Collaboration to Support Further Redevelopment and Revitalization in Communities with Opportunity Zones

Michelle Madeley Alexis Rourk Reyes U.S. Environmental Protection Agency, Office of Community Revitalization

Rachel Bernstein

College of William & Mary

Abstract

Opportunity Zones (OZs) were created to drive economic development and job creation in low-income, disinvested neighborhoods that need private investment to support new and improved spaces, services, and economic opportunities for their residents. Part of the U.S. Environmental Protection Agency's (EPA's) Office of Policy, the Office of Community Revitalization (OCR) supports community-driven efforts to improve economic, environmental, community, and human health outcomes by convening community, local, state, federal, and private-sector actors that can help communities strategically plan for the use of public and private capital and implement their plans for economic growth and environmental protection. To support the more than 34.8 million people living in communities with Qualified Opportunity Zones (QOZs), OCR piloted an enhanced, focused technical assistance offering, strengthened interagency collaboration, and expanded geospatial planning and analysis capabilities to support economically distressed communities in their revitalization efforts. OCR also played a role in facilitating internal coordination across EPA and developed a community of practice with community development, sustainability, and brownfield revitalization staff in EPA's 10 regions. The premise of this initiative was that without meaningful community engagement, traditional investment could result in unintended adverse consequences, such as displacement of people, businesses, and cultures. Equitable investment engages the community to define project benefits and seeks to create thriving, sustainable neighborhoods of opportunity for all.¹

¹ There are two sources of data used for this article. One is American Community Survey 2015-2018, Table B03002 and the other is our EPA-Enhanced Qualified Opportunity Zones Feature Layer and Map Service, which provide data summarized or in some cases aggregated to be displayed at the census tract level. The full metadata for this Layer is provided at this link: https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707

Building EPA's Approach to Engaging on Qualified Opportunity Zones

As the QOZ designation process and guidance on the tax incentive came together, EPA developed an approach that built on emerging best practices, programs, and partnership models for supporting community development. The Office of Brownfields and Land Revitalization conducted early work to clarify the rules for brownfield sites, and the Superfund program developed tailored information about applicability with Superfund sites. EPA assigned "Regional OZ Leads" in each of the 10 EPA regional offices, and OCR convened this network with partners from program offices monthly.

In close collaboration with EPA regions and program offices, OCR led the development of an internal geospatial database and mapping application known as the OZ Mapper that pulls together public data from the United States Department of Agriculture (USDA), Centers for Disease Control and Prevention (CDC), the U.S. Census Bureau, the U.S. Department of Health & Human Services (HHS), and others to complement EPA-generated data and provide a comprehensive snapshot of key environmental, health, and economic factors for each QOZ in the country. This tool allows users to look up any QOZ tract and view additional data points, such as the number of EPAdesignated Brownfields, Superfund sites, or Toxic Release facilities in the tract; whether food access is limited; and whether the area is considered medically underserved, among other indicators. In addition to reviewing selected OZ tracts, this tool can be used to identify trends across QOZs, offering users insights such as the finding that more than 65 percent of OZ tracts overlap with floodplains (as estimated by the EPA's EnviroAtlas project; EPA, 2018) or that 47 percent of QOZs have impaired waters running through them. Given their environmental and health impacts and the potential for redevelopment, the number of brownfields in EPA's Assessment, Cleanup, and Redevelopment Exchange System (ACRES) database included for each QOZ is another relevant data point; however, it includes only those brownfields that have been included as part of EPAs Brownfields Program (EPA, n.d.a). For the complete list of the 40 data layers included in the OZ Mapper, see exhibit 11 at the end of this article. The beta version of the OZ Mapper was released in January 2021 and is available online.²

Reaching Communities with Qualified Opportunity Zones

In response to requests from communities for information on how to understand their QOZ designations and associated opportunities, OCR developed a pilot technical assistance program to support communities with QOZs and increase their capacity to leverage private-sector capital and other development finance tools.

OCR and Regional Opportunity Zone Leads identified several communities with which to partner, including rural communities, mid-sized cities, and specific neighborhoods and large sites in major urban areas. Exhibit 1 lists the communities, context, and geographic scale and describes the goals of the technical assistance. EPA invited federal partners to participate and share resources related to economic development, development and revitalization, and small business support. Those partners included the Economic Development Administration, U.S. Department of Housing and

² The OZ map can be found by searching "Opportunity Zones—ArcGIS."

Urban Development (HUD), Small Business Administration (SBA), USDA Rural Development, and Federal Highway Administration (FHWA). Many state agencies—typically the commerce, environmental, and transportation agencies—joined as well.

In each community, key community and local government actors created or strengthened relationships with cross-sector partners. Examples of initial outcomes include the following:

- Updating and strengthening community plans.
- Submitting grant applications.
- Incorporating a new 501(c)3 nonprofit.
- Preparing sites.
- (In one case) Developing a strategy for setting up a community-driven Qualified Opportunity Fund and a Real Estate Investment Fund.

To date, the community stakeholders have not facilitated or developed deals with OZ capital. Although the subject of Opportunity Zones brought stakeholders together, the result could be equitable development or revitalization projects that do not necessarily use OZ capital but access other financial resources in new ways.

The pilot assistance was designed to help communities with plan implementation, including overcoming project financing barriers to attract private capital. It became clear that public-sector resources are a key to demonstrating commitment, minimizing risk from projects by addressing predevelopment needs (site cleanup, for example), and making the community more attractive to private-sector investors. The technical assistance helped communities tailor strategies focused on local priorities to encourage development that fits their community vision. It also helped create local guidelines that protect and preserve treasured assets of each community.

Exhibit 1

Six Communities Included in EPA's Opportunity Zone Pilot Technical Assistance					
Community	Context	Geographic Scale	Description		
Wenatchee, WA	Rural	Regional (four counties and the Colville tribes)	Regional strategy among communities and tribes to support investments in small business, affordable housing, broadband, regional food system, and public health		
St. Louis, MO	Urban	Neighborhood, Corridor	Strategy to address site prep and cleanup barriers and barriers to access OZ, public funds, and incentives for MLK corridor/Northside neighborhood		
Lorain, OH	Small city	City	Strategy to attract OZ funds and investment to advance community priorities and Lorain Areawide Brownfield Plan		
Phoenix, AZ	Urban	Major site	Revitalization of landfill and sand and gravel mining sites in portion of the Rio Reimagined Project area (Urban Waters Partnership location)		
Huntington, WV	Small city	Major site	Strategic plan to support OZ investment in American Car & Foundry site, subject of Brownfields Area-Wide Plan		
Belfast, ME	Town	Cluster of sites	Community prospectus to support the redevelopment of catalytic brownfield sites		

EPA = Environmental Protection Agency. *MLK* = Martin Luther King Jr. Drive. *OZ* = Opportunity Zone. Source: *EPA* Office of Community Revitalization, 2021.

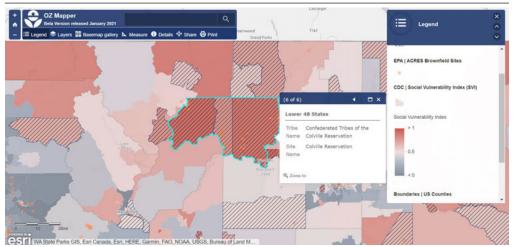
Using OZ Mapper Data to Build Pilot Community Profiles

The Opportunity Zone (OZ) Mapper is a flexible resource with many datasets. The following examples demonstrate how users can prioritize indicators and measures that are most relevant to the needs and goals of a community. With a mix of environmental, health, and social data layers, users can explore the information and pick salient indicators to visually tell the story of an opportunity for multibenefit investment in a particular community. Accordingly, the indicators vary for each example described from the pilot OZ technical assistance (exhibit 1). Each of the four examples represents different community sizes, geographic scope, and goals, so they are not presented for comparison but rather show how the OZ Mapper can support building unique community profiles.

North Star Region, Washington

In Washington State, four counties and one tribe contain a total of 11 large QOZs that collaborate on community development. Their Opportunity Zone strategy was focused regionally on the North Central Washington Economic Development District (NCWEDD). Through work with EPA, the city of Wenatchee, Washington, and the NCWEDD partners wanted to learn more about how their QOZs could benefit their healthcare, broadband, equity, social cohesion, and walkability goals. The OZ Mapper snapshot (exhibit 2) shows the diversity of places in the region and how partners might explore and use data such as these to develop targeted, place-based revitalization strategies. As indicated in exhibit 3, nearly all these tracts are designated as medically underserved, so public health and health care became a common sector to initiate regional, shared projects.

Exhibit 2



Visualization of NCWEDD Opportunity Zones: CDC Social Vulnerability Index and Brownfields

ACRES = Assessment, Cleanup, and Redevelopment Exchange System. CDC = Centers for Disease Control and Prevention. EPA = Environmental Protection Agency. NCWEDD = North Central Washington Economic Development District. OZ = Opportunity Zone. Source: EPA-Enhanced Qualified Opportunity Zones. ArcGIS Feature Layer by U.S. Environmental Protection Agency. https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707

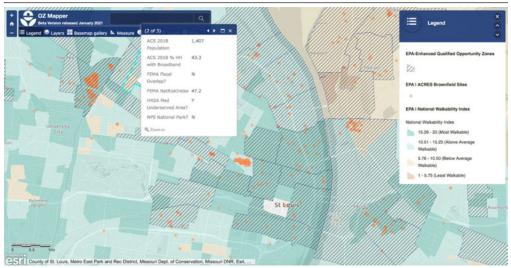
EPA's Opportunity Zone Data on the 11 QOZs in Washington's Opportunity Zones NCWEDD Region												
QOZ Number	County	# of Brownfields	Walkability Index Score (max = 20)	Impaired Waters Present?	Is it a Tribal Area?	Social Vulnerability Index Score (max = 1)	Is it a Food Desert?	Is it Rural?	2018 Population	% of Households with Broadband access?	Does it Overlap with Floodplain	Is it Medically Underserved?
53007961200	Chelan	0	6.7	Y	Ν	0.6	Ν	Ν	4,366	73.8	Ν	Υ
53007961000	Chelan	2	16.6	Ν	Ν	0.9	Ν	Ν	6,847	70.7	Ν	Ν
53007961100	Chelan	0	12.8	Ν	Ν	0.9	Y	Ν	10,118	81.6	Ν	Υ
53017950300	Douglas	1	4.0	Y	Ν	0.7	Υ	Ν	6,917	81.2	Υ	Y
53019940000	Ferry	14	6.3	Y	Y	0.8	Y	Y	1,545	53.7	Ν	Υ
53019970100	Ferry	0	4.0	Y	Ν	0.8	Υ	Y	2,998	67.2	Y	Υ
53019970200	Ferry	1	5.2	Y	Υ	0.7	Ν	Y	3,033	65.5	Y	Υ
53047970800	Okanogan	0	6.2	Y	Υ	0.9	Υ	Y	5,406	65.6	Ν	Υ
53047970400	Okanogan	0	4.7	Ν	Ν	0.8	Ν	Y	3,651	73.4	Ν	Y
53047940100	Okanogan	18	5.7	Y	Υ	0.9	Ν	Y	2,782	67.4	Υ	Υ
53047940200	Okanogan	10	5.2	Y	Υ	0.9	Ν	Y	2,883	66.6	Ν	Y

EPA = Environmental Protection Agency. NCWEDD = North Central Washington Economic Development District. QOZ = Qualified Opportunity Zone. Source: EPA-Enhanced Qualified Opportunity Zones. ArcGIS Feature Layer by U.S. Environmental Protection Agency. https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707

St. Louis, Missouri

In St. Louis, the Chief Opportunity Zones Officer and North Star Community Partners, a coalition of community development corporations, wanted to leverage QOZs to revitalize the Martin Luther King, Jr. (MLK) Drive corridor. This underinvested area includes predominantly African-American residents. The community partners have decades of experience working in the MLK Drive corridor neighborhoods and pointed to opportunities for redevelopment, including on Brownfield sites. The OZ Mapper data profile provides one way of accounting for Brownfields sites using the ACRES database. It confirms that the demographic makeup of the corridor is almost the highest percentage minority and low-income in the country (using the Environmental Justice Screening and Mapping Tool [EJSCREEN] Demographic Index). In addition, these tracts have more USDA-designated food deserts than the rest of the city, presenting opportunities to encourage development that provides essential amenities, such as grocery stores.

Visualization of QOZs and Relative Walkability Along St. Louis's MLK Drive Corridor



ACRES = Assessment, Cleanup, and Redevelopment Exchange System. ACS = American Community Survey. EPA = Environmental Protection Agency. FEMA = Federal Emergency Management Agency. HRSA = Health Resources & Services Administration. MLK = Martin Luther King Jr. NPS = National Park Service. 0Z = Opportunity Zone. Q0Zs = Qualified Opportunity Zones.

Source: EPA-Enhanced Qualified Opportunity Zones. ArcGIS Feature Layer by U.S. Environmental Protection Agency. https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707

Exhibit 5

EPA's Opportunity Zone Data on Tracts in the North Side of St. Louis

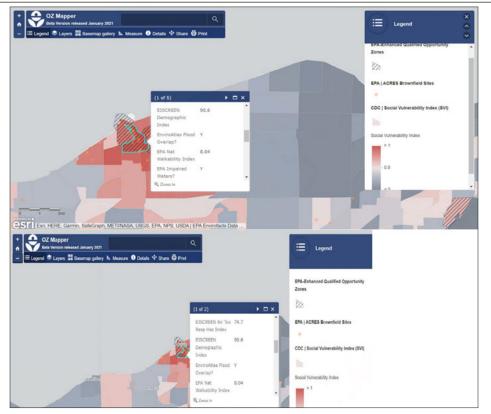
Opportunity Zone Data	Project Area: MLK Drive Corridor	Broader Area: St. Louis, MO		
Total Number of Brownfields	15	228		
Median EJSCREEN Demographic Index	96.26	91.90		
Percent Tracts that are Food Deserts	16.67	7.69		
Total Population	9,009	78,343		

EJSCREEN = Environmental Justice Screening and Mapping Tool. EPA = Environmental Protection Agency. MLK = Martin Luther King Jr. Source: EPA-Enhanced Qualified Opportunity Zones. ArcGIS Feature Layer by U.S. Environmental Protection Agency. https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707

Lorain, Ohio

In Lorain, the Lorain Port and Finance Authority (an economic development organization) and city and county governments aimed to strategically align their jurisdictional resources to support investment in the community's QOZs. The community completed a Brownfields Areawide Plan in 2018, and four key Brownfield sites are in the QOZs. The Black River runs through Lorain into Lake Erie, placing the community in EPA's Great Lakes Areas of Concern. The health of the river and lake is tied to the health of the community, and the OZ Mapper data profile (exhibits 6 and 7) highlight the interconnection of environmental, social, and economic indicators in Lorain and the corresponding benefits of taking a holistic approach to economic development.

Visualization of QOZs in Lorain, with Impaired Waters, Flood Risks, and Brownfields, Along with High Social Vulnerability Index Score



ACRES = Assessment, Cleanup, and Redevelopment Exchange System. CDC = Centers for Disease Control and Prevention. EJSCREEN = Environmental Justice Screening and Mapping Tool. EPA = Environmental Protection Agency. OZ = Opportunity Zone. QOZ = Qualified Opportunity Zone. Source: EPA-Enhanced Qualified Opportunity Zones. ArcGlS Feature Layer by U.S. Environmental Protection Agency. https://epa.maps.arcgls.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707 l?id=01e8be27c317405fb7cdb17e4857b707 l?id=01e8be27c317405fb7

Exhibit 7

EPA's Opportunity Zone Data on Tracts in Lorain, Ohio

Opportunity Zone Data	Project Area: Lorain, OH	Broader Area: Great Lakes Areas of Concern
Percent Tracts that are Food Deserts	50.0	22.5
Median EJSCREEN Demographic Index	85.0	80.9
Percent Tracts that have Impaired Waters	100.0	52.2
Total Number of Brownfields	29	933
Total Population	15,309	872,403

EJSCREEN = Environmental Justice Screening and Mapping Tool. EPA = Environmental Protection Agency. Source: EPA-Enhanced Qualified Opportunity Zones. ArcGIS Feature Layer by U.S. Environmental Protection Agency. https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707

Phoenix, Arizona

Phoenix is one of the municipalities included in the Rio Reimagined (for the Rio Salado, or Salt River) coalition, the most recent Urban Waters Federal Partnership designation (EPA, n.d.c). Along the Rio Salado are opportunities to improve the environmental and economic conditions, including in South Phoenix, where a developer plans to redevelop the former Del Rio landfill site into an agri-food innovation center. The plan aligns with the needs in the QOZ tract and the surrounding area, which has limited food access (exhibit 8) and low-income residents and notably high percentile scores on the EJSCREEN Demographic Indicators and Air Toxics Assessment Respiratory Hazard Indices (exhibit 9).

Exhibit 8



ACRES = Assessment, Cleanup, and Redevelopment Exchange System. EJSCREEN = Environmental Justice Screening and Mapping Tool. EPA = Environmental Protection Agency. LA = low access tract. LI = low income tract. OZ = Opportunity Zone. USDA = U.S. Department of Agriculture.

Exhibit 9

EPA's Opportunity Zone Data on Tracts in Phoenix, Arizona

Opportunity Zone Data	Project Area: Del Rio Fresh Site	Broader Area: Phoenix, AZ		
Total Number of Brownfields	-	16.0		
Median EJSCREEN Demographic Index	94.4	91.3		
Percent Tracts that are Food Deserts	100.0	35.6		
Total Population	3,181	185,862		

EJSCREEN = Environmental Justice Screening and Mapping Tool. EPA = Environmental Protection Agency. Source: EPA-Enhanced Qualified Opportunity Zones. ArcGIS Feature Layer by U.S. Environmental Protection Agency. https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707

Developing Tools to Scale Support for Economically Distressed Communities

Through the pilot technical assistance and the OZ Mapper, OCR learned more about community concerns and priorities related to OZ and developed tools to help these and other communities align funding for and attract investment to align with community priorities. These tools have evergreen utility for communities seeking to attract investment and leverage public-sector funding to support community wealth building. They are available online.³

- The Community Prospectus Development Tool outlines a seven-step process for developing a community prospectus, with strategies and case study examples that promote equity, sustainability, and thriving communities. It uses a question-driven approach to develop a prospectus that facilitates community wealth building. The asset-based approach recognizes existing cultural, social, and environmental assets and identifies investments to build on those assets.
- Leveraging Development Finance Tools to Attract Opportunity Zone Investment provides an overview of various development finance tools and how communities can use those tools to finance projects located in Opportunity Zones.
- The Engaging Investors Quick Guide includes key information about OZ investors and ideas for engaging with them in equitable community development projects.

Because most QOZs are economically distressed, the OZ Mapper dataset and tool also inform EPA's understanding of trends in environmental and health challenges faced by disinvested and underserved communities in general. Those data have been shared across EPA and with interagency partners at the Census Bureau, the Economic Development Administration (EDA), and USDA.

Recognizing Implications for Community Revitalization Work at EPA

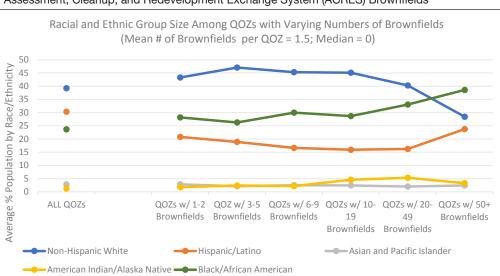
Only a few years have passed since QOZs were designated, but there is more to learn about the investments in QOZ. How do these investments affect communities, and how do federal programs serve community needs? Although Opportunity Zone investments can fill critical gaps in capital for projects, many communities with QOZs were not poised to take full advantage of them. One key area in which EPA/OCR and its federal partners can address those needs is by facilitating connections and planning processes through which communities identify state and federal resources that can address their specific community needs. Public-sector resources can be catalytic, supporting community priorities and attracting additional capital. Another critical strategy for attracting private investors is site readiness and identifying what public investment and partnership are needed to remove barriers—Brownfields Assessment, Community Development Block Grant (CDBG) funds, and EDA funds, for example.

³ https://www.epa.gov/smartgrowth/leveraging-opportunity-zones-community-revitalization

Understanding both the profiles of the community (using the OZ Mapper, for example) and the profiles of the community coalition is important. Applying the frame of the eight forms of capital—built, natural, cultural, political, financial, individual, intellectual, and social—can guide stakeholders toward solutions that include attracting financial resources, such as private investment through a Qualified Opportunity Fund (QOF), and solutions that are rooted in the community (WealthWorks, n.d.). In addition, communities can draw on and prioritize local assets to build community wealth.

As the EPA conducts further analysis of the data from the OZ Mapper, the representativeness of the QOZs and the ability to reach intended populations with appropriate resources comes into focus. Although the data combined and visualized as part of the OZ Mapper supported EPA and its partners in understanding trends across different geographic groupings of OZ tracts, as one considers QOZ tracts and their eligibility requirements, this sampling of 8,600+ low-income tracts also offers opportunities to enhance the understanding of the needs of economically distressed areas across the United States. When EPA's Enhanced Qualified Opportunity Zones dataset is joined with other data from the same period and geography, differences can be observed (EPA, 2021). For example, although a clear majority of QOZs do not have any brownfields, as designated by EPA's ACRES database, some QOZs have several and others more than 150 (EPA, n.d.b). A review of data on the number of brownfields per QOZ aligned with race and ethnicity data from the American Community Survey reveals that QOZs with high numbers of brownfields tend to have more African-American residents than do other QOZs (exhibit 10). The African-American population in those tracts is also larger than the average size of those groups across all QOZ tracts.

Exhibit 10



OZ Mapper Data on African-American Populations as Overrepresented in QOZs with Assessment, Cleanup, and Redevelopment Exchange System (ACRES) Brownfields

Source: EPA-Enhanced Qualified Opportunity Zones. ArcGIS Feature Layer by U.S. Environmental Protection Agency, 2021. https://epa.maps.arcgis.com/home/item.html?id=01e8be27c317405fb7cdb17e4857b707. American Community Survey, 2015-2019, Table B03002

OZ = *Opportunity Zone. QOZ* = *Qualified Opportunity Zone.*

As EPA continues its multisector approach to community revitalization, these data uncover key findings. In QOZ tracts that contain floodplains, the proportion of non-Hispanic White population is higher (42 percent) than average among all OZs (39 percent). By comparison, the proportion of African-American population is relatively lower (24-percent average across OZs and 21-percent average in OZ tracts with floodplains). Although further analysis is needed to determine the significance of those trends, the finding points to a potential disparity that EPA can address by combining economic development and flood mitigation efforts in communities that may be underserved by initiatives such as Opportunity Zones. This finding points to new research questions and new users of these data, as EPA plans to further develop this tool with added emphasis on understanding the environmental and health needs of the country's economically distressed communities.

EPA's community-driven approach to community revitalization also recognizes and requires steps of blending data such as these with on-the-ground community perspectives to ensure that they are put to best use in supporting sustainable and equitable development.

Understanding Opportunities and Limitations with Place-Based Federal Designations

EPA exercised its interdisciplinary coordination, data and mapping, and community technical assistance in support of Opportunity Zones, with most of OCR's activity ramping up in 2019. Those efforts built on the learnings and staffing structures of previous cross-agency, place-based initiatives and necessitated additional topical education, coalition building, and thoughtful integration with core EPA programs. States were charged with developing an Opportunity Zone designation process with their communities- and, after governors made their official QOZ determinations, states, local governments, tribes, and territories learned about the benefits, rules, and policies supporting Opportunity Zones. Place-based initiatives help direct investment, attention, and assistance to disadvantaged communities, and new designations can refresh and refocus long-standing coalitions or plant the seeds for new coalitions to form. At the same time, place-based designations come with overhead or administrative costs that could be streamlined and maintained. The community- and data-driven approach the EPA takes points to the types of work federal agencies can anticipate for future place-based efforts and could be more consistently supported across agencies. With limited data available, the anecdotal evidence from working with communities suggests that benefits are available to communities with QOZs that are independent of QOF investments, such as strengthened partnerships, improved and refined economic development plans, and increased federal support for underinvested communities.

List of Data Fields Included in OZ Mapper and EPA-Enhanced Qualified Opportunity Zones Feature Layer

Data Layer	Source	Enhanced Map Layer	OZ Mapper Visualization
# of RCRA Corrective Actions Within OZ tract	EPA NEPAssist	Х	Х
# of Toxic Release Inventory Facilities Within OZ tract	EPA TRI	Х	Х
Air Quality Non-Attainment: CO (1971 Std)	EPA		Х
Air Quality Non-Attainment: Lead (2008 Std)	EPA		Х
Air Quality Non-Attainment: NO2 (1971 Std)	EPA		Х
Air Quality Non-Attainment: Ozone 8-hr (2015 Std)	EPA		Х
Air Quality Non-Attainment: PM10 (1987 Std)	EPA		Х
Air Quality Non-Attainment: PM2.5 Annual (2012 Std)	EPA		Х
Air Quality Non-Attainment: SO2 1-hr (2010 Std)	EPA		Х
Census Tract Number	Census	Х	
OZ Tract Population	Census ACS 2018	Х	Х
County			
Current Asthma Crude Prevalence (%)	CDC PLACES 2020		Х
EJSCREEN Air Toxics Respiratory Hazard Index	EPA EJSCREEN	Х	
EJSCREEN Demographic Index	EPA EJSCREEN	х	
EJSCREEN Lead Paint Index	EPA EJSCREEN	Х	
EPA Impervious Surface (%)	EPA EnviroAtlas		Х
EPA 100-Year Floodplain	EPA EnviroAtlas		Х
EPA Grants Awarded from 2013–2020	EPA		Х
EPA Regions	EPA	Х	Х
EPA Tribal Areas	EPA	Х	Х
FEMA 100-year Floodplain	FEMA	Х	Х
Green Space (%)	EPA EnviroAtlas		Х
Impaired Waters	EPA	Х	
Impervious Surface (%)	EPA EnviroAtlas		Х
Internet Connectivity	Census ACS 2019	Х	Х
Limited Food Access	USDA		Х
Medically Underserved Areas & Populations	HRSA	Х	Х
National Park Service (NPS) Areas	NPS	Х	Х
National Risk Index	FEMA 2020	Х	Х
National Walkability Index	EPA	Х	Х
Number of Brownfield sites	EPA ACRES	Х	Х
Number of Superfund sites	EPA SEMS	Х	Х
OZ Tract Type (Low-Income or Contiguous)	U.S. Treasury	Х	
Protected Areas & State Parks	NPS		Х
Rural Area Designation	USDA	Х	
Social Vulnerability Index (SVI)	CDC SVI 2018	Х	Х
State			
SVI Housing & Transportation	CDC SVI 2018	Х	Х
Underground Storage Tank Facilities	EPA		Х

Acknowledgments

The authors would like to thank our partners in developing the OZ Mapper: Alex O'Neill and Kim Balassiano, U.S. Environmental Protection Agency Office of Mission Support, Office of Information Management, Information Access and Analysis Services Division; our technical assistance colead Jennifer Hirsch, formerly U.S. Environmental Protection Agency, Office of Community Revitalization; our collaborators and colleagues in the Regional OZ Lead community of practice; and our community technical assistance partners, including Brooklyn Holton (Wenatchee), Daffney Moore (St Louis), Tom Brown and Tiffany McClelland (Lorain), Roseanne Albright and Juan Batres (Phoenix), Miranda Maupin (Skeo Solutions), Katie Kramer (Council of Development Finance Agencies), Mike Taylor (Vita Nuova).

Authors

Michelle Madeley is an environmental protection specialist at the U.S. Environmental Protection Agency, Office of Community Revitalization. She can be reached at madeley.michelle@epa.gov. Alexis Rourk Reyes is an urban planning and public health professional at the U.S. Environmental Protection Agency, Office of Community Revitalization. She can be reached at rourk.alexis@ epa.gov. Rachel Bernstein is a government and environmental science and policy degree-seeking student at the College of William & Mary.

References

U.S. Census Bureau. 2015–2019 American Community Survey 5-year estimates, Table B03002.

U.S. Environmental Protection Agency (EPA). n.d.a. "Brownfields Grantee Reporting using the Assessment, Cleanup and Redevelopment Exchange System (ACRES)." https://www.epa.gov/brownfields/brownfields-grantee-reporting-using-assessment-cleanup-and-redevelopment-exchange-system.

------. n.d.b. "Overview of EPAs Brownfields Program." https://www.epa.gov/brownfields/ overview-epas-brownfields-program.

------. n.d.c. "Urban Waters." https://www.epa.gov/urbanwaters.

. 2021. "EPA-Enhanced Qualified Opportunity Zones." https://epa.maps.arcgis.com/home/ item.html?id=01e8be27c317405fb7cdb17e4857b707.

. 2018. "Estimated Floodplain Map of the Conterminous U.S." EnviroAtlas, October. https://enviroatlas.epa.gov/enviroatlas/DataFactSheets/pdf/Supplemental/EstimatedFloodplains.pdf.

WealthWorks. n.d. "Wealth: The Eight Capitals." https://www.wealthworks.org/basics/explore-regional-wealth-building/wealth-eight-capitals.