The Policy Case for Research Into Regulatory Barriers: Reflections on HUD's Research Conference on Regulatory Barriers to Affordable Housing

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The Role of Research in the Development of Housing Policy

Policymakers often are required to make judgments and take action without the benefit of an extensive research foundation. Indeed, from a policymaker's perspective, it sometimes seems as if the research process stretches out indefinitely without ever fully exhausting a subject or developing definitive conclusions. When a major research project is (finally) completed, it may come years after the program that gave rise to the research has been completed and, in some cases, has even been superseded by a new and improved program. Perhaps for these reasons some argue that a call for more research is just an excuse for delaying action.

On the other hand, research has a critical role to play in the policymaking process. Research can tell policymakers if a program is actually producing solid results, if a program is cost-effective in light of other programs with similar objectives, and if ways are available to improve a program to ensure it better achieves its stated objectives. Research also can help policymakers better understand the precise nature of complex problems so that they can design more effective solutions and test the efficacy of alternative solutions. Without solid research, policymakers, in a sense, are groping around in the dark. They can feel their way around the darkness and have a vague sense of what is around them, but they cannot actually see the true nature of things and whether there may be better routes through or around the obstacles than the one currently being taken.

The tension between the exigencies of policymaking and the more deliberate pace of research is a real one, but the tension need not lead to frustration or conflict. One way to reduce the tension would be to substantially increase the volume of housing-related research funded by the federal government. Consider what a corporation with an annual budget in excess of \$30 billion (the approximate size of the Department of Housing and Urban Development's (HUD's) annual budget) would spend on R&D.¹ If a fraction of this amount were invested into housing-related research, policymakers would be able to

test promising approaches to and make substantial improvements in the nation's housing programs. Because such an investment would be many times the nation's current expenditures on housing-related research, many more research projects could be undertaken, delivering results on an ongoing basis and providing a more reliable and visible stream of research input into housing-related policy issues.

Another way to help bridge the gap between policy and research would be to do a better job involving policymakers in the process of planning future research topics. If the broader policymaking community were invited to help shape the research agenda and were fully briefed on research results and its policy implications, policymakers would not only feel invested in the research but also be more likely to take advantage of the results to strengthen existing programs and implement new ones. (Note that such research would likely have application at state and local levels as well as the federal level.) Finally, housing-related research should be conducted using a wide variety of research approaches—some with shorter timelines and some with longer ones. This would ensure that policymakers receive the benefits of both timely input into the policymaking process and the more definitive input on the impact of housing policy possible only through a long-term study with a very rigorous (and unavoidably expensive) research design.

Summary of Research Recommendations

These observations provide a useful context for considering whether research on regulatory barriers would help advance the policy objective of expanding the availability of affordable housing, and if so, what kind of research should be performed to achieve this goal. As Michael Schill has addressed these questions quite expertly from the perspective of a researcher in his introductory article to this volume, this article addresses them from the perspective of a former policymaking official. The recommendations advanced in this article are based on the papers prepared for and the discussion that occurred at HUD's Research Conference on Regulatory Barriers to Affordable Housing, held on April 22, 2004.

In brief, the answer to the first question is a resounding yes: we absolutely do need more research related to regulatory barriers to affordable housing. As summarized in the papers collected in this volume, many forms of regulation have an impact on housing prices; in the aggregate, this impact is quite substantial and thus a major obstacle to improving housing affordability. Some of this regulatory barriers to affordable housing can help policy-makers understand which regulatory processes have the greatest impact on housing costs and identify alternative approaches that might meet a regulation's legitimate policy objectives with less of an impact on housing prices (or, where that is not possible, identify off-setting policies, such as allowing greater than normal density on nonimpacted land, that help to make up for the regulation's impacts on housing costs).

Research on the regulatory systems of particular localities can help those localities better understand the impact on housing costs of their specific local regulatory processes and help identify changes to those processes that would reduce the adverse impact on housing costs. Research also can help test alternative approaches to reducing the impact of regulation on housing costs, such as one-stop permitting, fast-track approvals for affordable housing, and more "as-of-right" zoning for multifamily housing. Finally, research can help test alternative approaches to strengthening the public image of affordable housing, rental housing, manufactured housing, and density generally, thus mitigating the "not-in-my backyard" (NIMBY) sentiment that is a major obstacle to the development of affordable housing at the local level.

As noted above, a need exists for multiple approaches to research, with staggered timelines and varying audiences. Even as researchers conduct the much-needed basic research that examines the precise impact of different regulatory processes and enables researchers to compare regulatory processes across locations, shorter term projects can and should be conducted that will deliver immediate results. For example, as Peter May discusses in his paper on regulatory implementation, a number of inefficiencies are present in the process by which housing and land use regulations are implemented that raise housing costs but serve no legitimate policy end. Brief short-term research projects that help identify the most common and problematic of such processes and highlight solutions that experts believe have worked can, if marketed widely and effectively, have an immediate impact in reducing inefficient implementation processes that negatively impact housing affordability. Finally, more creative thinking and consensus-building are needed around some of the thorniest challenges, such as the funding of new school construction and the protection of the environment, that lead to the development of new approaches that advance the legitimate goals of such policies while minimizing their negative impact on housing affordability.

Points of Agreement and Disagreement at the Research Conference

The papers prepared for HUD's Research Conference on Regulatory Barriers to Affordable Housing and the discussion at the conference itself provide a strong foundation for a determination of the extent to which research is needed to advance policymaking in this area and what form it should take. A useful point of departure is to consider the points on which the different speakers and writers agreed and on which they differed.

The speakers all agreed on the following basic points:

- 1. A wide variety of regulations leads to increases in housing costs. This rather basic point is easily forgotten in the rush to analyze these issues in finer detail. Many speakers at the conference emphasized the lack of detailed, systematic research regarding the precise effects of different regulations and regulatory environments on housing costs, but everyone agreed on the fundamental point that regulations can and do lead to significant increases in housing costs.
- 2. Merely knowing that a regulation negatively impacts housing affordability is not a sufficient basis upon which to judge a regulation. Competing public policy values, such as housing quality and environmental protection, also need to be considered. For example, by requiring builders to adhere to basic standards of housing quality, building codes increase the cost of some housing. But not all building codes should be thrown out. Some standards are plainly necessary to ensure that housing is decent and safe. Research can help us determine which standards are legitimately and efficiently related to safety and which are not. The same point goes for other core policy objectives, such as protecting the environment. Excessive building in a fragile ecosystem may have devastating environmental effects, warranting limitations on construction, even when such limitations raise housing costs. On the other hand, the benefits of every regulation justified by reference to environmental protection will not *always* be worth the costs. By more clearly demonstrating the housing affordability impacts of particular environmental regulation, research can help policymakers better balance these competing objectives. Research also can help identify the situations in which more creative thinking needs to occur to determine offsetting policies to improve housing affordability where a much needed environmental protection regulation inadvertently (or unavoidably) reduces housing affordability.
- 3. The cost of housing can be affected by both the content of a regulation and its implementation. This "big picture" point can also get lost in the minutia of the debate on research priorities. For example, in his discussant comments, David Sunding emphasized the costs associated with delays resulting from the need to prepare wetland permit applications. A nationwide analysis of such applications found that, on average, it

took 383 days from initiation of the process until submission of the application and another 405 days from submission until receipt of a decision from the U.S. Army Corps of Engineers (Sunding and Zilberman, 2002). Such delays cost money, and the costs translate into higher housing prices. By helping to clarify the housing cost impacts of such implementation processes—which by no means are limited to the environmental arena (other processes raising implementation issues include code enforcement, land use approvals, and many other aspects of the development and construction process)—research can help policymakers understand the extent to which such processes pose problems that need to be solved. Research also can help identify promising solutions.

As Michael Schill points out in his introductory paper, unlike some of the other areas of regulation that impact housing prices, implementation obstacles are not "morally ambiguous." In other words, no competing legitimate policy objective justifies bureaucratic inefficiency. Implementation obstacles thus pose a particularly fruitful target of quick turnaround research to identify the implementation processes that have the most significant impacts on housing costs and the most effective strategies for addressing these problems.

- 4. Context matters. Regulatory processes obviously differ from one locality to another. Any thorough examination of regulatory barriers to affordable housing thus needs to drill down to better understand the specific issues of a particular locality. Differences in local housing markets and political processes also need to be considered. For example, as James McElfish, Jr., noted in his discussant comments, the effects on housing prices of development limitations imposed by wetland regulations can range from "negligible to nonexistent" in a housing market such as rural Nebraska, where alternative developable land is in ready supply, to "substantial" in a high-demand, low-land-availability area such as Orange County, California. In his discussant comments, Carlos Martín similarly argued that context should be taken into consideration in the analysis of building code regulation. Particular housing code provisions may make more sense for one type of housing than another or in one area than another in light of local or regional building patterns.
- 5. The possibility of unintended consequences needs to be considered in assessing the merits of a particular regulation that negatively impacts housing affordability and determining how to modify the regulation so as to improve housing affordability. This point was emphasized in the discussant comments of William Fischel, who noted that if jurisdictions are denied the right to assess large impact fees, they might respond by simply refusing to issue any permits at all, which would hinder, rather than help, affordability. This does not mean the size of impact fees should be ignored altogether, but rather that the legitimate needs of local jurisdictions and the full range of their options and likely responses to policy changes should be considered before enacting policies that could inadvertently be counterproductive. It also may mean that, in the long term, systems need to be set up that help to oversee the fairness of local regulatory decisions.
- 6. *More research is needed to better understand which regulations have the greatest impact on housing affordability, the costs and benefits of such regulations in light of other policy objectives, and how best to resolve any conflicts.* This point emerged as the overriding theme of the conference, as presenter after presenter carefully reviewed the state of the evidentiary record in each area and found it wanting. It is of course the nature of researchers to identify a need for more research (just as it is the nature of practitioners to identify a need for more government funding), but in this case, the need for more research is clear. This article aims to articulate the specific policy value and implications of such research.

Somewhat surprisingly, fairly few points of outright disagreement arose during the conference. Different speakers, however, offered different emphases. One difference in emphasis concerned the strength of the existing evidence on the extent to which regulations increase the cost of housing. Some emphasized the limitations of the evidence, while others emphasized its strengths. For example, in their assessment of the impacts of growth control and other land use regulations on the price of housing, John Quigley and Larry Rosenthal were fairly guarded in their conclusions, emphasizing the methodological weaknesses of many of the studies and their mixed results. In commenting on the Quigley and Rosenthal paper, by contrast, Robert Ellickson argued that the most careful and impressive studies supported the common sense proposition that land use regulations that restrict supply lead to increases in housing prices. William Kreager echoed this point, noting that, based on his experience as a builder and a developer, regulations that limit developable land raise housing costs, as do fees, permits, and requirements that developers pay the full costs of new infrastructure (which they pass on to home purchasers).

Another difference concerned the willingness of individuals to consider the potential for regulations to impact costs by increasing demand as opposed to decreasing supply. The basic point here is that some regulations may raise costs by making the regulated land more attractive to potential buyers rather than by constricting the amount of developable land. From the perspective of affordable housing, one can argue that it does not matter whether the costs of housing are driven up by scarcity of supply or increased demand; if the resulting housing prices are unaffordable, subsidies will be needed to make the housing affordable. As noted above, however, the same regulations that drive up the costs of housing may serve competing social values that justify the increased costs. By considering the extent to which housing prices rise from "increased demand" created by regulations, economists are able to "monetize" (some of) the value of regulation, thus considering it in a cost-benefit analysis assessing the merits of the regulation. A narrow application of this approach, however, may miss much of the real value of the regulation, as many benefits served by regulation (for example, the long-term benefits to society of reduced global warming or of enhanced diversity of animal species) are societal benefits that are unlikely to be internalized into the price of an individual housing unit.

Research Suggestions and Recommendations

Finally, and perhaps most importantly, differences of opinion arose in what individuals recommended as the focus of future research in this area. The following is a summary of the principal research suggestions and recommendations that emerged from the conference, along with some thoughts on the policy relevance of each. (Note that the order in which these recommendations are presented below does not reflect any assessment of the relative priority of each recommendation.)

- 1. The collection of basic data on jurisdictions' regulatory policies and practices. This recommendation seemed to be the consensus of the conference participants. Although the gathering of basic data on regulatory practices and policies (including implementation practices) across jurisdictions does not sound particularly exciting, the collection of this information is critical to addressing fundamental, policy-relevant issues, including the identification of which regulations have the greatest impacts on housing costs and an assessment of the magnitude of those impacts. Because the gathering of such data is a relatively expensive undertaking, and the benefits extend to all communities included in the survey (as well as others that can learn from the data), the collection of such data is a natural role for a public entity such as the federal government to play.
- 2. Indepth analyses of the impact of regulatory environments on housing costs in particular jurisdictions. Since many regulations—and certainly most regulatory processes that affect the costs of housing are local in nature, research must focus on the specific

regulatory regimes of particular localities so that local decisionmakers can become informed on the particular regulations and processes that are increasing housing costs in their areas, along with options for mitigating those burdens. The study of New York City's regulatory environment by Salama, Schill, and Stark (1999) provides a good illustration of the power of such a study and its potentially positive impact on the local regulatory process. By closely analyzing the city's regulatory processes, quantifying the impacts of those processes on housing costs, and proposing specific steps to reduce the identified regulatory barriers to affordable housing, this study has had a significant impact on the city's regulatory policies. Among other changes that appear to be related (at least in part) to this study are the rezoning of significant parts of the city to increase the amount of land available for residential development and progress in reforming the city's outdated building code.

3. Indepth research on the impacts of regulation on particular housing types, such as manufactured housing, multifamily housing, condominiums, and cooperatives. Manufactured housing is a particularly important source of affordable housing for low-income families that is often neglected in the affordable housing conversation. In light of the lack of attention given to this segment of the affordable housing market, rehearsing the basic facts on manufactured housing is useful. As stated in Apgar et al. (2003: 3):

Between 1993 and 1999, manufactured housing accounted for more than one-sixth of the growth in owner-occupied housing stock. For particular submarkets, the share is considerably higher. For example, among households with very-low incomes (that is, less than 50 percent of area median), 23 percent of homeownership growth between 1993 and 1999 came through manufactured housing. For southern households, the figure was 30 percent, and for rural households 35 percent. Indeed, in the rural South, manufactured-home purchases accounted for a stunning 63 percent of the increase in very-low-income homeownership.

Although manufactured housing continues to be a substantial contributor to the nation's affordable housing stock, many regulatory barriers exist to the use of manufactured housing that lead to a reduction in the supply of low-cost housing produced through this market mechanism. These barriers range from outright bans of manufactured housing to more subtle land use requirements that make it extremely difficult or impossible for manufactured housing to be used in a particular community. A research program focused on better understanding the nature and extent of such regulatory barriers and identifying promising solutions for overcoming them could lead to significant increases in the supply of low-cost housing. The same point applies to other particular segments of the housing stock, such as multifamily housing, condominiums, or cooperatives, which are important sources of affordable housing but often face regulatory and other obstacles to their use.

4. *Research on the impacts of regulatory barrier mitigation strategies*. As Harriet Tregoning observed in her discussant comments, many jurisdictions have adopted policies intended to reduce barriers to affordable housing. Many of these approaches, such as one-stop permitting, electronic processing, administrative streamlining, and thirdparty certification of compliance, have focused on reducing delays and other burdens associated with *regulatory implementation*. Other changes focus on revising outdated regulatory provisions, such as Smart Codes that streamline the process for rehabilitating deteriorated housing or new building codes that permit the use of lower cost materials. Research that persuasively documents the positive impacts of such changes on lowering housing costs and helps policymakers understand which approaches yield the best "bang for the buck" would be of great use to local policymakers, advocates, and practitioners. 5. Research on how to impact public perception about the value of affordable housing, rental housing, and density. As many of the papers, presenters, and discussants observed, some regulatory barriers to affordable housing are inadvertent byproducts of regulatory processes that may not be sufficiently focused on (or informed about) the impacts of the regulation on affordable housing, while others may be quite intentionally designed to keep out new residents or prevent the proliferation of certain types of housing (for example, multifamily rental housing) that the proponents (or defenders) of the regulatory processes on affordable housing can supply much of the data needed to convince policymakers to adopt policies that mitigate *inadvertent* barriers to affordable housing, it will do little to prompt changes to regulations where the very point is to exclude, delay, or marginalize the development of affordable housing.

To address the NIMBY sentiment at the root of many of the regulatory barriers to affordable housing, experimentation with different strategies for strengthening the public image of affordable housing, density, and multifamily rental housing is necessary. Certainly, descriptive research has its place here; for example, studies of the effects on property values of particular types of affordable housing, such as public housing, low-income housing, tax credit housing, unsubsidized workforce housing, manufactured housing installed on a permanent foundation, and townhouses. As several panelists on the concluding panel of the conference noted, demonstrating that such impacts are negligible (or even positive) can help break down misconceptions that lead people to oppose new affordable housing development.

At the same time, a need exists for proactive research designed to test the potential of different marketing strategies to change the image of "less favored" housing types. Properties developed today under the HOPE VI program or the Low-Income Housing Tax Credit (LIHTC) program look very different from the traditional, high-rise public housing developed in the 1960s. Yet, when most people think of subsidized housing, they are unlikely to picture a nice new LIHTC development. A marketing campaign that helped the broader public come to terms with the very attractive nature of most subsidized housing today could help minimize NIMBY sentiment that motivates the establishment of many regulatory barriers (or nurtures the neglect that permits inefficient regulatory systems to continue, notwithstanding their negative impact on affordable housing). A research project that designed and tested the efficacy of different marketing approaches could show if such an approach would actually work, and if so, how it should be designed.

Similarly, as Tregoning argued in her discussant comments, local communities rarely appreciate the real negative economic consequences of a shortage of affordable housing until the problem reaches crisis proportions. A proactive marketing campaign designed to promote the economic benefits of ensuring adequate affordable housing for the police officers, hospital workers, teachers, and other essential workers who keep local economies going could help change public perception about the value of such housing, reducing NIMBY sentiment and increasing support for affordable housing strategies. Again, research could help determine if such a strategy would actually be effective, and if so, how it should be designed to achieve maximum effect. Similar approaches could be used to test strategies for strengthening public opinion of multifamily rental housing, manufactured housing, and increased density generally.

6. Research and policy development on offsetting policies that can help resolve competing concerns. In his discussant comments, James McElfish stressed the importance of "offsetting" strategies that help compensate for unavoidable housing cost impacts of environmental regulation. For example, cluster development allows for the preservation of large open spaces for ranching and habitat, while at the same time ensuring adequate space for people to live and work. Other offsetting approaches include allowing density

waivers to compensate landowners for reductions in the amount of developable land or transferable development rights programs that help preserve the net amount of residential development opportunities, even if they substantially reduce or eliminate a particular landowner's opportunities to develop his or her land. Research can help identify when such offsets are needed, the magnitude of the impact that needs to be offset (which can help target an appropriate resolution), and highlight particularly innovative and effective approaches that are being used to address these problems by different jurisdictions. (Research purists might classify the latter point as "best practices identification," rather than "real" research, but careful identification and documentation of effective local practices being used to address challenging problems can be a highly effective use of research dollars that has a real impact on local practice and often has no alternative funding source within HUD.)

As observed in the environmental context and elsewhere, regulatory barriers sometimes reflect a clash of competing values. In some such cases, we may need to spur more creative analysis and policy development to develop alternative approaches that do a better job balancing these competing objectives. New school construction, for example, is a particularly thorny issue. On the one hand, one cannot deny that requiring new homeowners to pay for the costs of constructing new schools has the effect of raising new construction costs, placing some newly constructed housing beyond the reach of low-income families. On the other hand, most localities are reluctant to cover such costs out of local property tax revenues and, as Fischel observed, may choose to permit *no* new construction rather than absorb the costs of new school construction and other marginal costs of adding new residents. Paying for these costs at the state or national levels would spread the costs out over a much wider base, thus mitigating the impacts on any one community. For some reason, however, most new school construction continues to be financed locally. Research and policy exploration that thoroughly examines how this issue is handled in different areas and states and considers new approaches that might break the logiam and mitigate the impact of new school construction costs on new homeowners would be quite useful.

A similar point applies to liability insurance, which although often overlooked in a discussion of regulatory barriers can have a significant negative impact on affordability. Some builders in California, Texas, Arizona, and other states argue that the high costs of liability for product defects, especially for planned unit developments and condominiums, substantially increases the costs of constructing such housing. Protecting the public from product defects is important, but ensuring that housing is affordable is also important. Creative thinking and policy development on solutions to resolve such competing concerns is needed to address such barriers.

7. Finally, and perhaps stretching the concept of regulatory barriers just a bit, the field would benefit from *more creative thinking and policy development on new housing types that would be attractive to the public but would cost less to build.* As Carlos Martín inquired in his discussant comments, is it really the case that all Americans dream of owning a single-family detached "Cape Cod" style home? Or are there significant portions of the public that either already desire an alternative (and less expensive) form of housing or that could be convinced to desire such housing if exposed to it in the right circumstances and if the price were right? These questions are closely related to regulatory barriers issues because a detailed examination of local regulations would be needed to determine if such alternative housing types would be permissible and affordable. Determining how the current regulatory environment shapes existing housing types, which in turn shapes the public's "image" of the American Dream, could be helpful in charting a course for regulatory reform that leads to a richer and more diverse range of housing types and, ultimately, more satisfied consumers.

Conclusion

As the discussion above indicates, numerous policy-relevant research projects have been identified that could contribute to the overall goal of reducing regulatory barriers to affordable housing. Faced with an array of potential research approaches and limited research funding, one may legitimately ask which recommendations deserve the highest priority.

Before responding to this question, it may be useful to conduct a small thought experiment that highlights the magnitude of the problem of regulatory barriers to affordable housing. According to a recent copy of *U.S. Housing Market Conditions*, 1.39 million new, privately owned one-unit homes were completed in 2003, and the median sale price of single-family homes in 2003 was \$195,000. If policy changes to reduce regulatory barriers led to a 5-percent reduction in the market price of only 5 percent of these homes, the total cost savings for the nation would be as much as \$675 million in just 1 year alone. (Similar savings would be achieved in future years as well.) Even if these changes led to only a 2-percent reduction in the market prices of only 2 percent of these homes, the annual savings to consumers would be as much as \$108 million. And this does not reflect the savings that would be achieved through reductions in the costs of two-, three-, and four-family homes; multifamily developments; manufactured housing; or new subsidized housing developments.

In light of the huge potential savings that could be achieved through even minimal reductions in the prices of a tiny fraction of the new housing sales each years, the answer to the priority question should be that researchers and policymakers should be pursuing *all* policy-relevant research in this area as quickly as possible. Given the magnitude of the potential benefits for increasing housing affordability, multiple research tracks are needed, addressing different components of this issue, with different research methodologies and different timelines. Such an effort would obviously require a real budget, but the investment would be well justified.

In sum, a comprehensive research program is needed in this area to accomplish the following goals:

- Arm practitioners, policymakers, and researchers with knowledge about the nature of the problem and how to fix it.
- Experiment with strategies to change public perception about affordable housing, multifamily rental housing, and greater density to encourage the public to be more open to such development.
- Further develop offsetting policy options that help to mitigate affordability problems that flow from otherwise desirable policies.

Finally, the coalition of groups working on this issue should be broadened, and the number of individuals that are educated on the problems of regulatory barriers and how to overcome them should be expanded. The issue of regulatory barriers is rarely on the radar screen of most practitioners, advocates, and policymakers when they make or influence decisions on how to increase the availability of affordable housing. Clearly, regulatory barriers reduction is not the only answer to affordable housing shortages. Nor is it an adequate substitute for government-funded housing subsidies for the lowest income families with the greatest housing needs. But regulatory barriers reduction clearly can have a meaningful and substantial impact in improving housing affordability. This is not a partisan issue. Meaningful regulatory barrier removal would significantly advance the cause of affordable housing.

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Note

1. According to the U.S. Department of Housing and Urban Development's (HUD's) fiscal year (FY) 2005 Budget Justifications, the FY 2004 HUD budget enacted by Congress totaled \$30.4 billion in discretionary budget authority and another \$4.3 billion in mandatory budget authority. In addition, billions of dollars in government funding are invested in affordable housing each year through the low-income housing tax credit, tax-exempt bonds, and state and local housing programs.

References

Apgar, William, et al. 2003. An Examination of Manufactured Housing as a Communityand Asset-Building Strategy. Cambridge, MA: Neighborhood Reinvestment Corp. and the Joint Center for Housing Studies, Harvard University.

Salama, Jerry J., Michael H. Schill, and Martha E. Stark. 1999. *Reducing the Cost of New Housing Construction in New York City*. A Report to The New York City Partnership and Chamber of Commerce, The New York City Housing Partnership and The New York City Department of Housing Preservation and Development. New York: New York University School of Law, Center for Real Estate and Urban Policy. http://www.law.nyu.edu/ realestatecenter/CREUP_Papers/Cost_Study_1999/NYCHousingCost.pdf.

Sunding, David, and David Zilberman. 2002. "The Economics of Environmental Regulation by Licensing: An Assessment of Recent Changes to the Wetland Permitting Process," *Natural Resources Journal* 42: 59–90.