PBTH group also initially has fewer families living in their own place than in the SUB and CBRR groups. The PBTH proportion remains lower than that in the SUB group through month 32 and becomes roughly equivalent to the proportion in the CBRR group by the end of the followup period.

Looking at exits from the status of living in own place, we find that assignment to CBRR does increase these exits relative to assignment to SUB and also relative to assignment to PBTH or UC. The increase in exits occurs in the first 18 months after random assignment, the time when rapid re-housing temporary subsidies would be ending. We also find that assignment to SUB lowers exits from living in own place relative to usual care.

The data on the living situation of doubled up show that, after the first year, the CBRR, PBTH, and UC groups have constant and equivalent proportions of families doubled up. The SUB group has a lower proportion of families who are doubled up, but this proportion slowly increases throughout the followup period.

These findings on family living situations augment evidence about the relative effects of the interventions studied in the Family Options Study. Most importantly, this analysis builds on what we know about priority access to long- and short-term rental assistance. Gubits et al. (2016) concluded that having priority access to a long-term rent subsidy produces substantial benefits for families. This analysis shows that in addition to reducing housing instability, improving child and adult well-being, and reducing food insecurity, priority access to long-term subsidies also increased the proportion of families living in their own housing each month in the 3-year followup period and reduced the proportion of families who lived doubled up. High proportions of families offered long-term subsidies were able to lease up with this assistance, sustain the assistance throughout the followup period, and maintain independent housing.

This analysis also provides additional evidence about the relative effects of short-term rent subsidies. Although priority access to short-term subsidies produced similar housing stability outcomes for families as usual care at a lower cost during the entire 3-year followup period, this analysis finds that, in the first 8 months after random assignment, priority access to short-term subsidies increased housing independence relative to usual care. In addition, compared with priority access

to long-term subsidies, the offer of a short-term subsidy hastened family's return to independent living in the first 2 months after random assignment. Exits from independent housing were also higher for families who were offered short-term assistance relative to long-term subsidies, transitional housing, and usual care.

Multiple questions remain that warrant future investigation using the Family Options Study Program Usage and Living Situation data. These questions include: What percentages of families living in their own place are doing so with homeless and housing program assistance? What happens to families immediately after the end of program assistance? What are the typical lengths of time and episodic patterns of being doubled up? How do doubled-up living situations relate to other outcomes for families?

Appendix A. Living Situation Data Construction

The Program Usage data set construction is described in Gubits et al. (2016), appendix A. The Living Situation data were based on a multipart survey item (see exhibit A-1) that was asked of family heads in the short-term 6-, 12-, and 27-month tracking surveys and in the longer, more detailed 20- and 37-month followup surveys. The surveys each asked for the address where the family was currently living and how long they had been living there. However, the surveys did not ask how long the family had been in the current living situation. The study team assumed that the length of time in the current living situation was the same as the length of time living at the current address. The survey data show that this assumption was not always correct, particularly when families were in doubled-up situations. In many cases, families' responses switched back and forth between *doubled up with a relative or friend and paying part of rent* and *doubled up with a relative or friend and not paying part of rent*. In general, when information about when a living situation status began was conflicting, the living situation was deemed to have started on the survey date.

The living situation statuses intersect with data on families' program use in following manner.

- Families using certain types of programs (rapid re-housing, the long-term subsidies offered to SUB families, permanent supportive housing, public housing, and project-based vouchers/Section 8 projects) are always considered to be living in their own places.
- Families staying in transitional housing are considered to not be living in their own place.
- Living situations besides *living in own place* are considered to be mutually exclusive with all other living situations and use of programs.

The Program Usage and Living Situation data have monthly indicator variables from the calendar month of random assignment through either (1) the calendar month of response to the 37-month survey (37-month survey respondents) or (2) the calendar month containing the 1,129th day after random assignment, the median 37-month response point (37-month survey nonrespondents).

Exhibit A-1

Survey Item on Living Situation (1 of 2)

A1. Which of the following best describes your current living situation?

<i>Would you say you are living/staying in...</i>	YES	NO	REF	DK
<A4a> A house or apartment that you own or rent. This does not include your parent’s or guardian’s home or apartment.	1	2	7	8
BASE: A4a≠1 <A4b> Your partner’s (boy/girlfriend’s/fiancé’s, significant other’s) place.	1	2	7	8
BASE: A4b≠1 <A4c> A friend or relative’s house or apartment, and paying part of the rent [PROBE: THIS INCLUDES YOUR PARENT’S or GUARDIAN’S HOUSE OR APARTMENT OR OTHER FRIEND OR RELATIVE]	1	2	7	8
BASE: A4c≠1 <A4d> A friend or relative’s house or apartment, but not paying part of the rent [PROBE: THIS INCLUDES YOUR PARENT’S or GUARDIAN’S HOUSE OR APARTMENT OR OTHER FRIEND OR RELATIVE]	1	2	7	8
<i>CAP1: We ask A4a, A4b, A4c, or A4d until we have a ‘yes’ response and then skip to A5. Once we have a YES SKIP TO A5; Otherwise, continue down A4e through A4p until a YES response is reached.</i>				
BASE: A4a OR A4b OR A4C OR A4d ≠ 1 <A4e> A permanent housing program with services to help you keep your housing (on site or coming to you) IF YES: COLLECT NAME OF PROGRAM: <A4E_1_OTHER>_____ THEN SKIP TO A5	1	2	7	8
BASE: A4e≠1 <A4f> A transitional housing program IF YES: COLLECT NAME OF PROGRAM: <A4F_1_OTHER> _____ THEN SKIP TO A5	1	2	7	8
BASE: A4f≠1 <A4g> A domestic violence shelter IF YES: SKIP TO A5	1	2	7	8
BASE: A4g≠1 <A4h> An emergency shelter IF YES: COLLECT NAME OF PROGRAM: <A4H_1_OTHER> _____ THEN SKIP TO A5	1	2	7	8

Exhibit A-1

Survey Item on Living Situation (2 of 2)

Would you say you are living/staying in...	YES	NO	REF	DK
BASE: A4h≠1 <A4i> A voucher hotel or motel IF YES: SKIP TO A9	1	2	7	8
BASE: A4i≠1 <A4j> A hotel or motel you pay for yourself IF YES: SKIP TO A9	1	2	7	8
BASE: A4j≠1 <A4k> A residential drug or alcohol treatment program IF YES: SKIP TO A9	1	2	7	8
BASE: A4k≠1 <A4l> Jail or prison IF YES: AND INCARCERATED FLAG1=NO or DK READ TERMINATE SCRIPT 1 IF YES AND INCARCERATED FLAG1=YES SKIP TO A9. <A4LCHK> Incarceration check is a check for interviewer's if ICHK=Noor DK and A4l=yes. (1=Verify A4l, 2=Verify incarceration Check.)	1	2	7	8
BASE: A4l≠1 <A4m> A car or other vehicle IF YES: SKIP TO A9	1	2	7	8
BASE: A4m≠1 <A4n> An abandoned building IF YES: SKIP TO A9	1	2	7	8
BASE: A4n≠1 <A4o> Anywhere outside [PROBE: STREETS, PARKS, ETC.] IF YES: SKIP TO A9	1	2	7	8
BASE: A4o≠1 Somewhere else? <A4p> OTHER → SPECIFY: <A4P_1_OTHER> _____ IF YES: SKIP TO A9	1	2	7	8

Acknowledgments

This study was supported by U.S. Department of Housing and Urban Development contracts C-CHI-00943, Task Orders T-0001 and T-0003, and DU206SF-13-T-00005 to Abt Associates. The authors acknowledge contributions to the conceptual overview, data set construction, and analysis of this paper by Samuel Dastrup, Marybeth Shinn, and Claudia Solari. They also thank HUD's program officer, Anne Fletcher, for her guidance and vision throughout the Family Options Study.

Authors

Daniel Gubits is a principal associate at Abt Associates.

Tom McCall is a senior programmer analyst at Abt Associates.

Michelle Wood is a principal associate at Abt Associates.

References

Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Steven Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, and Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: Government Publishing Office; U.S. Department of Housing and Urban Development.

National Alliance to End Homelessness. 2006. "What Is Housing First?" November 9. http://b3cdn.net/naeh/b974efab62feb2b36c_pzm6bn4ct.pdf.

U.S. Department of Health and Human Services, Administration for Children and Families. n.d. "Definitions of Homelessness for Federal Program Serving Children, Youth, and Families." https://www.acf.hhs.gov/sites/default/files/ecd/homelessness_definition.pdf.

U.S. Interagency Council on Homelessness (USICH). n.d. "Housing First." <https://www.usich.gov/solutions/housing/housing-first>.

Family Options Study: How Homeless Families Use Housing Choice Vouchers

Claudia D. Solari
Jill Khadduri
Abt Associates

Abstract

This article uses nonexperimental analysis from the Family Options Study, a rigorously designed experimental study of interventions for families experiencing homelessness, to describe the ways in which families who had spent at least 7 days in emergency shelters used long-term rent assistance provided through the Housing Choice Voucher (HCV) program. A long-term rent subsidy was one of the study's interventions, with some families randomly assigned to receive priority access to a housing voucher. A few other families in the study also used HCV assistance at some point during the 20-month period following their stay in an emergency shelter despite not receiving priority access to vouchers. This article shows that families given priority access to voucher subsidies leased up at very high rates, 82 percent. The only household characteristics associated with lower rates of lease up were recent, self-reported substance abuse and an adult family member with a felony conviction. Even families with those characteristics usually were able to use vouchers. For families without priority access to a voucher, those with a prior history of doubling up were more likely to gain access to and use a voucher, perhaps because they were already on waiting lists at the time of their shelter stay. Local policies of the homeless services system and public housing agencies appear to have affected patterns of voucher use, but no consistent patterns were related to housing market conditions.

Housing Choice Vouchers in the Family Options Study

The U.S. Department of Housing and Urban Development (HUD) launched the Family Options Study in 2008 to learn about which housing and services interventions work best for families with children experiencing homelessness. The study was implemented using a rigorous, experimental methodology. Nearly 2,300 families in 12 sites across the country were randomly assigned to one

of four interventions after spending at least 7 days in emergency shelter.¹ After providing informed consent, completing a baseline survey, and undergoing eligibility screening, the study team randomly assigned families experiencing homelessness in emergency shelter to one of four groups.

1. SUB, in which families have priority access to long-term rent subsidies, usually a housing choice voucher (HCV).
2. CBRR, in which families have priority access to short-term rent subsidies, lasting up to 18 months, in the form of community-based rapid re-housing assistance.
3. PBTH, in which families have priority access to temporary, service-intensive stays, lasting up to 24 months, in project-based transitional housing facilities.
4. UC, in which families have access to usual care homeless and housing assistance but do not have priority access to any particular program.

A report on the short-term impacts of priority access to the Family Options Study interventions examines impacts in five domains related to family well-being, which are (1) housing stability, (2) family preservation, (3) adult well-being, (4) child well-being, and (5) self-sufficiency (Gubits et al., 2015). The report presents the impacts of program interventions during the first 20 months following random assignment based on the responses of 1,857 families from a followup survey and describes the relative costs of the interventions based on program use during that period.²

Assignment to the long-term rent subsidy group led to greater housing stability during the 20-month followup period compared with priority access to the other interventions or with usual care. For example, compared with usual care, priority access to long-term rent subsidies reduced homelessness, stays in shelter, and involuntary doubling up. Assignment to the SUB intervention reduced the number of child separations and number of schools children attended compared with UC and reduced the incidence of intimate partner violence. Assignment to the SUB intervention reduced the percentage of families who worked for pay in the week prior to the survey and in the period since random assignment. Priority access to long-term rent subsidies led to increased food security and had no effect on overall cash income (Gubits et al., 2015).

This article takes a closer look at the SUB intervention, with a focus on families who received priority access to a housing voucher and used that subsidy, as well as on families who did not receive priority access to vouchers but, nevertheless, used voucher assistance. Gubits et al. (2015) presented experimental analysis of families assigned to the SUB intervention. This article, in contrast, does not use a randomly assigned comparison group. For example, within the SUB group, we compare families who succeeded in leasing up with vouchers to families who did not, and these families differ in ways that have not been controlled through random assignment. Instead, we use cross tabulations and multivariate analysis to show correlations between family (and site) characteristics and voucher use.

¹ The 12 communities participating in the study are Alameda County, California; Atlanta, Georgia; Baltimore, Maryland; Boston, Massachusetts; Bridgeport and New Haven, Connecticut; Denver, Colorado; Honolulu, Hawaii; Kansas City, Missouri; Louisville, Kentucky; Minneapolis, Minnesota; Phoenix, Arizona; and Salt Lake City, Utah.

² Gubits et al. (2016) presented the impacts on study families during a longer period, 37 months after random assignment.

In the sites that included the SUB intervention, the intervention was a tenant-based subsidy provided by one or more public housing agencies (PHAs) through the HCV program for 92 percent of family referrals.³ The HCV program is the federal government's largest housing assistance program, providing rental subsidies to more than 2 million households across the country. The voucher program is not an entitlement open to all households who meet income and other eligibility requirements but, instead, is limited in size by congressional appropriations. Thus, assistance from the HCV program usually is only accessible to families who get themselves on waiting lists and come to the top as program slots become available through turnover or expanded appropriations.

A family assigned to receive priority access to a voucher was referred to a PHA that had agreed to put study families at the top of its waiting list and offer them turnover slots immediately. Once accepted by the PHA as eligible for the program and issued a voucher, a family could use the voucher to rent a housing unit of its choice in the private rental market. The housing unit had to meet HUD's Housing Quality Standards and to have a rent that the PHA determined reasonable when compared with the rents of unassisted units in the same housing market. The voucher assistance subsidized the monthly rent for the unit, and the amount that the subsidy provided was the payment standard established by the PHA (or the unit's actual rent, if lower) minus 30 percent of the family's adjusted monthly income.⁴

Once a family leases up with a housing voucher, the family can retain the subsidy assistance indefinitely, assuming the family maintains program eligibility. Family income is recertified annually and must remain low enough to qualify the family for a subsidy value greater than zero. The family must pay its share of rent and not engage in lease violations. A family with a housing voucher may move to another housing unit and continue to use the subsidy, as long as the new unit has a willing landlord and meets program requirements.

PHAs have viewed people experiencing homelessness as having difficulties with some of the processes for using vouchers—in particular, documenting eligibility and income and finding a housing unit in the private market with a willing landlord. PHAs have cited those difficulties as reasons for not giving families and individuals experiencing homelessness preferential positions on HCV waiting lists. PHAs have argued that they are not adequately compensated for the additional effort it takes to serve households experiencing homelessness through HUD's reimbursement system for HCV program administrative costs (Dunton et al., 2014; Finkel et al., 2015). In this study, the SUB intervention could include assistance with the processes involved in using a voucher—for example, from the staff of emergency shelters—but it did not include ongoing social services linked to receiving the housing subsidy. The Family Options Study did not collect systematic information on the extent to which emergency shelter staff helped families navigate the process of using a housing

³ For some families, the SUB intervention was not a housing voucher. Honolulu offered permanent housing subsidies through public housing units for nearly three-fourths of families. The remaining 10 families assigned to the SUB intervention were offered tenant-based assistance operated by the Department of Community Services and very similar to the HCV program. The Connecticut study site referred 15 families assigned to the SUB intervention to developments with project-based vouchers.

⁴ Payment standards are adjusted for the number of bedrooms in a unit. Actual rents include estimates of utility costs that tenants pay. Details regarding the calculation of housing assistance payments under the HCV program are in 24 CFR Part 982.505. This calculation is part of the standard design of the HCV program.

voucher. However, members of the study team responsible for monitoring study implementation report that staff of at least some of the emergency shelters in which families were staying at the time they were offered priority access to vouchers did provide such assistance.

Eligibility Screening for Study Families

Before random assignment, the Family Options Study screened families by asking questions related to eligibility for the programs to which families might be randomly assigned. Preliminary screening was intended to reduce the chance that a family be given priority access to a program for which they would later be determined ineligible.⁵

The HCV program has statutory eligibility criteria that require prospective families to document U.S. citizenship or legal status, absence of drug-related criminal convictions, lack of previous evictions from a federally funded housing program, and absence of arrearages due to a PHA. Some participating PHAs asked the study team to screen participants for these requirements, and some PHAs asked the study team to add eligibility screening criteria beyond those required by statute or by HUD regulations. For example, some PHAs had locally established eligibility criteria such as a consistent source of income, the family's willingness to reside within the PHA's jurisdiction, or the family's ability to pay security deposits and other startup costs. However, of the families who were screened for PHA-administered programs, 98 percent appeared to meet the PHA's eligibility criteria and were considered for random assignment to the SUB intervention (Gubits et al., 2013).

Pre-random-assignment eligibility screening was not a formal eligibility determination process.⁶ Following random assignment to an intervention and referral to an intervention provider, families had to complete the program's regular eligibility determination process. The study team found that, in some cases, families were determined ineligible for the program after completing the program's eligibility determination process. After random assignment, 11 percent of families assigned to PHA-administered programs were screened out despite the previous screening (Gubits et al., 2013).⁷

Data on Use of HCV and Other Programs by Study Families

The Family Options Study collected several types of information on study families' use of the study's interventions and on their use of housing programs and homeless assistance programs other than the programs to which the families were randomly assigned.

⁵ The small number of families not considered for random assignment to the HCV program were given the opportunity to be randomly assigned to one of the study's other treatment groups, as long as at least two treatment groups were available at that time in the community and if the family passed preliminary screening for the available programs. See Gubits et al. (2013) and Gubits et al. (2015) for more on the mechanics of preliminary screening and the way it affected the study's analytical approach.

⁶ Shinn et al. (2017) provide more information on the availability and targeting of homeless system resources, including eligibility criteria for the programs to which families in the study were given priority access.

⁷ Some other families may have failed to take the next step after being told a PHA had a voucher for them and, therefore, were never issued a voucher by the PHA.

The study team used that information to create a program usage file of family-level information on the program type, the date a family entered that program, and the date a family left the program.⁸ The program usage file uses the following data sources.

1. Enrollment verification data submitted by PHAs and providers of programs in the CBRR and PBTH treatment groups.
2. Survey data that adults of study families provided in 6- and 12-month tracking surveys and in followup surveys.
3. Administrative data in HUD's data systems for the HCV program and other housing assistance programs.
4. Administrative data in communities' Homeless Management Information System (HMIS). Providers of CBRR, PBTH, and other homeless assistance programs submit data to HMIS.

For each data element needed (program type and program entry and exit dates) to determine which programs a family used during which time periods, the study team applied a set of rules for deciding which data to preserve if two data sources had conflicting information for the same family and the same time period.⁹ Generally, the team considered the enrollment verification data the most reliable for program type and program entry dates and the administrative data sources the most reliable for program exit dates. The survey data accounts of project entry and exit dates and descriptions of the type of projects were considered the least reliable because of difficulties families might have identifying program types and retrospectively accounting for specific dates over a number of months (National Research Council, 2001).

Patterns of Voucher Use by Families With Priority Access to Vouchers

In this section, we consider patterns of voucher use by families who had priority access to a voucher, because they were randomly assigned to the SUB intervention. A later section covers patterns of program use by families who did not have such priority access but who, nonetheless, used a voucher. Patterns of program use include lease-up rates (the number of families with priority access to a voucher and used the voucher), how long it took families to go through the process of using a voucher, and whether families used other homeless assistance programs (besides emergency shelter) before using the voucher. This section also considers which families with priority access to a voucher were able to use the voucher and whether certain family characteristics made voucher use less likely.

⁸ This article focuses on the 1,857 families reinterviewed at 20 months, whereas Shinn et al. (2017) include all 2,282 families eligible for followup, regardless of whether families were successfully reinterviewed at the 20-month followup.

⁹ Appendix A describes the construction of the program usage data in further detail.

Lease-Up Rates Among Families With Priority Access to Vouchers

Of the 502 families given priority access to vouchers, 82.3 percent, or 413 families, leased up with a voucher within 20 months.^{10,11} Eleven percent of the families receiving priority access to PHA-administered programs subsequently were screened out by PHAs; therefore, the success rate of families issued vouchers—a metric other studies use—was even higher than 82.3 percent.¹² The rate among families given priority access to vouchers was also substantially higher than rates for all families (not just homeless families) who attempted to use vouchers.¹³

Families used vouchers at different rates in different communities in the study. The lease-up rate of families with priority access to vouchers ranged from 30 to 95 percent (exhibit 1). Alameda, Boston, Connecticut, and Phoenix all had HCV lease-up rates that exceed 90 percent. Kansas City and Salt Lake City are among the sites with the lowest HCV-use rates, under 75 percent. Honolulu had only 10 families referred to an HCV program, and only 3 of them leased up.

Families who successfully lease up with a voucher must first find an available private market unit with a rent that the HCV subsidy standard can meet. We might expect that a loose housing market with a high vacancy rate would result in a relatively high HCV lease-up rate. This scenario was true for Phoenix and for the two study communities in Connecticut—New Haven and Bridgeport. Those sites had among the highest HCV lease-up rates and the highest rental vacancy rates (11.7 percent for Phoenix and 12.3 percent for Connecticut) (Gubits et al., 2015). However, other sites with very high voucher lease-up rates are also the areas with the tightest housing markets. In 2010, Boston had the lowest rental vacancy rate of all the sites (5.4 percent), and Alameda's vacancy rate was among the lowest of the sites (5.6 percent). Although homeless families may face more challenges to finding suitable housing in environments with few vacancies and high competition for housing, they may also have access to additional resources to identify vacant units meeting

¹⁰ Of families randomly assigned to the SUB intervention and interviewed at followup, 84.2 percent, or 446 out of 530 families, used a long-term rent subsidy at some point from random assignment until the 20-month followup interview. A few of those families were given access and moved into public housing units in Honolulu. Of the 38 families assigned to the SUB intervention in Honolulu, only 10 were given priority access to the tenant-based program that is similar to HCV, bringing the original 530 families to 502 families with priority access to the HCV program.

¹¹ This number includes lease up among the 15 families in Connecticut that received priority access to a project-based voucher rather than tenant-based vouchers. It also includes the 10 families in Honolulu who received priority access to the tenant-based assistance that the Department of Community Services operates.

¹² A precise voucher success rate, similar to that used in Finkel and Buron (2001), cannot be calculated for the Family Options Study because of data limitations. We know the number of families who went to the PHA and then were screened out, but we do not know the number of families, despite given priority access to vouchers, who did not take the next step and attempt to go through the eligibility screening process. Thus, we do not have the number of families who were issued vouchers to compare with the number of families that succeeded in using vouchers. We know that 82 percent of families given priority access to vouchers leased with vouchers; thus, the success rate must exceed 82 percent. Gubits et al. (2013) estimated a preliminary success rate of 92 percent based on early information collected during enrollment. This success rate may be somewhat overstated, as it does not take account of the small percentage of families who did not respond to the followup survey. Administrative data suggests that the rate at which they leased up with vouchers was lower than the rate for survey respondents.

¹³ Finkel and Buron (2001) found national voucher success rates to be 69 percent in 2000. They cite earlier studies that found the rate was 68 percent in the mid-1980s and 81 percent in 1993.

Exhibit 1

Voucher Lease-Up Rates Among Families With Priority Access to Vouchers, by Study Site

Site	Number of Families With Priority Access to a Voucher	Voucher Lease-Up Rate (%)	Number of Leased Up Families
Overall	502	82.3	413
Alameda	72	91.7	66
Boston	60	95.0	57
Connecticut	42	90.5	38
Denver	65	83.1	54
Honolulu	10	30.0	3
Kansas City	47	68.1	32
Louisville	25	76.0	19
Minneapolis	55	78.2	43
Phoenix	63	93.7	59
Salt Lake City	63	66.7	42

Notes: Atlanta and Baltimore were study sites, but they did not have the SUB intervention, and no families in those sites had priority access to a voucher. Honolulu used its public housing program to set aside units for nearly three-fourths of the SUB intervention. Because 28 SUB families were not granted priority access to vouchers, we remove them from the universe of families with priority access to vouchers, leaving 10 families. Connecticut referred 15 of the 42 families assigned to the SUB intervention to project-based voucher programs instead of tenant-based voucher programs. We count these 15 families as having priority access to vouchers.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

housing quality standards. We know that emergency shelter staff in some study sites provided such assistance.¹⁴ Furthermore, across all types of housing markets, people staying in shelters with children may be strongly motivated to do whatever it takes to use housing subsidies, compared, for example, with families who come to the top of voucher waiting lists at times when they are not in crisis.

Time Between Random Assignment and Voucher Lease Up Among Families With Priority Access to Vouchers

Gaining priority access to a voucher through the study’s random assignment was the equivalent of coming to the top of a waiting list for the HCV program. Families then had to go through the standard HCV program processes, including presenting documentation to the PHA on the family’s eligibility for the program and the family’s income, attending a PHA briefing on program rules, receiving the voucher from the PHA,¹⁵ searching for a housing unit with a willing landlord, and having the PHA inspect the housing unit and determine that the unit passes a quality standard and has rent in line with market rents for similar units. Families trying to use vouchers often present more than one housing unit to the PHA before successfully leasing up.

¹⁴ Staff of emergency shelters often help families get on waiting lists for vouchers and other forms of assisted housing, the same as they help families apply for other subsidy and benefit programs available to low-income families. The Family Options Study did not collect systematic information on which emergency shelters in which study sites provided such assistance, but members of the study team responsible for monitoring study implementation report that some emergency shelters provided it.

¹⁵ The voucher is a document that provides the family with information on the maximum subsidy that the family can receive, based on the family’s size and composition and the HCV program’s subsidy standard.

This analysis of the amount of time it took families to go through the process of using a voucher focuses on a subset of families who completed a 20-month followup interview, who leased up with vouchers prior to their interviews, and have records in the Public and Indian Housing Information Center (PIC) data system. PIC records offer the most specific program entry dates of all our data sources, allowing us to measure program use to the day. PIC has records for 395 of the 413 families with priority access to a voucher who leased up.¹⁶

Families with priority access completed the lease-up process and started to receive HCV subsidies nearly 4 months (114 days) on average after their random assignment date (exhibit 2). This length of time is not an unusually long for families trying to use vouchers to lease up (Finkel and Buron, 2001).¹⁷ HCV program rules give families 60 days from the date the PHA issues the voucher to lease up with a voucher before dropping the family from the program and offering the voucher to a different household; however, PHAs are allowed to, and often do, extend the time for families who are actively searching for housing to around 120 days from the point of voucher issuance.¹⁸

Exhibit 2

Average Time Between Random Assignment and Start of Housing Subsidy Among Families With Priority Access to Vouchers, by Study Site

Site	Number of Families Using a Voucher	Average Number of Days
Overall	395	114
Alameda	65	66
Boston	54	188
Connecticut	37	130
Denver	53	92
Honolulu	0	NA
Kansas City	29	108
Louisville	18	120
Minneapolis	42	124
Phoenix	57	72
Salt Lake City	40	153

NA = not applicable.

Notes: These data are based on a subset of families in the program usage data with records in the Public and Indian Housing Information Center (PIC) showing housing assistance payment start dates in the Housing Choice Voucher program. Although Honolulu had three families who received priority access and used tenant-based assistance that is very similar to a voucher, data on the assistance are not recorded in the PIC data and are not included. Atlanta and Baltimore were study sites, but they did not have the SUB intervention, and no families in those sites had priority access to a voucher.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

¹⁶ Rates at which PHAs report household records to PIC are high, but some PHAs may fail to report information for some families or the timing of PIC extracts used for analysis may miss some families.

¹⁷ Finkel and Buron (2001) found that the length of time from voucher issuance to lease-up date was 83 days on average nationally. Those who could not lease in place but had to move into a new unit, which is most similar to the situation faced by the Family Options Study families, took 89 days on average. Nearly one-fourth (23 percent) of households who leased up with a voucher nationally took more than 120 days from voucher issuance to lease-up date. In contrast to Finkel and Buron (2001), the start of the clock for the time periods reported in exhibit 2 is at random assignment, which is prior to voucher issuance. The full period of time for our measure starts an earlier point in the process than the Finkel and Buron (2001) measure.

¹⁸ Program rules and guidelines are available in the Housing Choice Voucher Program Guidebook (HUD, 2001). Information about voucher search time and extensions is in Chapter 8. Finkel and Buron (2001) also noted that before program rule changes in 1999, PHAs were restricted to a maximum search time limit extension of 120 days. After the rule change, however, the extension periods were no longer restricted and left at the discretion of the PHA.

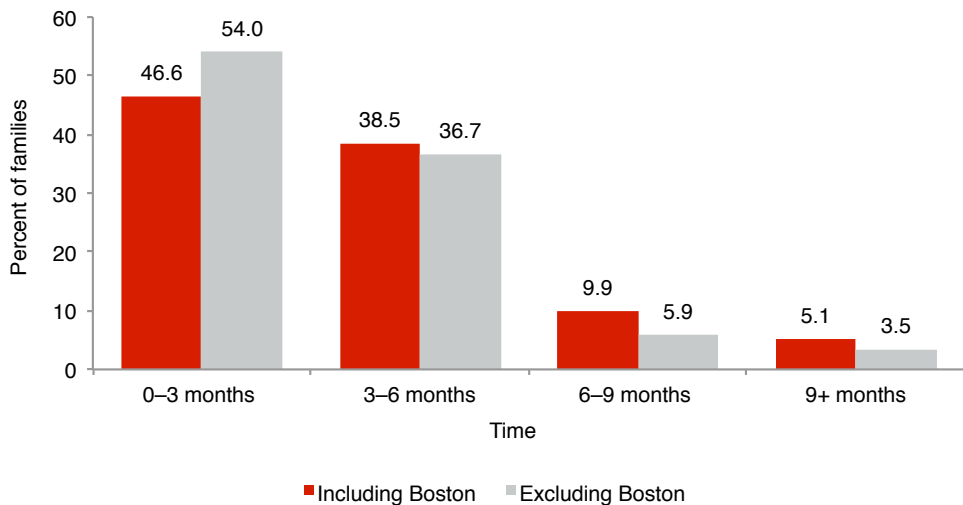
The average length of time, from random assignment to voucher lease up, varied by site. Among those with priority access to vouchers, families leased up after as little as 2 months (66 days) on average in Alameda County. In contrast, lease up took more than 6 months (188 days) on average in Boston. Next to Alameda, the shortest times from random assignment to lease up occurred in Phoenix (72 days on average) and Denver (92 days on average). Next to Boston, families with priority access in Salt Lake City (153 days on average) and Connecticut (130 days on average) took the longest time.

Boston, a right to shelter community, assures all homeless families some form of emergency housing. With a tight housing market and a strong emergency shelter system, families in Boston took the longest time to use the vouchers to which they received priority access.

Exhibit 3 shows a distribution of the length of time for families to lease up across the sites in which families received priority access to vouchers. We present this information with and without Boston because of the apparent effect of Boston's right to shelter policy in extending the time families remained in shelter before using the voucher. Because they could remain in shelter indefinitely and return to shelter at any time, families in Boston may have felt less urgency about finding a housing unit in which to use the voucher. Among all sites (including Boston), nearly one-half (46.6 percent) of the families who used a voucher had begun to do so within 3 months. Within 6 months, 85.1 percent of families who would lease up had done so. Excluding Boston, more than one-half (54.0 percent) of the families who leased up a voucher did so within 3 months of random assignment when given priority access to a voucher.

Exhibit 3

Time Between Random Assignment and Start of Housing Subsidy Among Families With Priority Access to Vouchers



Notes: These data are based on a subset of families in the program usage data with Public and Indian Housing Information Center (PIC) records showing housing assistance payment start dates in the Housing Choice Voucher program. Time is measured in days between the study's random assignment date and the start of the housing assistance payment in the PIC data. Excluding Boston reduces the analysis sample to 341 families. Time categories are 0–3 months is 0–90 days, 3–6 months is 91–180 days, 6–9 months is 181–270 days, and 9 or more months is 271 or more days.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

Using Other Homeless Assistance Programs Before Leasing Up With Vouchers

Random assignment to a Family Options Study intervention did not prohibit families from finding their way to programs to which they were not assigned. This gives us an opportunity to explore how patterns of voucher use fit into the way in which families use the homeless assistance system. For this analysis, we continue to focus on the subset of families for which we have voucher lease-up information from PIC.

During the time between random assignment to priority access to a voucher and leasing up, families could have used other homeless assistance programs, such as transitional housing or rapid re-housing. Managers of homeless assistance systems in some communities intentionally use transitional housing or rapid re-housing as a pathway to long-term rent subsidies, and emergency shelter staff may advise families to use the system in that way. Either emergency shelter staff or families may view the short-term case management that other programs provide as beneficial.

Most study families given priority access to vouchers did not use other programs first but, instead, went directly to leasing up with vouchers; however, we observe some variation among communities. We identified the three most common homeless assistance program pathways followed by families before leasing up with a voucher—(1) emergency shelter to HCV, (2) emergency shelter to rapid re-housing to HCV, and (3) emergency shelter to transitional housing to HCV. Within any of these pathways, gaps in program use or other periods of emergency shelter use may exist. For example, in the emergency shelter to rapid re-housing to HCV pathway, some families experienced gaps in the use of homeless assistance programs or multiple stays in emergency shelter, but rapid re-housing rather than another homeless assistance program was the way station before using HCV.

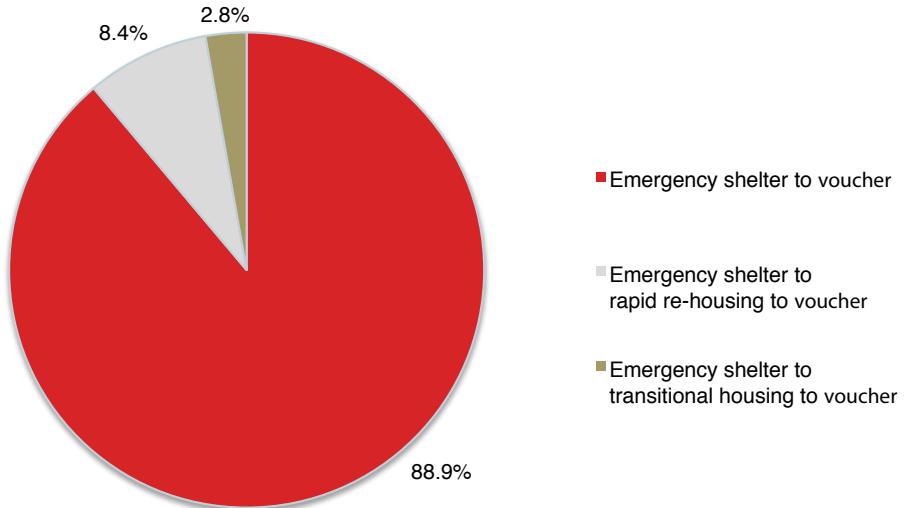
Most families with priority access to vouchers used emergency shelter and then a voucher (88.9 percent), as exhibit 4 shows. Across all study sites, families used vouchers after first receiving rapid re-housing assistance only 8.4 percent of the time. These families did not have priority access to rapid re-housing programs because of the study but received rapid re-housing assistance anyway. Only 11 families (2.8 percent) with priority access to vouchers used transitional housing first.

Exhibit 5 shows the frequency of program use pathways by study site among families who leased up using the vouchers to which they had priority access. Salt Lake City had the lowest share of families who went from emergency shelter to leasing up with vouchers without first using another homeless assistance program. Three in five families (60.0 percent) with priority access to HCVs used rapid re-housing before leasing up with vouchers. Nearly one in five families (16.7 percent) in Minneapolis also used rapid re-housing before leasing up with a voucher. Both Salt Lake City and Minneapolis have large rapid re-housing programs with strong commitments to helping families leave shelter immediately.¹⁹ Although the study did not give these families priority access to rapid re-housing, families in those communities were able to gain access to rapid re-housing assistance before using voucher subsidies.

¹⁹ In some cases, rapid re-housing services may have been case management received while families were in shelter, rather than rental assistance. We attempted to review and edit rapid re-housing data records to capture receipt of rental assistance, but some instances of case management only may remain in the data.

Exhibit 4

Pathways to Leasing Up With Vouchers Among Families With Priority Access to Vouchers



Note: These data are based on a subset of families in the program usage data with records in the Public and Indian Housing Information Center showing housing assistance payment start dates in the Housing Choice Voucher program.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

Exhibit 5

Homeless Assistance Program Use Before Leasing Up With Vouchers Among Families With Priority Access to Vouchers, by Study Site

Site	Number of Families	ES-HCV (%)	ES-RR-HCV (%)	ES-TH-HCV (%)
Overall	395	88.9	8.4	2.8
Alameda	65	100.0	0.0	0.0
Boston	54	98.1	1.9	0.0
Connecticut	37	97.3	0.0	2.7
Denver	53	92.5	1.9	5.7
Honolulu	0	0.0	0.0	0.0
Kansas City	29	82.8	0.0	17.2
Louisville	18	88.9	0.0	11.1
Minneapolis	42	83.3	16.7	0.0
Phoenix	57	100.0	0.0	0.0
Salt Lake City	40	40.0	60.0	0.0

ES-HCV = emergency shelter to Housing Choice Voucher (HCV) program. ES-RR-HCV = emergency shelter to rapid re-housing to HCV program. ES-TH-HCV = emergency shelter to transitional housing to HCV program.

Notes: These data are based on a subset of families in the program usage data with records in the Public and Indian Housing Information Center (PIC) showing housing assistance payment start dates in the Housing Choice Voucher program. Although Honolulu had three families who received priority access and used tenant-based assistance that is very similar to a voucher, data on the assistance are not recorded in the PIC data and are not included. Atlanta and Baltimore were study sites, but they did not have the SUB intervention, and no families in those sites had priority access to a voucher.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

In Kansas City and Louisville, relatively large shares of families with priority access to vouchers first used transitional housing programs to which the study had not given them priority access (17.2 and 11.1 percent).

Family Characteristics Associated With Voucher Lease Up Among Families With Priority Access to Vouchers

Despite the very high rates at which families with priority access to vouchers leased up, not all families did. Providers of emergency services to families experiencing homelessness and PHAs attempting to serve homeless families may benefit from knowing which types of families have more or less difficulty navigating the lease-up process. The process of leasing up with a voucher includes getting through a PHA’s processes for documenting eligibility and income, searching for housing that meets the HCV program’s standards, and finding a willing landlord. We investigate the following family characteristics gathered at the time families were staying in emergency shelters from their baseline surveys—race and ethnicity, income and education, family composition, prior housing instability, and self-reported histories of alcohol or drug abuse and felony convictions.

Some characteristics are more common than others. For example, only 12.2 percent of families given priority access to vouchers said that they had an adult family member with a past instance of a felony conviction, whereas 84.9 percent of families said they had a history of doubling up as an adult because they could not afford rent (exhibit 6).

Exhibit 6

Voucher Lease-Up Rates Among Families With Priority Access to Vouchers, by Selected Baseline Characteristics

Baseline Characteristic	Percent of Families With Priority Access to a Voucher	Percent Who Leased Up With a Voucher
Total (N = 502)	100.0	82.3
Alcohol or drug abuse in the past year	19.9	73.0
History of eviction	46.0	78.8
Felony conviction of at least one adult family member	12.2	68.9
Race/ethnicity—White, not Hispanic	22.3	75.0
Black/African American, not Hispanic	38.6	85.1
Hispanic	24.7	89.5
Asian/Pacific Islander/other, not Hispanic	14.3	73.6
Annual family income less than \$5,000	34.5	82.7
High school diploma/GED	39.8	86.0
WIC or TANF receipt	60.2	86.1
Adult partner is present	23.3	76.0
Ever doubled up as adult because couldn't pay rent	84.9	81.7
Anyone age 15+ in the family has a disability that limits or prevents work	36.3	80.2

GED = General Equivalency Development. TANF = Temporary Assistance for Needy Families. WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Sources: Family Options Study program usage data, from random assignment through the 20-month interview; baseline survey

The cross tabulations in exhibit 6 show that, indeed, some variation exists in the rates at which families with a particular characteristic leased up. For example, families with an adult who reported alcohol or drug abuse in the past year had relatively low lease-up rates. Similarly, families identifying their race and ethnicity as White and not Hispanic had low lease-up rates. However, some family characteristics may be related to each other or may vary across study sites. For example, the association of family characteristics with leaseup rates may reflect site-to-site variations in housing market characteristics or the type of housing search assistance from program staff. Therefore, we used logistic regression models to perform a multivariate analysis to estimate the relationship between each characteristic and voucher lease up while holding other factors constant. Exhibit 7 displays the results of a logit model that predicts lease up with a voucher for families

Exhibit 7

Logit Model Predicting Voucher Lease Up Among Families With Priority Access to Vouchers

	Priority Access (N = 502)		
	Log-Odds	Odds	p-value
Intercept	1.731		
Family-level characteristics			
Alcohol or drug abuse in the past year	- 0.594	0.552	0.058*
History of eviction	- 0.320	0.726	0.243
Felony conviction of at least one adult family member	- 0.600	0.549	0.086*
Race/ethnicity (Reference = Black/African American, not Hispanic)			
White, not Hispanic	- 0.296	0.744	0.400
Asian/Pacific Islander/other, not Hispanic	- 0.192	0.826	0.634
Hispanic	0.357	1.430	0.390
High school diploma/GED	0.355	1.426	0.203
Adult partner is present	- 0.269	0.764	0.367
Ever doubled up as adult because couldn't pay rent	- 0.524	0.592	0.188
WIC or TANF receipt	0.436	1.546	0.113
Anyone age 15+ in the family has a disability that limits/prevents work	0.201	1.223	0.469
Annual family income (in thousands)	0.121	1.129	0.039**
Sites (Reference = Minneapolis)			
Alameda	0.846	2.329	0.142
Boston	1.129	3.092	0.114
Connecticut	0.431	1.539	0.508
Denver	0.282	1.326	0.579
Honolulu	- 2.785	0.062	0.004**
Kansas City	- 0.647	0.524	0.189
Louisville	0.084	1.088	0.889
Phoenix	1.710	5.529	0.008**
Salt Lake City	- 0.248	0.780	0.611

GED = General Equivalency Development. TANF = Temporary Assistance for Needy Families. WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

* p < 0.1. ** p < 0.05.

Notes: Unlike the impact models in Gubits et al. (2015), these models do not incorporate survey nonresponse weights. Atlanta and Baltimore were study sites, but they did not have the SUB intervention, and no families in those sites had priority access to a voucher. Observations with missing values for the explanatory variables were imputed.

Sources: Family Options Study program usage data, from random assignment through the 20-month interview; baseline survey

with priority access to HCV subsidies.²⁰ The model controls for family characteristics and for study sites—that is, for the community in which the family stayed in emergency shelter. Exhibit 7 reports log-odds coefficients, odds ratios, and *p*-values.²¹ Coefficients with a *p*-value less than 0.05 are statistically significant, and those less than 0.10 are marginally statistically significant.

Two family characteristics predict a lower chance of leasing up with a voucher with marginal statistical significance. Among those with priority access to vouchers, the chance that a family with an adult with recent alcohol or drug abuse would lease up with a voucher were 44.8 percent of the chance that a family without an adult with substance abuse would lease up (*p*-value = 0.058), controlling for other family characteristics and the family's community. Among those with priority access to vouchers, the chance that a family that had at least one adult with a felony conviction prior to the family's shelter stay would lease up with a voucher were 45.1 percent of the chance that a family without an adult with a prior felony conviction would lease up (*p*-value = 0.086). In other words, it is less likely a family with these negative characteristics will use a voucher compared with a family without those negative characteristics, despite having priority access to a voucher.

No PHA asked the study team to screen families for substance abuse before random assignment. PHAs may have applied such a criterion during the later formal process of determining eligibility. In addition, families with such characteristics may have had more difficulty taking the further steps needed to lease up. Something about a family's substance abuse may have been apparent to landlords from whom they attempted to rent a housing unit.

Family Options Study families have incomes that place most of them in deep poverty,²² with a median household income when in emergency shelter at the start of the study of only \$7,410 a year. Although the cross tabulation showed that families with income below \$5,000 per year leased up at the same rate as all families with priority access to vouchers (82.7 versus 82.3 percent), the multivariate analysis showed something different, with statistical significance. Among families with priority access to vouchers, the odds of leasing up with a voucher increased for a family with a higher annual income at baseline (*p*-value = 0.039).

Patterns of Voucher Use Among Families Without Priority Access to Vouchers

We now turn to families whom the study did not give priority access to the voucher program and who, nonetheless, found their way to the HCV program and leased up with vouchers. Of the families without priority access to vouchers, 7.9 percent, or 105 families, leased up with a voucher during the 20-month followup period.²³ Although this percentage is small, it may be surprising

²⁰ See appendix B for intermediary models that do not include site-level covariates.

²¹ The odds ratio coefficients are less than 1 for log-odds values that are negative, and coefficients are above 1 for positive log-odds values. Both are presented for convenience.

²² The U.S. Department of Health and Human Services considers a family with an income of less than 50 percent of the federal poverty level to be in deep poverty.

²³ This analysis includes only families who responded to the study's followup survey at approximately 20 months following random assignment.

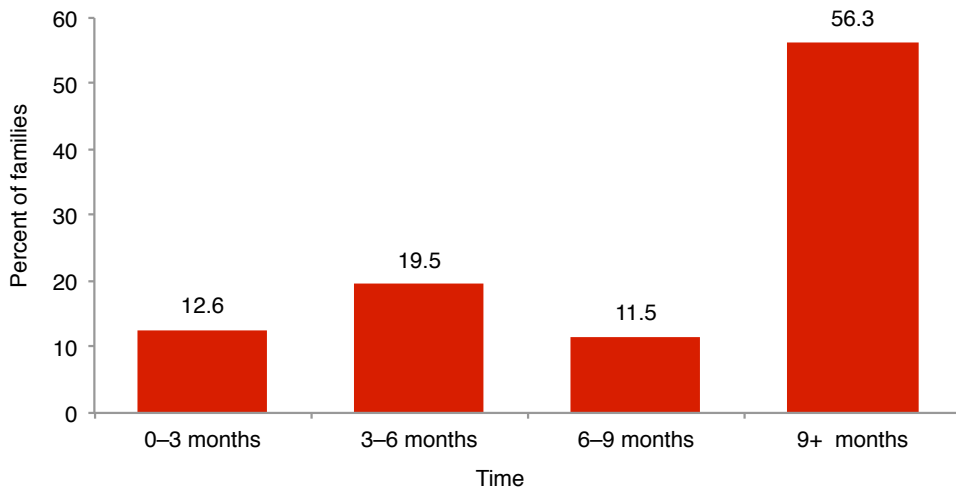
that any homeless families without priority access to vouchers obtained and used vouchers.²⁴ Managers of the homeless services systems in some communities consider vouchers essentially unavailable because of long waiting lists, and they do not consider the HCV program to be part of the approach to serving homeless families. Alternatively, some homeless assistance systems may try to use temporary rental assistance or transitional housing as a bridge to a long-term rent subsidy.

The study did not require that families take up their assigned intervention and did not prevent them from taking up other interventions of their choosing. Therefore, families who leased up with vouchers could have been randomly assigned to the CBRR or PBTH interventions or to the UC group. Unlike the families that the study granted priority access to vouchers, a family without priority access had to receive a voucher by putting themselves on a waiting list and then reaching the top of that list maintained by the local PHA. The study did not ask families whether they were on waiting lists for assisted housing at the time of random assignment, nor did we collect this information from PHAs. Without that information, we used what we know about the families, the PHAs, and the homeless assistance systems in the study communities to explore how families in emergency shelter come to use the HCV program during the course of a year and a half following stays in emergency shelters.

Time Between Random Assignment and Voucher Lease Up for Families Without Priority Access to Vouchers

A study family could have spent time on a PHA's waiting list for the HCV program before the random assignment date. We know only the time it took after random assignment to an intervention for a family to lease up with a voucher. Following the date of random assignment, it took families without priority access to vouchers—those assigned to the CBRR, PBTH, or UC interventions—an average of 10 and one-half months (320 days) to lease up with vouchers, 2.8 times longer than families with priority access (114 days). Only 12.6 percent of families in other assignment groups leased up within the first 3 months after random assignment (exhibit 8). Only 43.6 percent of families without priority access who used vouchers leased up within 9 months. Although some families without priority access to vouchers were able to obtain and use vouchers, the pattern for these families reflects the fact that they did not go to the top of waiting lists immediately but, rather, were called from them in whatever order the PHA's usual policies determined.

²⁴ Some other study families not assigned to the SUB treatment group used other forms of housing assistance such as public housing or project-based Section 8 during the 20-month followup period.

Exhibit 8**Time Between Random Assignment and Start of Housing Subsidy Among Families Without Priority Access to Vouchers**

Notes: These data are based on a subset of families in the program usage data with Public and Indian Housing Information Center (PIC) records showing housing assistance payment start dates in the Housing Choice Voucher program. Time is measured in days between the study's random assignment date and the start of the housing assistance payment in the PIC data. Although the Atlanta and Baltimore study sites were excluded from prior analyses, they are included here, because they had families assigned to other study interventions. Time categories are 0–3 months is 0–90 days, 3–6 months is 91–180 days, 6–9 months is 181–270 days, and 9 or more months is 271 or more days.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

Effect of Local Policies on Whether Families Without Priority Access to Vouchers Nonetheless Leased Up With Vouchers

Local policies—policies of the PHA or policies of the homeless assistance system—may affect the likelihood that a family with a recent experience of homelessness can gain access to the HCV program and lease up with a voucher subsidy. PHAs are permitted to order waiting lists by using preferences for people with particular characteristics, and many PHAs do so to create priorities for homeless people. PHA preference systems are complex, and the priority can place a family at the top of a waiting list immediately, increase a family's likelihood of coming to the top of a waiting list in a relatively short period of time, or give a family access to a voucher that the PHA set aside for clients of particular programs that provide services to homeless people.

The rates at which families without priority access to vouchers nonetheless leased up with vouchers differed considerably by study site (exhibit 9). The lease-up rates range from under 3 percent in Baltimore and Phoenix to above 10 percent in Boston and Denver. Of the study sites, Boston has the highest rate of voucher use among families in the study's other assignment groups, 28.6 percent. Part of the explanation may be that Boston has a right to shelter policy, so families can remain in shelter until they reach the top of an HCV waiting list.²⁵ Further analysis shows that

²⁵ The state's Emergency Assistance program implements the right to shelter policy. <http://www.mass.gov/hed/economic/eohed/dhcd/legal/regs/760-cmr-67.pdf>.

Exhibit 9

Voucher Lease-Up Rates Among Families Without Priority Access to Vouchers, by Study Site

Site	Percent Leasing Up With Vouchers	Number of Families Without Priority Access to Vouchers	Number of Families Without Priority Access Who Leased Up With Vouchers
Overall	6.6	1,327	87
Alameda	5.9	135	8
Atlanta	0.7	151	1
Baltimore	0.0	46	0
Boston	28.6	105	30
Connecticut	6.5	123	8
Denver	11.3	71	8
Honolulu	3.3	153	5
Kansas City	6.5	92	6
Louisville	5.4	56	3
Minneapolis	4.6	109	5
Phoenix	2.6	155	4
Salt Lake City	6.9	131	9

Notes: These data are based on a subset of families (87 of 105) in the program usage data with Public and Indian Housing Information Center (PIC) records showing housing assistance payment start dates in the Housing Choice Voucher program. Although the Atlanta and Baltimore study sites were excluded from prior analyses, they are included here, because they had families assigned to other study interventions.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

homeless families in Boston frequently transitioned directly from emergency shelter to HCV, without gaps between leaving emergency shelter and beginning receipt of voucher subsidies. That was the case for 26 of the 30 families in Boston for whom we have enough information on exit dates for emergency shelter programs, as well as entry dates for the HCV program.

In addition, the Boston Housing Authority offers priority points to families in certain emergency shelter programs that have the effect of pushing homeless families toward the top of the voucher waiting list. Families may be more willing to stay in emergency shelter for long periods, because they have strong chances of securing vouchers. Similar to Boston, the Denver Housing Authority prioritizes serving homeless families, with vouchers set aside to serve this population.

The time for families without priority to gain access to vouchers and lease up (exhibit 10) ranged from slightly under 6 months in Connecticut (164 days) and Denver (174 days) to nearly 14 months in Boston (411 days) and Salt Lake City (423 days).²⁶ PHAs in both Boston and Denver had preferences for homeless families; however, in Denver, the preference seemed to have shortened the waitlist time. In Boston, it seemed to encourage families to remain in emergency shelter while waiting for vouchers.

²⁶ The very short amount of time for a family in Atlanta, 25 days, is puzzling. No families in Atlanta received priority access to vouchers (the Atlanta Housing Authority did not participate in the study). This family may have been well along in the process of using a voucher at the time the family was randomly assigned to one of the interventions available in Atlanta.

Exhibit 10**Average Time Between Random Assignment and Start of Housing Subsidy Among Families Without Priority Access to Vouchers, by Study Site**

Site	Number of Families Who Leased Up With a Voucher	Average Number of Days
Overall	87	320
Alameda	8	214
Atlanta	1	25
Baltimore	0	NA
Boston	30	411
Connecticut	8	164
Denver	8	174
Honolulu	5	373
Kansas City	6	295
Louisville	3	270
Minneapolis	5	362
Phoenix	4	253
Salt Lake City	9	423

NA = not applicable.

Note: These data are based on a subset of families (87 of 105) in the program usage data with Public and Indian Housing Information Center (PIC) records showing housing assistance payment start dates in the Housing Choice Voucher program.

Source: Family Options Study program usage data, from random assignment through the 20-month interview

Family Characteristics Associated With Voucher Lease Up Among Families Without Priority Access to Vouchers

We used the same logit model to assess the relationship between family characteristics and leasing up for families with priority access to vouchers to understand the characteristics of families in other Family Options Study assignment groups who obtained and used vouchers. In this case, the model sheds light on which families get themselves on waiting lists for the HCV program, as well as which families PHAs find eligible and which families' landlords accept as renters. Exhibit 11 presents the results.^{27,28} Again, the model controls for both family characteristics and the communities in which families were residing.

Echoing the finding for families with priority access to vouchers, families without priority access who, at the time of the family's stay in emergency shelter, had an adult with recent drug or alcohol abuse were less likely to use vouchers. Among families without priority access to vouchers, the chance that a family with an adult with recent substance abuse would obtain a voucher and use it were 44.5 percent of the chance a family without an adult with substance abuse would lease up (p -value = 0.018), controlling for other family characteristics and site indicators.

Among families with no priority access to voucher, some characteristics are associated with a greater chance of obtaining and using a voucher during the 20-month period following random

²⁷ Results from the long-term impact report revealed that having priority access to rapid re-housing reduces the use of permanent housing subsidies, including permanent supportive housing programs and mainstream housing programs, during the first half of the followup period (Gubits et al., 2016). The proportions of the CBRR families using any permanent housing subsidy are lower than the corresponding proportions for the UC families in months 6 to 14 and are statistically significantly different in months 2 to 14. This finding suggests analyses mixing families assigned to CBRR and UC in the same model should be interpreted with caution.

²⁸ See appendix B for intermediary models that do not include site-level covariates.

Exhibit 11

Logit Model Predicting Voucher Lease Up Among Families Without Priority Access to Vouchers

	No Priority Access (N = 1,327)		
	Log-Odds	Odds	p-value
Intercept	- 3.585		
Family-level characteristics			
Alcohol or drug abuse in the past year	- 0.810	0.445	0.018**
History of eviction	0.054	1.056	0.820
Felony conviction of at least one adult family member	0.235	1.265	0.522
Race/ethnicity (Reference = Black/African American, not Hispanic)			
White, not Hispanic	- 0.233	0.793	0.496
Asian/Pacific Islander/other, not Hispanic	- 0.308	0.735	0.424
Hispanic	- 0.437	0.646	0.153
High school diploma/GED	- 0.019	0.981	0.934
Adult partner is present	0.355	1.426	0.187
Ever doubled up as adult because couldn't pay rent	1.094	2.987	0.013**
WIC or TANF receipt	- 0.165	0.848	0.485
Anyone age 15+ in the family has a disability that limits/prevents work	0.222	1.249	0.331
Annual family income (in thousands)	- 0.043	0.958	0.078*
Sites (Reference = Minneapolis)			
Alameda	0.179	1.196	0.745
Atlanta	- 0.553	0.575	0.367
Baltimore	- 0.389	0.678	0.640
Boston	2.080	8.006	< .0001**
Connecticut	0.279	1.321	0.617
Denver	0.999	2.716	0.066*
Honolulu	0.261	1.299	0.668
Kansas City	0.271	1.312	0.634
Louisville	0.106	1.111	0.873
Phoenix	- 0.683	0.505	0.296
Salt Lake City	0.335	1.398	0.546

GED = General Equivalency Development. TANF = Temporary Assistance for Needy Families. WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

* p < 0.1. ** p < 0.05.

Notes: Unlike the impact models in Gubits et al. (2015), these models do not incorporate survey nonresponse weights. Observations with missing values for the explanatory variables were imputed.

Sources: Family Options Study program usage data, from random assignment through the 20-month interview; baseline survey

assignment. Families in the study's other assignment groups that nonetheless leased up with vouchers were more likely to have doubled up in the past when they were financially vulnerable. The likely explanation is that families forced to double up had strong motivations for getting on HCV waiting lists and, thus, were more likely to come to the top of a voucher waiting list within the study's 20-month followup period. The odds of receiving a voucher subsidy are about three times higher among families who had previously doubled up compared with families who had not (p-value = 0.013).

In contrast to the finding for families with priority access to vouchers, having additional annual income for families in other assignment groups reduces the odds of leasing up with a voucher (p-value = 0.078). Some of the families without priority access to a voucher and with relatively higher incomes may not have qualified for the HCV program's waitlist preferences based on income

level.²⁹ Other families with relatively higher incomes may have found satisfactory living situations before rising to the top of voucher waiting lists. For still others, the crisis leading to their homelessness was not associated with persistent poverty, and therefore, they had not applied to the HCV program and been placed on waiting lists before entering a shelter.

Conclusion

Families in emergency shelters to whom the Family Options Study granted immediate access to housing vouchers were able to use the vouchers at very high rates. These rates compare favorably with the rates of successful voucher use for families who rise to the top of waiting lists through the regular process, families who usually are not homeless. This finding was somewhat surprising, given the barriers to using vouchers that are thought to be associated with families who experience homelessness. For example, common perceptions exist that homeless families have challenges to presenting themselves as acceptable tenants and, therefore, will have difficulties finding acceptable units within required timeframes. Further analysis of data from the Family Options Study shows that some barriers, in particular self-reported recent alcohol or drug abuse and felony convictions, are associated with lower rates of voucher use by homeless families given priority access to vouchers. However, even among families who had these barriers, voucher use was relatively high, at 73 percent for those with recent, self-reported substance abuse and 68.9 percent for those with felony convictions. Families used vouchers at high rates in both tight and loose rental housing markets.

Making use of a voucher to lease a housing unit is not a quick process. For homeless families, as for all families trying to use vouchers, the process includes presenting documentation to the PHA on the family's eligibility for the program and the family's income, attending a PHA briefing on program rules, receiving the voucher from the PHA, searching for a housing unit with a willing landlord, and having the PHA inspect the housing unit and determine that the unit passes a quality standard and has rent in line with market rents for similar units. For families given priority access to vouchers, the process took about 4 months on average. This finding was not surprising.

A number of families started using voucher subsidies at some point during the 20-month period following the families' emergency shelter stays despite not having been granted priority access to vouchers by the study. Once again, recent substance abuse was associated with lower rates of voucher use. In contrast, a history of doubling up was associated with a *high* rate of voucher use among families who would have gone through the regular PHA waitlist process rather than receiving immediate access to vouchers through the study. Families forced to double up may have had strong motivations for getting on voucher waiting lists even before an episode of sheltered homelessness.

Most families in the study had incomes well below the federal poverty level while in emergency shelter at the start of the study, with a median household income of only \$7,410 a year. Among families with priority access to vouchers, an additional \$1,000 per year of income increased the odds of a family leasing up with a voucher, although the reverse was the case for families without

²⁹ Federal law requires that 75 percent of households that the HCV program admits must have incomes below 30 percent of Area Median Income (AMI), or roughly the poverty level. Many PHAs make 30 percent of AMI an absolute income limit (Dunton et al., 2014).

priority access. Possibly, families going through the regular HCV program waitlist process, rather than gaining immediate access to vouchers, were more likely to find alternative arrangements before coming to the top of waiting lists if they had relatively higher incomes.

The further analysis of the patterns of voucher use that was conducted for this article suggests that the local policies of PHAs and local homeless assistance systems influence both the likelihood of a family's use of a voucher and the timing of that use. Boston's right to shelter policy was associated with high rates of voucher use by both families with priority access to vouchers and families in the study's other assignment groups. The Boston Housing Authority also provides some level of preference on the voucher waiting list for families in certain emergency shelters. However, these local policies appear to have the perverse effect of encouraging families to remain in shelter for longer periods of time. Families with immediate access to vouchers in Boston appear to have stayed in shelter rather than using a voucher more quickly. This is a perverse result, as the Family Options Study found that the per-family monthly cost of an emergency shelter stay is substantially higher than the per-family monthly cost of an HCV subsidy (Gubits et al., 2016, 2015).

In contrast to Boston, Denver has no right to shelter, but the Denver Housing Authority does give homeless families a wait list preference. In Denver, families without priority access to a voucher used vouchers relatively quickly compared with families in other study sites.

Families sometimes used rapid re-housing assistance prior to using vouchers to which they were given priority access. This pattern was more prevalent in Minneapolis and Salt Lake City, communities that emphasize the use of the rapid re-housing program to help families leave emergency shelters quickly.

Overall, the patterns of voucher use both for families for whom the study provided priority access and for families without priority access show that families are able to use the voucher form of housing subsidy to find and rent private market housing units following an episode of homelessness. Rates of use are high, and although these families have a number of challenges, most families do not have barriers that prevent them from using housing vouchers.

Appendix A. Details on the Program Usage Data

To create the program usage file, the study team gathered family-level information on program entry dates, program exit dates, and program types through six data sources throughout the course of the Family Options Study. The data sources are—

1. Enrollment verification data.
2. Six-month tracking survey.
3. Twelve-month tracking survey.
4. Twenty-month followup adult survey.
5. The Homeless Management Information System (HMIS).
6. The Public and Indian Housing Information Center (PIC)/Tenant Rental Assistance Certification System (TRACS).

Each data source has information about program use since the date of random assignment. The time the data source covers since random assignment may vary. For example, the administrative data (HMIS and PIC/TRACS) and the 20-month survey cover the full analysis period, but the tracking surveys and enrollment verification cover part of the period. Data on study families may be in all sources or one, with families without data on program use excluded from this analysis.

The study team considered data from all six sources when compiling family histories of program use. If program use data were available for a family in more than one data source, the data may have contained repetitive information. Information from multiple data sources either corresponded or conflicted.

To resolve conflicting information across data sources, the study team devised a system of decision rules. The study team ranked the data sources in the order believed to contain the most to least reliable program use information. Perceived reliability of the data sources varied by program use data item, such as program entry date, program exit date, and program type. Exhibit A-1 summarizes the reliability ratings.

The study team considered the program entry date from the enrollment verification data most reliable, because the team collected these data directly from the participating provider specifically about the study families. The administrative data—HMIS and PIC or TRACS—were also treated as highly reliable, second to the enrollment verification, because the data are gathered in real time and do not rely on retrospective accounts. Program entry date information from the tracking surveys and 20-month followup survey were considered less reliable because of human recall error, which is a common problem in surveys relying on retrospective accounts (National Research Council, 2001). If entry date information were only available in the surveys, the study team considered program entry dates closest to interview dates as more reliable than other older entry dates, because they would have lower recall error.

The study team considered the program exit date from the administrative data to be most reliable. Exit dates from the enrollment verification data were considered least reliable, because data were not collected for a long enough period to record exit dates. The tracking surveys also contained missing exit date information if the family was in a housing program at the time of those interviews and could suffer from recall error. The 20-month followup information on exit dates covered the full study period but could still suffer from recall error.

Exhibit A-1

Data Source Reliability by Program Use Data Item

Program Usage Data Item	Higher Reliability	Lower Reliability
Program entry date	Enrollment verification HMIS; PIC/TRACS	20-month followup; tracking surveys
Program exit date	HMIS; PIC/TRACS	20-month followup; tracking surveys; enrollment verification
Program type	Enrollment verification HMIS; PIC/TRACS	20-month followup; tracking surveys

HMIS = Homeless Management Information System. PIC = Public and Indian Housing Information Center. TRACS = Tenant Rental Assistance Certification System.

Sources: Enrollment verification data; 6-month tracking survey; 12-month tracking survey; 20-month followup survey; HMIS; and PIC/TRACS

The study team considered the program type data from the enrollment verification as the most reliable, because these providers were involved in the study to represent a treatment program type. Program type data from administrative sources were considered to also be highly reliable, second to the enrollment verification data. The study team worked closely with the HMIS administrators to accurately code programs. Data from PIC or TRACS were also considered highly reliable, because these administrative data are recorded in real time. Program type information in the 20-month followup and tracking surveys were considered to be least reliable due to recall error and likely lack of knowledge of the program type beyond the name of the program.

Based on these and other site-specific rules, the study team manually determined which of the preserved records and information most accurately reflected the program-use history for a family. These data were converted into the program usage data file, which contained one record per family. The program usage file contained a series of 34 binary variables reflecting the 34-month period from the month of random assignment through the month that the last 20-month survey in the study was completed.³⁰ These 34 variables were repeated for each of the following program types—emergency shelter, transitional housing, rapid re-housing, subsidized vouchers, and permanent housing. The variable value contained a value of one to flag that the study family was in that program type at that number month since random assignment, and it contained a zero if it was not in that program type. If the family had less than 34 months between random assignment and the 20-month survey interview end date, the remaining months through 34 were marked as missing.

The study team used this program usage data file to measure the share of families who ever used a type of assistance program during the period from the month of random assignment to the month of the follow up survey response (a median of 21 months).

³⁰ At least 18 months passed from the date of random assignment before the interviewer began to contact families to conduct the followup survey. Families who were difficult to locate had a longer period of time elapse between the dates of random assignment and the 20-month followup survey.

Appendix B. Logit Models Without Site-Level Controls

Exhibit B-1

Logit Models Controlling for Family-Level Characteristics Predicting Voucher Lease Up Among Families With and Without Priority Access to Vouchers

	With Priority Access (N = 502)			Without Priority Access (N = 1,327)		
	Log-Odds	Odds	p-value	Log-Odds	Odds	p-value
Intercept	1.800			- 3.180		
Family-level characteristics						
Alcohol or drug abuse in the past year	- 0.551	0.576	0.051*	- 0.969	0.380	0.003**
History of eviction	- 0.264	0.768	0.292	- 0.205	0.814	0.343
Felony conviction of at least one adult family member	- 0.549	0.577	0.094*	- 0.071	0.931	0.841
Race/ethnicity (Reference = Black/African American, not Hispanic)						
White, not Hispanic	- 0.385	0.680	0.226	- 0.107	0.898	0.723
Asian/Pacific Islander/other, not Hispanic	- 0.583	0.558	0.093*	- 0.311	0.733	0.320
Hispanic	0.466	1.594	0.206	0.065	1.067	0.811
High school diploma/GED	0.444	1.559	0.090*	- 0.076	0.927	0.728
Adult partner is present	- 0.429	0.651	0.120	0.188	1.207	0.432
Ever doubled up as adult because couldn't pay rent	- 0.295	0.745	0.420	1.108	3.028	0.010**
WIC or TANF receipt	0.589	1.802	0.017**	0.028	1.028	0.898
Anyone age 15+ in the family has a disability that limits/prevents work	0.006	1.006	0.982	0.179	1.196	0.411
Annual family income (in thousands)	0.063	1.065	0.132	- 0.038	0.963	0.100

GED = General Equivalency Development. TANF = Temporary Assistance for Needy Families. WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

* p < 0.1. ** p < 0.05.

Notes: Unlike the impact models in Gubits et al. (2015), these models do not incorporate survey nonresponse weights. Observations with missing values for the explanatory variables were imputed.

Sources: Family Options Study program usage data, from random assignment through the 20-month interview; baseline surveys

Acknowledgments

This study was supported by U.S. Department of Housing and Urban Development contract C-CHI-00943, Task Orders T-0001 and T-0003, to Abt Associates. The authors acknowledge contributions to the conceptual overview of this paper by Michelle Wood and technical guidance from Daniel Gubits. Nancy McGarry contributed to the analysis. The authors also thank HUD's program officer, Anne Fletcher, for her guidance and vision throughout the Family Options Study.

Authors

Claudia D. Solari is an associate/scientist at Abt Associates.

Jill Khadduri is a principal associate at Abt Associates and an Abt Associates senior fellow.

References

- Dunton, Lauren, Meghan Henry, Eliza Kean, and Jill Khadduri. 2014. *Final Report: Study of PHAs' Efforts To Serve People Experiencing Homelessness*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office. http://www.huduser.org/portal/publications/pdf/pha_homelessness.pdf.
- Finkel, Meryl, and Larry Buron. 2001. *Study on Section 8 Voucher Success Rates: Volume I Quantitative Study of Success Rates in Metropolitan Areas*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office. <http://www.huduser.org/portal/Publications/pdf/sec8success.pdf>.
- Finkel, Meryl, Jennifer Turnham, Larry Buron, Melissa Vandawalker, Bulbul Kaul, Kevin Hathaway, and Chris Kubacki. 2015. *Housing Choice Voucher Program Administrative Fee Study*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office. http://www.huduser.gov/portal/publications/pdf/AdminFeeStudy_2015.pdf.
- Gubits, Daniel, Marybeth Shinn, Stephen Bell, Michelle Wood, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Stephen Brown, Lauren Dunton, Winston Lin, Debi McInnis, Jason Rodriguez, Galen Savidge, Brooke E. Spellman. 2015. *Family Options Study: Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office. http://www.huduser.org/portal/portal/sites/default/files/pdf/FamilyOptionsStudy_final.pdf.
- Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D. Solari, Scott R. Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office. <https://www.huduser.gov/portal/sites/default/files/pdf/Family-Options-Study-Full-Report.pdf>.
- Gubits, Daniel, Brooke Spellman, Lauren Dunton, Scott Brown, and Michelle Wood. 2013. *Interim Report: Family Options Study*. Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Washington, DC: Government Publishing Office. http://www.huduser.org/publications/pdf/HUD_503_Family_Options_Study_Interim_Report_v2.pdf.
- National Research Council. 2001. *Studies of Welfare Populations: Data Collection and Research Issues*. Washington, DC: National Academies Press. <https://doi.org/10.17226/10206>.

Shinn, Marybeth, Scott R. Brown, Brooke E. Spellman, Michelle Wood, Daniel Gubits, and Jill Khadduri. 2017. "Mismatch Between Homeless Families and the Homelessness Service System," *Cityscape* 19 (3): 293–307.

U.S. Department of Housing and Urban Development (HUD). 2001. "Housing Choice Voucher Program Guidebook." https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/forms/guidebook.

Departments

In this issue—

- *Data Shop*
- *Graphic Detail*
- *Impact*
- *Policy Briefs*
- *Evaluation Tradecraft*
- *Affordable Design*
- *Request for Proposals*
- *Corrections*

Data Shop

Data Shop, a department of Cityscape, presents short articles or notes on the uses of data in housing and urban research. Through this department, the Office of Policy Development and Research introduces readers to new and overlooked data sources and to improved techniques in using well-known data. The emphasis is on sources and methods that analysts can use in their own work. Researchers often run into knotty data problems involving data interpretation or manipulation that must be solved before a project can proceed, but they seldom get to focus in detail on the solutions to such problems. If you have an idea for an applied, data-centric note of no more than 3,000 words, please send a one-paragraph abstract to david.a.vandenbroucke@hud.gov for consideration.

Residential Demographic Multipliers: Using Public Use Microdata Sample Records To Estimate Housing Development Impacts

Sidney Wong
Community Data Analytics

Daniel Miles
Gabrielle Connor
Brooke Queenan
Alison Shott
Econsult Solutions, Inc.

Abstract

Impact analysis plays a critical role in evaluating development proposals, devising housing policies, and developing comprehensive plans. To assess how enrollment and population increase and how net fiscal impacts affect municipalities and school districts, analysts require the latest evidence-based demographic multipliers that are specific to housing types. However, because outdated statewide multipliers are still widely used, an urgent need exists to devise up-to-date demographic multipliers to reduce imprecise impact assessment. In this article, we discuss a new generation of demographic multipliers based on the latest annually released American Community Survey

Abstract (continued)

(ACS) Public Use Microdata Sample (PUMS). We introduce a larger and more stable sample of households that have recently moved into both new and old housing units. We believe that these new multipliers are more accurate and relevant to impact assessment. With improved methodology, we can make these multipliers more geographically specific. Finally, we discuss the challenges and the new direction in using ACS PUMS data to generate statistically valid multipliers in small geographical units.

Introduction

This article discusses the methodology used to update and revise outmoded demographic multipliers. It first provides a background of traditional multipliers developed from the discontinued U.S. Census Bureau Public Use Microdata Sample (PUMS) records. It then summarizes procedures for using current American Community Survey (ACS) PUMS to generate updated multipliers. After introducing an improved mover sample, the article discusses recent demographic changes and other means to resolve the insufficient sample size problem prevalent in traditional multipliers and also discusses potentials for small-area multipliers.

Residential Demographic Multiplier and Its Data Sources

A residential demographic multiplier is an average ratio of demographic measures per occupied housing unit or per household.¹ Commonly used multipliers include school-age children (between 5 and 17 years of age) and average household size. The demographic impact of a residential development depends on its housing mix defined by structure type (for example, single-family detached, townhome, multifamily), size (for example, one bedroom, two bedrooms, three bedrooms), and tenure (for example, renter- or owner-occupancy). Demographic multipliers serve a critical role in the fiscal impact studies that developers, school board members, local government officials, and policymakers rely on to make land use and zoning decisions.

Several data sources can be used to estimate the demographic multipliers. Summary data from the pretabulated tables in the decennial census or ACS can be used to estimate the average household size and presence of school-age children by dividing the total household population and the residents ages 5 to 17, respectively, by the number of households. However, this methodology does not differentiate structure types, sizes, and tenure. Furthermore, this method covers all occupied housing units without taking account of the time of construction or moving into the unit. Alternatively, planners and researchers can conduct local surveys of recent development to collect demographic data. Although these surveys allow for detailed housing differentiation, they can be expensive and time consuming. The results are reflective only of the development surveyed and not all recent developments.

¹ By definition, the number of households is identical to the number of occupied units. Any apparent difference is due to a slight sampling fluctuation.

A third source is PUMS, freely distributed by the Census Bureau. PUMS files contain the actual responses to questionnaires sent to a sample population. Through the early 2000s, PUMS was released every 10 years; since the mid-2000s, PUMS is reported every year under the ACS.² PUMS covers the full range of population and housing unit responses, collected on individual questionnaires, for a subsample of housing units and group quarters. By combining data on the housing unit (housing records) and on the household and individuals who live in the unit (person records), researchers can generate demographic multipliers for specific housing household groups. PUMS is the major data source that Burchell and Listokin (1978) used in their pioneering work of generating demographic multipliers.

Burchell and Listokin (1978) reported demographic multipliers for 19 types of housing configurations under nine regional subdivisions. A configuration is a category in a housing typology defined by housing characteristics, such as structure, size (bedrooms), housing tenure, and housing value. Their analysis was restricted to a sample of units built within the past 10 years. Following their initial work, Burchell and Listokin improved their estimation methodology and reported multipliers based on contemporaneous census PUMS and American Housing Survey data (Burchell, Listokin, and Dolphin, 1994, 1985).

The 2000 Census PUMS-Derived Multipliers

Burchell, Listokin, and Dolphin (2006) updated their methodology using data from the 2000 census 5-percent PUMS. The multipliers reported the average household size and the presence of school-age children and public school-age children in 19 broad housing configurations that were further categorized into four groups by housing rent or value (exhibit 1). These sets of multipliers—commonly referred as the Fannie Mae multiplier series—covered Washington, D.C., and 50 states.

Listokin et al. (2006) generated multipliers in a slightly different manner, of only New Jersey and its three substate regions. They addressed a variety of issues in using the 2000 census PUMS, including the duration of the data, determinants of multipliers, research results on specialized housing, and the applications of multipliers in fiscal impact analysis and impact fee estimations.

Exhibit 1

Broad Housing Configurations in the Fannie Mae Multiplier Series

Number of Bedrooms	Single-Family Detached	Single-Family Attached	5+ Units Owner	5+ Units Renter	2-4 Units	Mobile
1			✓	✓	✓	
2	✓	✓	✓	✓	✓	✓
3	✓	✓	✓	✓	✓	✓
4	✓	✓				✓
5	✓					

Source: Burchell, Listokin, and Dolphin (2006)

² Through 2000, PUMS used responses to the long-form questionnaires in the decennial census. Since the mid-2000s, the Census Bureau has distributed a survey each year under the ACS to about 1 percent of the population. The responses are reported in ACS 1-year, 3-year, or 5-year PUMS files.

The work of Burchell and Listokin has not been updated since 2006. To assess the impact of new housing developments, policy analysts need the most accurate and current data. The use of outdated data can produce inaccurate estimates of development impacts, overestimating or underestimating how new developments will impact schools, traffic patterns, and municipal finances. Despite the need for multipliers that reflect up-to-date demographic trends and local conditions, decades-old statewide multipliers are routinely used. In the next section, we detail the procedures that employ the latest ACS PUMS records to generate multipliers.

Methodology of Statewide Multipliers Using ACS 5-Year PUMS

In response to the lack of updated demographic multipliers, Wong (2005) independently generated multipliers from 2000 census PUMS data for several Public Use Microdata Area (PUMA) aggregates.³ In early 2016, the Community Data Analytics (CDA) team formed to update the multipliers using the most recent data. The following discussion is of the four major steps in generating statewide multipliers based on ACS 5-year PUMS: (1) select records, (2) create housing configurations, (3) populate observations, and (4) calculate the multipliers. These steps pertain to a sample of recently built units. A subsequent discussion on other samples and PUMA or county-level multipliers will follow.

Step 1: PUMS Record Selection

The first step is to download and combine the ACS PUMS housing and person records for the state in question. The variable *YBL* (year structure first built) is employed to create the recently built unit sample for households living in structures built within 10 years prior to the ending year of the ACS 5-year PUMS (exhibit 2).

Exhibit 2

Common PUMS Variables Used in Multiplier Estimation

PUMS Variable	Explanation
ADJHSG	Adjustment factor for housing dollar amounts
AGEP	Age
BDSP	Number of bedrooms
BLD	Units in structure
GRNTP	Gross rent (monthly amount)
MV	When the householder moved into house or apartment
SCHG	Grade level attending
TEN	Tenure
VALP	Property value
YBL	When structure first built

PUMS = Public Use Microdata Sample.

Source: 2011–2015 American Community Survey PUMS Data Dictionary

³ A PUMA is a statistical area defined as a substate unit containing at least 100,000 persons. It is built on contiguous census tracts within a state, and it may cut across counties. In practice, some PUMAs have more than 200,000 persons. For example, the most populous PUMA (0500 in Florida) has a 2010 population of 268,718.

Step 2: Housing Configuration Creation

Multipliers are specific to housing configurations, so several PUMS variables are required to establish a contingency table. On a basic level, two variables, *BLD* (units in structure) and *BDSP* (number of bedrooms) are used. Structure groups—single-family detached, single-family attached, and multifamily units—use *BLD* values. The multifamily group is usually classified further by number of units in the structure. *BDSP* is used to create size groups of the units such as studio, one to three-bedroom, and other size categories. Additional variables are added to refine the configurations. A common variable is *TEN* (housing tenure), used to differentiate owner- and renter-occupied units. Burchell, Listokin, and Dolphin (2006) and Listokin et al. (2006) used *VALP* (property value) and *GRNTP* (monthly gross rent) to classify units by the median or terciles of housing value and gross rent.⁴ If these two variables are used, researchers should use *ADJHSG* (housing dollars adjustment factor) to inflate current dollars to constant dollars in the ending year of the ACS 5-year PUMS.

Step 3: Populate Records by Housing Configuration

This step assigns housing records and associated person records to each housing configuration. If all the variables discussed so far are used, the analysis is a five-way crosstabulation, including the filtering variable *YBL*. At this level, the probability of an insufficient sample for some configurations increases significantly, except in states with large populations.

Step 4: Multiplier Calculation

The next step estimates the weighted number of school-age children, occupants, and households for each housing configuration.⁵ Because PUMS records are sample data, this step applies relevant replicate weights provided by PUMS to estimate weighted observations from unweighted observations.⁶ Dividing the weighted number of school-age children and occupants by the weighted number of households yields the results of the multipliers. Following the Census Bureau standard of 90-percent confidence level, the margin of error is calculated. If age cohorts or grade groups are needed, additional variables like *AGEP* (age) and *SCHG* (grade level) are used to classify persons or school-age children according to major groupings.⁷

We used the preceding methodology and data from the 2000 census PUMS to replicate the New Jersey multipliers of Burchell, Listokin, and Dolphin (2006). We were able to successfully verify the demographic multiplier estimates. We completed statewide average household size and school-age children for all 50 states and selected PUMAs, including all Ohio PUMAs, using the 2011–2015 ACS PUMS. For quality control, CDA conducts several tests and examines the unweighted number of households to discard estimates without a sufficient sample size.

⁴ Listokin et al. (2006) used a universal cap rate of 10 percent to convert gross rent to housing value. The authors recommended following the convention in their Fannie Mae multiplier series of not conducting such a conversion, because the cap rate varies across time and place.

⁵ The discussion excludes two similar multipliers—public school-age children and public school children. As the public school participation rate varies among school districts, applying a statewide multiplier for local use results in biased impact estimations. The authors recommended not developing these two multipliers at the state level.

⁶ The documentation for the replicate weight methodology is in ACS Variance Replicate Tables. See <https://www.census.gov/programs-surveys/acs/technical-documentation/variance-tables.html>.

⁷ Such differentiation usually comes with a large margin of error in small states.

The Mover Sample Developed by CDA

The previously discussed procedures are based on a sample of recently built units. However, with a large share of records on older units removed, the variance of the demographic multiplier significantly increases in less-popular housing configurations. This insufficient sample size is further aggravated when recent housing construction is not active.

To resolve this sample size problem, CDA proposed an alternative sample that resembles the recently built unit sample. Based on the assumption that movers to new and older units have similar attributes as those who live in recently built units, CDA constructed a mover sample. The variable *MV* (when the householder moved into the unit) is used to identify households that moved in within 4 years of the starting year of the ACS 5-year PUMS.⁸ Exhibit 3 summarizes the ratios between the estimated weighted numbers of households of both samples to all households and to one another. At the state level, the mover sample accounts for about 26 to 52 percent of all households, whereas the recently built unit sample represents about 3 to 16 percent. On average, the estimated number of households in the mover sample is 4.4 times larger than that of the recently built unit sample.

The mover sample improves the accuracy of the estimates and is less affected by housing activity. This sample also makes the estimation of local multipliers easier. The scatterplot of 362 pairs of average household size multipliers in exhibit 4 illustrates high correlation (Pearson *r* of 0.966) between the two samples.⁹ The mover-based multipliers are more conservative; that is, less likely to underestimate impacts, except in some outlying five-bedroom configurations. Even if the assumption that movers to recently built units share similar characteristics with movers into older units is not completely true, the mover sample captures long-term characteristics of the future population when recently built units age. After all, a large share of recently built unit households is included in the mover sample.¹⁰

Exhibit 3

Comparing the Estimated Number of Households by Various Housing Configurations: 50 States and Washington, D.C.

	Recently Built Unit Sample	Mover Sample	
	Ratio of the Number of Households to All Households	Ratio of the Number of Households to All Households	Ratio of the Number of Households to That in the Recently Built Unit Sample
Minimum	0.03	0.26	2.61
Median	0.09	0.36	4.40
Maximum	0.16	0.52	11.18

Notes: The number of occupied units and households is identical by definition. Any apparent difference is due to a slight sampling fluctuation.

Sources: 2011–2015 American Community Survey (ACS) Table B25003; Community Data Analytics 2017 Planning Ratio Estimation Program computations derived from 2011–2015 ACS Public Use Microdata Sample

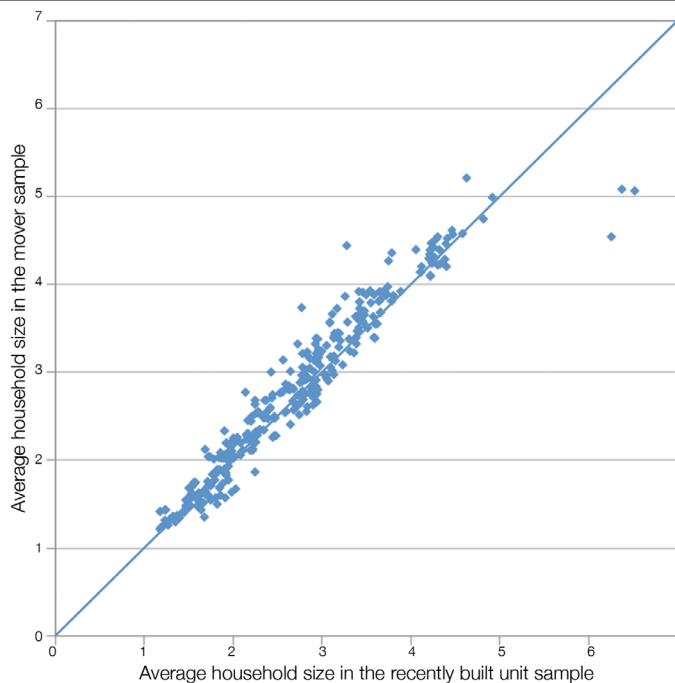
⁸ For samples generated from the 2011–2015 ACS PUMS, the earliest move-in year in a mover sample is 2008. This sample contains all households in the recently built unit sample that moved into the unit between 2008 and 2015 but excludes those between 2006 and 2007.

⁹ Because of overlapping sample elements and an unknown degree of heteroscedasticity, a statistical evaluation of individual pairs should be conducted. However, the rationale of using a mover is not statistical but practical, relying on an assumption that movers into new units are similar to other movers in the long run.

¹⁰ The newly built unit sample generated from the 2011–2015 ACS PUMS covers units built between 2006 and 2015, and all units built between 2008 and 2015 are included in the mover sample.

Exhibit 4

Average Household Size Multipliers Between Two Samples—Arkansas, California, Georgia, New Jersey, and Ohio (362 Pairs by Various Housing Configurations)



Note: Excludes estimates with less than 30 unweighted observations in either sample.

Source: Community Data Analytics 2017 Planning Ratio Estimation Program computations derived from 2011–2015 American Community Survey Public Use Microdata Sample using both samples

In addition, more than one-third of the mover sample belongs to the recently built unit sample for places with active housing construction. In low housing-activity places, the recently built unit sample does not provide adequate information for refined housing configurations.

2000–2015 Demographic Changes

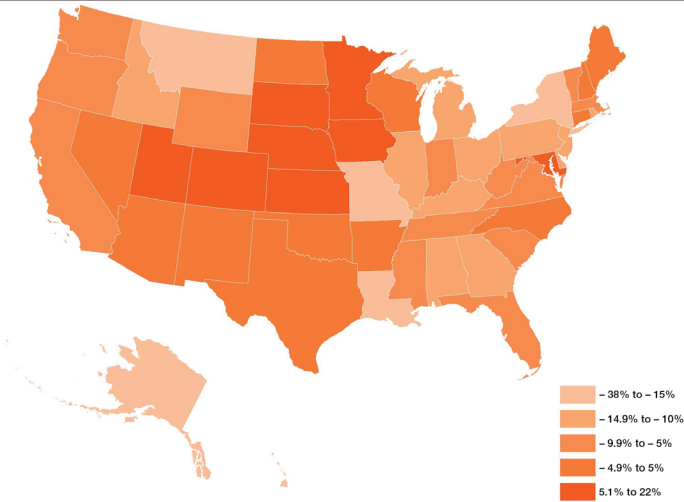
In this section, we highlight some major demographic changes as revealed by the CDA multipliers. First, in most states, the school-age children and average household size multipliers for most housing configurations declined between 2000 and 2015. This decrease is in line with the nationwide decline in average household size for all households.¹¹ Exhibit 5 illustrates changes in the number of school-age children for two-bedroom multifamily units between 2000 and 2015 and its decline in 39 states.

¹¹ Between 2000 and 2010, the average household size for all households fell or stagnated in every state except California, Delaware, Florida, Nevada, and Texas. Factors leading to the decline include falling fertility rates, an increase in single-person households (widowing or delay in marriage), aging of baby boomers, millennials choosing to delay parenthood, and the appeal of urban living. However, the direction and intensity of changes during this period is highly local.

Second, the use of a mover sample enables us to examine local variations of residential demographic multipliers. Exhibits 6 and 7 use the number of school-age children in Ohio to illustrate deviations between local (PUMA-level) and state estimates.

Exhibit 5

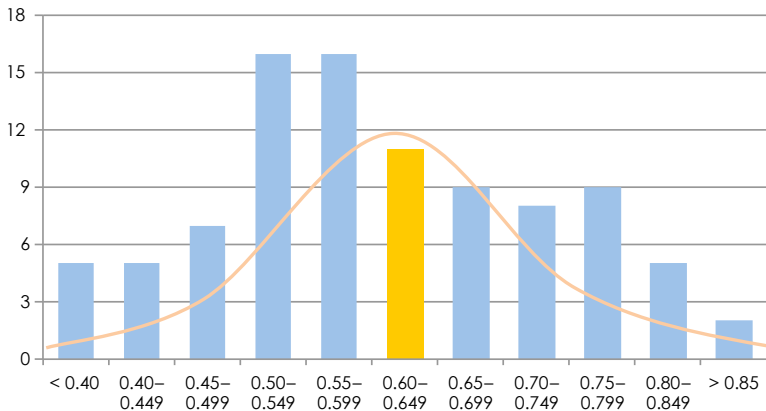
Percent Changes in School-Age Children Multiplier Between 2000 and 2015, Two-Bedroom Multifamily Units Using a Mover Sample



Source: Community Data Analytics 2017 Planning Ratio Estimation Program computations derived from 2000 Census Public Use Microdata Sample (PUMS) and 2011–2015 American Community Survey PUMS

Exhibit 6

Distribution of School-Age Children Multipliers for Three-Bedroom, Single-Family Detached Dwellings: 93 Ohio PUMAs Using a Mover Sample



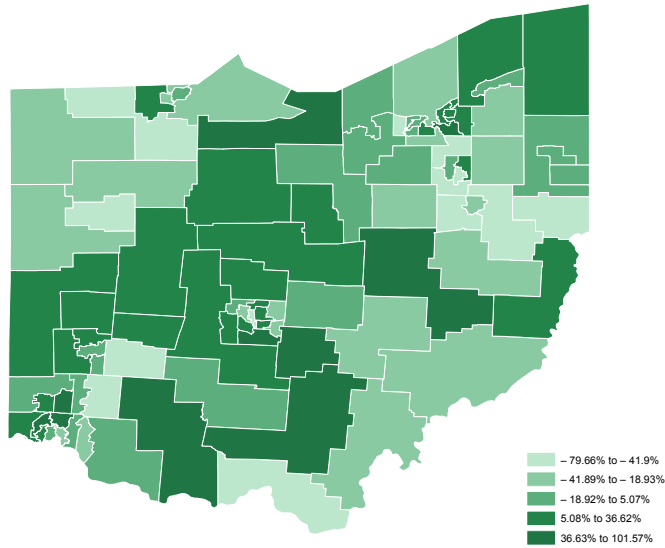
PUMA = Public Use Microdata Area.

Note: Statewide estimate at 0.63.

Source: Community Data Analytics 2017 Planning Ratio Estimation Program computations derived from 2011–2015 American Community Survey Public Use Microdata Sample

Exhibit 7

Deviation of School-Age Children Multipliers for Two-Bedroom, Multifamily Units From the State Estimate: 93 Ohio PUMAs Using a Mover Sample



PUMA = Public Use Microdata Area.

Source: Community Data Analytics 2017 Planning Ratio Estimation Program computations derived from 2011–2015 American Community Survey Public Use Microdata Sample

Multipliers for Small Geography

The key challenge to multipliers at the local level is an insufficient sample size. Although the use of a mover sample reduces variances, estimates at the PUMA level for highly differentiated housing configurations may still be unreliable. To develop residential demographic multipliers for small geographies, we need to explore (1) the determination of an appropriate sample size threshold and (2) other means to increase sample sizes.

Minimum Sample Size

Burchell, Listokin, and Dolphin (2006) used 600 weighted observations—that is, the estimated number of households—as the minimum sample size in each housing configuration. Given that the average ratio of weighted to unweighted observations is about 21 to 1, they possibly assumed 30 unweighted observations, as in a *t*-test protocol.¹² CDA's analysis of the ratios between weighted and unweighted observations finds that this criterion may not be desirable. Because multiple weights are used, the ratio varies more when the number of unweighted observations decreases. Exhibit 8 shows that 600 weighted observations can be derived from only 13 unweighted observations.

¹² Because multiple sample weights are used, the ratio between weighted and unweighted observations varies by housing configuration and geography.

Exhibit 8

Relationship of Weighted and Unweighted Observations

Selected Configurations and Geography	PUMS Used	Ratio of Weighted to Unweighted		
		Minimum	Median	Maximum
Recently built unit sample				
Maryland, 45 configurations	Census 2000	17.6	21.2	24.8
	ACS 2010–2014	14.9	21.3	24.5
Mover sample				
Maryland, 45 configurations	Census 2000	17.8	20.8	22.8
	ACS 2010–2014	18.2	22.3	27.1
New Jersey, 75 configurations	ACS 2011–2015	17.8	22.7	26.8
Ohio, 73 configurations	ACS 2011–2015	17.6	22.3	28.4
Ohio, 93 PUMAs				
Three-bedroom single-family	ACS 2011–2015	13.6	21.0	31.6
Two-bedroom all multifamily	ACS 2011–2015	16.7	25.3	43.4
Two-bedroom townhome	ACS 2011–2015	8.2	21.5	37.0
Two-bedroom multifamily	ACS 2011–2015	18.4	26.9	47.5
5+ unit structure, rented				

*ACS = American Community Survey. PUMA = Public Use Microdata Area. PUMS = Public Use Microdata Sample.
 Note: State-level ratios pertain to housing configurations of fewer than five bedrooms and various blended categories but exclude configurations that cannot generate multipliers.
 Source: Community Data Analytics 2016 and 2017 Planning Ratio Estimation Program computations derived from 2000 census PUMS and from 2010–2014 and 2011–2015 ACS PUMS*

Our recommendation of minimum sample size is 30 unweighted observations. In addition, estimates should be discarded by additional tests. One test is to identify if the value of an estimate decreases when the number of bedrooms increases. Based on the observation that the number of occupants positively correlates to the number of bedrooms, any multiplier that behaves differently should be considered as associated with an unacceptable sampling error. A second test is a coefficient of variation (CV) test. At the PUMA level, a stringent CV of 0.3 is generous for average household size but fails one-half of the school-age children estimates. One reason is that the value of one-bedroom and studio school-age children is close to 0, suggesting that the CV test should be applied only to two-bedroom or more configurations. The two tests are concurrent, but the CV test is more generous. When the number of unweighted observations is less than 30, the multipliers may pass a CV test at 0.4.

Other Means for Local Multipliers

Other means to increase sample size include (1) blending housing configurations, (2) avoiding age or grade differentiation, (3) expanding the geographical coverage, or (4) extending the time span of ACS PUMS records to more than 5 years.

Some types of housing are rarely built, such as owner-occupied multifamily units in rural areas, three- and four-bedroom rental multifamily units, and other five-or-more-bedroom units. Researchers can instead focus on popular configurations by combining all four-or-more-bedroom units into one category or not differentiating the tenure when the distribution is lopsided. Another possibility is to apply a known ratio between broad categories in terms of tenure or bedroom numbers in the same geography to derive a set of estimates for its subcategories. Applying these ratios assumes the ratios are uniformly distributed—an assumption that requires further study.

Differentiating multipliers by age cohorts or grade groups exacerbates the insufficient sample size problem. Even when the sample size seems adequate, the margin of error can be large. As such, such differentiation should not be conducted at the local level.

The other solution is to generate multipliers by a PUMA aggregate despite the fact that doing so weakens geographical specificity. Our preliminary study shows that an aggregate of five PUMAs provides reasonable estimates for most popular configurations. One way is to merge several contiguous PUMAs together. However, choosing PUMAs with unifying characteristics, such as whether a PUMA is rural or urban, seems to be more indicative.

Creating an extended ACS PUMS by pooling nonoverlapping records is another possibility. We can pool records from various ACS 1-year PUMS. This method involves using year-specific replicate weights. Combining nonoverlapping ACS multiyear PUMS requires scaling down replicate weights to prevent overestimation of weighted observations. If housing rent and value are involved, researchers have to develop dollar adjustment factors to inflate the monetary value to the end year. Pooling PUMS record could contain information originating more than a decade ago.¹³ At the PUMA level, this method has to overcome the issue that the 2010 and 2000 PUMAs are not the same spatial units, even if the codes are the same.¹⁴ Missouri Census Data Center provides a crosswalk to generate allocation factors between these the two sets of PUMAs. When the forward and backward allocation factors are nearly 100 percent, a prorated estimate works reasonably well. Otherwise, researchers face an uncertain degree of biases because of boundary changes.

More Research of Demographic Multipliers

The latest ACS PUMS records provide new possibilities for generating multipliers beyond the traditional school-age children and average household size. Notable examples are per-unit ratios of workers, commuters who use transit, numbers of cars available, persons who are foreign born, and so on. The use of additional variables can delineate samples by income groups or housing affordability and households living in condominiums or receiving welfare.

The need for multipliers for specialized housing—such as age-restricted development, transit-oriented development, and affordable housing—is increasing. The PUMS records, however, do not provide variables precise enough for these development types. If they are careful, researchers should be able to develop a surrogate sample based on multiple variables. The development of surrogate samples reminds us that if resources are available, post-occupancy surveys should be conducted to verify PUMS-based multipliers.

Another challenge is the possibility of multipliers for a spatial unit smaller than a PUMA or cutting across PUMAs, acknowledging that PUMA estimates are not uniformly distributed within. Can researchers use several variables to select ACS PUMS records from the region to develop a synthetic

¹³ In the case of a pooled ACS 2005–2015 PUMS, the earliest year the householder moved into a unit is either 1996 or 2002 because of MV classification. The earliest year of structure built is 2000, because YBL groups together units built between 2000 and 2004.

¹⁴ To conform to the requirement of a minimum of 100,000 persons, PUMA boundaries are modified after population count is available, usually 2 years after the decennial census.

geography that resembles the major attributes of the spatial unit in question? This process inevitably requires multiple iterations of adding and replacing records until optimal results are achieved (Simpson et al., 2017; Wong, 1992). The other option is to run a multivariate analysis to model multipliers by the determinants of housing configurations at the PUMA, county, and state levels to detect a pattern of concurring coefficients. Another path is to develop a simulation model for a quasi-experimental matching of larger geographies to smaller places (Rephann and Isserman, 1994). All these experimental models require resources that CDA has yet to acquire.

Acknowledgments

The authors thank Sirius C. Fuller and Simson L. Garfinkel at the Census Bureau, David W. Wong at the George Mason University Department of Geography and GeoInformation Science, and Garrett Hincken at the Center City District of Philadelphia for advice in refining the ideas expressed here. They also thank Richard Voith, president of Econsult Solutions, Inc., and his partners for supporting our research. Between 2005 and 2014, Jill Strube at the City of Smithville collaborated with the lead author in advancing the methodology in using the latest American Community Survey Public Use Microdata Sample to develop multipliers for Public Use Microdata Area aggregates. Rinoa Guo and Hanbo Xu of Econsult Solutions, Inc. developed the models for the Planning Ratio Estimation Program in 2016. The authors also acknowledge Robert Burchell, David Listokin, William Dolphin, and their Rutgers University team members for decades of work in pioneering research in demographic multipliers that greatly informs our endeavor.

Authors

Sidney Wong is the project lead at Community Data Analytics and a former city-planning faculty member at the University of Pennsylvania.

Daniel Miles is a vice president and associate principal at Econsult Solutions, Inc.

Gabrielle Connor is a research analyst at Econsult Solutions, Inc.

Brooke Queenan is a senior research analyst at Econsult Solutions, Inc.

Alison Shott is an associate director at Econsult Solutions, Inc.

References

Burchell, Robert W., and David Listokin. 1978. *The Fiscal Impact Handbook: Estimating Local Costs and Revenues of Land Development*. New Brunswick, NJ: Center for Urban Policy Research.

Burchell, Robert W., David Listokin, and William R. Dolphin. 2006. *Fannie Mae Foundation Residential Demographic Multipliers: Projections of the Occupants of New Housing*. Washington, DC: Fannie Mae Foundation.

———. 1994. *Development Impact: Assessment Handbook*. Vol. 1. Washington, DC: Urban Land Institute.

———. 1985. *The New Practitioner's Guide to Fiscal Impact Analysis*. New Brunswick, NJ: Center for Urban Policy Research.

Listokin, David, Ioan Voicu, William Dolphin, and Matthew Camp. 2006. *Who Lives in New Jersey Housing? New Jersey Residential Demographic Multipliers*. New Brunswick, NJ: Center for Urban Policy Research.

Rephann, Terance, and Andrew Isserman. 1994. "New Highway as Economic Development Tools: An Evaluation Using Quasi-Experimental Matching Methods," *Regional Science and Urban Economics* 24 (6): 723–751.

Simpson, Matthew, Scott H. Holan, Christopher Wikle, and Jonathan R. Bradley. 2017. "Estimating Distributions for Populations Within Nested Geographies With Public-Use Data." Paper presented at ACS Data Users Conference, May 11–12.

Wong, David W.S. 1992. "The Reliability of Using the Iterative Proportional Fitting Procedure," *Professional Geographer* 44 (3): 340–348.

Wong, Sidney. 2005. *Fiscal Impacts of the Proposed Beazer Projects, Hopewell Township, New Jersey*. Draft final report. Philadelphia: University of Pennsylvania.

Additional Reading

Livingston, Gretchen, and D'Vera Cohn. 2012. *U.S. Birth Rate Falls to a Record Low; Decline Is Greatest Among Immigrants*. Washington, DC: Pew Research Center.

Welsha, Ainsley, and David Wadleya. 2014. "The Relationship of Dwelling Size and Population Potential: Practical Implications for Strategic Urban Planning," *Urban Policy and Research* 32 (1): 85–105.

Wong, Sidney. 2017a. "Demographic Multipliers → Development Impacts." Paper presented at National Planning Conference, May 6–9.

———. 2017b. "Challenges in Using PUMS To Generate Small Area Demographic Multipliers To Assess Development Impacts." Paper presented at ACS Data Users Conference, May 11–12.

———. 2016a. "A New Technique for More Accurate Impact Assessment." <http://www.econsultsolutions.com/a-new-technique-for-more-accurate-impact-assessment/>.

———. 2016b. "Demographic Multipliers: Data Mining & Measuring Development Impacts," *Planning & Technology Today* 113 (Summer/Fall): 6–7.

Graphic Detail

Geographic Information Systems (GIS) organize and clarify the patterns of human activities on the Earth's surface and their interaction with each other. GIS data, in the form of maps, can quickly and powerfully convey relationships to policymakers and the public. This department of Cityscape includes maps that convey important housing or community development policy issues or solutions. If you have made such a map and are willing to share it in a future issue of Cityscape, please contact john.c.huggins@hud.gov.

Visualizing Residential Vacancy by Length of Vacancy

Alexander Din
Dewberry

Data

The United States Postal Service (USPS) collects counts of occupied and vacant residential and business addresses across the United States. The counts of vacant addresses are broken down by length of vacancy. This information is useful for researchers, planners, analysts, and others concerned with vacancy issues in making informed decisions to address them. For example, communities affected by recent vacancy may require different approaches and solutions than communities affected by long-term vacancy. I demonstrate how to use a modified box plot with swarm plot, paired with a micromap, to visualize ratios of different lengths of residential vacancy compared with total residential vacancy. I developed visualizations at the census tract level for the Pittsburgh, Pennsylvania Core Based Statistical Area (CBSA) on a quarterly basis from the first quarter of 2012 until the first quarter of 2017.

The U.S. Department of Housing and Urban Development provided the USPS data in tabular format, and the data were joined to spatial census tract data using ArcGIS 10.4, a geographic information system. The Pittsburgh CBSA is composed of 711 census tracts. Each census tract has counts of residential vacancies for four categories: less than 1 year,¹ between 1 and 2 years, between 2 and 3 years, and greater than 3 years. I created ratios for each category by dividing the count for that category by the total number of vacant residences; thus, one census tract produces ratios for each category that describe the composition of each census tract. It is important to note that the ratios do not indicate whether residential vacancy counts are low or high in a census tract or whether a low or high percentage of residential addresses are vacant within the census tract.

¹ Counts of residential vacancies of 1 year or less were transformed from several fields in the original data set, which were vacancies of 3 months or less, 3 to 6 months, and 6 to 12 months.

Modified Box Plot With Swarm Plot

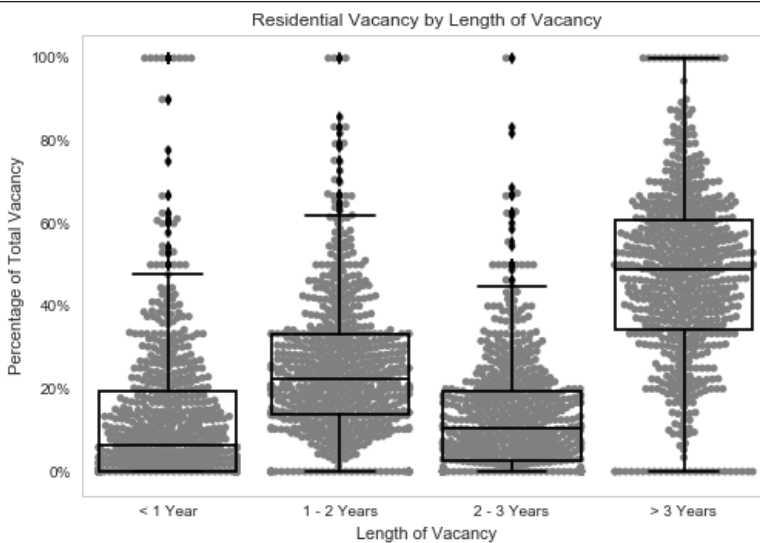
In order to understand each of the four categories for 711 census tracts, I developed a set of descriptive statistics to more succinctly represent the data set. The five-number summary is a set of descriptive statistics that includes the minimum, lower quartile, median, upper quartile, and maximum values of a data set. The standard method for visualizing the five-number summary is the box plot, also called a box and whiskers plot. At the center of the box plot is the median value; from there, the box extends to the lower and upper quartiles, and the whiskers extend to the minimum and maximum values of the category. However, the minimum and maximum values are not always the smallest and largest values but are instead capped at 1.5 times the interquartile range. Values outside of the minimum and maximum range are considered potential outliers and are represented with points. The outlier points for the standard box plot do not indicate whether multiple potential outliers exist at a specific value.

One limitation of the box plot is that it does not show the distribution of points within the plot. To overcome this limitation, the box plots have been modified to include a swarm plot. The swarm plot places a point for each census tract at the corresponding value along the box plot. If multiple census tracts have the same value, the swarm plot then plots the points outward horizontally, indicating a grouping of census tracts at a particular value, including at potential outlier values. This information is useful to visually inspect for potential clustering of values.

The graphic in exhibit 1 shows box plots for each category of residential vacancy for the first quarter of 2012 in the Pittsburgh CBSA. For residences that have been vacant 1 year or less, the median is slightly less than 10 percent. This indicates that in 50 percent of census tracts, residences that have

Exhibit 1

Box Plot Showing Distribution of Each Vacancy Type for the First Quarter of 2012



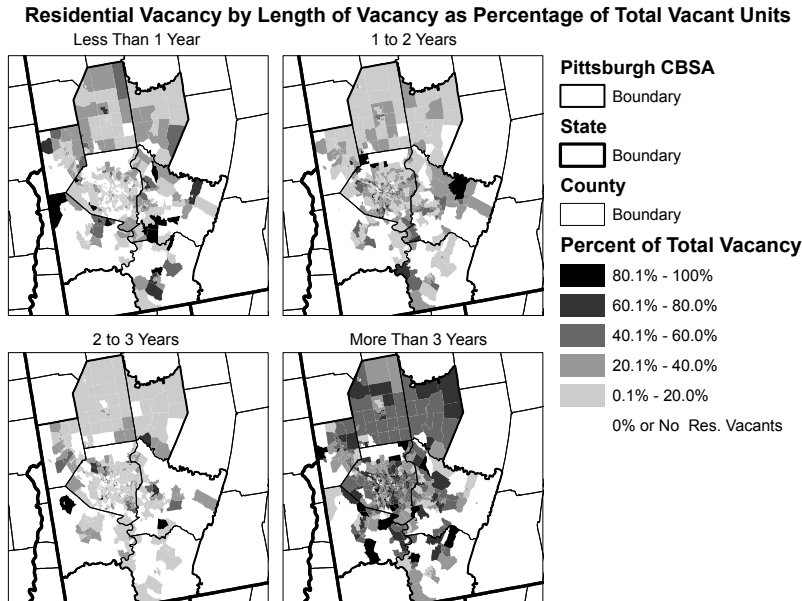
been vacant for 1 year or less compose less than 10 percent of all residential vacancies in those census tracts. For residences that have been vacant for 2 to 3 years, the maximum is approximately 45 percent. Census tracts where 45 percent or more of vacant residences have been vacant for 2 to 3 years may be potential outliers, including the grouping of census tracts at approximately the 50-percent mark. All categories except residences vacant for more than 3 years have potential outliers. The set of modified box plots present a clear method for visualizing the composition of residential vacancy across the Pittsburgh CBSA.

Micromap

The micromap is a set of maps that display related information on a single graphic (Mast, 2014). The micromap displays the four categories of residential vacancy using the same equal interval classification system in order to make the maps directly comparable to each other. Visualizing the data as a set of maps enables the reader to visually inspect the data in a spatial context. In exhibit 2, residences that have been vacant for less than 1 year appear to make up a greater proportion of vacant residences in the outer counties of the Pittsburgh CBSA. Residences that have been vacant for greater than 3 years appear to be concentrated in the central and northern regions of the Pittsburgh CBSA.

Exhibit 2

Micromap Showing Vacancy of Each Type for the First Quarter of 2012



Repeatable Process

For this analysis, I processed data and created outputs for 21 time frames. In exhibit 3, the median for residences vacant for less than 1 year increased to approximately 20 percent, and the median for residences vacant more than 3 years increased to nearly 60 percent. Coupled with the reduced range of the minimum and lower quartiles of the medium-term box plots, these changes indicate that recent vacancies and long-term vacancies compose a greater share of residential vacancies, whereas medium-term vacancies compose a smaller share. Comparing exhibit 4 with exhibit 2 shows that medium-term vacancy constitutes a smaller proportion of total residential vacancy across many census tracts, whereas recent vacancy and long-term vacancy appear to constitute a larger proportion.

The power of modern GIS and programming languages allows for the quick computing of multiple iterations of data processing and output techniques. Researchers, analysts, and others can quickly inspect visualizations across many time frames. While processing the data for these visualizations, one can transform data for further analysis, such as clustering, trending, and forecasting.

Exhibit 3

Box Plot Showing Distribution of Each Vacancy Type for the First Quarter of 2017

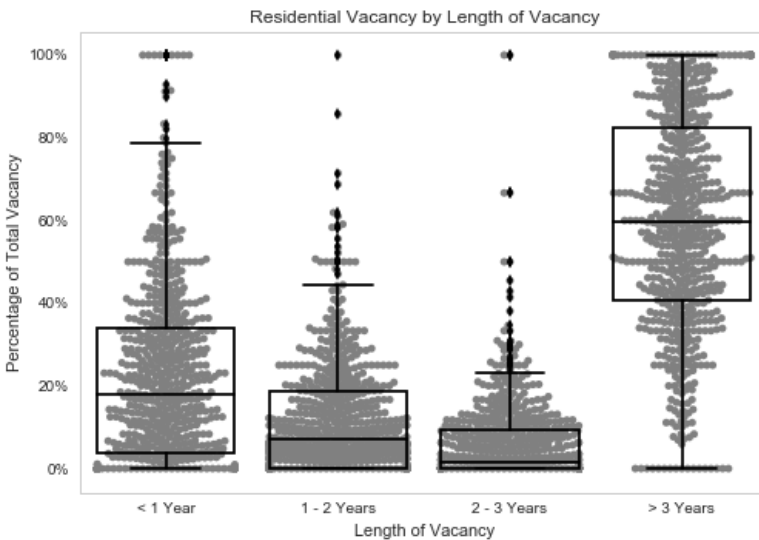
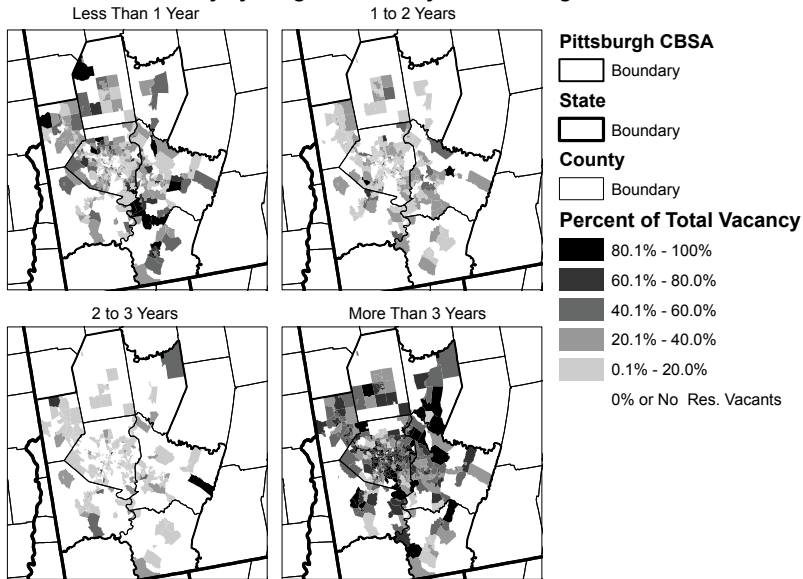


Exhibit 4

Micromap Showing Vacancy of Each Type for the First Quarter of 2017

Residential Vacancy by Length of Vacancy as Percentage of Total Vacant Units



Notes

ArcGIS 10.4 and the Spyder IDE were used for data processing. Python libraries used were Pandas 0.19.2, Matplotlib 2.0.0, and Seaborn 0.7.1. The Python scripts are available at <https://github.com/alexdingis/residential-vacancy-by-length>.

Author

Alexander Din is a Geographic Information Systems analyst at Dewberry.

References

Mast, Brent. 2014. "Comparative Micromaps and Changing State Homeownership Rates," *Cityscape* 16 (2): 163–167.

Impact

A regulatory impact analysis must accompany every economically significant federal rule or regulation. The Office of Policy Development and Research performs this analysis for all U.S. Department of Housing and Urban Development rules. An impact analysis is a forecast of the annual benefits and costs accruing to all parties, including the taxpayers, from a given regulation. Modeling these benefits and costs involves use of past research findings, application of economic principles, empirical investigation, and professional judgment.

Instituting Smoke-Free Public Housing: An Economic Analysis

Alastair McFarlane

Yves Djoko

Alex Woodward

U.S. Department of Housing and Urban Development

The views expressed in this article are those of the authors and do not necessarily represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. government.

Background

The U.S. Department of Housing and Urban Development (HUD) promulgated a smoke-free regulation to require public housing agencies (PHAs) to implement a policy that all PHA-owned indoor areas and all areas within 25 feet of public housing be free from lit tobacco products.¹ PHAs may exercise their discretion to include a prohibition of electronic nicotine delivery systems (ENDS) in their individual smoke-free policies if they deem such a prohibition beneficial. If successful, the rule will eliminate public housing residents' exposure to secondhand smoke (SHS) while at home and eliminate any adverse effects of smoking on the property.²

¹ "Instituting Smoke-Free Public Housing: Final Rule." 24 CFR Parts 965–966. *Federal Register* 81 (233) December 5, 2016.

² Pizacani et al. (2012) studied changes in behavior due to smoke-free policies in public housing in Portland, Oregon, and found that the change in frequent exposure to SHS (exposure multiple times per week) as a result of the rule was a significant decline from 41 to 17 percent of nonsmokers.

HUD's Office of Public and Indian Housing (PIH) has already issued several notices since 2009 encouraging and guiding PHAs to adopt smoke-free policies.³ More than 570 of the 3,090 PHAs had implemented their own voluntary smoke-free policies by the time the final rule was issued (HUD, 2016). However, federal policy is necessary to ensure that all public housing residents are equally protected. PHAs cannot capture all the benefits of a smoke-free environment—improved health and fewer lives lost due to catastrophic fires—and so will underprovide the optimal level of protection to its tenants. HUD's smoke-free policy will realize indoor environmental benefits for tenants, a gain for society that would not occur otherwise. Furthermore, a HUD-imposed smoke-free rule will reduce the policy uncertainty facing PHAs willing, but hesitant, to institute their own smoke-free regulations. A mandatory rule provides a strong signal that HUD will support actions to enforce a smoke-free policy.

In this article, we assess the costs and benefits of instituting smoke-free housing in public housing. We conclude that the implementation of a smoke-free policy would improve the health outcomes of public housing residents, and provide other tangible benefits such as reducing the risk of catastrophic fires, and lowering maintenance costs. Implementation of the smoke-free policy in public housing will generate some regulatory, compliance, and enforcement costs, which are estimated to be lower than the expected benefits of the rule.

Tenants' Benefits

SHS creates a negative externality by causing and exacerbating serious health problems through passive smoking (HHS, 2006; Öberg et al., 2010). According to the U.S. Surgeon General, no level of exposure to SHS is risk free (HHS, 2006). SHS has been proven to increase the likelihood of strokes and coronary heart disease among adults and of asthma attacks, lower respiratory infection, ear infection, and sudden infant death syndrome among children (HHS, 2014). One common source of exposure is in the home. Studies have shown SHS can travel from hallways into apartments and between neighboring units (King et al., 2010). Residual nicotine on indoor surfaces ("thirdhand" smoke) aggravates the health hazard of indoor smoking (Ramirez et al., 2014; Thomas et al., 2014). Controlling for socioeconomic variables, a child's exposure to tobacco smoke is greater in multiunit housing than in attached or single-family homes (Wilson et al., 2011). Reducing the prevalence of adverse health events and conditions will result in benefits stemming from longevity, reduced medical costs, and health improvements.

Approaches to Monetizing Health Benefits

The variability in the estimates of the social costs of environmental tobacco smoke (Gruber and Koszegi, 2008) is considerable. This variability may be due to differences in researchers' approaches and assumptions, evidence used, and even implicit interests of researchers (Chaloupka and Warner, 2000). One common approach is to approximate the difference in medical costs between individuals exposed to SHS and those without SHS exposure (Waters et al., 2009). Although

³ See Notice PIH-2009-21 at https://www.hud.gov/program_offices/administration/hudclips/notices/pih/09pihnotices; Notice PIH-2010-21 at <portal.hud.gov/hudportal/documents/huddoc?id=10-21hsgn.pdf>; Notice PIH 2012-22 at <portal.hud.gov/hudportal/documents/huddoc?id=12-22hsgn.pdf>; and Notice PIH-2012-25 at <portal.hud.gov/hudportal/documents/huddoc?id=12-25pihn.pdf>.

such a method does not provide an estimate of the consumer surplus derived from a longer and healthier life, it does serve as a useful proxy of the minimum willingness to pay to avoid negative health consequences. One Centers for Disease Control and Prevention (CDC) report (King, Patel, and Babb, 2014) estimated that the annual reduction in medical costs per PHA resident from a smoking ban would be \$91 (2012 U.S. dollars), or \$94 million in aggregate medical cost savings for PHA residents.⁴ Another study (Mason et al., 2015), which relies on World Health Organization morbidity and mortality data, estimated annual direct medical cost savings ranging from \$110 million to \$150 million (2011 U.S. dollars).

Indirect costs to society could include the lost value of wages, fringe benefits, and services through SHS-related morbidity (Chaloupka and Warner, 2000). Productivity losses represent a significant addition beyond the medical costs in the CDC studies referenced. Gravelle and Zimmermann's (1994) calculation of the health effects yields estimates of costs ranging from \$0.01 to \$0.21 per pack of cigarettes consumed. Under similar assumptions, Viscusi (1994) found the social costs of SHS to be \$0.27 per pack. Chaloupka and Warner (2000) assumed a broader range of health consequences and placed the cost at about \$1.20 per pack or greater. On a per-pack basis, Behan, Eriksen, and Lin's (2005) approximation of \$10 billion cost estimate translates to roughly \$0.76 per pack. Sloan et al. (2004) estimated the damages borne by a smokers' family, through increased health costs and reduced income, to be \$7.50 per pack (2015 U.S. dollars). For example, applying a central estimate of \$1.45 per pack would give us an aggregate annual benefit of \$68 million of benefits across the affected PHA population.⁵ Instead of relying on this estimate, we turned to the economic theory of housing markets.

Willingness To Pay

Rather than counting every individual impact—a task virtually impossible when considering secondary and tertiary effects—a measure of the willingness to pay for a smoke-free environment isolates the global net benefit to tenants of smoke-free housing. We do not need to know why someone is willing to pay more, but only that they have expressed a preference. A tenant would value smoke-free housing for many reasons: health benefits from limiting the exposure to SHS in terms of length of life, quality of health, and medical expenses; and quality of life effects in terms of living in a more agreeable indoor environment, reduced risk of fire, and spending less time reacting to the negative side effects of SHS. Even smokers may favor smoke-free housing if their households include nonsmokers. A willingness-to-pay approach simplifies the estimate of benefits; we do not need to know anything about the exposure to smoke while at home relative to other locations during the day or how SHS filters from one unit to another. We do not suggest that every tenant of public housing has an excellent understanding of the relative risk of SHS. Instead, individuals are expected to value a smoke-free environment as if they were participants in the private housing market. Two common ways exist of uncovering the valuation of any nontraded goods: stated preference (surveys) or revealed preference (regression analysis of market price data on property characteristics).

⁴ King, Peck, and Babb (2014) estimated the annual savings associated with banning smoking in public housing to be \$152.91 million. Healthcare costs accounted for \$94.01 million of the total.

⁵ \$68 million avoided damage per year = \$1.45 avoided damage per pack x 182.5 packs per year per smoker x 257,258 smokers living in housing with no smoke-free rule.

Revealed Preference

Surveys of renters' valuation demonstrate that tenants of multiunit housing are willing to pay more for smoke free units (King et al., 2010). Residents say that they are willing to give up other amenities and/or pay a rent premium to live in smoke-free units. Other surveys of renters show that residents tend to "support" smoke-free policies (Henrikus et al., 2003). A study of vacation rental properties finds that the rental rates for smoke-free properties is 11 percent greater than for comparable ones, controlling for other indicators of quality (Benjamin, Jud, and Winkler, 2001).⁶ The empirical result is not incontestably applicable, because it is derived from the demand of higher income renters for vacation properties. An imbalance with supply may also affect the estimated premium; at the time of the hedonic research, only a minority of the stock was smoke free, as compared to the present, when smoke-free housing is the norm for vacation rentals. The study provides convincing evidence that, in general, renters value smoke-free housing. Unpublished estimates by HUD researchers of the smoke-free premium ranges from 3 to 8 percent of monthly housing costs for otherwise comparable units.

Contingent Valuation/Stated Preferences

Real estate appraisers find that the stated preference method is a reliable alternative if available market data are insufficient to complete a rigorous hedonic analysis (Mundy and McClean, 1998). The Public Health Advocacy Institute reported the results of a survey of 1,304 residents of multiunit properties concerning smoke-free housing (Massachusetts Smoke-Free Housing Project, 2009). Two-thirds of residents consider SHS to be "very harmful" and one-fourth "somewhat harmful." Specific results from the report include the finding that 43 percent of residents are willing to pay more to live in a smoke-free building. Of the residents who are willing to pay more for smoke-free housing, 26 percent are willing to pay 20 percent more, and 63 percent are willing to pay 10 percent more. Another study (Hewett et al., 2007) found that nearly one-half of all households surveyed would be extremely or very interested in living in smoke-free buildings. All types of households stated a preference for smoke-free housing; a large proportion stated that they would be willing to pay more to live in smoke-free housing.

Dollar Value of Premium

The dollar value of the smoke-free rent premium can be calculated from one of two bases for tenants of public housing: the rent that the subsidized tenant pays or the total cost of providing the unit. The total cost approximates the market rent, so using that as a base would provide an estimate of the market value of smoke-free policies. The alternative approach of using the tenants' payment as a base provides a potentially better measure of what public housing residents could afford to pay for the benefit of smoke-free housing. Both approaches are relevant to understanding the regulatory impact.

On average, public housing tenants pay \$275 a month for their units. The federal government spends \$512 on average per month per unit for operating expenses. The market rent for an equivalent apartment would be \$787 (\$275 + \$512). The intensity of desire for a smoke-free

⁶ The tradition is long established of using this approach to value environmental quality (for example, see Chay and Greenstone, 2005). For a description of the economic theory underlying hedonic analyses, see Rosen (1974).

policy will vary by tenant, but on average we assume households are willing to pay 5 percent more for smoke-free housing.⁷ The annual per-household net benefit of smoke-free housing units would range from \$165 to \$472. We estimate that 732,000 units in PHAs are without a smoke-free policy. Tenants would therefore realize a surplus of between \$121 million and \$346 million if those units converted to smoke free. This range (\$100 million to \$300 million) of benefits is similar to estimates of the benefits calculated using other methods. Our high estimate of tenant benefits is greater than other studies because our hedonic estimate implicitly includes valuation of comfort and reduced risk of fire to tenants.

Accounting for Smokers

Some smokers (and potentially nonsmokers) may prefer to live in housing where smoking is *allowed*. This preference may stem from a low valuation of health benefits and the perception that smoke-free rules impose high inconvenience costs. A survey of public housing residents in Washington state found that nonsmokers are more supportive of smoke-free policies; 82 percent of nonsmokers agree with a nonsmoking policy compared with 41 percent of smokers (Ballor, Henson, and MacGuire, 2013). For the portion of smokers who support smoke-free housing, we assume that the net benefit is captured by the estimate of the rent premium, which was estimated across all households, both smokers and nonsmokers. However, those individuals who were surveyed did not have the option of stating a willingness to pay to avoid smoke-free housing.

We assume that the benefit for those smoker households against smoke-free housing (59 percent) is \$0. The impact of the smoke-free rule is measured only by the compliance cost for smokers. This formulation provides a conservative estimate of net benefits because most smokers will derive some benefit from smoke-free housing even if outweighed by costs. Our approach allows for negative net benefits for a significant portion (59 percent) of the smoking population.

Encouraging Cessation

Additional health benefits will arise if smokers are encouraged to quit or reduce smoking.^{8,9} A previous cost-benefit analysis by HUD (the regulatory impact analysis of the proposed rule) was criticized for counting the compliance costs to smokers but not any of the potential benefits to smokers. The rent premium approach solves this difficult issue by including pro-smoking ban smokers among the beneficiaries.

⁷ The premium of 5 percent was developed from information available in Massachusetts Smoke-Free Housing Project (2009). The premium corresponds to our own unpublished hedonic model estimates.

⁸ A meta-study by Levy et al. (2004) summarizes empirical findings concerning the effects of tobacco control policies. Vijayaraghavan et al. (2013) studied the effects of voluntary smoke-free regimens on quit rates of smokers of different income levels.

⁹ Such estimates of health gains can be complicated by having to confront the controversial issue of estimating “lost pleasure” of no longer smoking. For a discussion, see Chaloupka, Gruber, and Warner (2015) and Jin et al. (2015).

Compliance Costs: Smokers

Multiple methods of compliance are available to PHA smokers; they will choose the option (or combination of options) with the lowest net cost, given their preferences and circumstances.¹⁰ Most obviously, smokers can comply by smoking in designated areas. Smokers can also reduce the number of cigarettes they smoke at home; studies show that smoking bans reduce the prevalence of smoking. Another option would be to switch to a different means of nicotine delivery (for example, a nonprohibited tobacco product such as ENDS). Empirical studies provide evidence of substitution between cigarettes and ENDS, although the cross-price elasticity can be very low or not statistically significant (Grace et al., 2014; Huang et al., 2014; Zheng et al, 2016). Despite the current lack of both health and economic estimates of the impacts of active ENDS use, we believe that allowing ENDS could substantially lower the cost of compliance to smokers.

Smokers with a high opportunity cost of time, who have mobility limitations,¹¹ live farthest from areas where smoking is permitted, or who face harsh weather or dangers (such as traffic or crime) in outdoor areas would be more likely to comply with the rule by quitting smoking or switching to an alternative means of nicotine delivery. The simplest approach of estimating the burden on smokers is to estimate the inconvenience cost as the opportunity cost of the time spent travelling to a designated area, disregarding alternative compliance options. This method gives us an idea of the maximum compliance cost of the rule because [we assume] smokers will adjust their behavior to the lowest cost alternative. The compliance costs for smokers may be calculated as time lost per cigarette. The average HUD-subsidized resident lives in a three-story building with a working elevator. The round-trip travel time should be no more than 2 minutes on average or 3 minutes for those residents with impaired movement. It is difficult to measure the inconvenience of smoking outside versus inside. Many will respond by smoking cigarettes faster if smoking at the designated area is a burden. The lost utility could be measured as the adjustment burden: a differential of 2 minutes for smoking a cigarette slowly versus quickly is reasonable. We add those 2 minutes to the 2 to 3 minutes of travel time. Recipients of housing assistance consume, on average, 10 cigarettes per day at home,¹² resulting in a compliance burden of 40 to 50 minutes per day. Estimating the opportunity cost of time of unemployed smokers is discussed in detail in the Regulatory Impact

¹⁰ An implicit distinction is made between the utility of a smoker and of a nonsmoker. The Surgeon General concluded in 1988 that “cigarettes and other forms of tobacco are addictive.” Subsequent reports of the Surgeon General have documented the mechanisms by which smoking is addictive, including for youth (HHS, 2014, 2006, 1988).

¹¹ The survey of the Portland, Oregon PHA (Pizacani et al., 2012) found that those tenants with mobility impairments are less likely to comply with smoking restrictions.

¹² Recipients of housing assistance consume, on average, between 12 and 14 cigarettes per day (National Health Interview Survey, 2013). Not all cigarettes are smoked at home, and this rule will have no incremental impact on those cigarettes consumed by the smoker away from home. In keeping with standard measures, it is safe to assume that at least 2 to 3 cigarettes will be smoked away from home. A resulting measure would therefore result in approximately 10 cigarettes smoked per day at home. The unemployed, with more leisure time, may have more opportunities to smoke away from the building.

Analysis of the HUD Smoke-Free Final Rule. The average annual cost of compliance for smokers is \$729.¹³ Applying this cost, measured across the 139,000 affected smokers¹⁴ in PHAs nationwide against smoke-free policy results in an aggregate cost of \$101 million.

Public Housing Agency Benefits

Indoor smoking increases the cost of maintaining the quality of housing unit and rehabilitating it at turnover. The costs of extra cleaning, painting, flooring, and repair of damaged items at unit turnover can add up quickly for units previously occupied by smokers. Studies find that operators of multiunit housing with smoke-free policies report a reduction in costs (Snyder et al., 2015). One private manager of 4,500 units in the southeastern United States estimated a reduction of costs of \$100 per unit at turnover (HUD, 2014). This manager also noted that in previous years, two fires related to smoking cost the company more than \$1 million. One PHA interviewed priced the turnover cost-savings of smoke-free units at \$700 for a three-bedroom unit (HUD, 2014). Estimates provided by the Smoke-Free Housing Coalition of Maine (2008) based on data from two PHAs indicate renovation costs of a smoking unit can be two to five times that of a smoke-free unit.¹⁵ The same organization released data from subsidized housing facilities in New England showing that such benefits could be even greater for units occupied by heavy smokers (Smoke-Free Housing Coalition of Maine, n.d.).

The incremental cost of a smoking tenant depends on the extent to which a PHA reacts to damage. This cost will vary by the building: for example, many PHAs have chosen linoleum floors to promote indoor health, because such floors are easier to clean. Repainting a unit at turnover is standard practice regardless of whether a unit was occupied by a smoker. Comparing public housing with all other subsidized housing may overestimate the operational benefits of a PHA smoke-free policy. Much of subsidized housing competes on the private market (housing choice vouchers or low-income housing tax credits) or is in mixed-income developments (such as HOPE VI developments), for which property standards are high. However, for this rule, our estimates should be relevant to PHAs. Using data from HUD's 2014 report and from the Smoke-Free Housing Coalition of Maine (n.d.), moderated by considering only light smokers and without floor replacement for the units, we estimate a range of \$350 to \$700 per turnover.

To calculate the savings in maintenance costs from a national smoke-free policy, we used the estimated turnover rate in public housing of 9 percent (HUD Picture of Subsidized Housing data, 2009 updated to 2013), and the 732,000 units of public housing not covered by a PHA smoke-free

¹³ This cost is calculated from an average of employed households (28 percent) and those households with income from another source (72 percent). The percentage shares are derived from survey data collected for the 2015 "Quality Control for Rental Assistance Subsidies Determinations" report. The daily burdens are 40 and 50 minutes, respectively. The opportunity costs per hour are \$5.00 and \$1.58, respectively, for an average cost of \$2.54 per hour.

¹⁴ Not all smokers will be affected by this rule. A large proportion already smokes outside. King, Patel, and Babb (2014) report that the "national prevalence of smoke-free home rules increased from 56.7% to 91.4% among households with no adult cigarette smokers and from 9.6% to 46.1% among households with at least one adult smoker." The affected proportion would be 53.9 percent of the estimated 257,000 smoking adults residing in PHAs without any smoke-free rules.

¹⁵ From the Maine data, one group of researchers (King, Peck, and Babb, 2014) estimated renovation costs were \$1,674 per turnover.

policy, resulting in 66,000 turnover units annually that would be affected by the final rule. Smokers will inhabit approximately one-third (32.7 percent) of these units, or 21,545.¹⁶ To adjust for the fact that not all smokers of a household smoke indoors, we further multiply the number of turnover units inhabited by smokers by the percentage of smokers' homes without their own self-imposed smoke-free rule (53.9 percent), to arrive at a base of 11,600 units. Using the per-unit benefit estimates, we arrive at an aggregate estimate of \$4 million to \$8.1 million in annual renovation-related cost savings compared with the CDC's estimate of \$21 million using the data from Maine (King, Peck, and Babb, 2014).

Benefits From Reduced Risk of Fires

Smoking-related fire is the leading cause of fire deaths in multiunit properties.¹⁷ The damages from the fires caused by smoking in multiunit housing are disproportionately high compared with other causes of fires. Smoking causes 6 percent of all fires but 15 percent of all property damage, 31 percent of all civilian deaths, and 11 percent of all civilian injuries in fires in multiunit housing (NFPA, 2013: table 5B).¹⁸ Smoke-free policies would reduce fire risk. Correspondingly, fire and hazard insurance would be less expensive. Chaloupka and Warner (2000) reported that fire and hazard insurance premiums paid by landlords is higher for every smoker in a building. Our own research found insurance discounts of as much as 10 percent for properties with a smoke-free policy.

The units in public housing without a PHA smoke-free rule comprise approximately 2.6 percent of the U.S. multiunit housing stock.¹⁹ We assume that the risk and damage from fires caused by smoking in public housing are the same as for all multiunit housing.²⁰ Thus, a rigorously enforced smoke-free rule would avert approximately 170 fires, 3.4 civilian deaths, 12 injuries, and \$3 million in property damages annually.²¹ For the value of a statistical life, we use a standard estimate of \$8 million. The total gain from preventing an expected 3.4 deaths annually is \$27.2 million (\$8 million x 3.4). NFPA (2014) suggested an injury cost equal to 60 percent of a U.S. Consumer Product Safety Commission estimate equal to \$166,000 (1993 U.S. dollars). In 2014 U.S. dollars, the National Fire Protection Association cost per injury would be \$163,000. The value of the

¹⁶ The CDC calculated the percentage of smokers in subsidized housing (not the percentage of units with at least one adult smoker) at 32.7 percent (King, Peck, and Babb, 2014).

¹⁷ The causes of fire leading to fire death in multiunit housing are (in descending order): smoking materials, cooking equipment, electrical distribution and lighting equipment, intentional, heating equipment, candles, and playing with heat source (U.S. Fire Administration, 2008).

¹⁸ The annual average for all fires in multiunit housing for which the cause was known was 102,000 fires, 380 civilian deaths, and \$1 billion in damages (calculated by HUD from Table 5B). The data from the National Fire Protection Association concerning fire damage to multifamily housing do not include the costs to firefighters.

¹⁹ We calculated this percentage of 2.6 percent by dividing the 732,086 units with no official smoke-free policy by the estimated 28.1 million occupied units in structures with 2 or more units (2015 American Housing Survey).

²⁰ This analysis follows that of the CDC (King, Peck, and Babb, 2014) but uses data for multifamily housing, which are similar but more appropriate.

²¹ We calculated these numbers by taking 2.6 percent of 6,400 fires, 130 civilian deaths, 480 injuries, and \$116 million in damage.

averted damages caused by injuries would be approximately \$2 million (12 injuries x \$163,000). We assume that the harm to consumers from a reduced risk is already captured by the rent premium.

Compliance Costs: Public Housing Agencies

Administrative costs consist of public hearings, training for staff and residents, revisions of leases, installation of no-smoking signs, and time costs of enforcement. These costs will likely be larger during the first year, when all households are briefed in person. After the first year of implementation, only new admissions (9 percent of public housing households)²² would need to be counseled on the requirement. Based on public housing administrative data, 1.4 million residents would be briefed in the first year, and 126,000 residents would be briefed in succeeding years. A discussion of the smoke-free rule as an addendum to a lease would likely take a maximum of 15 minutes. The aggregate time burden would be an additional 350,000 hours in the first year of implementation and 31,500 afterward. BLS data of total compensation for government office workers²³ yields a cost to employers of approximately \$30 per hour. Notification of residents would cost PHAs approximately \$10 million in the first year and \$1 million for each year afterward.²⁴ The cost of notification is only one of the compliance costs facing PHAs. Other costs include infrastructure, enforcement, and eviction proceedings costs.²⁵ The total compliance cost to all PHAs during a typical year is expected to be \$7.7 million. Additional upfront costs are expected during the first year of implementation.

Conclusion

The implementation of a smoke-free policy in public housing will improve the health of public housing residents, reduce the risk of catastrophic fires, and lower overall maintenance costs. Nevertheless, the implementation of the smoke-free policy in public housing will generate some regulatory, compliance, and enforcement costs. Tenants are expected to gain a surplus between \$121 million and \$346 million but pay a compliance cost of \$101 million. Such a high compliance cost is unlikely given the potential of adjusting behavior. Benefits are likely to be greater if any smokers cease smoking as a result of the rule. Net benefits for residents of public housing range from \$20 million to \$245 million. PHAs will gain from reduced maintenance costs ranging from \$4 million to \$8.1 million and reduced fire damage costs of \$3 million. Recurring compliance costs for PHAs are estimated to be \$7.7 million annually, for annual net benefits of -\$0.7 million to \$3.4 million. First-year costs to PHAs are likely to be higher, by as much as \$9 million, but will be offset by the gains to the tenants.

²² Turnover rate measured by the variable “Percent moved in past year” from Picture of Subsidized Households Data, U.S. Department of Housing and Urban Development, <https://www.huduser.gov/portal/datasets/assthsgh.html>.

²³ <http://www.bls.gov/news.release/ecec.t04.htm>.

²⁴ This equation is only one example of the compliance cost on PHAs. To see a detailed description of public housing burden, please see HUD’s Smoke-Free Final RIA.

²⁵ Pizacani et al. (2012) interviewed 11 property managers of smoke-free public housing and found that 10 of them found enforcement to be extremely difficult. Nonetheless, 8 of the managers were in favor of the policy and noted few tenant complaints.

Acknowledgments

The authors thank Elizabeth Ashley for many helpful suggestions, Mark Nagurny and Caleb Smith for research assistance, and Kurt Usowski, Michael Hollar, and Danilo Pelletiere for useful discussions on a previous version of this report.

Authors

Alastair McFarlane is Supervisory Economist at the U.S. Department of Housing and Urban Development.

Yves Djoko is a senior economist at the U.S. Department of Housing and Urban Development.

Alex Woodward is a student trainee at the U.S. Department of Housing and Urban Development.

References

- Ballor, Douglas, Heidi Henson, and Kathleen MacGuire. 2013. "Support for No-Smoking Policies Among Residents of Public Multiunit Housing Differs by Smoking Status," *Journal of Community Health* 38 (6): 1074–1080.
- Behan, Donald, Michael Eriksen, and Yijia Lin. 2005. "Economic Effects of Environmental Tobacco Smoke." Society of Actuaries. <https://www.soa.org/research-reports/2000-2006/research-economic-effect/>.
- Benjamin, John, Donald Jud, and Daniel Winkler. 2001. "The Value of Smoking Prohibitions in Vacation Rental Properties," *Journal of Real Estate Finance and Economics* 22 (1): 117–128.
- Chaloupka, Frank, Jonathan Gruber, and Kenneth E. Warner. 2015. "Accounting for 'Lost Pleasure' in a Cost–Benefit Analysis of Government Regulation: The Case of the Food and Drug Administration's Proposed Cigarette Labeling Regulation," *Annals of Internal Medicine* 162 (1): 64–65.
- Chaloupka, Frank, and Kenneth Warner. 2000. "Chapter 29: The Economics of Smoking." In *Handbook of Health Economics*, edited by Anthony J. Culyer and Joseph P. Newhouse. Amsterdam, The Netherlands: Elsevier: 1539–1627.
- Chay, Kenneth Y., and Michael Greenstone. 2005. "Does Air Quality Matter? Evidence From the Housing Market," *Journal of Political Economy* 113 (2): 376–424.
- Grace, Randolph, Bronwyn Kivell, and Murray Laugesen. 2014. "Estimating Cross-Price Elasticity of e-Cigarettes Using a Simulated Demand Procedure," *Nicotine and Tobacco Research* 17 (5): 592–598.
- Gravelle, Jane, and Dennis Zimmerman. 1994. "Cigarette Taxes To Fund Health Care Reform: An Economic Analysis," *National Tax Journal* 47 (3): 575–590.
- Gruber, Jonathan, and Botond Koszegi. 2008. *A Modern Economic View of Tobacco Taxation*. Paris, France: International Union Against Tuberculosis and Lung Disease.

Hennrikus, Deborah, Paul Pentel, and Sandra Sandell. 2003. "Preferences and Practices Among Renters Regarding Smoking Restrictions in Apartment Buildings," *Tobacco Control* 12: 189–194.

Hewett, Martha, Sandra Sandell, John Anderson, and Marsha Niebuhr. 2007. "Secondhand Smoke in Apartment Buildings: Renter and Owner or Manager Perspectives," *Nicotine & Tobacco Research* 9 (Suppl_1): S39–S47.

Huang, Jidong, John Tauras, and Frank Chaloupka. 2014. "The Impact of Price and Tobacco Control Policies on the Demand for Electronic Nicotine Delivery Systems," *Tobacco Control* 23: iii41–iii47.

Jin, Lawrence, Donald Kenkel, Feng Liu, and Hua Wang. 2015. "Retrospective and Prospective Benefit-Cost Analyses of US Anti-Smoking Policies," *Journal of Benefit-Cost Analysis* 6 (1): 154–186.

King, Brian, Roshni Patel, and Stephen Babb. 2014. "Prevalence of Smokefree Home Rules—United States, 1992–1993 and 2010–2011," *MMWR Morbidity and Mortality Weekly Report* 63: 765–769.

King, Brian A., Richard M. Peck, and Stephen D. Babb. 2014. "National and State Cost Savings Associated With Prohibiting Smoking in Subsidized and Public Housing in the United States," *Preventing Chronic Disease*: 11.

King, Brian A., Mark J. Travers, K. Michael Cummings, Martin C. Mahoney, and Andrew J. Hyland. 2010. "Secondhand Smoke Transfer in Multiunit Housing," *Nicotine and Tobacco Research* 12: 1133–1141.

Levy, David T., Frank Chaloupka, and Joseph Gitchell. 2004. "The Effects of Tobacco Control Policies on Smoking Rates: A Tobacco Control Scorecard," *Journal of Public Health Management and Practice* 10 (4): 338–353.

Mason, Jacquelyn, William Wheeler, and Mary Jean Brown. 2015. "The Economic Burden of Exposure to Secondhand Smoke for Child and Adult Never Smokers Residing in U.S. Public Housing," *Public Health Reports* 130 (30): 230–244.

Massachusetts Smoke-Free Housing Project, Public Health Advocacy Institute. 2009. *Market Demand for Smoke-Free Rules in Multi-Unit Residential Properties and Landlords' Experiences With Smoke-Free Rules*. Boston, MA: Northeastern University School of Law. <http://www.phaionline.org/wp-content/uploads/2009/04/phaihosingsurvey.pdf>.

Mundy, Bill, and David McLean. 1998. "The Addition of Contingent Valuation and Conjoint Analysis to the Required Body of Knowledge for the Estimation of Environmental Damage to Real Estate," *The Journal of Real Estate Practice and Education* 1 (1): 1–19.

National Fire Protection Association (NFPA). 2014. *The Total Cost of Fire in the United States*. Quincy, MA: National Fire Protection Association. <http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics/fires-in-the-us/overall-fire-problem/total-cost-of-fire>.

———. 2013. *Home Structure Fires—2013*. Quincy, MA: National Fire Protection Association.

Öberg Mattias, Maritta Jaakkola, Annette Prüss-Ustun, Christian Schweizer, and Alastair Woodward. 2010. *Second-Hand Smoke: Assessing the Environmental Burden of Disease at National and Local Levels*. Geneva, Switzerland: World Health Organization.

Pizacani, Barbara, Julie Maher, Kristen Rohde, Linda Drach, and Michael Stark. 2012. “Implementation of a Smoke-Free Policy in Subsidized Multiunit Housing: Effects on Smoking Cessation and Secondhand Smoke Exposure,” *Nicotine and Tobacco Research* 14: 1027–1034.

Ramírez, Noelia, Mustsafa Z. Özel, Alastair C. Lewis, Rosa B. Marcé, Francesc Borrull, and Jacqueline F. Hamilton. 2014. “Exposure to Nitrosamines in Thirdhand Smoke Increases Cancer Risk in Non-Smokers,” *Environment International* 71: 139–147.

Rosen, Sherwin. 1974. “Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition,” *Journal of Political Economy* 82: 34–55.

Sloan, Frank, Jan Ostermann, Christopher Conover, Donald Taylor Jr., and Gabriel Picone. 2004. *The Price of Smoking*. Cambridge, MA: MIT Press.

Smoke-Free Housing Coalition of Maine. 2008. “Allowing Smoking in Your Building Is Expensive and Dangerous.” Fact sheet. http://breatheeasymaine.org/wp-content/uploads/sites/2/2016/11/BEC_SFH_Older-Adult-Fact-Sheet_March2008.pdf.

———. n.d. “Save Money and Your Building.” <http://smokefreeforme.org/save-money/>.

Snyder, Kimberly, Janice Vick, and Brian King. 2015. “Smoke-Free Multiunit Housing: A Review of the Scientific Literature,” *Tobacco Control*. DOI:10.1136/tobaccocontrol-2014-051849pmid:25566811.

Thomas, Janet L., Stephen S. Hecht, Xianghua Luo, Xun Ming, Jasjit S. Ahluwalia, and Steven G. Carmella. 2014. “Thirdhand Tobacco Smoke: A Tobacco-Specific Lung Carcinogen on Surfaces in Smokers’ Homes,” *Nicotine and Tobacco Research* 16: 26–32.

U.S. Department of Health and Human Services (HHS). 2014. *The Health Consequences of Smoking: 50 Years of Progress: A Report of the Surgeon General*. Washington, DC: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

———. 2006. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Washington, DC: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

———. 1988. *The Health Consequences of Smoking: Nicotine Addiction*. Washington, DC: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Center for Health Promotion and Education, Office of Smoking and Health.

U.S. Department of Housing and Urban Development (HUD). 2016. “HUD-PIH Program Data.” Raw data. Washington, DC: U.S. Department of Housing and Urban Development.

———. 2014. *Change Is in the Air: An Action Guide for Establishing Smoke-Free Public Housing and Multifamily Properties*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes. <https://portal.hud.gov/hudportal/documents/huddoc?id=smokefreeactionguide.pdf>.

———. 2009. "Picture of Subsidized Housing." Raw data. Washington DC: U.S. Department of Housing and Urban Development.

U.S. Fire Administration. 2008. *Residential Structure and Building Fires*. Washington, DC: U.S. Department of Homeland Security, Federal Emergency Management Association. https://www.usfa.fema.gov/downloads/pdf/publications/residential_structure_and_building_fires.pdf.

Vijayaraghavan, Maya, Karen Messer, Martha White, and John Pierce. 2013. "The Effectiveness of Cigarette Price and Smoke-Free Homes on Low-Income Smokers in the United States," *American Journal of Public Health* 103 (12): 2276–2283.

Viscusi, Kip. 1994. "Cigarette Taxation and the Social Consequences of Smoking," *Tax Policy and the Economy* 9: 51–101.

Waters, Hugh, Steven Folders, Nina Alesci, and Jonathan Samet. 2009. "The Economic Impact of Exposure to Secondhand Smoke in Minnesota," *American Journal of Public Health* 99 (4): 754–759.

Wilson, Karen, Jonathan Klein, Aaron Blumkin, Mark Gottlieb, and Jonathan Winickoff. 2011. "Tobacco-Smoke Exposure in Children Who Live in Multiunit Housing," *Pediatrics* 127: 1.

Zheng, Yiqing, Chen Zhen, Daniel Dench, and James Nonnemaker. 2016. "U.S. Demand for Tobacco Products in a System Framework," *Health Economics*. DOI: 10.1002/hec.3384.

Policy Briefs

The Policy Briefs department summarizes a change or trend in national policy that may have escaped the attention of researchers. The purpose is to stimulate the analysis of policy in the field while the policy is being implemented and thereafter. If you have an idea for future Policy Briefs, please contact david.l.hardiman@hud.gov.

HOPE and Choice for HUD-Assisted Households

Paul Joice

U.S. Department of Housing and Urban Development

The views expressed in this article are those of the author and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. government.

Abstract

From 1993 to 2011, the U.S. Department of Housing and Urban Development's (HUD's) HOPE VI Program provided 260 grants totaling \$6 billion for the demolition and redevelopment of severely distressed public housing. In 2010, HUD created the Choice Neighborhoods program as the successor to HOPE VI and has since awarded \$633 million in implementation grants. Considerable debate has taken place among researchers, policymakers, and advocates about whether HOPE VI, Choice Neighborhoods, and similar redevelopment programs provide benefits for the residents who were living in properties before redevelopment. This article explores existing research on HOPE VI and presents early evidence on the experiences of residents in Choice Neighborhoods redevelopment sites, with particular emphasis on household incomes and attrition rates (that is, the rate at which households cease to receive housing assistance). Six years after the initial awarding of Choice Neighborhoods grants, household incomes have increased and attrition rates have been lower than one would expect based on the experiences of similar programs.

Introduction

Since the establishment of HUD in 1965, the agency has struggled to address the deterioration of assisted housing, particularly public housing, and urban neighborhoods. Often, those two challenges have gone hand in hand. Public housing was racially segregated, targeted to households with very low incomes, and typically built in older, inner-city neighborhoods that previously contained substandard housing (Khadduri, 2015; Schill, 1993). Over time, these neighborhoods declined further, and public housing properties deteriorated with age. Many factors contributed to this decline, including concentration of poverty, migration of jobs and middle-income households to the suburbs, poor design of public housing properties, inadequate funding of public housing, public housing occupancy and rent rules, public housing management practices, and more (Schill, 1993).

By the late 1980s, many public housing properties had accrued substantial capital needs. In 1992, the National Commission on Severely Distressed Public Housing issued a report estimating that 86,000 public housing units—6 percent of the total public housing stock at the time—were severely distressed and in need of major rehabilitation or replacement (National Commission on Severely Distressed Public Housing, 1992). Congress responded in 1992 with the creation of the HOPE VI Program. The central goal of HOPE VI was to transform severely distressed public housing through rehabilitation, demolition, and reconstruction. Secondary goals of HOPE VI included the deconcentration of poverty and provision of supportive services for public housing residents. Projects funded by HOPE VI varied widely across sites and over time. Some sites used HOPE VI funding to demolish public housing and rebuild in the same location with the same number of units, improving the physical condition of the public housing without substantially redesigning the site or the community. Other sites used HOPE VI to demolish public housing and replace the demolished units with housing choice vouchers, focusing on deconcentrating poverty through vouchers. Still other sites used HOPE VI to completely transform a development and neighborhood, attempting to reduce the concentration of poverty by demolishing public housing and rebuilding a mix of housing—including public housing, other assisted housing, and market rate housing. The program evolved substantially over time. It was a “laboratory to test new and often contentious ideas about public housing finance, management, and design” (Popkin et al., 2004: 3).

From 1993 to 2011, HUD provided 260 HOPE VI grants totaling \$6 billion (Gress, Cho, and Joseph, 2016). In total, 98,592 public housing units were demolished—more than the 86,000 severely distressed units that were estimated to exist in 1992—and 97,389 new units were built, including 55,318 public housing units and 28,979 affordable units (Gress, Cho, and Joseph, 2016). However, the remaining public housing stock continues to include many severely distressed developments in low-opportunity neighborhoods. Finkel et al. (2010) estimated that the backlog of capital needs among the nearly 1.2 million public housing units was approximately \$26 billion, with each subsequent year accruing an additional \$3.4 billion in capital needs. In 2015, 4,792 out of 26,711 public housing developments (18 percent) were in census tracts with poverty rates of 40 percent or higher.¹

¹ Author’s analysis of HUD’s 2015 *Picture of Subsidized Households*. This analysis excludes 4,101 public housing developments for which the census tract poverty rate was unavailable.

HUD created the Choice Neighborhoods program (hereafter, Choice) in 2010 as the successor to the HOPE VI Program, with the objective of continuing to support large-scale redevelopment of severely distressed assisted housing. Choice embraces many of the programmatic elements of the HOPE VI Program, such as an emphasis on mixed finance redevelopment, the inclusion of a variety of housing types (including market rate units and subsidized units targeted to different income groups), one for one replacement of hard units of subsidized housing, right to return for original residents, and a greater emphasis on supportive services for residents (Buron et al., 2002; HUD, 2015, 2013). Whereas HOPE VI could be used only for public housing redevelopment, Choice can target other HUD-assisted housing, primarily project-based Section 8 properties supported by HUD's Office of Multifamily Housing Programs. A wider variety of local entities can apply for Choice funds, including public housing agencies, local governments, nonprofit organizations, and even for-profit entities—if they partner with another eligible entity, such as the public housing agency. Choice also places greater emphasis on comprehensive neighborhood transformation and explicitly aims to benefit existing residents in the neighborhoods and assisted housing properties being redeveloped (HUD, 2015, 2013).

Considerable debate has occurred among researchers, policymakers, and advocates about whether HOPE VI, Choice, and similar redevelopment programs provide benefits for residents living in properties before redevelopment. This article explores this issue on several fronts. First, it reviews existing literature on resident experiences in HOPE VI. Second, it examines attrition—that is, the rate at which households cease to participate—in HUD's core programs, using administrative data. Finally, the article presents new evidence on the experiences of Choice residents during the first 6 years of the program.

Literature Review—HOPE VI Resident Experiences

One of the most common criticisms of HOPE VI was that the program did not do enough to ensure that original residents of targeted properties benefited from its redevelopment. HOPE VI grants focused on properties meeting the definition of severely distressed, and demolition or full replacement was usually necessary. This level of construction activity required that residents of HOPE VI properties relocate, at least *temporarily*, during demolition and reconstruction. Furthermore, many grantees relocated residents on a *permanent* basis, either by moving them to another public housing property or giving them housing choice vouchers (also known as Section 8 vouchers) to use in the private rental market (Polikoff, 2009). HOPE VI properties were in neighborhoods with concentrated poverty, often having poverty rates in excess of 60 percent (Kingsley, Johnson, and Pettit, 2003). Reducing the concentration of poverty was one key objective of the HOPE VI program. Policymakers and staff implementing HOPE VI grants believed that the program was in the best interest of residents—whether residents returned to completed (and hopefully, vastly improved) HOPE VI properties or simply relocated to better neighborhoods (Cisneros, 2009; Katz, 2009). Some residents, however, felt as if they were being pushed aside and that redevelopment was meant to make their neighborhood more appealing to new, higher-income residents (Keating, 2000; Popkin et al., 2004; Wexler, 2001; Zielenbach, 2002).

The evidence shows that, for the most part, HOPE VI helped improve the quality of the housing and neighborhoods in which original residents lived. Buron et al. (2002) surveyed residents of

eight HOPE VI properties that were either complete or in the process of completion, meaning that original residents had relocated and were either living in temporary units, had returned to completed developments, or had settled in new locations (using vouchers in the private rental market or living in different public housing properties). Buron et al. found that, in this short period of time, the average neighborhood poverty rate experienced by HOPE VI affected households declined from 43 to 29 percent. They also examined the housing conditions experienced by relocated HOPE VI residents and found that 56 percent were living in units in better condition than before HOPE VI activity, and another 29 percent rated their new homes as about the same as their prior homes. Comey (2007) found that in 2005, 85 percent of households living in new HOPE VI units rated their housing as being in excellent or good condition. Kingsley, Johnson, and Pettit (2003) focused on households who moved out of HOPE VI properties using housing choice vouchers and found that these households experienced declines in average neighborhood poverty rate from 61 to 27 percent. Households that moved to other public housing, rather than taking vouchers, did not experience the same magnitude of decline in poverty rates or improvement in housing conditions, but these households did move to homes and neighborhoods that were better than those in which they lived before HOPE VI, primarily because their pre-HOPE VI environments were “intolerable” (Popkin, Levy, and Buron, 2009: 485). Households affected by HOPE VI—whether or not they returned to completed developments—also experienced dramatic improvements related to public safety. For example, the percentage of residents reporting big problems with drug sales in the neighborhood dropped from 78 percent at baseline to 33 percent 4 years later (Popkin, Levy, and Buron, 2009).

Although HOPE VI activity correlates with many positive changes in the living environments of affected households, the program has drawn criticism for its effect on baseline residents. In particular, the number of residents able to move back into completed HOPE VI units has continued to fall short of expectations. When asked at baseline, 70 percent of HOPE VI residents replied that they would like to return to their properties after rehabilitation (Buron et al., 2002). The HOPE VI grantees typically expected about one-half of baseline residents to return, but expected return rates declined over time as grantees worked through the redevelopment process (GAO, 2003). Actual return rates are even lower. GAO (2003) concluded that, for 39 sites where reoccupancy was completed at the time of analysis, 17 had return rates below 25 percent and only 16 had return rates of 50 percent or higher. In their analysis of data that HOPE VI grantees report to HUD, Gress, Cho, and Joseph (2016) found a mean return rate of 27 percent for the 237 HOPE VI developments reporting data on reoccupancy. In some sites, HOPE VI grantees lost track of relocated residents or imposed screening criteria that made it difficult for baseline residents to return (GAO, 2003; Popkin et al., 2004).

Of course, low rates of return do not tell the whole story. Some households may have decided after relocation that they preferred their new homes and neighborhoods, and thus chose not to return. Evidence previously cited—showing that HOPE VI relocatees (particularly those with vouchers) experienced substantial improvements in neighborhood poverty—suggests that this situation is likely to have occurred for some residents (Cunningham, 2004). Also, many reasons unrelated to HOPE VI could explain why baseline residents might not return. Households exit HUD assistance regularly for reasons that can be positive, such as income gains that make them no longer eligible

or choosing to purchase a home, or negative, such as death, eviction, or incarceration. Popkin, Levy, and Buron (2009) reported that, as of 2005, 10 percent of HOPE VI Panel Study respondents were renting in the private market with no assistance, 4 percent had become homeowners, and 1 percent were either homeless or in prison. The pace of research on HOPE VI slowed after 2005, along with the program's appropriations. Several projects surveyed HOPE VI residents in the late 1990s and early 2000s, but no followup surveys have been conducted since 2005. As a result, many unanswered questions exist about how HOPE VI affected original residents.

Household Attrition in HUD's Core Programs

What proportion of baseline residents should we expect, or hope, to return to a property after redevelopment through programs such as HOPE VI or Choice? As discussed previously, HOPE VI properties have typically experienced return rates below 50 percent. Is this unacceptably low, indicative of mistakes made by HUD and HOPE VI grantees in program administration? Alternatively, is there effectively an upper bound limiting return rates due to factors beyond the control of HUD and HUD grantees?

To return to redeveloped properties, residents must continue to receive HUD assistance during the course of redevelopment, which usually takes several years. Thus, to understand the rate of return, we must first understand how likely HUD-assisted households are to continue receiving HUD assistance for 4 or more years. Several researchers have examined how long HUD-assisted households live in subsidized housing, using a concept known as "length of stay."

Many length-of-stay analyses, based on limited data, involved identifying groups of active HUD-assisted households and computing the difference between the current date (that is, the date of the data extract) and the date on which each household was admitted to the program through which they receive assistance. Lubell, Shroder, and Steffen (2003) found that the median length of stay for public housing residents was 4.69 years. Thompson (2007) built on Lubell, Shroder, and Steffen's analysis in several ways, including using a broader cross section of data to include households that had exited assistance programs, and found slightly shorter lengths of stay—a median of 3.97 years for public housing. Both studies found that mean length of stay tends to be much longer than median length of stay, reflecting a skewed distribution with a large number of households having short stays. These studies and others also examined how length of stay varies with different household characteristics, such as age of the householder, family composition, disability status, and income. Most studies found that length of stay was longer for households that included elderly people or people with disabilities, households that lived in public housing (rather than received housing choice vouchers), and for households with lower incomes (Ambrose, 2005; Olsen, Davis, and Carrillo, 2005). Recent work from McClure (2017) indicates that length of stay has increased in recent years and that earlier findings that public housing households had longer lengths of stay than voucher households may no longer hold true.

The length-of-stay literature is highly relevant to this effort to understand return rates in redevelopment programs. However, length-of-stay research may not provide the best benchmark for assessing return rates in redevelopment programs for one important reason—length-of-stay analyses are point-in-time estimates that use *retrospective* data for the population *currently receiving assistance*,

with *currently* meaning at the time of data extraction for analysis.² In this article, I use a cohort approach and examine attrition over time. I identify a baseline population at a particular point in time, several years in the past, and follow them longitudinally as they proceed toward the present. This analysis relies on HUD administrative data collected via the HUD-50058 and HUD-50059 forms and stored in the Public and Indian Housing Information Center (PIC) and Tenant Rental Assistance Certification System (TRACS) databases.

I choose December 1, 2010 as the reference date, at which time I estimate that 4,675,777 households were receiving assistance through HUD's rental housing assistance programs.³ Exhibit 1 shows how this total breaks down by program.

I estimate that 4,106,835, or 88 percent, of the 4,675,777 households in the 2010 cohort were still receiving assistance on December 1, 2011. In each subsequent year, more households dropped out, and after 5 years nearly 40 percent of the December 2010 cohort had left HUD assistance. The largest year-over-year attrition rate was in the first year from December 1, 2010, to December 1, 2011. Exhibits 2 and 3 show the attrition of this cohort over time.

Exhibit 1

Active Households on December 1, 2010, by Program Type

Program Type	Number of Households	Percent
Mod Rehab	34,607	0.74
Rent Supp/RAP	20,843	0.45
Section 202/811	145,727	3.12
Section 236/BMIR	41,135	0.88
Housing choice voucher	2,132,277	45.60
Public housing	1,051,312	22.48
Project-based Section 8	1,249,876	26.73
Total	4,675,777	100.00

BMIR = below market interest rate. Mod Rehab = moderate rehabilitation. RAP = rental assistance payment. Rent Supp = rent supplement.

Exhibit 2

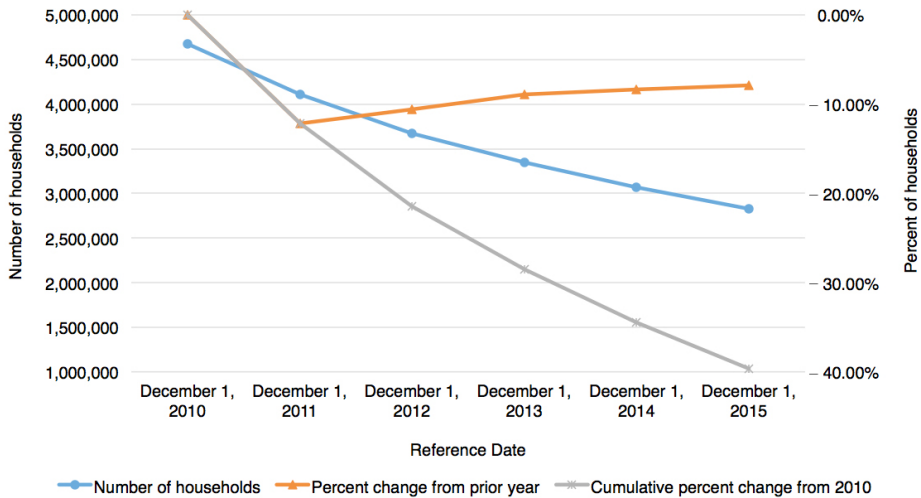
Households From December 1, 2010 Cohort Still Active in Subsequent Years

Date	Number of Households From 2010 Cohort	Percent Change From Prior Year	Cumulative Percent Change From 2010
December 1, 2010	4,675,777	NA	NA
December 1, 2011	4,106,835	- 12.17	- 12.17
December 1, 2012	3,671,702	- 10.60	- 21.47
December 1, 2013	3,344,242	- 8.92	- 28.48
December 1, 2014	3,063,867	- 8.38	- 34.47
December 1, 2015	2,822,287	- 7.88	- 39.64

NA = not applicable.

² In the case of McClure (2017), which used survival analysis, the data were limited to households that had left assistance.

³ HUD's rental housing assistance programs include public housing, housing choice vouchers (tenant-based and project-based), Project-Based Rental Assistance contracts administered through HUD's Office of Multifamily Housing Programs, and a few other small legacy programs such as Moderate Rehabilitation and Rent Supplement. This analysis does not include households assisted by HUD funds distributed to local governments, such as through the HOME Investment Partnerships and Community Development Block Grant programs.

Exhibit 3**Count and Percent Change of December 1, 2010 Cohort in Subsequent Years**

The preceding analysis includes households participating in all HUD's major rental assistance programs, but a nearly identical pattern is evident for the 1,051,312 households that were in public housing on December 1, 2010. After 5 years, 40.4 percent of these baseline public housing households were no longer assisted.

Compared with the length-of-stay literature previously discussed, these findings seem to reflect a lower level of attrition. Results from Lubell, Shroder, and Steffen (2003) and Thompson (2007) suggest that one-half of HUD-assisted households will leave HUD assistance after 4 or 5 years. I find that only 40 percent had left after 5 years. Several possible explanations exist for this difference. My analysis focuses on a different time period, and it is possible that changing economic conditions in the wake of the Great Recession made HUD-assisted households less likely to leave assistance. Recent evidence from McClure (2017) supports this hypothesis, showing that length of stay has increased in recent years. Another likely explanation is that length-of-stay analyses are right censored. Most households being analyzed have not yet exited assistance, so their length of stay would be underestimated. The cohort-based approach I use is not affected by right-censored data, because I do not attempt to determine the entire duration of assistance.

This analysis requires an important caveat. Residents of HOPE VI and Choice developments may be systematically different from the general population of HUD-assisted households. Popkin et al. (2002) found that 53 percent of the HOPE VI residents in their sample had lived in public housing for 10 or more years, and 72 percent had lived in public housing for 5 or more years. The same study also found that HOPE VI residents struggled with serious health problems. It is likely that the residents of HOPE VI and Choice developments are less willing or less able to move, than the general HUD-assisted population. HOPE VI and Choice developments are, by definition, among the most distressed properties in the HUD portfolio. It is reasonable to assume that people who

had the means and inclination to move elsewhere would have done so long before redevelopment. Those who remain by the time redevelopment begins are probably more likely to be long-time residents who will continue to receive assistance throughout the redevelopment period.

In the following sections, I examine attrition among Choice grantees and use two benchmark trend lines for comparison. Benchmark 1 relies on the attrition rate presented in exhibit 2, based on the entire population of HUD-assisted households. The attrition rate slows over time, as short-term residents cycle out and the remaining population consists of people who require sustained support. Benchmark 2 is adjusted to reflect the likelihood that residents in Choice developments are systematically different from the HUD-assisted population at large. For benchmark 2, I assume attrition of 8 percent in year 1; this rate is roughly equal to the attrition rate after 3 years for the larger HUD-assisted population, based on an assumption that Choice developments are likely to have fewer short-term residents. For benchmark 2, I assume an additional 6-percent attrition in year 2 and an additional 4-percent attrition in each subsequent year. This projection is purely hypothetical for the purpose of comparison and should not be used to evaluate success or failure in a particular site.

Choice Neighborhoods—Program Overview and Data Sources

In August 2011, HUD awarded the first Choice Neighborhoods implementation grants to support revitalization efforts in Boston, Massachusetts; Chicago, Illinois; New Orleans, Louisiana; San Francisco, California; and Seattle, Washington. As of April 2017, HUD had awarded Choice implementation grants worth \$633,020,927 to 22 communities. As with HOPE VI, these revitalization efforts exhibit considerable variation. Many involve demolition of obsolete buildings and new construction, and some include rehabilitation of old buildings. Each grantee identifies a target development, a public or assisted housing site to rebuild or rehabilitate, which can range in size from roughly 100 to 500 or more units. Each grantee also identifies the boundaries of the surrounding neighborhood, which they will seek to revitalize. Some grantees use Choice as part of an ambitious plan to remake an entire neighborhood. For example, in the downtown-adjacent Yesler neighborhood of Seattle, the production of as many as 8,000 units—including subsidized units, market-rate rentals, and for-sale units—is expected during the course of a decade or more. Other grantees have more modest production goals. For example, Boston's Quincy Corridor redevelopment focuses primarily on rehabilitation and preservation of affordable housing and will not result in an increase from the 129 units at baseline (HUD, 2015, 2013).

For this article, the most important forms of variation across sites relate to redevelopment time frames and relocation strategies. In San Francisco's Eastern Bayview neighborhood, the Alice Griffith public housing development is being replaced in a phased approach whereby new units are produced before old units are demolished. This phased approach should allow for residents to remain in place until new units are available and to move only once. Other sites use an approach common under HOPE VI in which residents leave their original units and temporarily live off site as new units are built. Many factors drive construction schedules, including availability of financing, scope of the redevelopment, local market conditions, and grantee capacity. Boston's Quincy

Corridor and San Francisco's Eastern Bayview neighborhoods received Choice grants at the same time, but Boston completed its construction when San Francisco had barely begun. Of course, grantees that received Choice funding in 2011, such as Boston and San Francisco, faced much different circumstances than grantees that received Choice funding in 2015, such as Atlanta and Kansas City. As a result, it is important to examine each Choice grant independently, or at the very least, to group by cohort. This article focuses primarily on the first cohort of Choice implementation grantees, which received funding in 2011 and have had more than 5 years to make progress on redevelopment.

It is notoriously difficult to conduct a true evaluation of programs like Choice that do not consist of a single consistent intervention and do not lend themselves to the development of a counterfactual scenario. However, it is possible, even necessary, to use data to monitor progress and measure performance on an ongoing basis. In recognition of this need, HUD established an extensive performance measurement system to track progress for all Choice grantees as they proceed through implementation. This performance measurement system (known as Choice Neighborhoods Inform, or CN Inform) includes metrics related to Choice's core focus areas: housing, people, and neighborhood. Grantees report some of these metrics, and HUD collects many others from existing data sources such as HUD's PIC and TRACS databases. These data allow for HUD and Choice grantees to report on program-relevant outcomes and to revise their strategies in response to evolving needs. In the remainder of this article, I present some preliminary findings from the PIC and TRACS data that feed into CN Inform.

Most data presented here focus on the households living in assisted housing developments at the core of each Choice development. I refer to these properties as target developments. Households that lived in target developments when grantees submitted the first round of Choice applications to HUD (December 9, 2010) are *baseline households*. A household that continues to receive HUD assistance at a later date is an *active* baseline household. Active baseline households are not necessarily still living in the Choice target development. They may have relocated temporarily while construction is under way, or they may have relocated permanently to other assisted housing or with a housing choice voucher. As long as a household still receives HUD rental assistance, it is considered active.

In many Choice sites, households continued to *move in* to the target development after the Choice application was submitted to HUD. These "new" households are not officially considered baseline residents, although many Choice sites do provide them with similar rights and opportunities. None of the information presented here includes households that moved in after the Choice application was submitted to HUD.

Attrition of Choice Neighborhoods Target Development Residents

The five Choice Neighborhoods sites that I examine vary considerably in size. The smallest, Boston, had only 130 households at baseline, and the largest, Seattle, had 504 households. Exhibit 4 presents quarterly estimates, for each site, of the number of baseline target development

households that continue to receive HUD assistance. In all sites, I see some level of attrition over time. Causes for this attrition could include death, incarceration, eviction, or assisted households choosing to move into the private market.

Exhibit 5 better illustrates the level of attrition by controlling for the baseline number of households in each site. This plot shows the cumulative level of attrition in each site as a percentage of the baseline household count, on a quarterly basis. The number of active baseline households should not exceed the baseline level. Overall, the trend line should be flat or downward sloping. However, in any one quarter, these numbers may go up. For example, in San Francisco, a sharp

Exhibit 4

Count of Active Baseline Households for Each Choice Neighborhoods Target Development

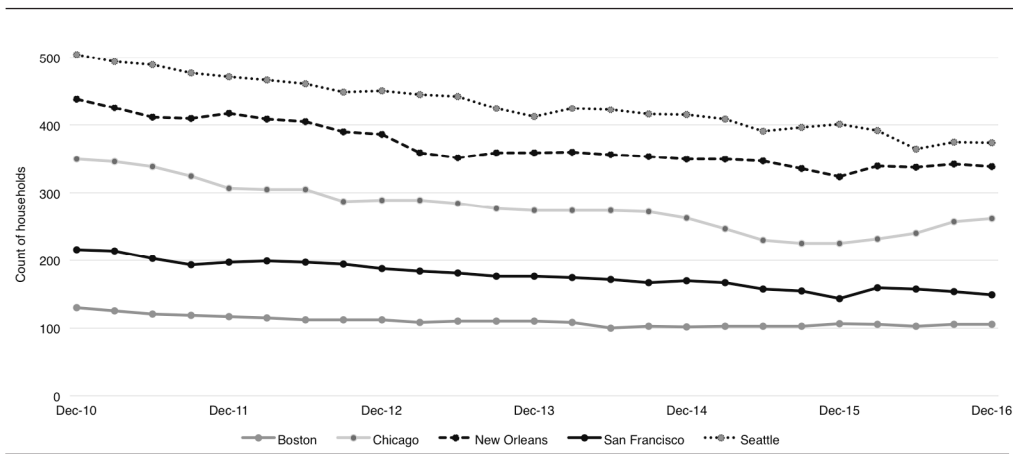
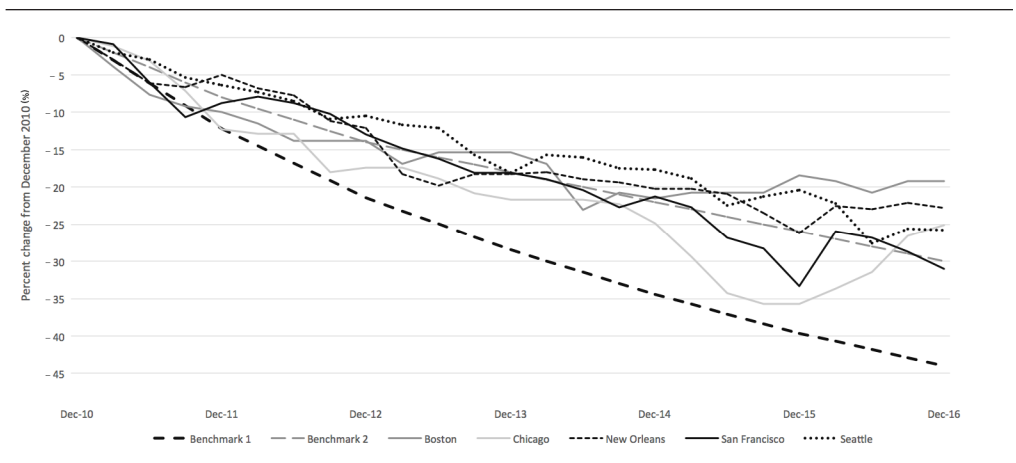


Exhibit 5

Percent Change in Baseline Households Continuing To Receive Assistance



drop is evident in the quarter ending December 2015, followed by a sharp increase in the quarter ending March 2016. In Chicago, the number of active baseline households dropped from 272 in September 2014 to 225 in September 2015, only to recover to 262 by December 2016. It is important not to read too much into these quarterly fluctuations. Some households may temporarily leave HUD assistance then return in subsequent quarters. Quarter-to-quarter fluctuations may also reflect delayed or inconsistent reporting by grantees.

In addition to showing the actual level of attrition in each site, exhibit 3 includes the two benchmark trend lines discussed previously. Benchmark 1 is based on actual attrition among the full HUD-assisted population, and benchmark 2 is an estimate of attrition for severely distressed developments.

The rate of attrition among these five sites varies during the period of analysis. In Boston, 19.2 percent of the 130 baseline households were no longer receiving HUD assistance of any form in December 2016, 6 years after the launch of Choice. Compared with evidence from HOPE VI, and the preceding analysis of attrition in the general HUD-assisted population, this level of attrition is low. During a period of 6 years, in the midst of major redevelopment efforts, at least 70 percent of baseline households still receive HUD assistance in four of the five sites. Even the sites with the highest level of attrition—Chicago at 25.1 percent, Seattle at 25.8 percent, and San Francisco at 31.0 percent—compare favorably with both benchmark trend lines.

It appears that attrition rates start out high and slow as Choice redevelopment progresses. HUD awarded the Choice grants in August and September 2011. By that point, each site had seen at least 5 percent of its baseline households leave HUD assistance. Among the first five sites, Boston made the most rapid progress on construction, with all construction complete as of December 2016. Boston also appears to have the most stable trend. After dropping 10 percent in year 1 and another 4 percent in year 2, Boston's cumulative attrition rate stabilized around 15 percent through year 3. After another sharp drop in year 4, the cumulative attrition rate stabilized once again around 20 percent, where it remained through the end of 2016. Chicago, which experienced significant attrition through December 2015, is another site that has made considerable progress on construction. During that time, the demolition of the target development (Grove Parc), construction of new buildings, and relocation of households were in progress. After December 2015, many households that had appeared to leave assistance were once again recorded in HUD's data systems. This trend suggests that, as Choice units are completed and the initial disruption of redevelopment fades, affected households settle into a relatively stable long-term home.

Relocation and Return

The preceding section discusses the extent to which baseline households continue to receive HUD assistance over time. The fact that they continue to receive assistance does not mean that they returned or will return to a completed Choice development. Where do these households live? What form of HUD assistance do they receive? Have they returned to completed Choice developments? In this section, I explore these questions on a site-by-site basis, which is necessary because of the vastly different redevelopment schedules across sites.

In Boston, the development at the center of the Choice neighborhood was home to 130 households at the time of application. In December 2016, redevelopment was completed, and 105 of the baseline households were still receiving HUD assistance. Fifty-eight baseline households lived at Quincy Heights, the completed Choice development, which equates to a rate of return of 44.6 percent. Of the other 47 households still receiving assistance, the majority, 42, were participating in the Housing Choice Voucher program, and the remainder lived in public housing or other Project-Based Rental Assistance (PBRA) properties. It is important to note that Quincy Heights, in December 2016, was home to 130 households. In addition to the 58 baseline households that returned, 72 other low-income households moved into the renovated units.

We also examine *where* the active baseline households lived in December 2016. This analysis is limited to those households for whom HUD had a valid geocoded address in both December 2010 and December 2016 (n=1,221). This distance analysis is presented for all sites in exhibit 6. In Boston, in 2016, I find that 31 percent of these households lived within 200 feet of their original locations. This finding is consistent with the 44.6-percent return rate, because the Quincy Heights development comprises multiple buildings spread across several adjacent blocks. A substantial proportion of Boston residents appear to have returned not only to the same development but also to the same building.

In 2016, 72 percent of Boston’s active baseline households lived within 1 mile of their original location. In addition to those who returned to completed Choice developments, some households relocated to other nearby HUD-assisted housing. The remaining households (28 percent) were HUD assisted but living more than 1 mile from their original homes. Two households relocated more than 10 miles away.

Exhibit 7 illustrates the locations of baseline residents from the Boston Choice development in 2010 and in 2016. The hexagonal symbols on the map are sized to represent the number of active baseline households living within a 0.5-mile radius. The light gray symbol represents the base year—that is, the baseline location (the location of the target development), and number of households in December 2010. Darker gray symbols represent the end year—that is, locations and household counts as of December 2016. In exhibit 7 and subsequent maps for other sites, outliers (households that relocated farther away) are omitted for the purpose of map legibility. On the Boston map, 22 hexagons are present. The two overlapping hexagons at the center indicate the location of the target development. Their sizing indicates that the 2016 household count, at that location, was roughly one-half of the 2010 household count. The other 20 hexagons are identically sized,

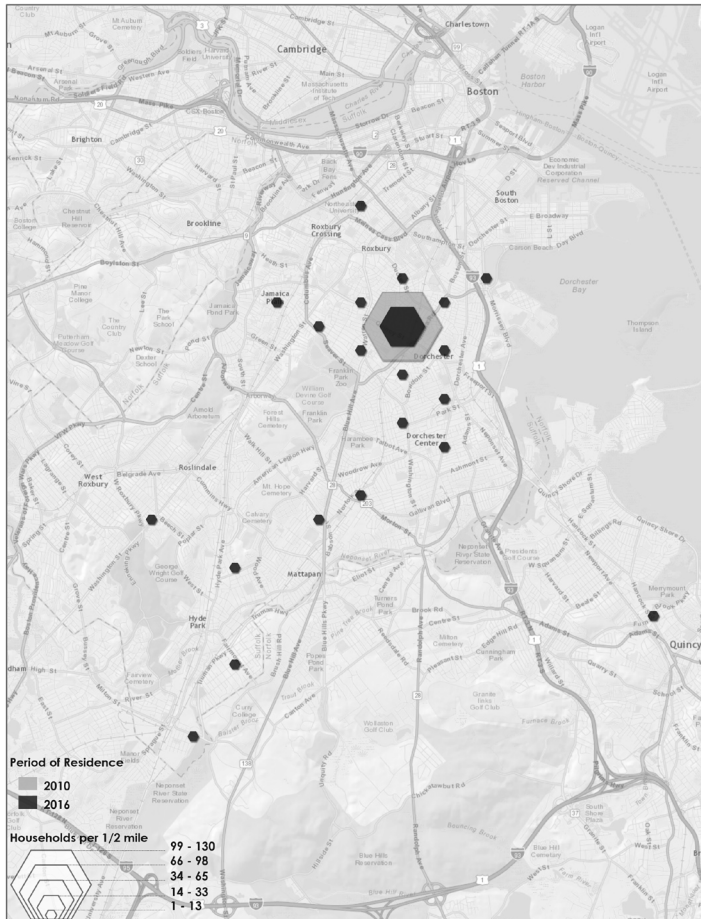
Exhibit 6

Distance Between 2010 and 2016 Locations for 1,221 Active Choice Neighborhoods Baseline Households

Distance	Boston	Chicago	New Orleans	San Francisco	Seattle	Total
Less than 200 feet (%)	31.43	20.69	1.51	63.76	19.25	21.21
200 to 500 feet (%)	6.67	9.58	5.12	15.44	14.97	10.48
500 feet to 1 mile (%)	34.29	32.95	25.30	7.38	33.16	27.93
1 to 10 miles (%)	25.71	31.42	63.55	11.41	26.20	35.63
More than 10 miles (%)	1.90	5.36	4.52	2.01	6.42	4.75

Exhibit 7

Map of Boston Choice Neighborhoods Households in 2010 and 2016

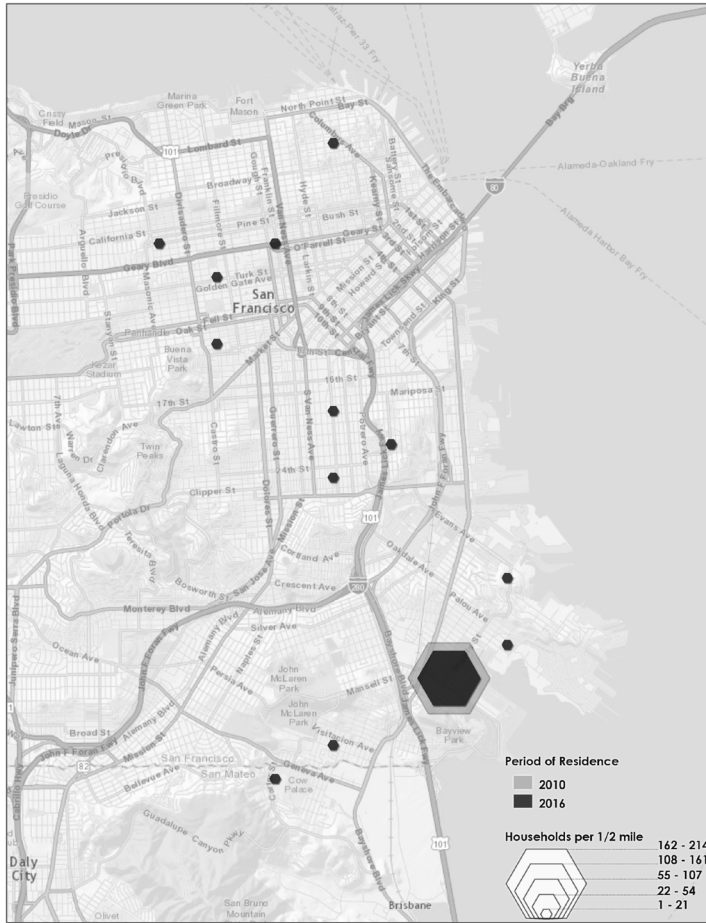


indicating 1 to 13 households in each location. I selected class breaks to provide as much visual variation as possible, masking locations with only one or two households for privacy reasons.

Boston presents a fairly simple case because of the fact that housing redevelopment is complete. San Francisco is equally simple but for the opposite reason—as of December 2016, no Choice replacement units had been completed, and no old units had been demolished. The San Francisco Choice development, the Alice Griffith public housing community, was home to 216 households at baseline. In December 2016, 149 baseline households were still HUD-assisted. Nearly all, 121 out of 149, were still living at Alice Griffith, within 500 feet of their original units. Another 17 households had relocated with a housing choice voucher, and 2 had relocated to a PBRA property. These relocations seem to be unrelated, or at most tangentially related, to the Choice redevelopment process. Exhibit 8 shows the location of Alice Griffith households at baseline and followup.

Exhibit 8

Map of San Francisco Choice Neighborhoods Households in 2010 and 2016



The other three sites—Chicago, New Orleans, and Seattle—present more complicated situations. In all three sites, some old units had been demolished and some new units had been built. It is difficult to know whether households (1) are in temporary relocation status, (2) have not yet moved at all, or (3) have completed relocation and settled into permanent units.

In Chicago, the Grove Parc apartments were a HUD-assisted PBRA property, occupied by 350 households at baseline. As of December 2016, 88 of these households were no longer assisted, and the remaining 262 had dispersed across geography and HUD programs. Of those 262 households, 30 percent lived within 500 feet of their original location, 33 percent lived 500 feet to 1 mile from their original location, and the remaining 37 percent moved more than 1 mile. There are 99 active baseline households living at three new developments referred to collectively as Woodlawn Center. I assume that these 99 households have completed the relocation process, which equates to an interim return rate of 28 percent. There are 38 households living at a development called Grove Parc Apartments,

although it is not clear whether this building has completed the redevelopment process. There are 114 households renting on the private market with housing choice vouchers, and the remaining 11 active baseline households live in public housing or some other HUD-assisted development. Because the Grove Parc redevelopment is not yet complete, it is safe to assume that the return rate will increase from its current level of 28 percent. The new Woodlawn Center development is also home to an additional 72 low-income households that were not baseline residents, bringing the total units at Woodlawn Center to 171. Exhibit 9 shows the location of Grove Parc households at baseline and followup.

In New Orleans, the Iberville public housing development was home to 439 households at baseline. In December 2016, 339 of these households were still HUD-assisted, primarily through the Housing Choice Voucher program—248 households, or 73 percent, of the 339 still assisted. This high proportion of HCV households reflects the fact that the site of the former Iberville development, being renamed Bienville Basin, is currently undergoing major construction, and households

Exhibit 9

Map of Chicago Choice Neighborhoods Households in 2010 and 2016



have relocated using vouchers. In December 2016, 103 units were occupied in Bienville Basin, 51 of which were occupied by baseline Choice households that had returned to the completed property (an interim return rate of 12 percent). Most (64 percent) active baseline households lived 1 to 10 miles from their original location, consistent with the widespread use of vouchers for temporary relocation. Exhibit 10 shows the location of Iberville households at baseline and followup.

In Seattle, the Yesler Terrace public housing development and surrounding Yesler neighborhood are part of a major redevelopment that will add thousands of new housing units. This redevelopment is moving forward in phases, and as of February 2016, 148 replacement units had been completed (Seattle Housing Authority, 2016). These replacement units are subsidized through project-based housing choice vouchers. This program type makes them indistinguishable from other housing choice vouchers, and I cannot determine which households are settled in replacement units in December 2016. Overall, 374 of the 504 baseline households continued to receive HUD assistance. The Housing Choice Voucher program supported 170 households, presumably including some living in Choice replacement units. As of December 2016, 202 households lived in public housing, including 137 still living at Yesler Terrace in unrenovated units. Another 36 households lived in public housing properties that were redeveloped with HOPE VI funds not long ago. Distance analysis reveals that, in 2016, 34 percent of active baseline residents lived within 500 feet of their original location and another 33 percent lived 500 feet to 1 mile away. The remainder, slightly less than one-third of those still assisted, lived more than 1 mile from their original location. Exhibit 11 shows the location of Yesler households at baseline and followup.

Exhibit 10

Map of New Orleans Choice Neighborhoods Households in 2010 and 2016

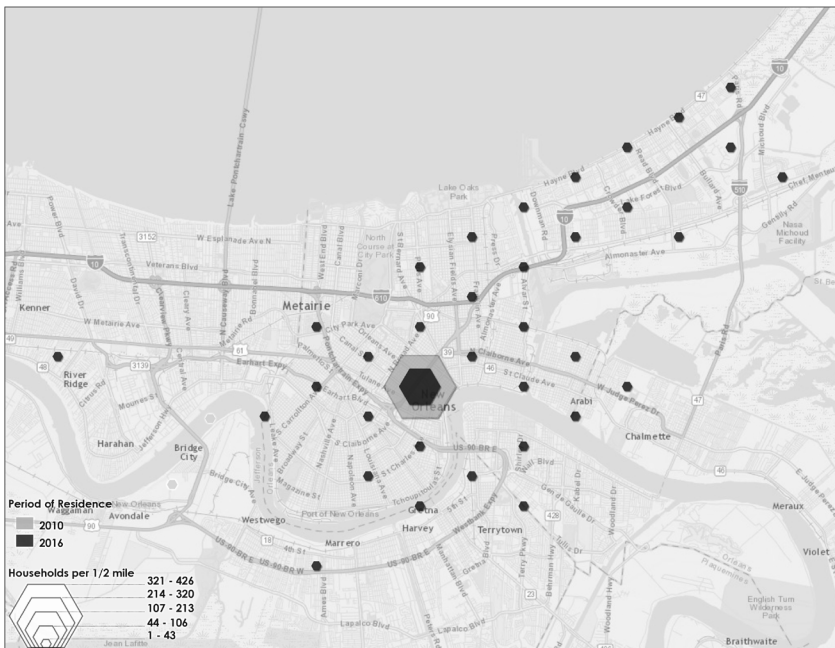
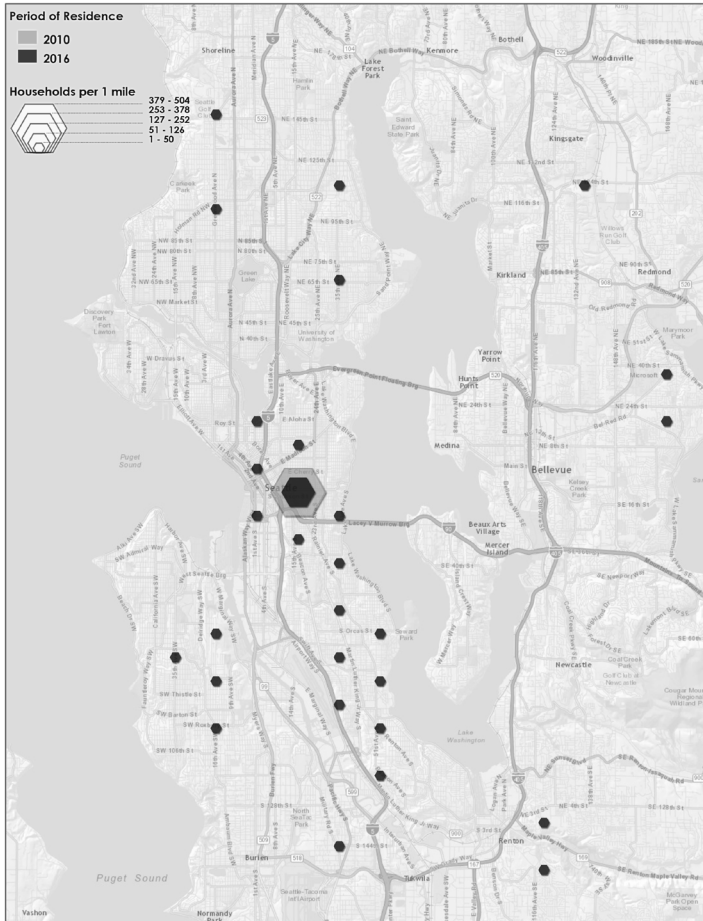


Exhibit 11

Map of Seattle Choice Neighborhoods Households in 2010 and 2016



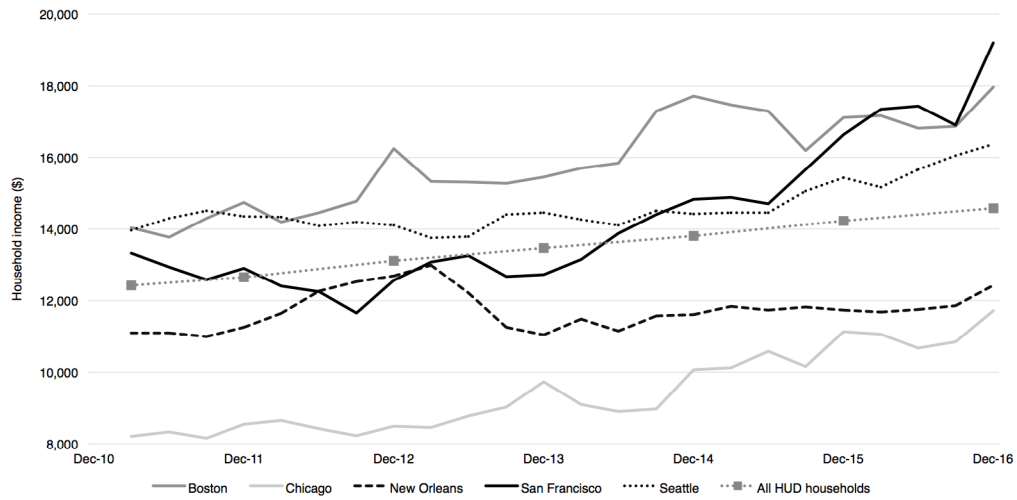
One thing that is clear from all five maps is that no major clusters of relocated households exist. Aside from the location of the target development, no single area—based on the 0.5-mile or 1-mile diameter scale, depending on site—received more than 10 percent of baseline households. However, obvious patterns are apparent at higher levels of geographic aggregation. In Chicago, nearly all relocated households remain on the south side. In New Orleans, relocated households mostly moved east, not west. In Boston, relocated households dispersed in multiple directions but mostly remained close to their original homes.

Choice Neighborhoods—Income and Demographics of Target Development Residents

Attrition and relocation are important issues to monitor in Choice Neighborhoods, due to the controversy that often plagued the HOPE VI program related to right-to-return, but Choice aspires to do much more than simply avoid displacing people. The program is also meant to spur positive outcomes for baseline residents on dimensions such as income, employment, health, and education. Some of these outcomes, such as income sources and amounts, can be monitored using PIC and TRACS data. Exhibits 12 and 13 present the mean and median annual household income for active baseline households, starting with the first quarter after grant application, or March 2011.⁴ Also, each exhibit includes a comparison trend line labeled “All HUD households,” which is based on the previously discussed cohort of all households receiving HUD assistance in December 2010. For the comparison trend line, I rely on data from March 2011, then each December thereafter. As with Choice residents, this comparison group is a longitudinal panel, meaning that it includes only those households that were assisted in December 2010 and continued to receive assistance in a subsequent quarter.⁵

Exhibit 12

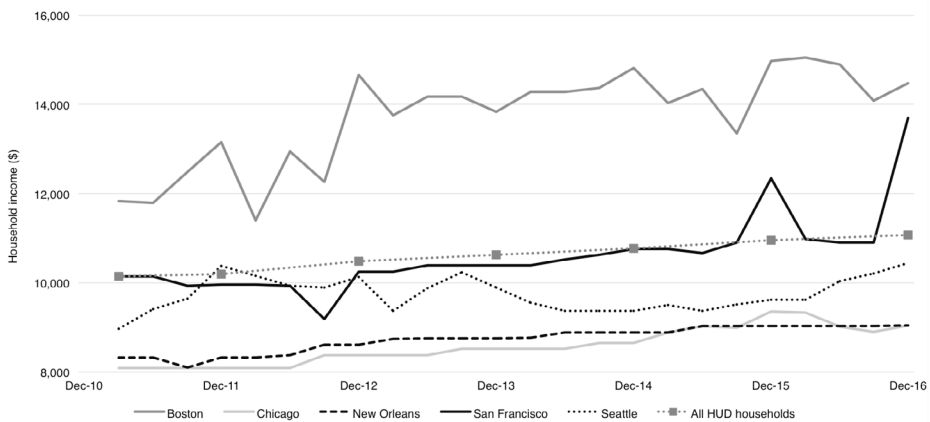
Mean Household Income for Choice Neighborhoods Active Baseline Households



HUD = U.S. Department of Housing and Urban Development.

⁴ Although these figures present *annual* household income, they change on a *quarterly* basis, because records in the PIC and TRACS systems are updated throughout the year. During any particular quarter, the income figure I use is the most recent available for each household. When I report that residents of the Boston Choice development had a mean household income of \$14,037 in March 2011, it could include some households that reported incomes on February 1, 2011, and others that reported incomes on November 1, 2010.

⁵ This comparison group is matched longitudinally to minimize differences based on attrition. It does not include households that began receiving assistance after December 2010, as these households might be systematically different. Beyond that, the comparison group is not deliberately designed to mirror the characteristics of Choice residents. This information is presented for context and is not meant to illustrate a counterfactual against which Choice should be evaluated.

Exhibit 13**Median Household Income for Choice Neighborhoods Active Baseline Households**

HUD = U.S. Department of Housing and Urban Development.

Incomes increased, on average, for all five cohort 1 sites between March 2011 and December 2016. Mean incomes, which are more vulnerable to changes in extreme values, increased by more than 40 percent in Chicago and San Francisco, 28 percent in Boston, 17 percent in Seattle, and 12 percent in New Orleans. Median incomes, which should be more stable and representative of a typical household, increased by 35 percent in San Francisco, 22 percent in Boston, 16 percent in Seattle, 12 percent in Chicago, and 9 percent in New Orleans. For the comparison group, mean income increased by 17 percent and median income increased by 9 percent.

This income growth appears promising, but it is possible that average incomes increased due to changes in the composition of residents over time. Households with zero income being disproportionately evicted would cause an apparent increase in average incomes, even if the remaining households do not experience any increase. Conversely, higher-income households disproportionately leaving to move into the private housing market would drive down average incomes independent of any change among the remaining households. To overcome this challenge, I attempt to identify a consistent panel of households from the five Choice sites. I focus on 1,232 households assisted at baseline (December 9, 2010) and in December 2016, and I then examine the annual income of these households in December of each year from 2010 to 2016.⁶ I find that, from December 9, 2010, to December 2016, this group of households experienced a 29-percent increase in mean income and a 17.7-percent increase in median income. As shown in exhibit 14, the growth was consistently positive throughout the 6-year period. This evidence suggests that the increases in average incomes are legitimate and not simply driven by the attrition of lower-income households.

⁶ This approach is not perfect. These 1,232 households were all HUD assisted on December 9, 2010, and in December 2016, but they are not necessarily assisted continuously in between. For example, in December 2013, 62 of the 1,232 households did not appear to receive assistance. I assume that any year-to-year fluctuation in this population is random and not driven by household characteristics that would be endogenous with earnings potential.

Exhibit 14

Median and Mean Income, Cohort 1 Panel of Consistently Assisted Households

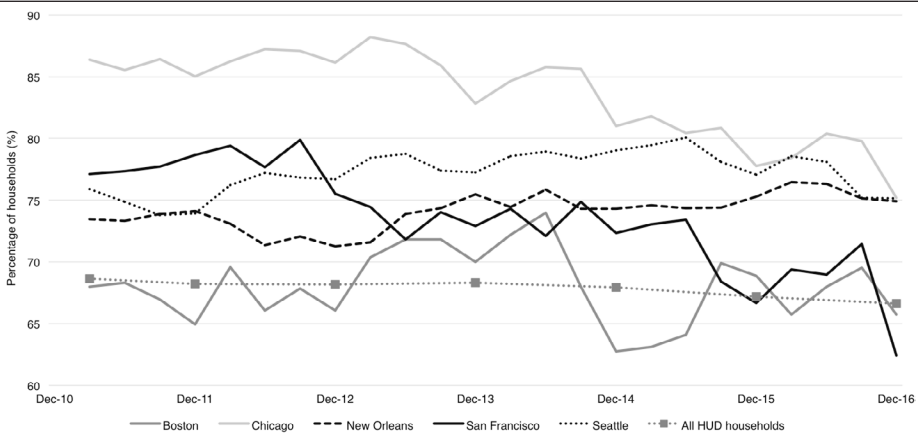
Date	Mean Income (\$)	Median Income (\$)
December 2010	11,417	8,640
December 2011	11,547	8,640
December 2012	12,069	8,928
December 2013	12,130	9,119
December 2014	12,915	9,241
December 2015	13,642	9,600
December 2016	14,758	10,169

Although household income is increasing among the cohort 1 grantees, other measures make it clear that Choice residents still face extreme economic headwinds. Exhibit 15 shows the poverty rate for households in each development. I use poverty guidelines from the U.S. Department of Health and Human Services, which are updated every year and adjusted for household size. In two sites, the poverty rate declined substantially, by 15 percentage points in San Francisco and 11 percentage points in Chicago. In Boston, New Orleans, and Chicago, the poverty rate fluctuated during the period of analysis and does not show a clear trend. In December 2016, the poverty rate was down in Boston and Seattle, by less than 2 percentage points, and was up in New Orleans, by less than 2 percentage points. In all five sites, the poverty rate remained more than 60 percent in December 2016. During the same time period, the poverty rate among the comparison group declined from 69 to 67 percent.

Several mechanisms exist by which Choice could lead to increased income for assisted housing residents. Choice grantees provide some form of case management to assisted households. At the very least, these case managers help residents through the relocation process. Some provide more extensive services, such as connecting residents to job training programs or helping them to access other forms of public assistance. Also, a hope exists that the Choice redevelopment will spur

Exhibit 15

Poverty Rate for Choice Neighborhoods Active Baseline Households



HUD = U.S. Department of Housing and Urban Development.

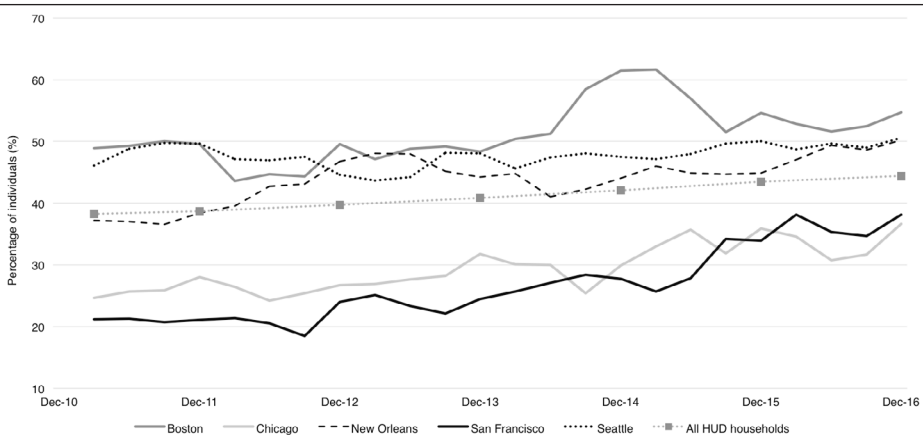
broader economic activity throughout the neighborhoods and create an environment with more jobs. One important trend that can be examined using PIC and TRACS data is the prevalence of wage income among assisted residents. First, I categorize all individuals receiving HUD assistance based on age and whether they identify as having a disability.⁷ For all work-able individuals—that is, those ages 18 to 64 with no disability—I calculate the percentage that report at least some income from wages. As with other analysis in this article, this calculation is limited to individuals who are part of a baseline household that remains assisted in a subsequent quarter. Exhibit 16 presents results for each of the five sites.

As with income, all five sites experienced substantial positive changes. Three sites experienced double-digit growth in the percentage of work-able adults with wage income—San Francisco from 21 to 38 percent, New Orleans from 37 to 50 percent, and Chicago from 25 to 37 percent. Boston and Seattle, the sites with the highest percentage of wage earners at baseline, increased by 6 and 5 percentage points, respectively. During the same time period, the comparison group also experienced an increase in the prevalence of wage income, from 38 to 44 percent.

A thorough analysis of the demographic composition in these Choice developments is outside the core focus of this article, but it is important to look at a few key characteristics of the population. As noted previously, I examine wage prevalence with a focus on those who I expect to work for pay—able-bodied adults. Changes in this population could be important drivers of the economic circumstances of Choice residents. I find that that is likely the case. Exhibits 17 and 18 show the percentage of individuals from each site that are age 65 or older or have a disability.

Exhibit 16

Percentage of Choice Neighborhoods Work-Able Adults With Wage Income

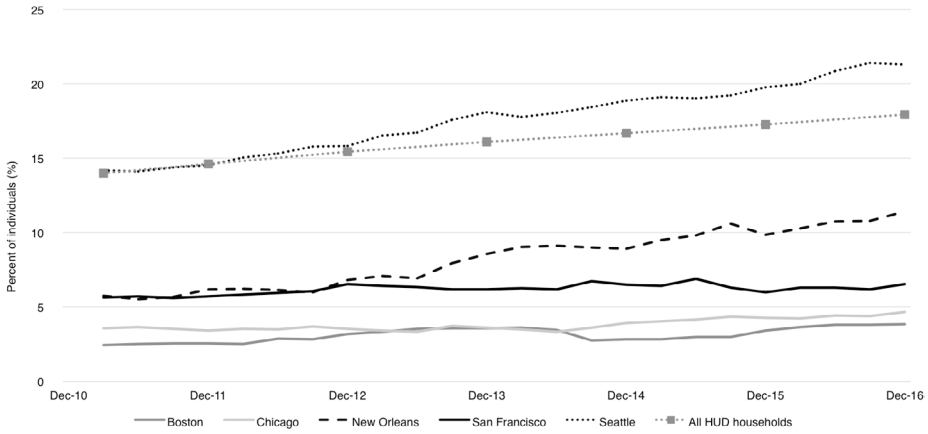


HUD = U.S. Department of Housing and Urban Development.

⁷ Disabled status is self-reported—first, by the household to the property owner or public housing agency, and then by the property owner or public housing agency to HUD. It is not independently verified.

Exhibit 17

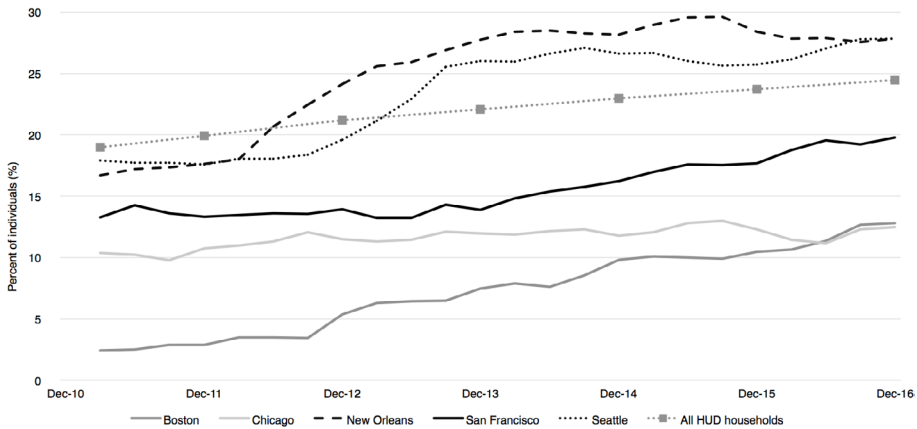
Percentage of Choice Neighborhoods Active Baseline Residents Age 65 or Older



HUD = U.S. Department of Housing and Urban Development.

Exhibit 18

Percentage of Choice Neighborhoods Active Baseline Residents With a Disability



HUD = U.S. Department of Housing and Urban Development.

These exhibits illustrate several remarkable facts. First, Yesler Terrace in Seattle has a very high proportion of seniors and people with disabilities, and both groups have grown as a proportion of the total population at the site. The senior population has increased in New Orleans and Seattle, in both raw numbers and as a proportion of the total population. Boston, New Orleans, and Seattle have experienced increases in the number of people with disabilities, even as the total number of residents has declined. All five sites have experienced proportional increases in the number of people with disabilities, although by only 2 percentage points in Chicago and 6 percentage points in San Francisco. The comparison group also has a very high, and increasing, proportion of elderly people and people with disabilities.

Conclusion

Choice Neighborhoods is a relatively new program, and very little research exists to date about the program's outcomes. Research on HOPE VI, the place-based precursor to Choice, also left many unanswered questions. In this article, I sought to compile preliminary evidence about the welfare of Choice residents 6 years after HUD awarded the first grants. I focus on attrition rates, relocation patterns, and changes to the economic circumstances of residents. With respect to attrition, I find most baseline residents continue to receive HUD assistance, and the rate of attrition they experience (ranging from 18 to 31 percent) is roughly in line with, or perhaps better than, what I would expect based on experiences of other HUD-assisted households. Although these households continue to receive HUD assistance, the nature of that assistance varies widely. Many households transitioned from one HUD program, such as public housing, to another, such as housing choice vouchers, and many households also relocated, at least temporarily. Pooled across all five sites, in December 2016, 68 percent of active baseline households lived at least 500 feet from their original locations. It is too early to speculate about the ultimate rate of return at these five sites. However, in Boston, the only site where construction is complete, 44.6 percent of baseline households returned to the property.

With respect to income and earnings, conditions are improving for baseline residents of Choice developments. Household income has increased, wage income has become more prevalent, and poverty rates have declined (except in New Orleans). The rate of improvement varies by site, and further research is needed to understand the drivers of these gains. Furthermore, it is not obvious that the Choice program *caused* these improving conditions. Comparisons with the broader HUD-assisted population suggest that other factors, like an improving economy, might drive income gains. Nonetheless, it is encouraging to see economic improvements among households living in communities that were previously among the most distressed in the HUD portfolio. Further research should apply more advanced statistical techniques to determine whether Choice investments caused these positive changes.

Much of this article intentionally focuses on baseline residents who also continued to receive HUD assistance. This population is of great interest to the Choice program. However, two other important populations require attention—baseline residents who dropped out of HUD programs and HUD-assisted residents who moved into a Choice development after baseline. Additional research is needed to understand the experience and outcomes of these households. Of course, it will also be important to examine additional cohorts of Choice implementation grantees as they progress through the redevelopment process. Further research on all these areas would add to the current body of knowledge on both the HOPE VI program and the nascent Choice program and help determine whether these programs are cost-effective mechanisms for revitalizing neighborhoods and improving the lives of low-income families now and into the future.

Acknowledgments

The author acknowledges John Huggins, from HUD's Office of Policy Development and Research, for his excellent work analyzing residents' relocation patterns and creating all maps in this article.

Author

Paul Joice is a social science analyst with the U.S. Department of Housing and Urban Development, Office of Policy Development and Research, Program Evaluation Division.

References

- Ambrose, Brent W. 2005. "A Hazard Rate Analysis of Leavers and Stayers in Assisted Housing Programs," *Cityscape* 8 (2): 69–93.
- Buron, Larry, Susan Popkin, Diane Levy, Laura Harris, and Jill Khadduri. 2002. *The HOPE VI Resident Tracking Study: A Snapshot of the Current Living Situation of Original Residents From Eight Sites*. Report prepared for the U.S. Department of Housing and Urban Development. Washington, DC: Urban Institute.
- Cisneros, Henry. 2009. "A New Moment for People and Cities." In *From Despair to HOPE: HOPE VI and the New Promise of Public Housing in America's Cities*, edited by Henry G. Cisneros and Lora Engdahl. Washington, DC: Brookings Institution Press: 3–13.
- Comey, Jennifer. 2007. *HOPE VI'd and on the Move*. Washington, DC: Urban Institute.
- Cunningham, Mary. 2004. *An Improved Living Environment? Relocation Outcomes for HOPE VI Relocates*. Washington, DC: Urban Institute.
- Finkel, Meryl, Ken Lam, Christopher Blaine, R.J. de la Cruz, Donna DeMarco, Melissa Vandawalker, Michelle Woodford, Craig Torres, and David Kaiser. 2010. *Capital Needs in the Public Housing Program*. Washington, DC: U.S. Department of Housing and Urban Development.
- Gress, Taryn, Seungjong Cho, and Mark Joseph. 2016. *HOPE VI Data Compilation and Analysis*. Washington, DC: U.S. Department of Housing and Urban Development.
- Katz, Bruce. 2009. "The Origins of HOPE VI." In *From Despair to HOPE: HOPE VI and the New Promise of Public Housing in America's Cities*, edited by Henry G. Cisneros and Lora Engdahl. Washington, DC: Brookings Institution Press: 15–29.
- Keating, Larry. 2000. "Redeveloping Public Housing: Relearning Urban Renewal's Immutable Lessons," *Journal of the American Planning Association* 66 (4): 384–396.
- Khadduri, Jill. 2015. "The Founding and Evolution of HUD: 50 Years, 1965–2015." In *HUD at 50: Creating Pathways to Opportunity*. Washington, DC: U.S. Department of Housing and Urban Development: 5–101.
- Kingsley, Tom, Jennifer Johnson, and Kathryn Pettit. 2003. "Patterns of Section 8 Relocation in the HOPE VI Program," *Journal of Urban Affairs* 25 (4): 427–447.
- Lubell, Jeffrey, Mark Shroder, and Barry Steffen. 2003. "Work Participation and Length of Stay in HUD-Assisted Housing," *Cityscape* 6 (2): 207–223.

McClure, Kirk. 2017. *Length of Stay in Assisted Housing, 1995–2015*. Washington, DC: U.S. Department of Housing and Urban Development.

National Commission on Severely Distressed Public Housing. 1992. *The Final Report of the National Commission on Severely Distressed Public Housing: A Report to the Congress and the Secretary of Housing and Urban Development*. Washington, DC.

Olsen, Edgar O., Scott E. Davis, and Paul E. Carrillo. 2005. "Explaining Attrition in the Housing Voucher Program," *Cityscape* 8 (2): 95–113.

Polikoff, Alexander. 2009. "HOPE VI and the Deconcentration of Poverty." In *From Despair to HOPE: HOPE VI and the New Promise of Public Housing in America's Cities*, edited by Henry G. Cisneros and Lora Engdahl. Washington, DC: Brookings Institution Press: 65–81.

Popkin, Susan, Bruce Katz, Mary Cunningham, Karen Brown, Jeremy Gustafson, and Margery Turner. 2004. *A Decade of HOPE VI: Research Findings and Policy Challenges*. Washington, DC: Urban Institute.

Popkin, Susan, Diane Levy, and Larry Buron. 2009. "Has HOPE VI Transformed Residents' Lives? New Evidence From the HOPE VI Panel Study," *Housing Studies* 24 (4): 477–502.

Popkin, Susan, Diane Levy, Laura Harris, Jennifer Comey, Mary K. Cunningham, Larry Buron, and William Woodley. 2002. *HOPE VI Panel Study: Baseline Report*. Washington, DC: Urban Institute.

Schill, Michael. 1993. "Distressed Public Housing: Where Do We Go From Here?" *University of Chicago Law Review* 60 (2): 497–554.

Seattle Housing Authority. 2016. "Renewing Yesler's Promise: The Redevelopment of Yesler Terrace." <http://www.seattlehousing.net/wp-content/uploads/2016/02/Final-8-page-brochure-revised-2-2.pdf>.

Thompson, Dianne. 2007. "Evaluating Length of Stay in Assisted Housing Programs: A Methodological Note," *Cityscape* 9 (1) 217–238.

U.S. Department of Housing and Urban Development (HUD). 2015. *Choice Neighborhoods: Baseline Conditions and Early Progress*. Washington, DC: Urban Institute; MDRC.

———. 2013. *Developing Choice Neighborhoods: An Early Look at Implementation in Five Sites*. Washington, DC: Urban Institute; MDRC.

U.S. Government Accountability Office (GAO). 2003. *Public Housing: HOPE VI Resident Issues and Changes in Neighborhoods Surrounding Grant Sites*. Washington, DC.

Wexler, Harry J. 2001. "HOPE VI: Market Means/Public Ends—The Goals, Strategies, and Midterm Lessons of HUD's Urban Revitalization Demonstration Program," *Journal of Affordable Housing* 10 (3): 195–233.

Zielenbach, Sean. 2002. *The Economic Impacts of HOPE VI on Neighborhoods: A Housing Research Foundation Report*. Washington, DC: Housing Research Foundation.

Evaluation Tradecraft

Evaluation Tradecraft presents short articles about the art of evaluation in housing and urban research. Through this department of Cityscape, the Office of Policy Development and Research presents developments in the art of evaluation that might not be described in detail in published evaluations. Researchers often describe what they did and what their results were, but they might not give readers a step-by-step guide for implementing their methods. This department pulls back the curtain and shows readers exactly how program evaluation is done. If you have an idea for an article of about 3,000 words on a particular evaluation method or an interesting development in the art of evaluation, please send a one-paragraph abstract to marina.l.myhre@hud.gov.

Real Estate Analysis as a Tool for Program Evaluation

Jaime Bordenave
The Communities Group

Dennis Stout
Econometrica, Inc.

Abstract

This article describes the use of standard techniques of financial analysis—sources and uses statements and pro forma models—in the evaluation of the U.S. Department of Housing and Urban Development’s (HUD’s) new Rental Assistance Demonstration (RAD) program. Sources and uses statements provide a convenient framework for analyzing how a real estate development project is financed. Pro forma models are cashflow estimates of the performance of a real estate project over time under a set of assumptions. Lenders, developers, appraisers, brokers, and others involved in real estate transactions commonly use both tools to determine feasibility, structure financial transactions, establish property valuations, estimate investment returns, analyze risks, and make financial decisions. The RAD program expands financing options available to public housing authorities for making capital investments in affordable housing projects. A recent evaluation of RAD, funded and directed by HUD’s Office of Policy Development and Research, used the models described in this article.

Introduction

The Rental Assistance Demonstration (RAD) enables public housing and Section 8 Moderate Rehabilitation, or Mod Rehab, properties to convert to project-based Section 8 Housing Assistance Payment contracts. The Section 8 subsidy that converted public housing receives under RAD is based on the total amount of the tenant rent and of operating and capital fund subsidies that a property receives under the public housing program, plus annual adjustments through the operating cost adjustment factor (OCAF). Public housing authorities (PHAs) can leverage a project's long-term cashflow to finance debt, because the Section 8 Housing Assistance Payment contract provides subsidies during the term of the contract, which can be 15 or 20 years plus automatic renewal. PHAs can use this debt, plus other sources of funds, to recapitalize and renovate or redevelop projects. PHAs can pursue different conversion strategies for projects depending on the amount of financing they can raise and the capital needs of projects.

We illustrate the use of standard tools of real estate analysis with an actual case study of a RAD conversion that uses conventional mortgage debt to finance substantial rehabilitation. We subject this case to the sort of hypothetical financial analysis in which PHAs engage when deciding whether to pursue RAD conversion. Our financial models compare the financial performance of the case study under two scenarios: (1) conversion under RAD and (2) status quo and use of other financing alternatives by comparing the differences in upfront capital structure and in long-run cashflows. The alternative mixed-finance scenario is designed to result in the same development program as proposed under RAD, but by its nature this approach does not provide sufficient reliable net operating income to support the debt available through a RAD conversion. This comparative financial model analysis provides researchers with insights into the sources and magnitudes of financial benefits that can be achieved with RAD compared with reasonable currently available options without RAD—principally by leveraging mortgage debt and improving project cashflow—and compared with PHAs' options without RAD.

Analytical Tools

We present two common tools used in housing and real estate analysis: (1) the development budget (sources and uses statement) and (2) the long-term operating pro forma. The development budget identifies the amount and sources of financing and how those funds will be deployed to complete the planned development. For the development budget to be in balance, total sources of funds should equal total uses of funds. If necessary project costs (uses) exceed identified sources, a gap exists that needs to be filled for the project to proceed.

Uses are usually determined first when putting together a development budget. Sources are then determined based on the debt capacity (if any) of the project, Low-Income Housing Tax Credit (LIHTC) equity (as appropriate), and all known soft sources of funding, from either the PHA or other sources. *Soft* funds—either grants that do not have to be repaid or loans that are payable subject to the project's generating sufficient net operating income—will usually have to fill any gap, because sources may already include the maximum potential debt the project can support. Changes to unit mix is one possible way to increase revenues to support added debt—such as

adding market rate units, or adding some project-based vouchers by using the agency's Housing Choice Voucher program. If sources exceed uses, it is possible for a PHA to receive a cash payment from the transaction. Those funds could be used to support other projects or for other purposes of the PHA. Any such payments to the PHA are indicated as uses in the development budget.

Sources of funds typically include the following categories.

- First mortgage debt, which may be commercial or Federal Housing Administration (FHA) insured, taxable or tax exempt. The amount of first mortgage debt a project can carry is limited by the maturity period, the interest rate, and the project's net operating income. This debt is fixed rate, permanent, and fully amortizing. A rise in interest rates reduces a project's debt capacity if all other factors are unchanged.
- Other types of third-party debt, such as secondary loans.
- Outside equity, such as 4-percent or 9-percent LIHTC equity.
- Contributions from the project sponsor, such as the PHA, including capital grants, operating reserves, cash on hand, Replacement Housing Factor (RHF)/Demolition and Disposition Transitional Funding (DDTF) monies, and soft loans.
- Sources from the project, such as rehabilitation assistance funds received during the construction phase, sometimes called "funding from operations."
- Gap financing, also known as "soft money," which is usually funding from public entities that may be in the form of grants or soft loans; that is, loans with flexible repayment terms such as loans subject to cashflow. Depending on the project, examples of other common sources may include reduced hookup and permit fees from the local jurisdiction, grants and soft loans from the Federal Home Loan Bank's Affordable Housing Program, state and federal Historic Tax Credits, energy conservation grants, and many others.
- Deferred developer fees, which may come from the PHA as developer and any third-party developer or codeveloper.

Uses of funds shows the development budget by line item, including the type and amount of expenditures that must be made to complete the development. Expenditures include—

- Acquisition costs, if the PHA plans to buy another building or parcel of land. Also, in all rehabilitation projects with tax credits, the PHA sells the property to a new for-profit entity at the appraised value, and the value of the improvements constitutes an acquisition cost that becomes part of the basis that earns tax credits at the 4- or 9-percent rate, depending on LIHTC program.
- Payoff of existing debt, such as any outstanding Capital Fund Financing Program or Energy Performance Contract loans.
- Construction and contingency costs and contractor's overhead and profit, also known as "hard costs."
- Cost of relocating tenants during rehabilitation or demolition, if necessary.

- Professional fees for outside consultants, advisers, attorneys, and architects, and for local permits and approvals.
- Financing fees and related costs; for example, application and underwriting fees and interest on construction loans during the construction period.
- Project reserves, which HUD and lenders require to ensure that the project can cover any losses until it achieves stabilized occupancy, which is typically cast as a percentage of occupancy (for example, 95 percent) over a number of months (typically 6 months). In a rehabilitation project, it is sometimes necessary to make an initial deposit to the reserve for replacement, so that the 20-year capital needs can be met.
- Developer fees, some or all which may go to the PHA as developer or codeveloper. Partial deferment of fees by the developer appears as deferred developer fees, an offsetting source of funds.

The long-term operating pro forma examines income and expenses during a 15- to 20-year period for a project after the development or conversion is complete. Common income sources include—

- Rental income, including tenant-paid and government-subsidized portions of rent, as determined by the contract rent in RAD conversions, and public housing operating and capital fund subsidies in non-RAD alternatives.
- Other income collected by the project; for example, late fees or onsite laundry facilities.

Rental and other income (gross income), less vacancy and bad debt expenses, equals effective gross income (EGI).

Project expenses include—

- Operating expenses, which cover insurance, utilities (except tenant-paid utilities), maintenance, asset management, tenant services, property taxes or payments in lieu of taxes (PILOT), administrative costs, security, and other project operating costs.
- Contributions to the project's reserves, which are the required annual deposits into controlled accounts to fund future nonroutine capital items, such as heating, ventilation, and air-conditioning replacement.¹
- Debt service (payments on loans).

Net operating income (NOI) is calculated as EGI minus operating expenses and contributions to reserves but not debt service. The debt-service coverage ratio is calculated as the ratio of NOI to debt service payments. At application, RAD requires a debt-service coverage ratio of 1.2, which means that the project budget needs to show \$1.20 of available NOI for every dollar of debt service, to provide an additional cushion above and beyond the various project reserves. A positive cashflow results when NOI exceeds debt service (NOI – debt service = cashflow). Cashflow is

¹ HUD determines the amount of the contribution to reserves at project underwriting for RAD projects over a 20-year period. In the case of tax credit projects, the investor or housing finance agency (HFA) may require a different amount. More typically, HUD requires a level higher than the amount the HFA and investor require. The higher of the two amounts is the amount that must be contributed.

negative when NOI is less than debt service, which indicates an infeasible plan if the negative cashflow occurs in the early years of the pro forma. After the initial-year operating budget is established, it is then trended for 20 years based on the lender, investor (if any), insurer such as FHA (if utilized), HUD, and RAD criteria. RAD requires trending income with a 2-percent increase, although expenses should be trended at 3 percent annually. As a result of trending assumptions, NOI, debt-service coverage ratio, and cashflow typically decline over time, although not in all cases.

These two tools—the development budget (sources and uses statement) and the operating pro forma—work in tandem. The development budget determines how much of a project's capital needs can be met upfront. Meeting a project's upfront capital needs may have an effect on out-year income, such as supporting higher rents due to upgrades, and lower expenses (for instance, by reducing maintenance and utilities with energy-saving investments), although the operating pro forma demonstrates a project's longer-term sustainability if it can meet all financial obligations and still generate positive cashflow. The operating pro forma is particularly important for projects requiring debt, because adequate debt service coverage during the term of the loan is essential for attracting lender support.

Certain assumptions are necessary for these analyses. For example, we had to make assumptions about the term and interest rate of the mortgage. Also, we assumed that operating expenses increase by 3 percent each year, consistent with HUD's underwriting guidelines. For the RAD scenario, we assumed that contract rents increase each year by a 2-percent OCAF, which is again consistent with HUD guidance. For non-RAD financing scenarios, we assumed that public housing funds (operating and capital funds) decline at 1 percent per year, which is a lower rate of decrease than during the past 15 years.² These two assumptions significantly affect the outcomes of our analysis. Therefore, we also include two sensitivity analyses for the non-RAD financing scenarios—one that assumes a 2-percent annual decline in public housing funds and a second that assumes public housing funds remain constant.³

It is possible to test other non-RAD scenarios for comparative purposes, such as a reduced level of upfront improvements, the status quo (few or no improvements), or the use of tax credits to support the funding of improvements. Each of these alternative scenarios requires detailed modeling and analysis of a project's physical condition, financial requirements, and operating costs over time and takes many more assumptions.⁴

² No set standard exists for projecting the future change to revenue in the non-RAD approach, because both the capital fund and operating fund grants to housing authorities are subject to congressional actions. The general consensus is that these revenues will not increase over time, but rather will trend downward. For example, public housing capital fund appropriations have declined from \$2.9 billion in 2000 to \$1.9 billion in 2015, or by 2.9 percent per year. However, in 2009, the program received \$6.5 billion in appropriations, in part, due to one-time stimulus funding in the American Recovery and Reinvestment Act.

³ Our analysis does not examine the impact of interest rate changes. All else equal, a mortgage interest rate increase reduces the amount of first mortgage debt that RAD projects carry. Our analysis also does not include future refinancing. Refinancing should not be necessary during the initial Housing Assistance Payment contract term of 15 to 20 years, based on the project underwriting standards that HUD, lenders for RAD projects, HFAs, and investors in tax credit projects use.

⁴ For instance, if we modeled the impact of a reduced scope of development, we would have to make assumptions about what improvements would be made, what impact they would have on operating costs, and whether reserves would be sufficient to cover the 20-year capital needs. Similarly, if the PHA simply continued operating the property as public housing with current subsidies, we would need to make assumptions about obsolescence, the capital needs backlog, and the impact on future project performance. We would make assumptions about the competitiveness of the project if the PHA chose to apply for 9-percent LIHTC equity.

Case Study: RAD Conversion for Substantial Rehabilitation Using Conventional Mortgage Debt

This section describes the case study, summarizes the sources and uses development budget and operating pro forma as described in the PHA’s RAD documentation, and presents the results (1) under RAD and (2) under the alternative mixed-finance assumption that the PHA could use financing sources other than through the RAD program to carry out its development plan.

This case involves a 198-unit project that primarily serves families and is converting to RAD to address significant repair needs. It illustrates a situation in which a PHA assumes significant project debt under RAD in order to finance major rehabilitation costs. This RAD financing strategy works, because the project has sufficient projected NOI under RAD. Without RAD, the project would have difficulty supporting this amount of project debt, if any at all. Most likely, it would have to resort to alternative financing sources, such as gap soft financing, to meet the capital needs for the project. Compared with the alternative scenario of using gap financing, the RAD scenario leaves the project far better off financially despite the repayment of debt.

Sources and Uses Development Budget

Exhibit 1 shows the development budget for this project. The middle column shows the sources and uses of funds for the RAD conversion, and the right-hand column shows the non-RAD alternative. The PHA proposes substantial rehabilitation for this project of approximately \$31,400 per unit, or \$6.2 million total, in hard costs. Total development cost is \$44,300 per unit, or \$8.8 million

Exhibit 1

Sources and Uses Development Budget for RAD Conversion and Non-RAD Alternative

Sources and Uses	RAD Conversion (\$)	Non-RAD Alternative (\$)
Sources of funds	8,769,685	8,173,235
First mortgage	5,965,000	—
9% LIHTC equity	—	—
PHA loan	2,388,369	2,388,369
Prior-year public housing capital fund	—	—
Gap or additional soft funding needed	—	5,368,550
RHF/DDTF	—	—
Funding from operations	116,316	116,316
Deferred developer fee	300,000	300,000
Uses of funds	8,769,685	8,173,235
Acquisition cost	—	—
Pay off existing debt	—	—
Construction costs	6,224,462	6,224,462
Relocation costs	50,000	50,000
Professional fees	398,390	398,390
Financing fees and related costs	806,365	209,915
Other	57,602	57,602
Reserves	632,866	632,866
Developer fees	600,000	600,000

DDTF = Demolition and Disposition Transitional Funding. LIHTC = Low-Income Housing Tax Credit. PHA = public housing agency. RAD = Rental Assistance Demonstration. RHF = Replacement Housing Factor.

Note: All figures in dollars.

Source: Project sources and uses data maintained by RAD program

total, under the RAD scenario. Total development cost is slightly less at \$41,279 per unit, or \$8.2 million total, under the non-RAD scenario due to the reduction in financing fees and related costs.⁵ All other uses of funds are the same for both scenarios.

After contributing its own capital funds (in the form of a soft loan), contributing limited project funds from operations, and partially deferring its development fee, the PHA has a large financing shortfall of nearly \$6.0 million, which is 68 percent of the project's financing requirement in this scenario. The PHA plans to fill this shortfall with conventional mortgage debt. Conventional mortgage debt carries a 4.23 percent rate of interest with a term of 40 years and requires a debt-service coverage ratio of 1.2. After determining the amount of debt a project can carry, developers then consider equity and soft sources, including PHA funds, and as a last resort, deferral of a portion of the developer fee (including the PHA's share of the fee, if any).

Without RAD, the PHA would need to replace the project's mortgage debt with another financing source to achieve the same scope of development for this project.⁶ The PHA may be unable or disinclined to use more of its own resources, because the PHA already provides a soft loan of \$2.4 million that usually comes out of the PHA's capital funds, RHF/DDTF funds, PHA reserves, or a combination of the three. Our analysis, therefore, assumes that the PHA uses outside gap financing, equal to the first mortgage amount under RAD, to replace the mortgage debt under RAD.⁷ Under this scenario, gap financing would be in the form of grants or soft loans. Raising such a large amount of soft funds could be a challenge, however, and would compete with other uses for these limited funds. Without gap financing or RAD, the proposed development would be infeasible. Because the gap financing would reduce project borrowing, financing fees and related costs decline by nearly \$600,000 (in this instance, mostly from the savings on interest during construction). Therefore, the amount of gap financing under the non-RAD alternative would be \$5.4 million, which is \$0.6 million less than the \$6.0 million in project mortgage debt for the RAD scenario that was replaced.

Pro Forma Operating Budget

Exhibits 2 and 3 present two pro forma operating budgets of this rehabilitation project—one each for the RAD and non-RAD scenarios. The key to understanding how well the project performs with RAD is to compare cashflows in each scenario, keeping the level of improvements the same under

⁵ We used the Loans and Fees section of the RAD application to complete the Financing Fees and Related Costs line item in the sources and uses development budget. The Loans and Fees section of the RAD application has about 14 separate items. Many of these items—such as organizational costs, recordation, title insurance, escrow agent fees, and other miscellaneous items that are part of any closing—are required regardless of the existence of a loan.

⁶ Although RAD is a *no new money* program, the conversion of the capital fund subsidy into an operating subsidy and the application of the OCAF to future contract rents under RAD provides converted projects with the ability to support more debt than they could without RAD.

⁷ Tax credits also could be used as a financing source for this project for both the RAD approach and the non-RAD alternative. PHAs may choose not to utilize tax credits due to the challenge of competing for 9-percent LIHTC, the desire to provide direct management services, or the lack of sufficient tax credit experience. The PHA might not meet its debt service requirement by year 9, although the project generates sufficient cashflow initially. Therefore, the project could not support debt at the same interest rate and repayment terms without RAD as under RAD.

Exhibit 2**20-Year Pro Forma for RAD Conversion**

RAD Income and Expenses	Year 1 (\$)	Year 10 (\$)	Year 20 (\$)	All Years (\$)
Rental income at 2% p.a. OCAF	1,381,512	1,651,035	2,012,602	33,567,108
Less vacancy (5% rental income)	(69,076)	(82,552)	(100,630)	(1,678,355)
Effective gross income (EGI)	1,312,436	1,568,483	1,911,972	31,888,753
Operating expenses (OE) at 3% p.a.	(652,370)	(851,195)	(1,143,935)	(17,529,426)
Contributions to reserves (CR)	(99,000)	(99,000)	(99,000)	(1,980,000)
Net operating income (NOI) = EGI – OE – CR	561,066	618,288	669,037	12,379,326
Debt service payment (DSP)	(309,480)	(309,480)	(309,480)	(6,189,608)
Cashflow (CF) = NOI – DSP	251,586	308,808	359,557	6,189,719

OCAF = operating cost adjustment factor. p.a. = per annum. RAD = Rental Assistance Demonstration.

Note: All figures in dollars.

Exhibit 3**20-Year Pro Forma for Non-RAD Alternative**

Non-RAD Income and Expenses	Year 1 (\$)	Year 10 (\$)	Year 20 (\$)	All Years (\$)
Rental income at – 1% p.a.	1,381,512	1,262,035	1,141,362	25,156,375
Less vacancy (5% rental income)	(69,076)	(63,102)	(57,068)	(1,257,819)
Effective gross income (EGI)	1,312,436	1,198,933	1,084,294	23,898,556
Operating expenses (OE) at 3% p.a.	(652,370)	(851,195)	(1,143,935)	(17,529,426)
Contributions to reserves (CR)	(99,000)	(99,000)	(99,000)	(1,980,000)
Net operating income (NOI) = EGI – OE – CR	561,066	248,738	(158,641)	4,389,130
Debt service payment (DSP)	—	—	—	—
Cashflow (CF) = NOI – DSP	561,066	248,738	(158,641)	4,389,130
Cashflow if rent increases at 0% p.a.	561,066	362,242	69,502	6,739,302
Cashflow if rent decreases at – 2% p.a.	561,066	144,046	(348,860)	2,302,744

p.a. = per annum. RAD = Rental Assistance Demonstration.

Note: All figures in dollars.

Source: Pro forma model developed by The Communities Group using RAD project data

both scenarios.⁸ In both scenarios, the operating budgets start at the same level in the first year. Both budgets have the same income of \$1.4 million, because we assume the project receives the same amount of capital funding in both scenarios.⁹ They also have the same vacancies (\$69,000) and expenses (\$652,000) in the first year, because the project has the same level of investment in both scenarios. Finally, both operating budgets have the same level of contributions to the reserve for replacement (\$99,000) in all years.¹⁰

⁸ Although it is possible for a project to reduce the level of capital improvements under the non-RAD scenario, that strategy greatly complicates the analysis and introduces more assumptions. Therefore, this case study keeps improvements equal in both scenarios.

⁹ In RAD, capital funding is part of the contract rent. To facilitate comparison and to not disadvantage the alternative approach, we assume that the PHA provides equivalent capital funding to the project in the non-RAD alternative scenario. More likely, this assumption may not hold, because capital funds are not easily obtainable, and the PHA may use them for another project or projects or another purpose.

¹⁰ In many cases, PHAs retain capital funds, use a portion of funds to support operating costs (at the project level and central office), and then use the balance to provide improvements at needier projects. Our analysis probably significantly overstates the results for the non-RAD approach, because it treats the comparison the same as the RAD scenario.

Over time, however, annual EGI and NOI increase under RAD and decrease under the non-RAD alternative. The reason for this difference is that the RAD pro forma assumes an annual OCAF of 2 percent, and the non-RAD pro forma assumes revenue dropping by 1 percent per year. Both pro formas assume that expenses will increase 3 percent per annum, as required by the underwriting criteria in the RAD program.

The RAD pro forma shows that the project is able to cover its payments of \$309,000 per year on the debt used to finance the rehabilitation under RAD and still generate substantial cashflow. Over 20 years, the project will make \$6.2 million in loan payments on its original loan balance of \$6 million under RAD. At the same time, the project will generate another \$6.2 million in cashflow. This result illustrates how RAD conversion can help PHAs raise financing through project debt, although leaving the project in a financially strong position.

Even though the non-RAD alternative included no fixed-payment mortgage debt, it generates only \$4.4 million in cashflow over 20 years—about \$1.8 million less than under the RAD scenario—if income declines by 1 percent per year. Because our results are sensitive to this assumption, we also looked at the impact of using different income projections in the non-RAD scenario. If income is flat (0-percent change), the 20-year non-RAD cashflow improves to \$6.7 million, which is slightly better than under RAD. If income falls by 2 percent per year, the 20-year non-RAD cashflow falls to \$2.3 million, which is significantly worse than under RAD.

Comparing Results

Exhibit 4 summarizes and compares the results of our analysis of both the 20-year operating pro formas and the upfront development budgets for this project under the RAD and non-RAD scenarios. Both scenarios have significant variances in all items except for operating expenses and contributions to reserves. The RAD conversion has \$8 million more than the non-RAD alternative for EGI and NOI. This advantage is partially offset by the \$6.2 million in debt payments under RAD, leaving a net gain in cashflow of \$1.8 million for the project under RAD as compared with

Exhibit 4

Comparison of 20-Year Cumulative Cashflow and Development Budget for RAD Conversion and Non-RAD Alternative

20-Year Cumulative Cashflow and Development Budget	With RAD (\$)	Non-RAD Alternative (\$)	Variance (\$)
Effective gross income (EGI)	31,888,753	23,898,556	7,990,196
Operating expenses (OE)	(17,529,426)	(17,529,426)	—
Contributions to reserves (CR)	(1,980,000)	(1,980,000)	—
Net operating income (NOI) = EGI – OE – CR	12,379,326	4,389,130	7,990,196
Debt service payment (DSP)	(6,189,608)	—	(6,189,608)
Cashflow (CF) = NOI – DSP	6,189,719	4,389,130	1,800,588
Development budget (DB): Project debt under RAD less change in total use of funds under non-RAD = additional gap financing	5,965,000	596,450	5,368,550
Total resource variance (CF + DB)			7,169,138
Total resource variance per ACC unit			36,208

ACC = Annual Contributions Contract. RAD = Rental Assistance Demonstration.

Note: All figures in dollars.

Source: Pro forma model developed by The Communities Group using RAD project data

the non-RAD alternative. In addition, in the non-RAD alternative, the PHA has to cover a development shortfall of \$6 million that was funded by project debt in the RAD scenario, less \$600,000 in reduced loan costs. Without the advantage of RAD conversion, the PHA has to find an additional \$5.4 million in gap financing to finance the substantial rehabilitation of this project, which fell from \$8.8 million under RAD to \$8.2 million in the non-RAD alternative.

Combining the development shortfall of \$5.4 million with the pro forma 20-year results, the total variance between the RAD scenario and the non-RAD mixed-finance scenario, at 1-percent annual decline, is \$7.2 million, or \$36,208 per unit. The most important contributors to the positive outcome for this RAD conversion are the transformation of capital funding and operating funding into RAD contract rents and the stability and upward trend of those contract rents under the project-based Section 8 program. This long-term funding permits borrowing (\$30,126 per unit) in lieu of the PHA using other sources of financing. It also results in positive cashflow over 20 years, improving the results for the RAD conversion compared with the non-RAD alternative by an additional \$9,094 per unit.

Our approach to comparing this actual RAD project to an alternative non-RAD approach is as close as possible to comparing apples to apples, in that it assumes that—in the non-RAD alternative—the project initially receives capital funds equal to the level at the time of conversion and uses those funds to cover the capital needs of the project. Most likely, these funds will decline over time, as they have during the past decades. Also, few PHAs apply all available capital funds to capital needs; rather, a portion is used for operating costs, planning, central office cost center operations, and so on. Having the same level of capital improvements at the outset allows for operating costs to be treated as equal. With other changes to the assumptions, it becomes nearly impossible to control all the variables and provide a reasonable comparison. As presented, the assumption that the PHA uses reserves, capital funds, or HUD's Capital Fund Financing Program to close the financing gap likely would result in a disproportionate use of those resources to complete this project—at the expense of other projects in the PHA's portfolio.

Conclusions

The following discussion presents our conclusions and lessons learned from the use of standard tools of real estate analysis to examine the impact of RAD on a single project.

- RAD can provide development financing sources, such as conventional debt, that are not otherwise available to finance projects with large capital needs.
- RAD can provide more resources, including both upfront development sources and long-term operational sources.
- Achieving the same level of capital improvement using alternative non-RAD, mixed-finance approaches likely would come at the expense of other properties in PHAs' portfolios. The mixed-finance or alternative models that we compared with RAD have substantial funding gaps that need to be filled with soft funds, which are limited in amount and availability. Using soft funds for these alternatives means that they would not be available to meet the needs of other projects in a PHA's portfolio.

The major features of RAD that make it more effective than alternative mixed-finance options include (1) stabilizing and converting capital funding to an operating subsidy that supports debt financing; (2) locking in current subsidy levels, with future OCAF increases, over the long term; and (3) leveraging greater project resources to achieve more substantial capital improvements and investment, thereby reducing capital needs backlogs and future maintenance and utilities costs for converted projects.

Acknowledgments

The authors acknowledge the helpful assistance from Nathan Bossie and Paul Joice in HUD's Office of Policy Development and Research in refining and clarifying the presentation of this analysis. We also appreciate the support of Marina Myhre in shepherding this article through the publication process and of John Wehmueller in simplifying our prose.

Authors

Jaime Bordenave is President of The Communities Group.

Dennis Stout is Director of Housing and Community Development at Econometrica, Inc.

Affordable Design

The U.S. Department of Housing and Urban Development sponsors or cosponsors three annual competitions for innovation in affordable design. This Cityscape department reports on the competitions and their winners. Each competition seeks to identify and develop new, forward-looking planning and design solutions for expanding or preserving affordable housing. Professional jurors determine the outcome of these competitions.

2017 Innovation in Affordable Housing Student Design and Planning Competition: Woodhill Homes, Cleveland, Ohio

Regina Gray, compiler

U.S. Department of Housing and Urban Development

Winning Team: Rutgers University

Jane Allen, Chelsea Moore-Ritchie, Sharone Small, Kim Tryba, Christine Winter

Runner-Up Team: University of Michigan at Ann Arbor

Bader Bajaber, Melissa Bloem, Emily Burrowes, Laura Devine, Prashanth Chamarti Rajendra Raju

The Jury

Beverly Bates, Michael Bodaken, Uwe Brandes, Linda Mandolini, Joe Reilly

Observations From the Field

Jeffery Patterson, Executive Director and CEO, Cuyahoga Metropolitan Housing Authority

The views expressed in this article are those of the compiler and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. government.

Introduction

The Innovation in Affordable Housing (IAH) Student Design and Planning Competition, now entering its fifth year running, invites teams of graduate students from various disciplines to submit plans in response to a housing design and construction issue identified by a selected housing authority. The goals of the competition are to encourage research and innovation in affordable

housing design that strengthens the social and physical fabric of low- and moderate-income communities and to foster crosscutting teamwork within the design and community development process. This article reflects on lessons learned from this year's event and identifies opportunities for furthering engagement with public housing authorities (PHAs) on these issues. The article features feedback from the jury, discussions with the second- and first-place winning student teams, and observations from Jeffery Patterson, Executive Director and CEO of the Cuyahoga Metropolitan Housing Authority (CHMA), on the importance of creating better communities through a sustained commitment to creative design.

The IAH Student Design and Planning Competition welcomes graduate students in urban planning, architecture, engineering, finance, and many other disciplines to submit proposals. The competition challenges the students to address social, economic, and environmental issues in response to a specific housing problem developed by a public housing agency. The U.S. Department of Housing and Urban Development (HUD) partnered with CMHA in Cleveland, Ohio, to develop program requirements to assist students with developing their proposals. The site—Woodhill Homes—is a 478-unit multifamily development on the outskirts of downtown Cleveland. Although its proximity to the city should generate more economic opportunities for Woodhill Homes residents, the property is isolated from the surrounding neighborhoods, and inadequate transportation options hinder access to the urban core. CMHA challenged students to submit proposals that not only address the redevelopment needs of the property, but also to find solutions for enhancing connectivity with the surrounding neighborhoods.

Woodhill Homes is one of the oldest public housing developments in the country. The distinction of being among the first also brings with it major challenges that the students were asked to address—a decaying landscape that is further hampered by harsh winters, stormwater damage, vandalism, and outdated building materials. The students' task was to develop a site plan that addresses badly needed renovations to the buildings around the development and in each unit. As is the case every year, students also had to account for the social and environmental needs of the residents, survey the regulatory environment, consider the conditions of the local housing market, and be familiar with the long-range comprehensive plan. Competition guidelines also required that teams submit proposals responsive to five general elements of design: (1) planning context and analysis, (2) building solutions and technology, (3) equitable development solutions, (4) site-specific illustrations for new development or redevelopment, and (5) operations and finances.

The competition is designed in two phases. In phase I, a jury of five practitioners, planners, and architects evaluated first-round proposals. This year, 35 teams representing 175 students from various professional graduate schools submitted proposals. From these submissions, the jury selected 4 finalist teams. In phase II, these finalists refined their plans—addressing complex issues, incorporating more detail, improving floor plans, and conducting additional analyses following a site visit to CMHA and nearby Woodhill Homes. Lessons learned from this visit were meant to help students improve their final proposals. Several weeks after the site visit, all jurors and finalists traveled to Washington, D.C., for the awards ceremony event at HUD headquarters on April 18, 2017. At the event, the student teams presented their revised project solutions in front of the jury and an audience. After an intense deliberation, the jury selected the team from the Rutgers University as the winner and the team from the University of Michigan at Ann Arbor as the runner-up.



In the remainder of this article, the members of the jury and winning student teams offer their thoughts about the competition. First, jurors share the elements of the winning site plans that represented innovative solutions and address whether the proposed solutions could be implemented at Woodhill Homes. The students then reflect on recommendations from the jury, the biggest challenges faced, and how they attempted to address them. They also identify opportunities to learn from mistakes, ideas of what innovation is, elements observed that provided value to the design of the project, and any tradeoffs that had to be made to get to a feasible site plan. This article concludes with insights from the Executive Director and CEO for the CMHA on this year's competition.

Jury Comments

Beverly Bates, Michael Bodaken, Uwe Brandes, Linda Mandolini, Joe Reilly

This year's jury consisted of a diverse group representing members of the construction industry, academia, advocacy, and housing finance. As in previous competitions, jurors were instructed to select the proposals that offer the best examples of innovative design and to encourage the students to think outside the box, keeping in full view the feasibility of their ideas. Also, because Woodhill Homes is one of the more challenging projects that we have seen thus far, their task was compounded by the fact that two outstanding proposals were put forward. We asked the jury to focus on the following three criteria.

- **Innovation**—The teams were constantly reminded that this award is called “Innovation in Affordable Housing” for an important reason; we want students to come up with new ideas around design, building technologies, or methods that have not been attempted before. These ideas and the solutions offered should be highlighted in all aspects of the site plan.
- **Financing**—Perhaps the most complex aspect of the Woodhill Homes case is assigning a reasonable price tag to the project. Both the Rutgers and Michigan teams needed to be clearer on how they calculated per-unit construction and operating costs; for instance, accounting especially for green features that may have higher upfront costs than expected. Another major consideration

is the feasibility of tax credit investment, given the conditions of the local housing market and difficulty with securing 4-percent tax credit financing. The teams' pro formas should also consider the long-term return on investments for the residents and the community as a whole.

- **Site needs and communitywide considerations**—As discussed throughout this article, the existing Woodhill Homes site needs major infrastructural upgrades. The students were charged with addressing site and building circulation, deteriorating building materials, parking, and impervious street surfaces that would cause flooding during rainstorms, among other challenges. However, the students were also strongly encouraged to be specific about how their plans enhance social cohesion, create a sense of community, and connect residents to opportunities beyond the Woodhill Homes neighborhood.

These criteria explain why the jury chose the Rutgers team as the winner of this year's competition. Among the most innovative aspects of their proposed site plan is the addition of Morris Lofts—a 40-unit building that residents could use for all types of activities, including a space for arts, rooms for training and community development activities, and a place where social workers and other practitioners could help residents address a variety of personal needs. The proposed site plan also includes a place for children and youth activities, as well as a recreational room designated for older adults and seniors. The proposed programs are created around resident empowerment; for instance, the plan includes the addition of a coordinator to work with the residents looking for job opportunities in the City of Cleveland's robust medical industries.

On the financial side, the jurors commended the Rutgers team for how they considered the use of both 9-percent and 4-percent tax credit financing—the former used for the building of Morris Lofts and the latter for unit renovations in existing buildings. Although the jury was not totally convinced that bringing tax credit syndicates onboard was realistic, the idea of combining various sources of income to include healthy contributions from private industry, the Federal Home Loan Bank program, the Ohio Housing Development Assistance Program, and the Gordon Gund Foundation, it concluded that the team had done its homework. For that, the jurors noted that the Rutgers team's plan was outstanding on the merits of its pro forma.

The aspect of the Rutgers team that most impressed the jurors was the integration of social service delivery into the design that transformed underutilized spaces into shared, commune-like areas to encourage more interaction between residents. To fully understand how the team's proposal envisioned this plan to reduce social isolation requires that one note how all the buildings in the Woodhill Homes property are closed off from one another, either by a street barrier that prohibits entry or by a physical structure like a large dumpster, iron or wooden fence, or raised terrain, making it difficult or unsafe to cross over from building to building. The jury noted that the team seemed to take great care in focusing on how the existing physical conditions contributed to the lack of social capital. The team was particularly sensitive to how the Woodhill community could get involved in reviving the property to its historic prominence, such as restoring art pieces and other important artifacts from the post-1930 Works Progress Administration (WPA) era.¹

¹ For example, the community center in the CMHA was built in the late 1930s during the height of the federal public works programs. Woodhill residents often participated in the various onsite activities that the center offered. The Inner Museum Conservation Association worked closely with the housing authority to preserve WPA-era artwork. To this day, historic preservation is a centerpiece of the community center, a functioning place for community engagement for all ages.

When the Michigan team presented its proposed site plan during the awards ceremony in April, the jury noted their outstanding visual presentation. Many of the visuals centered on the plan's environmental sustainability concept and healthy community design, which incorporated a community garden, new plants and trees, and recycled materials. Central to Michigan's project, and cited as a very bold approach, was the presentation of a parking plan alongside a pedestrian walk and bike pathway. Although jurors lauded the idea of a car-sharing program and other considerations around mobility, they questioned how parking or an auto-centered plan would align with the demographic characteristics of this population. Still, the jurors thought that the team's theme of providing improved access to the city through transit rerouting and street connectivity was one of the most commendable features of the proposed program.

In addition to the design concept, jurors thought that the Michigan plan was audacious. The students flirted with the idea of creating a mixed-income community by including a few market-rate units in the portfolio. Although the jurors were concerned that the team risked losing valuable tax incentives and whether Woodhill would serve as a viable place where the market could work, they did applaud the students for taking on the idea and presenting it well. The \$7.6 million the Michigan team proposed for new construction would go toward the establishment of a Women's Health Center, partly mortgaged with a HUD Federal Housing Administration (FHA) 221(d)(4) program loan.² A grocery cooperative would be phased in, which was a very popular idea among the jury, because access to food sources appeared to be an issue.

As they did the Rutgers team, the jury commended the Michigan pro forma—apart from the parking and mixed-income plan—citing the students' reasonable financing proposal that consisted of public and private investors, grants, and loans. A proposed 1-percent energy bond would go a long way in addressing the team's proposed energy-efficient and green features, such as the bioswale, low-impact materials, the green buffer, the garden shed, and permeable asphalt. The Michigan team was also similar to the Rutgers team in its plan to better utilize existing space. The plan proposes the addition of a community gazebo and a cistern, private backyards that open to a communal area, and a converted pedestrian path with imbedded street controls to slow auto traffic.

The Runner-Up Team: University of Michigan at Ann Arbor

Bader Bajaber, Melissa Bloem, Emily Burrowes, Laura Devine, Prashanth Chamarti Rajendra Raju

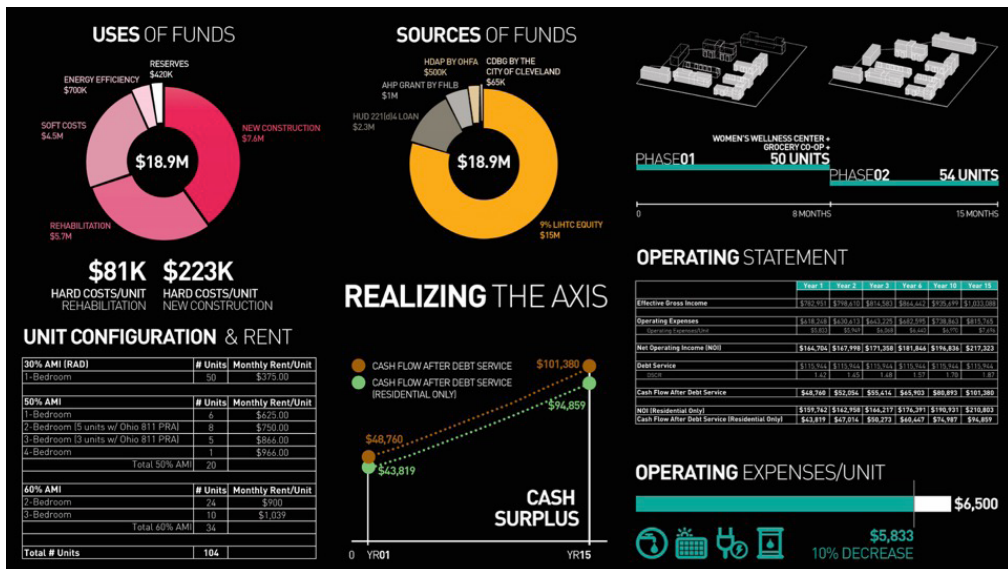
The runner-up team from the University of Michigan at Ann Arbor presented a plan that incorporates both new construction and the infill of existing buildings. The plan, called Axis Woodhill, aims to create a green mixed-income community that connects the residents "back to the grid" by expanding transportation options while acknowledging that residents often rely on the automobile because existing transit options are limited.

The students agreed that the most daunting task was balancing the need for new upgrades with addressing units that were in the worst shape. Constructing new units would likely add to the

² The 221(d)(4) mortgage program is a 40-year, fixed-rate, fully amortizing loan insured by FHA and is used to support multifamily housing construction or rehabilitation projects, with total project costs more than \$2 million.

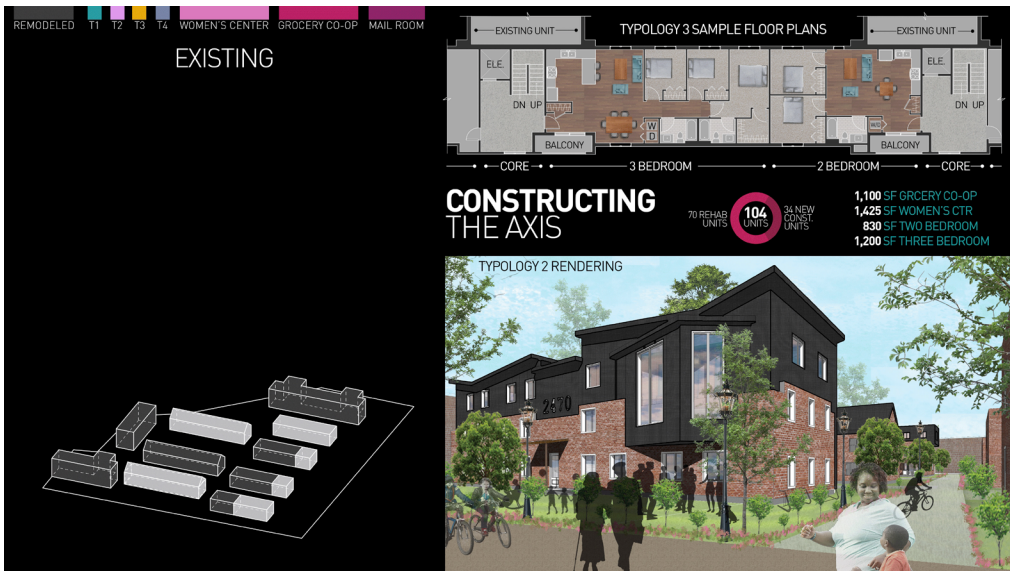
total project costs. To offset those costs, the team would include market-rate units that would attract moderate-income families, creating a mixed-income community. The students maintained that proposing a new mixed-use, mixed-income community with sustainable features was a novel and innovative idea. Anticipating the jury's criticism, the team admitted that the inclusion of market-rate units would be controversial, but that the investments would yield long-term positive outcomes for the residents and the community.

The team's proposed car-sharing program that included 55 additional parking spaces would add to the controversy. The students argued that, based on their research and contrary to what some might assume, low-income families do rely on cars as much as they would a traditional bus or transit route, particularly given the limited choices that the existing transportation system currently offers. However, the students acknowledged that efforts to improve transit access are well under way and had been a prominent fixture of the city of Cleveland's comprehensive plan. They cited projects sponsored by the Opportunity Corridor Partnership³ and Thrive 105-93,⁴ for instance, to address street connectivity and access to job opportunities and cultural attractions for Woodhill residents. Still, the students maintained that public housing should not be isolated and that the people residing in this community do not hold values that are distinct from those living outside of it. The idea of creating a mixed-income community, for example, was a bold step, but they argued that sustainable features, safe pedestrian-friendly spaces, and health and wellness are as valued in low-income communities as in any other.



³ For example, improvements are under way along East 105th Street, which is a major thoroughfare in Cleveland that leads to the downtown core. In addition, the East 55th and Woodhill Red Line rail stations are near the Woodhill community; these stations also expand access to many job opportunities close to the city, where the medical industry has thrived in recent years.

⁴ The Cleveland City Planning Commission established Thrive 105-93 as a comprehensive community-development plan that centers on the goals of sustainability, access to jobs, healthy community living, and public safety. The plan focuses on improving access and mobility for Woodhill and for residents in close-by neighborhoods.



The Winning Team: Rutgers University

Jane Allen, Chelsea Moore-Ritchie, Sharone Small, Kim Tryba, Christine Winter

The team from Rutgers University took home first prize for their site plan for Woodhill Homes, called "Beyond the Threshold." Although the plan is a proposal for infill housing, new construction is involved. The feature of the project that most differs from the Michigan proposal is simplicity. The presentation of the plan was concise and easy to understand, which garnered praise from the

jury. The plan focuses on community empowerment through social cohesion. The team—consisting mostly of urban planners and architects with a background in social work—suggested that increasing the density of the building would not only solve the need for more units but would also offer a better view of downtown. The reconfiguration plan boasts features such as pitched roofs and green facades (or “living walls”); private backyards and walkways that connect each building (or “village”) to enhance resident interaction; improved lighting; and upgraded heating, ventilation, and air-conditioning (HVAC) systems that reduce heating costs in the winter and cooling costs in the summer. Additional passive design features include high-performance windows and continuous insulation employed throughout the building envelope.

The centerpiece of the Rutgers proposal is the incorporation of social-based solutions throughout the plan. Acknowledging the human aspect of the design, the students highlighted the new community center where free Internet service would be offered. Onsite resident coordinators would provide direct assistance to single mothers—about 97 percent of the population at Woodhill Homes—who seek affordable childcare and better access to jobs. The students, some of whom are single mothers, seem to fully understand the challenges that Woodhill residents face and spent much of their time developing a plan that enables more direct interventions from social workers and community development advocates. The idea of creating a community where the residents work together in a common space with common goals was not lost on the team—the design reflects these goals. Organized in a U shape, the proposed grounds have green, energy-efficient features throughout, including a new community garden and upgraded playground for children, safely tucked away in a formerly underutilized space. The design added front and back porches to encourage more interaction and site flow among the residents. Green facades would cover all buildings, and the positioning of the buildings would provide relief from hot temperatures in the summer. Energy-efficient appliances would be included in each unit, reducing heating costs in the winter. The jury noted the careful attention paid to the needs of Woodhill residents and the community where they reside.





Conclusion: Moving Forward—Observations From the Field

Jeffery Patterson

When the four finalist teams of the 2017 IAH Student Design and Planning Competition arrived at CMHA, the students were welcomed by Jeffery Patterson, Executive Director and CEO. During his speech, Patterson challenged the students to take in the view beyond the villages of Woodhill Homes. He suggested that Woodhill offers some of the best sights and views of the city, as elevated slopes raise the development above the surrounding cityscape. Although Woodhill is relatively close to prestigious academic institutions like Case Western Reserve University and Cleveland State University, and to St. Joseph's and other medical centers, the community is cut off from the rest of the city due to poor access to jobs and transportation options. Expanding access to economic opportunities and reducing social isolation have been among Patterson's top priorities for many years. Progress towards these goals has been met, working with the City of Cleveland—the housing authority's top partner—and other public and private entities, such as the Cleveland Neighborhood Progress Community Development Financial Institution, local community development corporations, affordable housing advocates, banks, and philanthropic organizations. For instance, when an area hospital closed its doors nearly a decade ago, jobs were lost, and the residents of Woodhill suffered. The community partners, however, created enough capital to renovate the building and reopen the hospital, offering additional job opportunities for residents to rejoin the workforce.

Challenges remain, due primarily to poor connectivity. When asked how the ideas from the teams could be vetted and implemented into the Woodhill property, Patterson acknowledged that most of the teams' recommendations for a new development might not be financially feasible. However, Woodhill Homes is a Rental Assistance Demonstration (RAD)⁵ community that has already

⁵ The RAD program gives PHAs an opportunity to preserve affordable housing stock by leveraging public and private debt and equity. PHAs enter into new long-term contracts with private syndicators to finance rehabilitation or construction projects.

undergone capital improvements—an improved water drainage and recycling system, upgrades to building materials, and an updated HVAC system in every building. He commended all the finalist teams for their sustainable development proposals that encourage walking and reduce the carbon footprint. Increasing density is a popular goal because more affordable units are needed at Woodhill. Patterson appreciated certain aspects of the teams' plans, such as recognizing the historical significance of Woodhill by maintaining as much of the initial design facades as possible, and reusing building materials that enhance durability. Patterson believes that improvements to the physical landscape should respect the cultural traditions of the community and surrounding neighborhoods. These neighborhoods share a common history, too, so ideas about increasing connectivity and open up these communities to improve social cohesion are ideal.

To Patterson, innovative practices not only involve transforming the buildings to make them look more aesthetically pleasing and less like traditional public housing while preserving the historic character; innovation also means diversity in unit design. Intergenerational housing, as he refers to it, allows for the units to adapt to household and lifestyle changes and for different types of families: single parent-headed households, young professionals, seniors, children aging out of foster care, veterans, and persons with disabilities. Enhanced onsite social services that create opportunities for self-sufficiency and aging in place are also innovations that Patterson identifies as necessary for Woodhill Homes. These services should be offered on site to reduce reliance on cars and as an alternative for those families who need access to childcare services as they look for work, address health and wellness needs, or transition to homeownership. Patterson commends HUD for encouraging future generations of young practitioners to continue offering their ideas through this competition for years to come.

Acknowledgments

The U.S. Department of Housing and Urban Development (HUD) thanks the award-winning student teams from Rutgers University and the University of Michigan at Ann Arbor for sharing their thoughts and for all the hard work they put into their submissions for this year's competition. HUD also greatly appreciates the 2017 Innovative Affordable Housing jury members' dedication and hours devoted to the awards selection process. HUD also thanks Steven Winter Associates for its planning and logistics efforts, the work that made this year's competition a success, and the notes and writings that made a valuable contribution to this article.

Postscript

The competition is thoroughly documented on the web.

To learn more about the award: [huduser.gov/portal/challenge/about.html](https://www.huduser.gov/portal/challenge/about.html).

To read about the 2017 award guidelines: https://www.huduser.gov/portal/challenge/past_competitions.html.

To learn more detail about the winning submissions: https://www.huduser.gov/portal/challenge/past_competitions.html.

Request for Proposals

Competition To Conduct Analysis of HUD's Randomized Evaluation Data

Moving to Opportunity and Family Options Studies

The U.S. Department of Housing and Urban Development (HUD) announces a new competition for access to data from two important randomized social experiments, the Moving to Opportunity for Fair Housing (MTO) demonstration program and the Family Options Study (FOS). HUD has partnered with the U.S. Census Bureau to make these experimental data more accessible to qualified researchers and more readily matched with other data, including from the Census Bureau's Administrative Data Inventory (<https://www.huduser.gov/portal/sites/default/files/pdf/Dataset-Competition-Appendix.pdf>), at 1 of 25 Federal Statistical Research Data Centers (RDCs). This competition supports greater evidence building on (1) the impact of neighborhoods on the lives of low-income families with children and (2) the impact of housing and services interventions for families with children experiencing homelessness.

The application deadline is January 15, 2018. HUD will announce three winners in March 2018. Winners will receive free access to their selected RDC and the relevant evaluation data, research assistance while performing analyses, and a disclosure review of their analytical findings. Each prize will pay for one seat for one team per proposal for a 1-year period following project approval and completion of all requirements to access the selected RDC. The total estimated value of the prize is \$15,000. Prize winners are responsible for any additional cost in preparing and supporting data access beyond MTO and FOS.

Eligibility

Proposals are being accepted from policy or research organizations, and their affiliates, that have demonstrated expertise conducting rigorous policy research and evaluation using social and behavioral science data. Government, academic, nonprofit, not-for-profit, and for-profit organizations are eligible. An applicant team must include at least one person who will meet the requirements for being granted Special Sworn Status with the Census Bureau.

For more information, visit <https://www.huduser.gov/portal/sites/default/files/pdf/Dataset-Competition-Full.pdf>.

Bridging the Gap to Scalable Community Reinvestment Lending Programs

Roberto G. Quercia
Sarah Riley

Correction

The volume 19, number 2 issue of *Cityscape* omitted a sentence in the Acknowledgments section on page 125. The omitted sentence should have read, “Some of the language summarizing Community Advantage Program research in this paper comes from a related paper by the authors published in the Boston College Journal of Law & Social Justice at <http://lawdigitalcommons.bc.edu/jlsj/vol37/iss2/7/>.”

Community Reinvestment Act and Local Governance Contexts: Advancing the Future of Community Reinvestment?

Colleen Casey
Joseph Farhat
Gregory Cartwright

Correction

The volume 19, number 2 issue of *Cityscape* contained errors on pages 142 and 143. The third full sentence on page 142 should have read, “Since SLEHCRA’s launch in 2009, the coalition has written 46 public comment letters.” Page 143, paragraph 2, sentence 4 should have read, “Since 2009, SLEHCRA has conducted more than 80 reviews of bank performance.” Page 143, paragraph 4, sentence 1 should have read, “As mentioned previously, SLEHCRA has written 46 public comment letters.”

The HECM Program in a Snapshot

George R. Carter III
Joshua J. Miller

Correction

The volume 19, number 1 issue of *Cityscape* contained errors in exhibit 6 and on pages 123 through 125. The corrected discussion follows.

FHA Administrative Data

In this section we use FHA administrative data to specifically examine HECM originations. The first HECM loan was originated in 1989 as a pilot program that was not made permanent until 1998 (Szymanoski, Enriquez, and DiVenti, 2007). The number of HECM loans originated during the 1990s was relatively low, with annual endorsements not exceeding 10,000 until 2002. Exhibit 5 shows the number of HECM originations from 2002 to 2015.

From 2002 to 2008, HECM originations increased from slightly less than 15,000 loans to the peak of about 115,000 loans. After the peak, the number of originations fell to an annual average of around 58,000 loans from 2011 to 2015. Although not included in exhibit 5, the number of loans originated during the first half of 2016 was 21,000, which is slightly less than the recent 5-year annual average.

The 2015 American Community Survey estimates that nearly 27.6 million homeowner households in which the household head was at least 62 years of age. Using these two statistics, we constructed a measure of market penetration of HECM loans that is comparable across time and geography. For example, in 2015, for every 1,000 age- and tenure-eligible households in the United States there were 24.4 HECM loans.⁴

An estimated measure of market penetration for each state is provided in exhibit 6. Utah is the state with the highest measure of HECM loans, at 50.3 loans per every 1,000 age- and tenure-eligible households. Maryland follows Utah at 43.1. The state with the lowest penetration of HECM loans is North Dakota, at 5.3, followed by South Dakota, at 7.8.

The state variation in the penetration of HECM loans may be explained by differences in preferences, state-level regulations, market saturation, and local housing market conditions.

⁴ The figure is consistent with the 2 to 3 percent estimate provided in the Consumer Financial Protection Bureau's 2012 report to Congress (CFPB, 2012).

In fact, empirical examination of state-level variation in the rate of origination of HECM loans finds evidence that seniors use the product to insure against house price declines (Haurin et al., 2016). This finding may be one plausible explanation for the high uptake of HECM mortgages in California and Florida before the housing bust.

Exhibit 6

HECM Loans Active in 2015 per 1,000 Eligible Households

United States	24.4	Pennsylvania	19.9
Utah	50.3	Illinois	18.7
Maryland	43.1	South Carolina	18.2
California	40.8	Georgia	17.6
Nevada	37.7	Oklahoma	17.1
Florida	35.2	Alabama	16.9
Oregon	34.4	Arkansas	16.6
New Jersey	33.9	Tennessee	16.5
Connecticut	32.9	Vermont	16.2
Colorado	32.6	Minnesota	16.1
Delaware	32.4	Missouri	15.2
Arizona	30.5	North Carolina	15.1
Virginia	30.1	Michigan	14.2
Idaho	30.0	Alaska	13.4
Rhode Island	28.8	Mississippi	13.1
Hawaii	28.8	Indiana	12.7
Washington	28.0	Wisconsin	11.8
Massachusetts	27.6	Nebraska	11.4
Texas	26.6	Kansas	11.2
New York	24.9	Ohio	11.1
New Mexico	24.6	Kentucky	8.9
New Hampshire	23.9	Iowa	8.7
Montana	21.5	West Virginia	7.9
Wyoming	20.8	South Dakota	7.8
Louisiana	20.8	North Dakota	5.3
Maine	20.5		

HECM = Home Equity Conversion Mortgage.

Note: An eligible household is defined as a homeowner with a household head who is at least age 62.

Sources: Federal Housing Administration administrative data; 2015 American Community Survey

Contents

Symposium: Planning Livable Communities..... 1

Guest Editors’ Introduction by Denise G. Fairchild and Patrick J. Revord 3

Articles by—

Lauren C. Heberle, Brandon McReynolds, Steve Sizemore, and Joseph Schilling 9

Elizabeth Mattiuzzi..... 39

Elizabeth A. Walsh, William J. Becker, Alexandra Judelsohn, and Enjoli Hall 63

Juan Sebastian Arias, Sara Draper-Zivetz, and Amy Martin 93

Meghan Z. Gough and Jason Reece..... 115

Kathryn Wertheim Hexter and Sanda Kaufman..... 135

Karen Chapple, Grace Streltsov, Mariana Blondet, and Cristina Nape..... 163

Symposium: The Family Options Study..... 189

Guest Editors’ Introduction by Anne Fletcher and Michelle Wood 191

International Commentaries by—

Eoin O’Sullivan 203

Guy Johnson and Juliet Watson 211

Geoffrey Nelson 219

U.S. Commentaries by—

Marah A. Curtis 229

Elaine Waxman 235

Nicole E. Allen 245

Patrick J. Fowler 255

Aletha C. Huston..... 265

Articles by—

Michelle Wood and Anne Fletcher 271

Marybeth Shinn, Scott R. Brown, Brooke E. Spellman, Michelle Wood, Daniel Gubits, and Jill Khadduri 293

Zachary Glendening and Marybeth Shinn..... 309

Hannah Bush and Marybeth Shinn 331

Daniel Gubits, Tom McCall, and Michelle Wood 357

Claudia D. Solarì and Jill Khadduri 387

Departments..... 413

Data Shop by Sidney Wong, Daniel Miles, Gabrielle Connor, Brooke Queenan, and Alison Shott 415

Graphic Detail by Alexander Din 429

Impact by Alastair McFarlane, Yves Djoko, and Alex Woodward..... 435

Policy Briefs by Paul Joice 449

Evaluation Tradecraft by Jaime Bordenave and Dennis Stout..... 475

Affordable Design compiled by Regina Gray 487

Request for Proposals: Competition To Conduct Analysis of HUD’s Randomized Evaluation Data 497

Correction: Bridging the Gap to Scalable Community Reinvestment Lending Programs by Roberto G. Quercia and Sarah Riley 499

Correction: Community Reinvestment Act and Local Governance Contexts: Advancing the Future of Community Reinvestment? by Colleen Casey, Joseph Farhat, and Gregory Cartwright 499

Correction: The HECM Program in a Snapshot by George R. Carter III and Joshua J. Miller 500

