FEDERAL RESERVE BANK OF PHILADELPHIA

How Are Cities Leveraging Opportunity Zones for Community Development?

Philadelphia as a Case Study

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INTRODUCTION

Opportunity Zones, enacted as part of the Tax Cuts and Jobs Act of 2017, are designed to spur economic development and job creation in economically distressed communities by providing tax benefits to investors who make eligible investments into these communities. Opportunity Zones depart from previous federal place-based programs, in that Opportunity Zone investments do not require additional approval from federal, state, or local governments. There is also no limit to the amount of private capital that can be invested in Opportunity Zone funds. This novel program has the potential to attract an unprecedented amount of capital[1] to the communities that need it the most and could serve as a focusing event that galvanizes community stakeholders around a shared vision of community development.

Designating the right neighborhoods in major cities posed a challenge. Governors, who were given the authority to make recommendations for Opportunity Zones in their jurisdictions, often had to balance between investment viability and helping the areas with the highest needs, in addition to political considerations. While distressed communities remain overwhelmingly concentrated within the urban core, many urban neighborhoods have started to rebound. Owing to recent demographic and economic shifts and renewed interest in urban living, new investment is already flowing into some once underinvested and predominantly low-income communities, even without the Opportunity Zone incentive. Young professionals and highly educated individuals have started to move into the urban core, leading to the gentrification of many urban neighborhoods. Given that the Opportunity Zone program operates through market-driven investment, designating stronger or gentrifying neighborhoods as Opportunity Zones will likely appeal the most to investors. However, some have raised the concern that the program may just crowd out private investment in these areas by subsidizing projects that would have happened regardless. Furthermore, if Opportunity Zone investment concentrates in residential development, it will create real estate booms, fuel gentrification, and possibly displace vulnerable residents already living in these neighborhoods.

Picking inner-city neighborhoods experiencing extreme disinvestment, on the other hand, does not guarantee these communities see any additional capital, even with the incentive for investment. In most cases, incentives provided by Opportunity Zones can only marginally improve the investment viability of a project, instead of radically changing the nature of development in many distressed areas. Thus, without the flexibility to tailor the level of subsidy the program offers in more distressed areas or for projects creating greater social benefits, attracting investors to the most distressed areas could be a challenge.

Using Philadelphia as a case study, this study intends to reflect on the selection of Opportunity Zones in major cities and to explore real estate market trends and residential mobility in designated zones in Philadelphia. This study focuses on the neighborhood factors predicting Opportunity Zone designations in 2018, instead of who has been impacted by those designations, by clarifying the following questions:

1. How were Opportunity Zones selected in Philadelphia, and how do they compare with the eligible neighborhoods that were not selected?
2. Are gentrifying neighborhoods in Philadelphia more likely to be designated as Opportunity Zones?
3. What have been the market trends after neighborhoods were designated as Opportunity Zones in Philadelphia?

Overall, we find that gentrifying areas were more likely to be designated as Opportunity Zones in Philadelphia, although the zones generally had higher levels of economic distress. Among 29 major U.S. cities, Philadelphia was the city most likely to designate gentrifying neighborhoods over nongentrifying areas, with 35.9 percent of gentrifying neighborhoods being designated as Opportunity Zones, higher than the major city average of 18.8 percent. This raises the concern that Opportunity Zone investment in Philadelphia may be concentrated in gentrifying neighborhoods, where investments would have flowed even without the program's tax incentives, and pass over more distressed areas. Here, gentrifying neighborhoods are defined as neighborhoods that had experienced above city median level increases in home values or rents and the share of college-educated individuals between 2010 and 2017.

The success of the Opportunity Zone program depends on a rigorous evaluation of its broad socioeconomic impacts. While our preliminary analysis suggests there has been no significant divergence in real estate trends and residential mobility at the community level in the brief period after the zones were designated, our study highlights the desperate need for accurate and relevant data on the Opportunity Zone program. The current lack of information on Opportunity Zone investment undermines not only our ability to evaluate the program but also the opportunity to help the communities of greatest need across the country.

1. How were Opportunity Zones selected in Philadelphia, and how do they compare with the eligible neighborhoods that were not selected?

There was considerable variation in how Opportunity Zones were selected across states and cities. In the case

[1] The U.S. Treasury estimates that $100 billion in private capital will be invested in Opportunity Zones. See home.treasury.gov/news/press-releases/sm530.

of Philadelphia, the Pennsylvania state officials solicited recommendations from local government officials and community organizations for its Opportunity Zone designations. The state prioritized recommendations of areas that had high levels of economic distress but also a high potential to attract investment.[2] Officials from the City of Philadelphia compiled criteria, which include the following six factors,[3] for their Opportunity Zone recommendations based on the state's guidance:

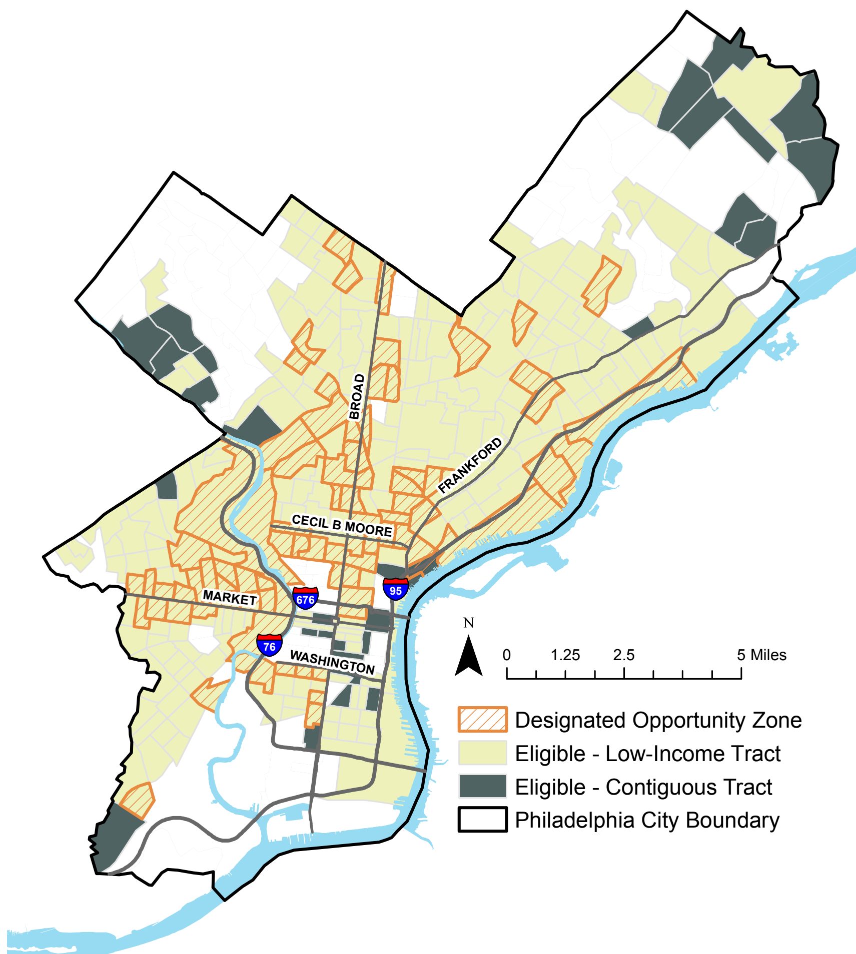
- alignment with existing public investments and initiatives
- alignment with neighborhood zoning plans that offer a clear path for new development
- location near major public assets that offer opportunities for large-scale public-private partnerships
- location in emerging real estate markets
- location in commercial corridors that have seen growth in population and real estate values
- access to anchor institutions such as universities and cultural institutions

On April 20, 2018, the state recommended 300 census tracts as Opportunity Zones, 82 of which were located in Philadelphia, that were later certified by the U.S. Department of the Treasury. Philadelphia's designated Opportunity Zones contain nearly 300,000 people, or 19.2 percent of the city's population. They are clustered in a few particular areas of the city. Wide swaths of West Philadelphia along Market Street are designated as Opportunity Zones. Similarly, there is a cluster of Opportunity Zones along Broad Street in North Philadelphia and another cluster along the Delaware River waterfront in the River Wards. In South Philadelphia, much of the areas along Washington Avenue and Grays Ferry Avenue were designated as Opportunity Zones. Figure 1 illustrates Philadelphia's Opportunity Zone designations.

Philadelphia received more designated zones as a share of its eligible tracts compared with most other major U.S. cities. Figure 2 summarizes designated Opportunity Zones in the 30 largest U.S. cities and a few smaller peer cities as a share of each city's eligible tracts.[4] Philadelphia's 82 designated Opportunity Zones represent 29.0 percent of the city's eligible low-income community (LIC) census tracts, slightly lower than Las Vegas, San Diego, Miami, Atlanta, Los Angeles, and Pittsburgh, but higher than all other major cities. The two major cities in Pennsylvania — Philadelphia and Pittsburgh — both have relatively higher shares (31.4 percent for Pittsburgh). In contrast, most major cities in Texas, as well as several cities

(continued on page 7)

FIGURE 1. PHILADELPHIA'S OPPORTUNITY ZONE DESIGNATIONS



Sources: U.S. Census TIGER/Line Shapefiles; Community Development Financial Institutions Fund, U.S. Department of the Treasury

[2] See dced.pa.gov/programs-funding/federal-funding-opportunities/qualified-opportunity-zones/.

[3] See archive.org/details/cig_0152-Committee_on_Appropriations_1-23-2019.

[4] A few slightly smaller cities, including Atlanta; Miami; Minneapolis; Newark, NJ; and Pittsburgh, were also included in this analysis based on their similarities to Philadelphia.

What Are Opportunity Zones?

The Opportunity Zone program was initially introduced as a standalone bill in February 2017 by Senators Corey Booker (D-NJ) and Tim Scott (R-SC) but was later enacted as part of the Tax Cuts and Jobs Act in December 2017. The idea originated from a 2015 paper written by economists Jared Bernstein and Kevin Hassett on behalf of the Economic Innovation Group (Bernstein and Hassett, 2015).

The law defines eligible census tracts primarily based on the New Markets Tax Credit program's definition of low-income communities (LICs). A census tract qualifies for the Opportunity Zone program if it has either of the following:

- An LIC, defined as a tract with a poverty rate of 20 percent or higher; or a median family income that is 80 percent or lower of the statewide or metropolitan area median family income (whichever is lower).
- Tracts contiguous with LICs are also eligible if their median family income does not exceed 125 percent of the adjacent LIC, but contiguous tracts could compose no more than 5 percent of the state's designations.

Nationwide, over 42,000 census tracts, or 57 percent of all tracts, were eligible for designation.[1] Every state and the District of Columbia were able to make recommendations of up to 25 percent of its total number of eligible LIC tracts as Opportunity Zones. The law authorized the governor of each state (and the mayor of the District of Columbia) to submit its recommended Opportunity Zones to the U.S. Treasury Department by March 21, 2018 for certification.[2] Nationwide, the Treasury Department certified the designation of 8,764 census tracts as Opportunity Zones.

To invest in an Opportunity Zone, individuals must establish or invest in a Qualified Opportunity Fund (QOF). QOFs are investment vehicles that must hold 90 percent of their assets in designated Opportunity Zones. QOFs are certified via a self-certification process with the IRS. QOFs can finance a wide array of projects and asset classes. Commercial real estate, housing, infrastructure, and businesses are all eligible for investments. The law bars excludes some businesses, such as liquor stores and golf courses, from eligibility.[3]

The driving incentive behind Opportunity Zones is a deferral of tax liability on capital gains. The magnitude of the benefit depends on how long the incentive is held in the Opportunity Zone. Realized capital gains invested in Opportunity Zones are eligible for:

- Temporary deferral of tax liability on the initial capital gains invested into a QOF. These gains are not taxed until December 31, 2026 or when the asset is disposed of, whichever comes first.
- A basis step-up on initial capital gains invested. If capital gains are invested in Opportunity Zones for at least five years, the basis on the initial investment is eligible for a 10 percent increase. If capital gains are invested in Opportunity Zones for at least seven years, the basis on the initial investment is eligible for a 15 percent increase.
- Permanent exclusion of the taxable income of capital gains generated from an Opportunity Zone investment if the investment is held for 10 years.

The law, however, contains no reporting requirements around Opportunity Zone investments. As a result, as of the writing of this report, there is no way to determine the number and size of QOFs, the Opportunity Zones in which they are investing, and the asset classes in which they are investing.[4]

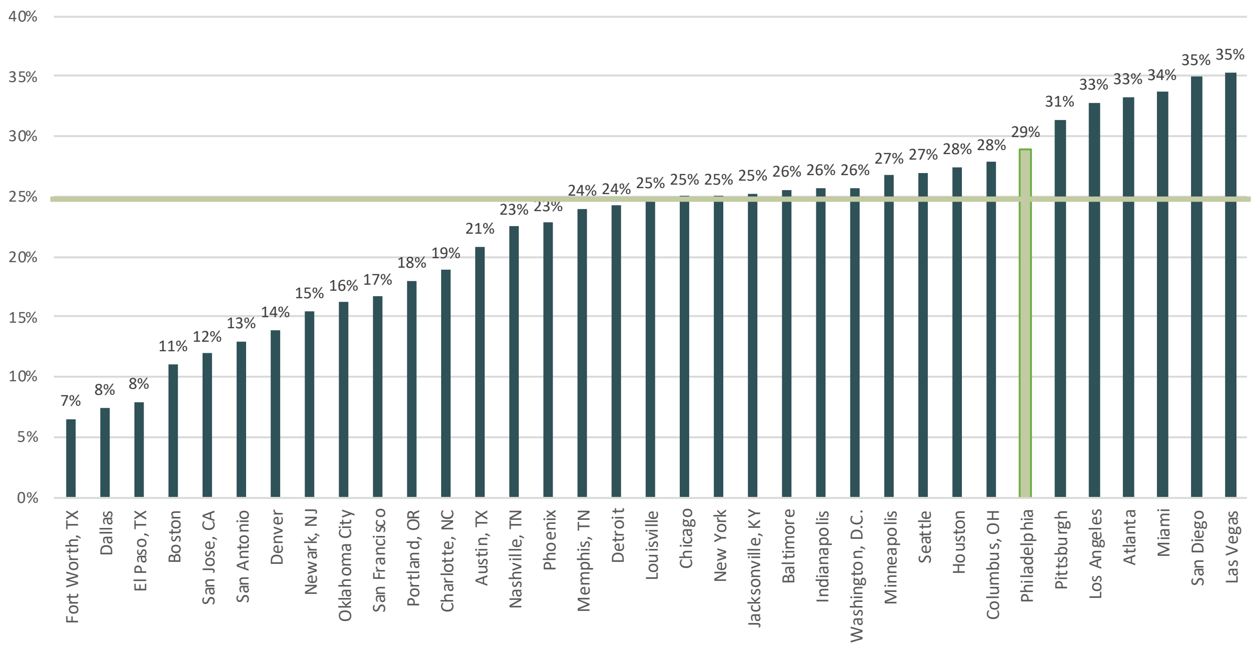
1 This number includes all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. See www.cdfifund.gov/Pages/Opportunity-Zones.aspx.

2 States were able to request a 30-day extension of this deadline.

3 See www.irs.gov/pub/irs-drop/reg-115420-18.pdf.

4 As of November 2019, the Department of the Treasury and the Internal Revenue Service (IRS) have released a proposed Form 8996 for Qualified Opportunity Funds (QOFs) for the 2019 tax year. The form is designed to collect basic information on the investment by opportunity funds in business property by census tract.

FIGURE 2. SHARE OF ELIGIBLE TRACTS DESIGNATED AS OPPORTUNITY ZONES IN MAJOR U.S. CITIES



Sources: Community Development Financial Institutions Fund, U.S. Department of the Treasury
Note: Census tracts for each city were identified using a crosswalk generated by the Missouri Census Data Center's Geocorr 2014: Geographic Correspondence Engine.

The Opportunity Zone Selection Process Across the Country

States were given significant flexibility to designate Opportunity Zones from their pool of eligible census tracts. Consequently, there was considerable variation in how Opportunity Zones were picked by different states — including proportional distribution among counties, the use of data analytics to identify priority areas, and the solicitation of recommendations from local governments.

Many states emphasized additional criteria alongside the poverty and income eligibility thresholds outlined by the law. For example, Texas identified areas with low population density and areas that have recently experienced natural disasters.[1] Rural areas thus are overrepresented in the Texas's Opportunity Zone designations — 60 percent are in at least a partially rural tract (Perlmeter, 2018).

Other states used indices and formulas to make their selections. In New Jersey, officials made designations based on a formula that incorporated its Municipal Revitalization Index,[2] geographic distribution, public transit access, and existing public investments. The state also sought feedback from mayors and the state's Congressional delegation before finalizing its results.[3]

Geographic proportionality was important to many states. Illinois, for example, designated at least one Opportunity Zone in each of its 88 counties and limited each municipality to five designations (Keller et al., 2019).[4]

States also developed different public engagement approaches. Indiana established an external advisory board composed of civic leaders from across the state to provide input on the state's selections.[5] Four states — California, Michigan, Nevada, and Vermont — along with the District of Columbia released their draft designations to the public for comment before submitting them to the Treasury Department.[6]

1 See gov.texas.gov/news/post/governor-abbott-submits-opportunity-zone-designations-to-the-u.s.-treasury-department.

2 The Municipal Revitalization Index is New Jersey's official measure of municipal distress, ranking municipalities based on eight indicators of social, economic, physical, and fiscal conditions.

3 See nj.gov/governor/njopportunityzones/index.shtml.

4 Cook County, Illinois was exempt from this limit.

5 See calendar.in.gov/site/gov/event/gov-holcomb-nominates-156-opportunity-zones/.

6 See eig.org/news/opportunity-zones-map-comes-focus.

TABLE 1. PHILADELPHIA NEIGHBORHOOD CHARACTERISTICS BY OPPORTUNITY ZONE STATUS

Neighborhood Characteristics	Designated Opportunity Zones	Eligible, Not Selected	Ineligible Tracts	Citywide
Demographic				
Total population	299,215	1,022,412	233,445	1,555,072
White alone	19.6%	33.1%	68.7%	35.8%
Black alone	58.2%	42.4%	16.0%	41.5%
Hispanic	14.3%	14.8%	5.8%	13.4%
Asian alone	5.8%	7.2%	6.5%	6.8%
Age 25 or more with high school degree or less	60.4%	54.6%	32.4%	51.8%
Age 25 or more with bachelor's degree or more	16.3%	21.9%	48.0%	25.4%
Economic				
Median family income	$36,760	$49,967	$103,142	$56,130
Poverty rate	36.7%	27.4%	9.3%	26.4%
Avg. number of establishments	67.8	77.0	63.2	72.5
Employment per 1,000 people	544	371	583	436
Housing				
Avg. median home value	$122,358	$156,079	$319,369	$177,032
Homeownership rate	44.9%	53.2%	58.6%	52.6%
Avg. median rent (monthly)	$832	$942	$1,156	$954
Rent-burdened households	54.0%	54.0%	43.9%	52.5%
Vacancy rate	18.1%	13.2%	8.0%	13.3%
Number of tracts	**82**	**231**	**71**	**384**

Sources: 2015 American Community Survey 5-year estimates, U.S. Census Bureau; Community Development Financial Institutions Fund, U.S. Department of the Treasury; 2016 Zip Business Patterns, U.S. Census Bureau; 2015 LEHD Origin-Destination Employment Statistics, U.S. Census Bureau
Note: Zip Business Patterns Data were apportioned to census tracts based on the HUD-USPS ZIP crosswalk file.

with relatively strong housing markets, including Boston; San Jose, CA; Denver; San Francisco; and Portland, OR, have the lowest shares (below 20 percent). Given that a state was able to designate up to 25 percent of its eligible LIC tracts, Philadelphia is slightly overrepresented in Pennsylvania's designations.

Philadelphia's designated Opportunity Zones tend to have worse economic indicators, measured by the average median family income and the poverty rate, compared with eligible, not-selected tracts. Table 1 summarizes Philadelphia's census tract characteristics by Opportunity Zone designation status. Based on the 2015 American Community Survey (ACS) data that were used for the designation of Opportunity Zones, the average median family income across designated Opportunity Zones is $36,760, compared with $49,967 in eligible, not-selected areas. The average poverty rate of Opportunity Zones is 36.7 percent, higher than the 27.4 percent for eligible, not-selected areas (see Figures A1 and A2 in the Appendix). Opportunity Zones also have lower home values, homeownership rates, and monthly rents than eligible, not-selected areas. However, Opportunity Zones tend to have higher concentrations of jobs compared with eligible, not-selected areas. There are 544 jobs per 1,000 people in Opportunity Zones, higher than the levels in eligible, not-selected areas (371 jobs per 1,000 people) as well as the citywide average (436 jobs per 1,000 people). This pattern is consistent with the city's criteria of selecting locations in commercial corridors and locations with easy access to anchor institutions and job centers.

Philadelphia's designated Opportunity Zones have a higher share of black residents and slightly lower levels of educational attainment compared with eligible, not-selected areas. Black residents constitute 58.2 percent of all people living in Opportunity Zones, compared with 42.4 percent of the population in eligible, not-selected areas. The share of adults age 25 or over with a bachelor's degree is 16.3 percent in Opportunity Zones, compared with 21.9 percent in eligible, not-selected areas. Of course, since Opportunity Zones were designated based on data collected a few years ago (2011–2015), the demographic characteristics and economic conditions of Opportunity Zone neighborhoods may have changed in more recent years, which will be examined in more detail in the next subsection.

Philadelphia's designated Opportunity Zones tend to have a higher share of areas zoned for commercial and industrial uses compared with the rest of the city. An analysis of the city's zoning base district data reveals that 39.2 percent of the land in Opportunity Zones is zoned for commercial and industrial uses, higher than the 27.2 percent for the whole city. Opportunity Zones have fewer residentially zoned areas than the rest of the city. Residentially zoned areas constitute 55.9 percent of Opportunity Zones, compared with 65.1 percent of the citywide land area (see Figure A3 in the Appendix). This pattern of land use is consistent with the land use patterns of Opportunity Zones in several other cities, such as Washington, D.C. and Cleveland (Greene et al., 2019).

Finally, there has been widespread interest in community development circles in the overlap between Opportunity Zones and other placed-based programs that are important for community development, such as the Community Reinvestment Act (CRA). The CRA encourages federally regulated depository institutions to meet the credit needs of low- and moderate-income (LMI) communities.[5] Given the similarity in their eligibility criteria, there is broad overlap between designated Opportunity Zones and CRA-eligible areas in Philadelphia. Four-fifths (80 percent) of Philadelphia's 82 designated Opportunity Zones are CRA-eligible. Conversely, over one-third (37 percent) of Philadelphia's 180 LMI tracts have been designated as Opportunity Zones (see Figure A4 in the Appendix). However, it remains unclear whether and what types of Opportunity Zone investments will qualify for the CRA credit. One complication is that Opportunity Zones are not necessarily CRA-eligible geographies; an area with a higher median family income[6] can still be eligible for an Opportunity Zone designation as long as its poverty rate exceeds 20 percent or it is a contiguous tract. This means regulators will apply the same screens to Opportunity Zone investments as they do to other projects.

Overall, Philadelphia's Opportunity Zones have higher poverty rates, lower family incomes, lower educational attainment, and lower home values than eligible, not-selected areas. They also have more land zoned for commercial and industrial uses, as well as higher employment concentrations. Most, but not all, of them are CRA-eligible geography. It is, however, important to not only take a cross-sectional look at these characteristics but to analyze them over time. The next section will document the social and economic changes that Philadelphia's Opportunity Zones have experienced in the past decade.

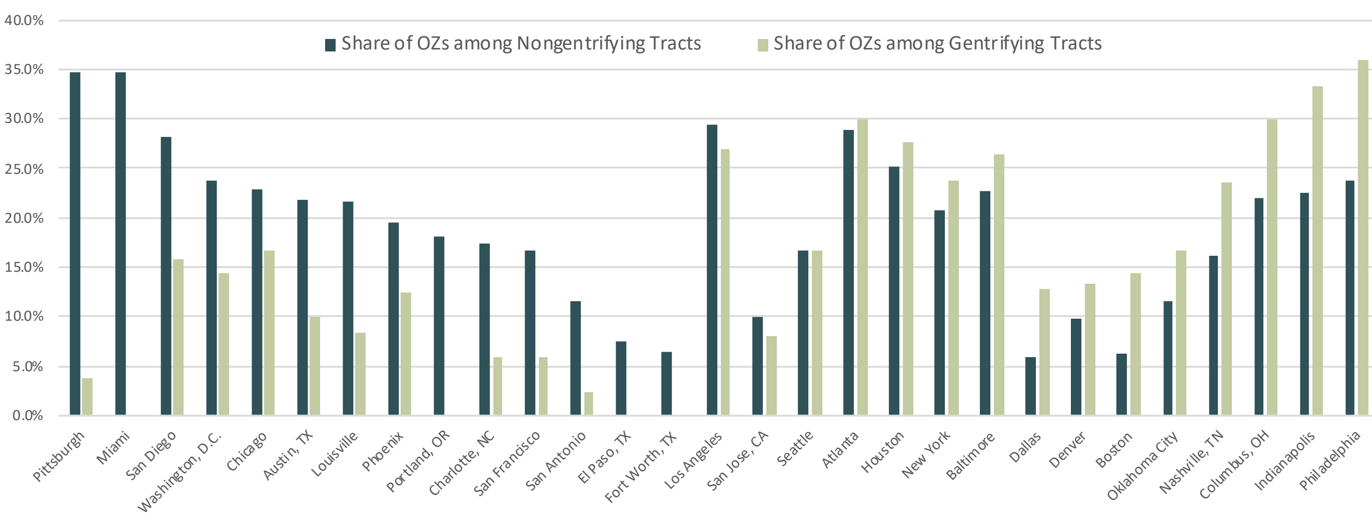
2. Are gentrifying neighborhoods in Philadelphia more likely to be designated as Opportunity Zones?

The answer is yes, although the answer varies significantly across other major U.S. cities. Gentrifying neighborhoods represent a much larger share of Philadelphia's Opportunity Zone designations compared with those of other major

[5] Under the CRA, an LMI community is defined as a census tract with median family income less than 80 percent of the area median.

[6] An area with a higher median family income could be eligible for an Opportunity Zone as long as its poverty rate exceeded 20 percent or it was a contiguous tract. The median family income of CRA-ineligible Opportunity Zones in Philadelphia was as high as $97,109 (2015 5-Year ACS Estimates).

FIGURE 3. SHARE OF DESIGNATED OPPORTUNITY ZONES BY NEIGHBORHOOD GENTRIFICATION STATUS IN MAJOR U.S. CITIES

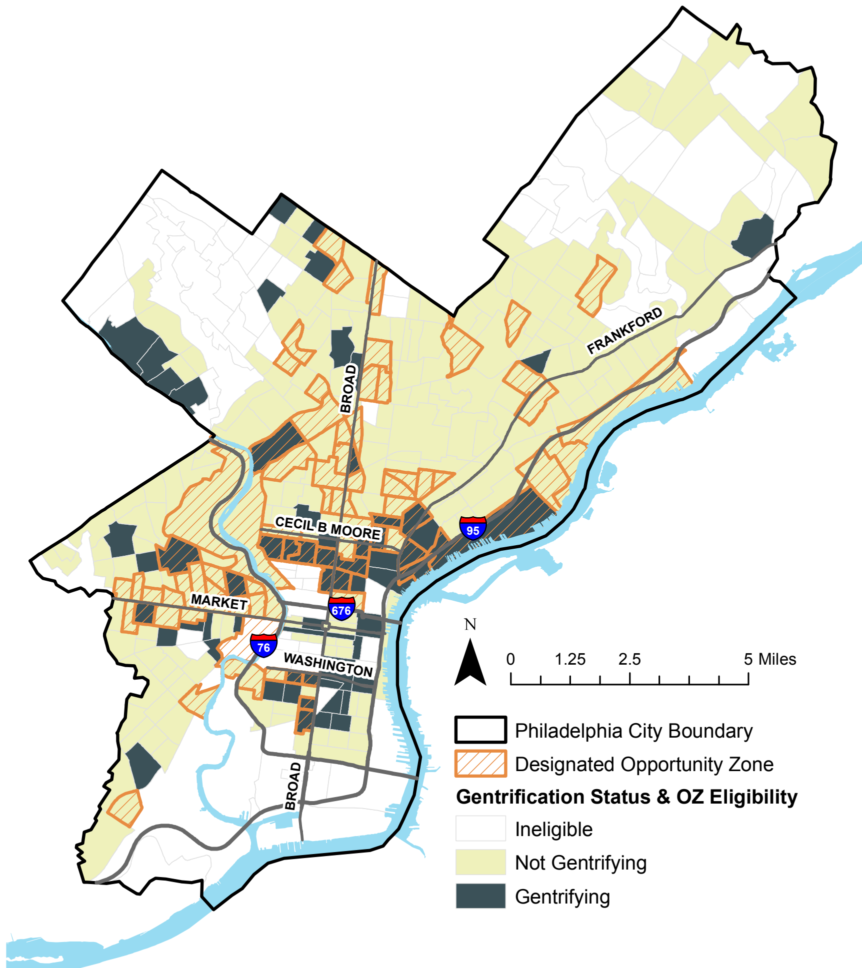


Sources: 2010 and 2017 American Community Survey 5-year estimates; Community Development Financial Institutions Fund
Note: Gentrifying neighborhoods are defined as any Opportunity Zone–eligible neighborhoods that had experienced increases above the city median in home values or rents and share of college-educated individuals during the period between 2010 and 2017.

cities. When pooling all Opportunity Zone-eligible census tracts in 29 major cities together,[7] the gentrifying tracts' rate of being designated as an Opportunity Zone was about 18.8 percent, lower than the 20.9 percent among nongentrifying tracts at the aggregate level.[8] However, gentrifying neighborhoods in Philadelphia have the highest likelihood (35.9 percent) of being selected as Opportunity Zones (Figure 3). Philadelphia also has the largest gap — suggesting the selection of gentrifying areas over nongentrifying neighborhoods — of 12.3 percentage points (the selection rate is 23.7 percent among nongentrifying neighborhoods). Here, a tract is considered to be gentrifying if it experienced both a percent increase above the citywide median increase in either its median gross rent or median home value and an increase above the citywide median increase in its share of college-educated residents from 2010 to 2017 (see Appendix B for detailed discussion of our definition of gentrification and Appendix Table A1 for data of major cities).

However, these trends vary considerably across cities. In seven other cities, gentrifying neighborhoods were also more likely to be selected than eligible nongentrifying tracts, including in Indianapolis; Columbus, OH; Nashville, TN; Oklahoma City; Boston; Denver; and Dallas. In contrast, nongentrifying neighborhoods were more likely to be designated in 14 other cities: Pittsburgh; Miami; San Diego; Washington D.C.; Chicago; Austin; Louisville, KY; Phoenix; Portland, OR; Charlotte; San Francisco; San Antonio; El Paso, TX; and Fort Worth, TX. In these cities, it appears officials targeted more of their zones to places in deeper distress. In fact, based on our definition of gentrification, no gentrifying neighborhoods were selected in Portland, El Paso, Fort Worth, and Miami. For the remaining seven major cities — Los Angeles; San Jose, CA; Seattle; Atlanta; Houston; New York; and Baltimore — the state's selections were, on average, similar in gentrifying neighborhoods compared with other eligible tracts that did not experience gentrification during the predesignation period (2010–2017).[9]

FIGURE 4. PHILADELPHIA'S GENTRIFYING TRACTS (2010–2017) AND DESIGNATED OPPORTUNITY ZONES



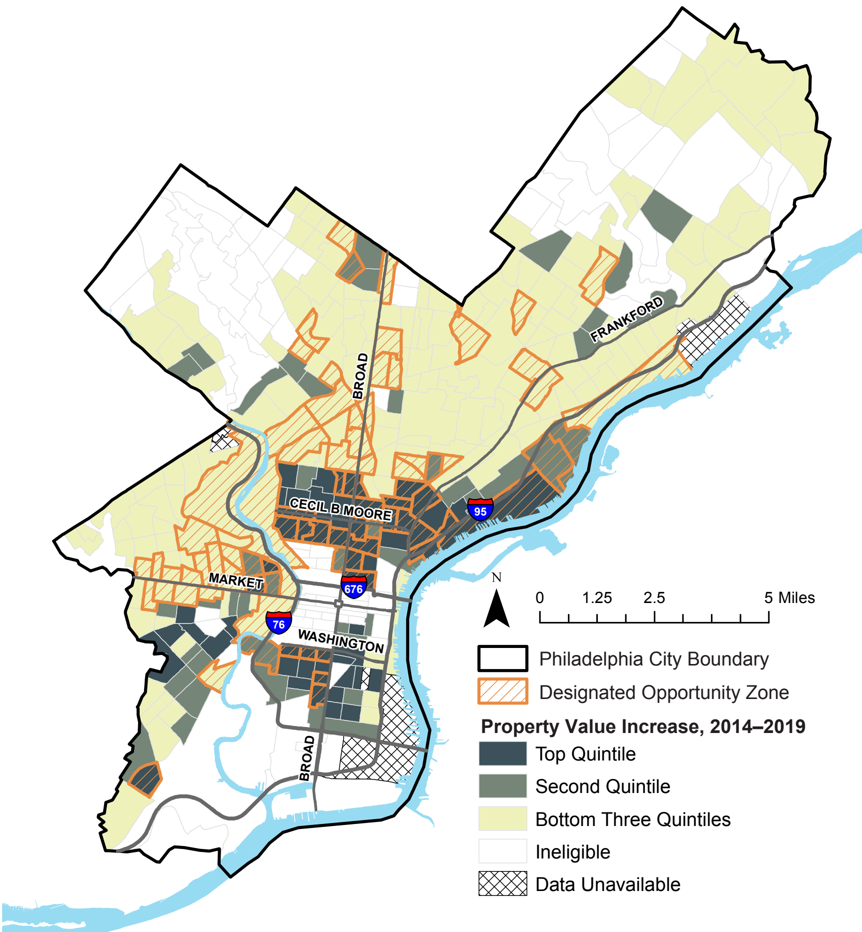
Sources: U.S. Census TIGER/Line Shapefiles; Community Development Financial Institutions Fund, U.S. Department of the Treasury; 2010 American Community Survey 5-year estimates; 2017 American Community Survey 5-year estimates

[7] A few smaller cities with too few gentrifying neighborhoods were dropped from this analysis. Since our gentrification measure is a relative measure (relative to the trend of the city), gentrifying neighborhoods are not necessarily comparable across cities, since citywide increases in housing costs and educational attainments vary significantly across cities.

[8] The pattern is slightly different when considering all designated Opportunity Zones. Theodos, Meixell, and Hedman (2018) documented that tracts experiencing socioeconomic change were actually more represented among all designated tracts (3.2 percent) than among eligible nonselected tracts (2.4 percent). Gelfond and Looney (2018) also suggest most states selected tracts that had higher home price appreciation than LICs that were not selected.

[9] We consider the selection rates similar if the odds ratios of being selected as Opportunity Zones among gentrifying neighborhoods over nongentrifying ones are between 0.8 and 1.2.

FIGURE 5. PHILADELPHIA'S PROPERTY VALUE INCREASE BY QUINTILE (2014–2019) AND DESIGNATED OPPORTUNITY ZONES



Sources: U.S. Census TIGER/Line Shapefiles; Community Development Financial Institutions Fund, U.S. Department of the Treasury; Department of Revenue, City of Philadelphia

A striking contrast can be found between Philadelphia and Pittsburgh, two cities from the same state: Over one-third of gentrifying neighborhoods are designated as Opportunity Zones in Philadelphia, compared with close to zero (only one out of 27 gentrifying neighborhoods) in Pittsburgh. This pattern, as well as the significant variation in the designation rate of Opportunity Zones in different cities, clearly illustrates how the wide latitude state and local governments had in recommending eligible tracts has resulted in a significant variation in the profiles of designated zones.

Figure 4 shows the significant overlap in the distribution of the designated Opportunity Zones and areas that were gentrifying from 2010 to 2017 in Philadelphia, especially areas surrounding the Center City area, such as neighborhoods in lower North Philadelphia, the Point Breeze neighborhood in South Philadelphia, and neighborhoods in the River Wards. The pattern of selecting gentrifying areas with larger increases in home values in Philadelphia can also be confirmed by the significantly larger increase in assessed values of properties, a proxy of the market value of an average property, in Opportunity Zones. From 2014 to 2019, the average assessed value for single-family properties in Opportunity Zones increased by 18.9 percent, higher than the 10.2 percent increase for the eligible, not-selected tracts.[10] Figure 5 suggests Opportunity Zones are more likely to be areas with larger increases in assessed values (the top two quintiles in assessed value increases from 2014 to 2019). In other words, Opportunity Zone neighborhoods had an upward trend in home values long before being selected for the program.

Neighborhood Changes in Philadelphia's Opportunity Zones

The census data suggest Philadelphia's designated Opportunity Zones also saw bigger increases in total population, total non-Hispanic white population, educational attainment, and household income than eligible, not-selected neighborhoods from 2010 to 2017 (Table 2). Opportunity Zone neighborhoods experienced a 7.9 percent increase in total population and became whiter from 2010 to 2017, with the number of non-Hispanic white residents increasing by 24.0 percent. In contrast, eligible neighborhoods not selected as Opportunity Zones experienced a more modest population increase (3.0 percent) and a significant decline in the share of non-Hispanic whites (-7.1 percent) during the same period. Astonishingly, highly educated (college-educated and above) residents increased by 60.7 percent in a relatively short period from 2010 to 2017 in Opportunity Zone neighborhoods, much higher than the 33.6 percent increase in eligible, not-selected neighborhoods.

In Philadelphia, Opportunity Zone neighborhoods and eligible, not-selected neighborhoods also experienced different economic fates. The median household income increased by 8.6 percent

[10] We acknowledge that this analysis may capture the slight change in assessed value after the Opportunity Zones were designated (from April 2018 to June 2019).

from 2010 to 2017 in neighborhoods designated as Opportunity Zones, compared with a 0.3 percent decrease in eligible, not-selected neighborhoods. While there was almost no change in the poverty rate (a slight increase of 0.02 percentage point) in Opportunity Zone neighborhoods, there was a 1.4 percentage point increase in eligible, not-selected neighborhoods. Finally, consistent with what we found using property assessment data, Opportunity Zone neighborhoods recorded a larger increase in home values and rents (a 25.6 percent increase on average in the median home value and a 28.2 percent increase in the median rent from 2010 to 2017 for Opportunity Zone neighborhoods, higher than increases of 12.4 percent and 19.2 percent, respectively, for eligible, not-selected neighborhoods).

The pattern of neighborhood change of Philadelphia's Opportunity Zones reflects elements of the selection process that city and state officials engaged in, namely the dual priorities of selecting areas with low economic indicators and high potential for investment. On the one hand, neighborhoods designated as Opportunity Zones in Philadelphia had experienced higher house price appreciation and more rapid change in socioeconomic conditions than those not selected. Gentrifying areas in Philadelphia are more likely to be designated versus more distressed nongentrifying areas. On the other hand, a majority of Opportunity Zones in Philadelphia (59 out of the total of 82 zones) are not located in gentrifying neighborhoods, and designated Opportunity Zones generally have a higher poverty rate and lower incomes than eligible, not-selected areas. Opportunity Zones have been developed strategically into several clusters, each of which — particularly clusters in West Philadelphia and North Philadelphia — have a mix of stronger neighborhoods and more distressed neighborhoods. The lower-income, nongentrifying neighborhoods in these clusters could potentially benefit from the agglomeration effect or spillover effects from investment in gentrifying neighborhoods. Furthermore, the city has also intentionally designated areas with great concentrations of commercial and industrial sites, instead of residential areas, to mitigate the pressure of gentrification on existing residents. Many gentrifying neighborhoods in South Philadelphia and University City, while having booming real estate markets, are not designated as Opportunity Zones (Figure 4).

Selecting gentrifying neighborhoods does not necessarily lead to bad outcomes when properly guided and implemented, but the effects of the program on local communities still need to be carefully monitored and evaluated. If Opportunity Zone investments, however, eventually concentrate in the stronger neighborhoods that were already gentrifying, this targeting strategy could compromise the goal of the program by focusing on the communities most likely to see continued growth regardless. The anecdotal evidence in Philadelphia suggests this concern is not groundless: Four of the five Opportunity Zone projects reported in an April 2019 *Philadelphia Inquirer* article are located in gentrifying neighborhoods, and the only investment in a nongentrifying neighborhood is much smaller in scale (see page 12).

TABLE 2. CHANGE IN NEIGHBORHOOD CHARACTERISTICS BY OPPORTUNITY ZONE STATUS

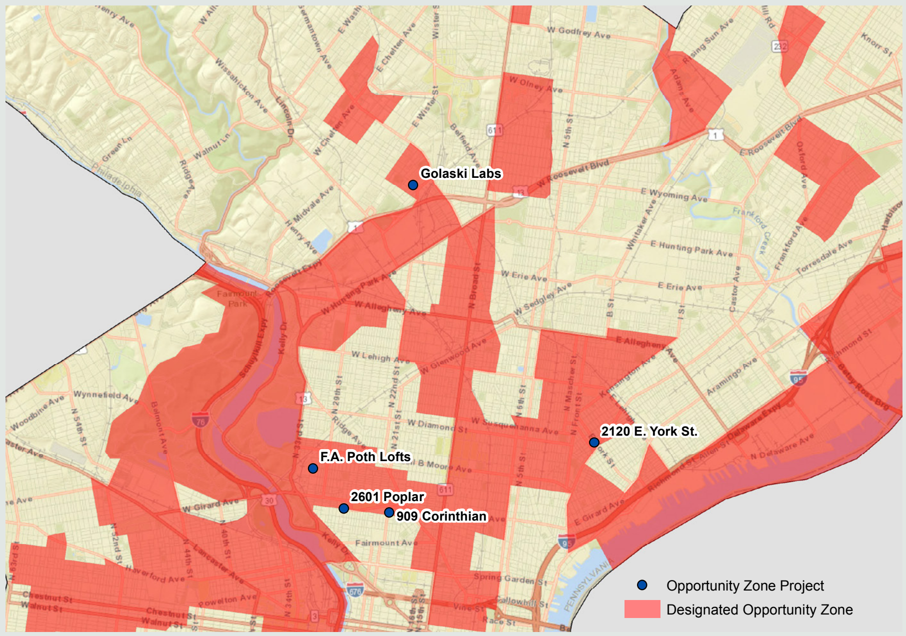
	Designated Opportunity Zones	Eligible, Not Selected	Ineligible
Initial Neighborhood Condition, 2010			
Total population in 2010	280,686	1,002,973	221,291
% of non-Hispanic white in 2010	18.0%	35.2%	71.2%
% of non-Hispanic black in 2010	61.6%	43.7%	16.4%
% of renters in 2010	53.9%	43.4%	39.8%
Avg. median household income in 2010 (in 2010 $)	$25,267	$36,631	$61,804
Avg. median family income in 2010 (in 2010 $)	$35,195	$49,303	$94,419
% of college-educated residents in 2010	13.4%	19.0%	43.2%
Avg. median age in 2010	33	34	41
Avg. median rent in 2010 (in 2010 $)	$692	$837	$999
Avg. median value in 2010 (in 2010 $)	$103,208	$146,636	$313,055
Change in Neighborhood Indicators, 2010–2017			
% change in total population	7.9%	3.0%	5.5%
% change in non-Hispanic white	24.0%	-7.1%	0.2%
% change in non-Hispanic black	-1.8%	0.5%	6.9%
Average % change in median household income (adj. for inflation)	8.6%	-0.3%	10.2%
Average % change in median family income (adj. for inflation)	4.4%	-0.4%	4.4%
% change in college-educated residents	60.7%	33.6%	23.4%
Change in median age	0.53	0.33	0.8
Percentage point change in poverty rate	0.02%	1.40%	-1.50%
Average % change in avg. median home value	25.6%	12.4%	8.9%
Average % change in avg. median rent	28.2%	19.2%	21.3%
Percentage point change in rent-burdened households	-4.30	-0.09	-2.10
Number of Tracts	**82**	**231**	**71**

Source: 2010 ACS 5-year estimates; 2017 ACS 5-year estimates; Community Development Financial Institutions Fund, U.S. Department of the Treasury

Opportunity Zone Projects in Philadelphia

While the lack of reporting requirements makes it difficult to comprehensively track Opportunity Zone investments in Philadelphia, a newspaper article provides a glimpse. In April 2019, *The Philadelphia Inquirer* detailed five real estate development projects leveraging QOF investments that were set to break ground.[1] Collectively, the projects represent over $32 million in QOF investment. Four of the projects are mixed-use development projects, while the fifth is a residential development project. In the figure below, we see that the projects tend to be located in neighborhoods with rapidly changing demographic and real estate dynamics. Four of the projects are located in areas that were gentrifying between 2010 and 2017 as well as were in the top quintile of tracts in terms of growth in assessed property value between 2014 and 2019.

The limited sample of closed deals suggest that as of early 2019, QOF investment in Philadelphia had been concentrated in zones that were gentrifying long before these zones were designated. As regulations are finalized and more QOFs are established, it remains to be seen whether Opportunity Zone investments spread to areas with weaker real estate markets.[2]



[1] See www.inquirer.com/real-estate/commercial/opportunity-zones-philadelphia-brewerytown-kensington-germantown-sage-pnc-20190405.html.

[2] Projects are listed on the website Philadelphia Delivers (www.philadelphiadelivers.com/opportunity-zones), which the City of Philadelphia and the Philadelphia Industrial Development Corporation (PIDC) established to market the city's Opportunity Zones, are more likely to be located in areas with higher poverty, lower median family income, and nongentrifying areas. But they are still seeking investment, instead of closed deals.

CONFIRMED PROJECTS LEVERAGING QOF INVESTMENT AND THEIR NEIGHBORHOOD CHARACTERISTICS

Project Name/ Address	Neighborhood	Project Type	OZ Investment	Tract MFI	Tract Poverty Rate	Gent. Status, 2010–2017	Property Value Growth, 2014–2019
2601 Poplar St.	Fairmount	Mixed use (108 apartment units; retail)	$12 million	$44,375	28.0%	Gentrifying	Top quintile
F.A. Poth Lofts	Brewerytown	Mixed use (128 apartment units; retail)	$10 million	$32,545	30.3%	Gentrifying	Top quintile
909 Corinthian	Francisville	Residential (22 apartment units)	$2 million	$18,875	52.6%	Gentrifying	Top quintile
2120 E. York St.	Kensington	Mixed use (56 apartment units, commercial)	$8 million	$37,841	30.2%	Gentrifying	Top quintile
Golaski Labs	Germantown	Mixed use (39 apartment units; office/retail)	$400,000	$34,063	30.5%	Nongentrifying	Bottom three quintiles

Sources: *The Philadelphia Inquirer*; ESRI; Community Development Financial Institutions Fund, U.S. Department of the Treasury; U.S. Census TIGER/Line Shapefiles; Community Development Finance Institutions Fund, U.S. Department of the Treasury

3. What have been the market trends after neighborhoods were designated as Opportunity Zones in Philadelphia?

A longer-term evaluation is needed to provide a more concreate answer to this question, since a place-based program's community impact usually takes time to unfold. This section intends to show some early real estate trends and demographic trends, in terms of the mobility of vulnerable residents, in Philadelphia's Opportunity Zones.

Real Estate Trends

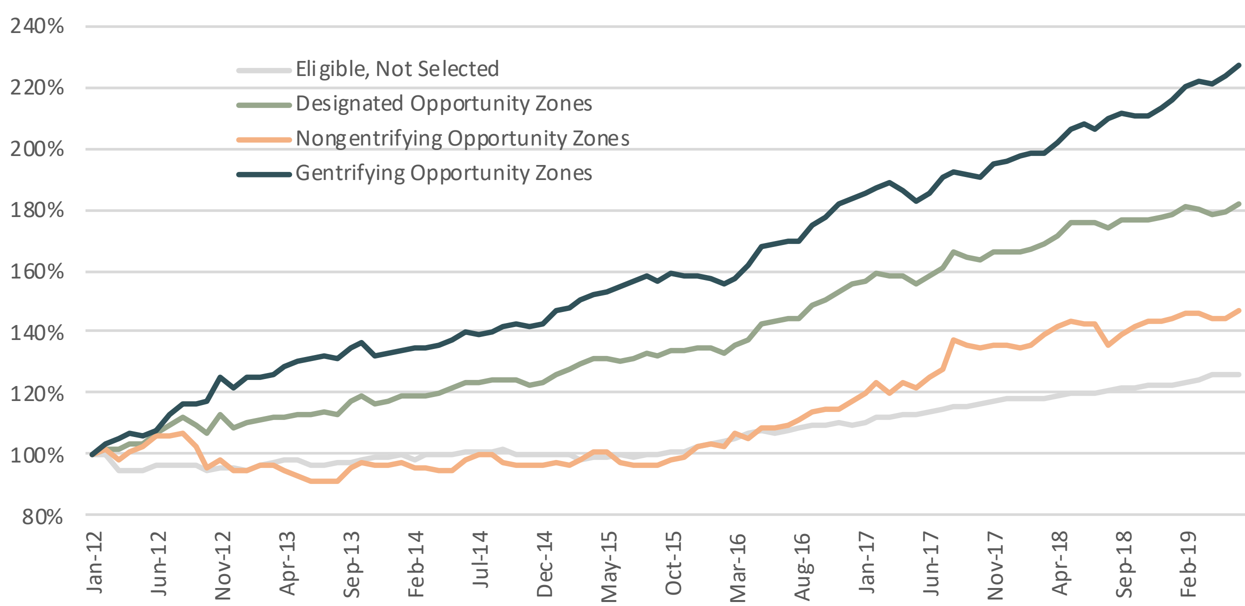
In Philadelphia, we do find divergent trends in the sales prices of single-family residential properties in Opportunity Zones compared with those in eligible, not-selected areas, but the divergence was present long before the designation announcement. Rather than a surge in housing prices after neighborhoods were designated as Opportunity Zones,[11] we find neighborhoods that were already experiencing larger house price increases were more likely to be selected as Opportunity Zones.

[11] It is reasonable to expect Opportunity Zone designations to have an effect on local real estate markets. The anticipation of increased investment in a designated Opportunity Zone could increase real estate demand. Additionally, the tax advantages of Opportunity Zone investments may be priced into property values. A Zillow analysis found a surge in real estate sales prices in designated Opportunity Zones in the months after they were announced (Casey, 2019).

Since 2012, average sales prices for single-family homes in Philadelphia's designated zones had grown at a much faster pace than those of homes in eligible, not-selected areas and ineligible areas. These increases were largely driven by the rapid increase in gentrifying neighborhoods that were designated as Opportunity Zones (Figure 6). During that time, without adjusting for inflation, the average sales price increased by 81.6 percent in designated Opportunity Zones but only increased 26.2 percent and 24.5 percent in eligible, not-selected areas and ineligible areas, respectively. While the increase in the average sales price in nongentrifying zones was only slightly higher than that in eligible, not-selected areas (46.7 percent versus 26.2 percent), the increase was much higher in gentrifying zones (127.0 percent).

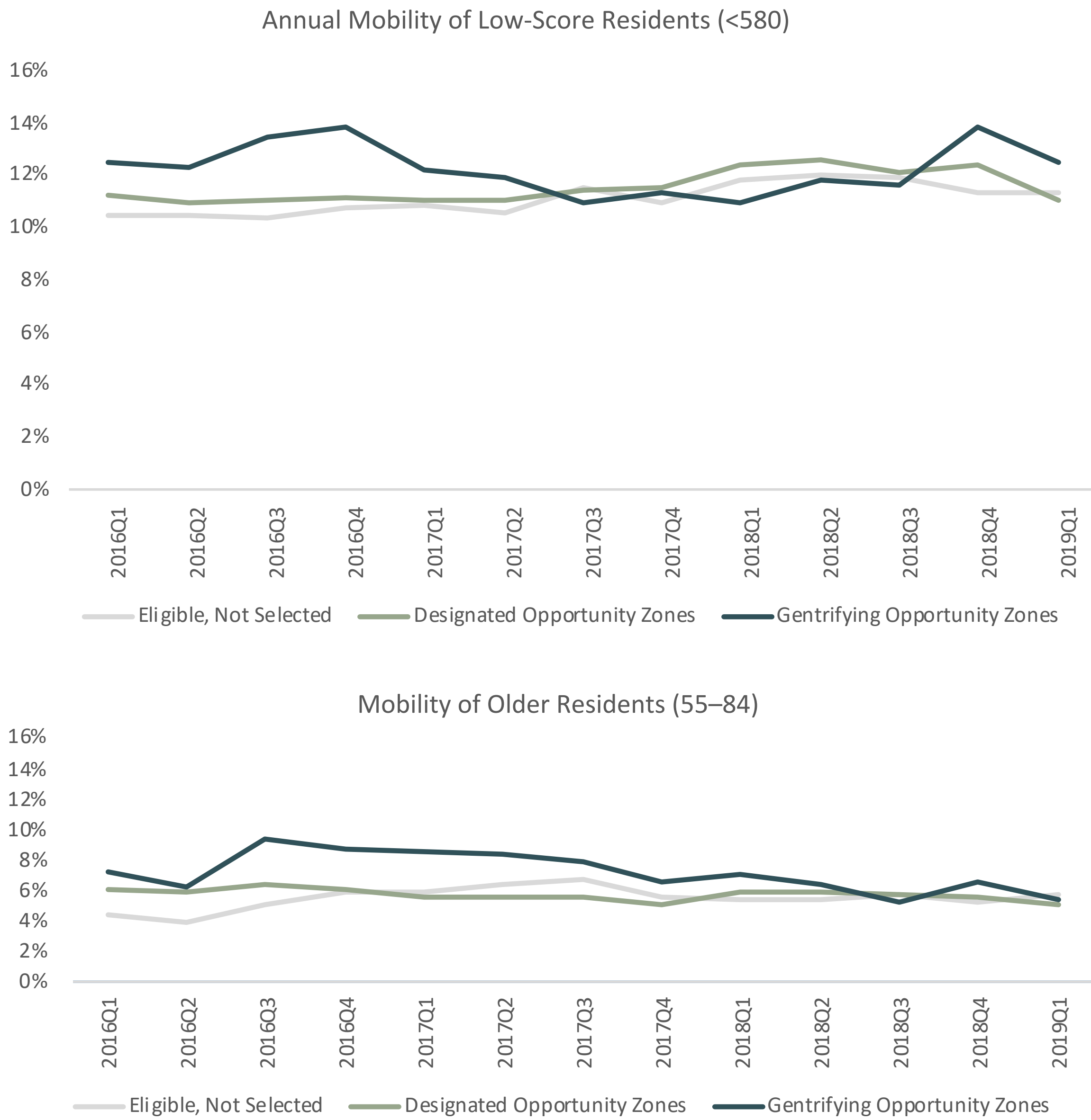
More important, there was no sign of a significant divergence in the sales price trend after April 2018, when Pennsylvania's Opportunity Zone designations were announced. Rather than a surge in real estate prices, designated Opportunity Zones — especially those already experiencing gentrification — have seen a continued upward trend in average sales prices that, for the past five years, has outpaced other areas in Philadelphia. The divergent trends suggest that the city's designated Opportunity Zones have become increasingly attractive markets for single-family homes in recent years — and that to date, their status as Opportunity Zones has not changed the trajectory of that growth. It is worth noting that the market for residential

FIGURE 6: TWELVE-MONTH MOVING AVERAGE OF SALES PRICE INDICES FOR SINGLE-FAMILY HOMES IN PHILADELPHIA BY OPPORTUNITY ZONE DESIGNATION STATUS (JANUARY 2012=100)



Sources: Department of Records, City of Philadelphia; Office of Property Assessment, City of Philadelphia; Community Development Finance Institutions Fund, U.S. Department of the Treasury
Note: This excludes single-family home sales in which the price was less than $1,000 or greater than $1.5 million.

FIGURE 7. ANNUAL MOBILITY RATE OF LOW-SCORE AND OLDER RESIDENTS BY NEIGHBORHOOD TYPE IN PHILADELPHIA



Sources: 2010 and 2017 American Community Survey 5-year estimates; Community Development Financial Institutions Fund
Note: Gentrifying neighborhoods are defined as any Opportunity Zone–eligible neighborhoods that had experienced increases above the city median in home values or rents and share of college-educated individuals during the period between 2010 and 2017.

properties is an incomplete picture of the broader real estate market. The price trends for Philadelphia's commercial and industrial properties in designated Opportunity Zones might be different following those designations.[12] It remains to be seen how real estate markets in these areas evolve as more Opportunity Zone investments are made.

Mobility of Older and Financially Vulnerable Residents

Generally, we have not seen a significant increase in residential mobility rates for older or financially vulnerable residents from the time Opportunity Zones were designated until the first quarter of 2019. A major concern about

[12] We did not include multifamily, commercial, and industrial properties from our analysis because of the low volume of sales and relative lack of uniformity within these property categories.

Opportunity Zones is that Opportunity Zone–induced investments may accelerate gentrification and displace existing residents and businesses in designated communities. The displacement concern could be even greater in neighborhoods that are already gentrifying, which is the case for many zones in Philadelphia.

Our evaluation is based on a unique individual-level dataset that allows us to identify whether an individual has moved across neighborhoods and to track the origin and destination neighborhood of a mover (Ding et al., 2016).[13] Residents in Opportunity Zones had higher mobility rates, even before their neighborhoods were designated as Opportunity Zones. Each year, about 11 to 13 percent of residents between 25 and 84 years old in Opportunity Zone neighborhoods moved to different neighborhoods, about 0.5 to 1 percentage point higher than that in eligible, not-selected census tracts. The overall higher mobility rate of residents in Opportunity Zone neighborhoods, especially in gentrifying Opportunity Zones, is not surprising, given our finding that Opportunity Zones are more likely to be in gentrifying neighborhoods, which are often characterized by higher residential turnover rates. Our analysis focuses on older residents and financially more vulnerable residents, who often have low credit scores (those who have Equifax risk scores below 580 or have no score). We find that low-score individuals residing in Opportunity Zone neighborhoods had slightly higher moving rates from 2016 to 2018, but the difference has been small and quite consistent over time, with no significant increase after 2018 (Figure 7). There was a slight increase in the mobility rate of low-score residents in gentrifying zones, but their mobility rate had been quite volatile and it might be too early to attribute this increase to the designation of Opportunity Zones.

Older residents in Opportunity Zones had quite similar moving rates as those in eligible, not-selected communities, and the difference has been small and quite consistent over time (Figure 7). There was no significant increase after 2018. However, the mobility rate of older residents in gentrifying neighborhoods had been slightly higher than that of those in eligible, not-selected tracts in most years during the 2016–2018 period, although the difference became smaller in recent years and there was no significant increase in the period after Opportunity Zones were designated.

Although new capital investment induced by the Opportunity Zone program is important, that alone is not enough to achieve equitable economic growth that benefits all residents.

[13] The CCP data include the census geography identifiers associated with each consumer's credit file, so we are able to identify whether an individual has moved across neighborhoods.

Residential mobility is only one of the outcomes to evaluate the consequences of designation of Opportunity Zones; there is a need to evaluate the broad social impacts of the program, such as the creation of permanent jobs with living wages that help lift local residents out of poverty, the development of affordable housing, and the provision of vital goods, services, and facilities to the local community. Only when more accurate and relevant data on areas picked for the program are available will we able to appropriately assess the effectiveness of the program.

SUMMARY

Opportunity Zones offer both opportunities and challenges to underinvested communities across the country. This study sheds light on how Opportunity Zones were selected and the ongoing demographic and real estate trends in Opportunity Zones. Philadelphia's Opportunity Zones demonstrate a high level of economic distress, but they are much more likely to be in gentrifying areas. The neighborhood characteristics of Philadelphia's Opportunity Zones reflect the state and city officials' dual emphasis of need and potential for investment when making Opportunity Zone designations in Philadelphia.

With the wide spectrum in the conditions of selected zones across the nation, we are concerned whether investments will flow to a very limited number of hotspots where investments would have flowed even without the incentive. The anecdotal evidence of recent Opportunity Zone projects in Philadelphia reinforces the concern: A small number of gentrifying neighborhoods could absorb a large share of Opportunity Zone investments. While we have not seen significantly larger increases in sales prices and in residential mobility rates for more vulnerable residents in Philadelphia after the zones were designated, it is unclear whether the most vulnerable residents of these communities will stand to benefit from any additional investment the incentive does attract. It is also unclear whether there have been sufficient efforts to ensure that development emerging from Opportunity Zone investments benefits neighborhoods and existing residents with the greatest need.

Finally, our study highlights the desperate need for accurate and relevant data on the Opportunity Zone program. The lack of data has made it difficult to track Opportunity Zone investments and measure their community impact. We need accurate, up-to-date, and more comprehensive data on Opportunity Zone investments and community outcomes to evaluate whether the program is working.

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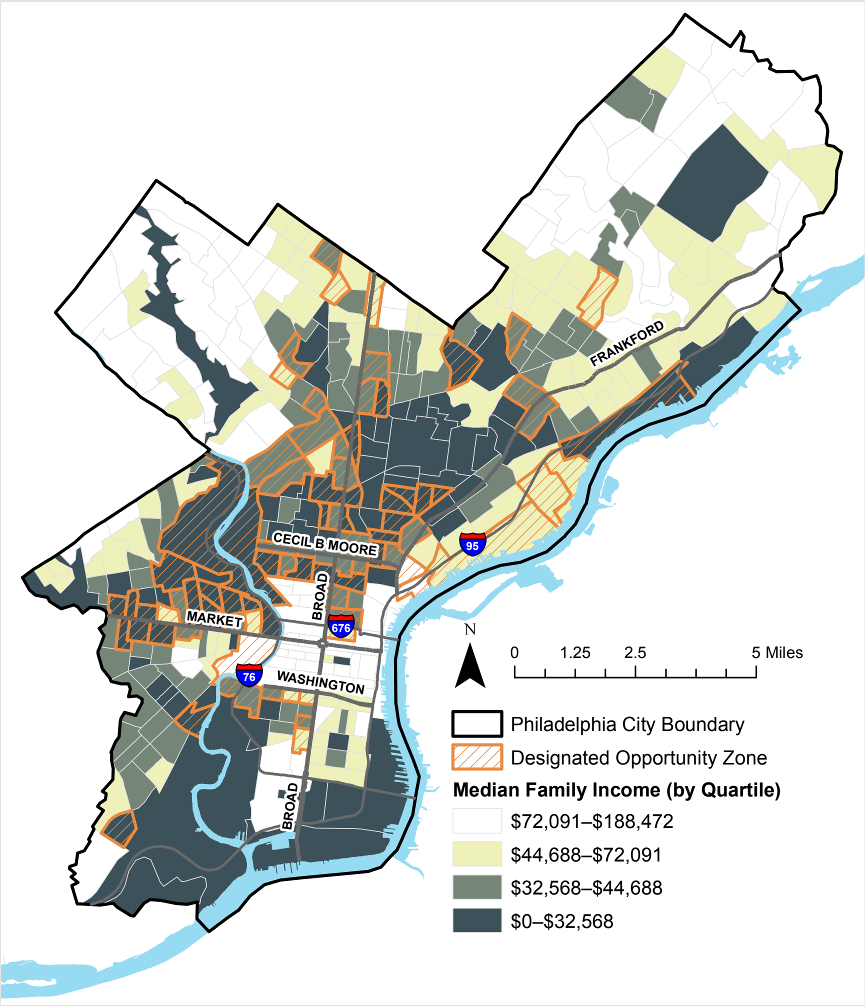
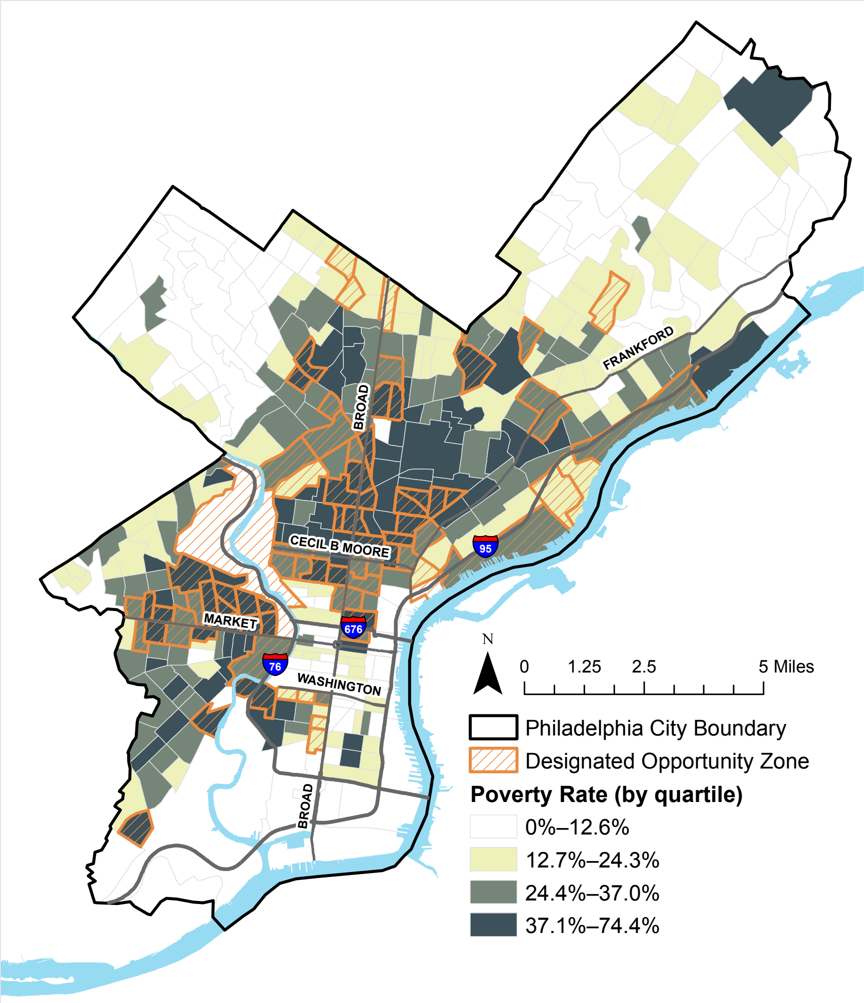
FIGURE A1. MEDIAN FAMILY INCOME AND OPPORTUNITY ZONE DESIGNATIONS IN PHILADELPHIA



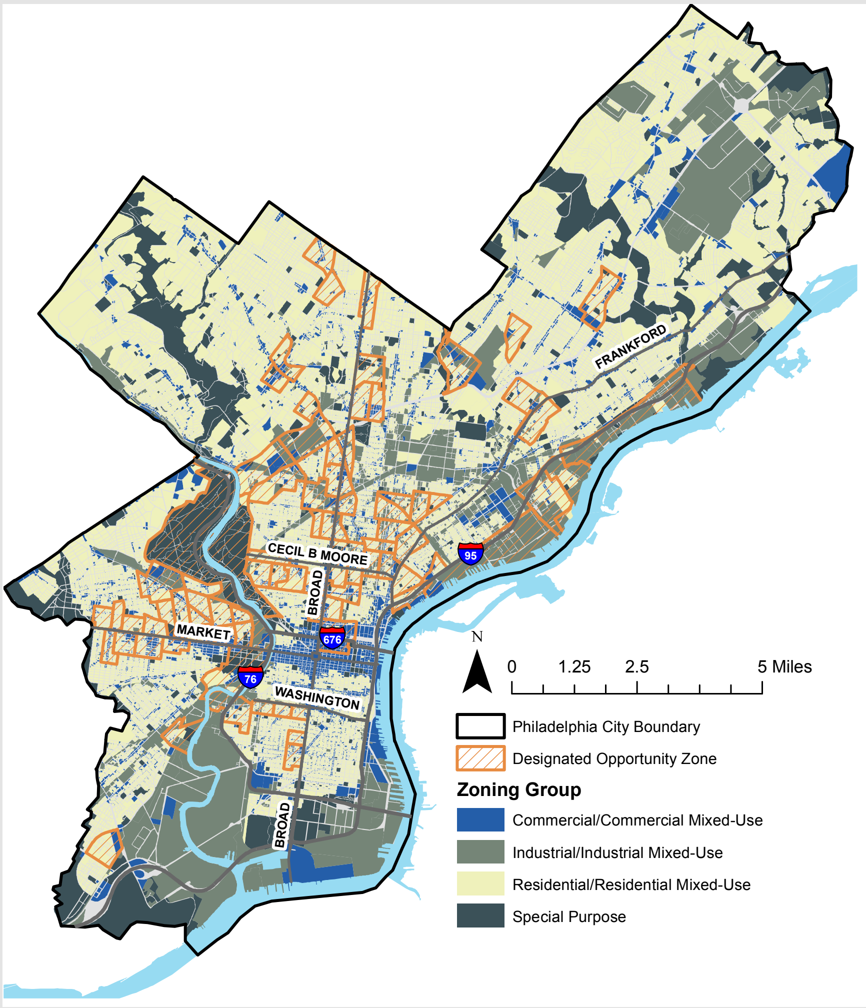
Sources: 2015 American Community Survey 5-year estimates, U.S. Census Bureau; U.S. Census TIGER/Line Shapefiles; Community Development Financial Institutions Fund, U.S. Department of the Treasury

FIGURE A2. POVERTY RATE AND OPPORTUNITY ZONE DESIGNATIONS IN PHILADELPHIA



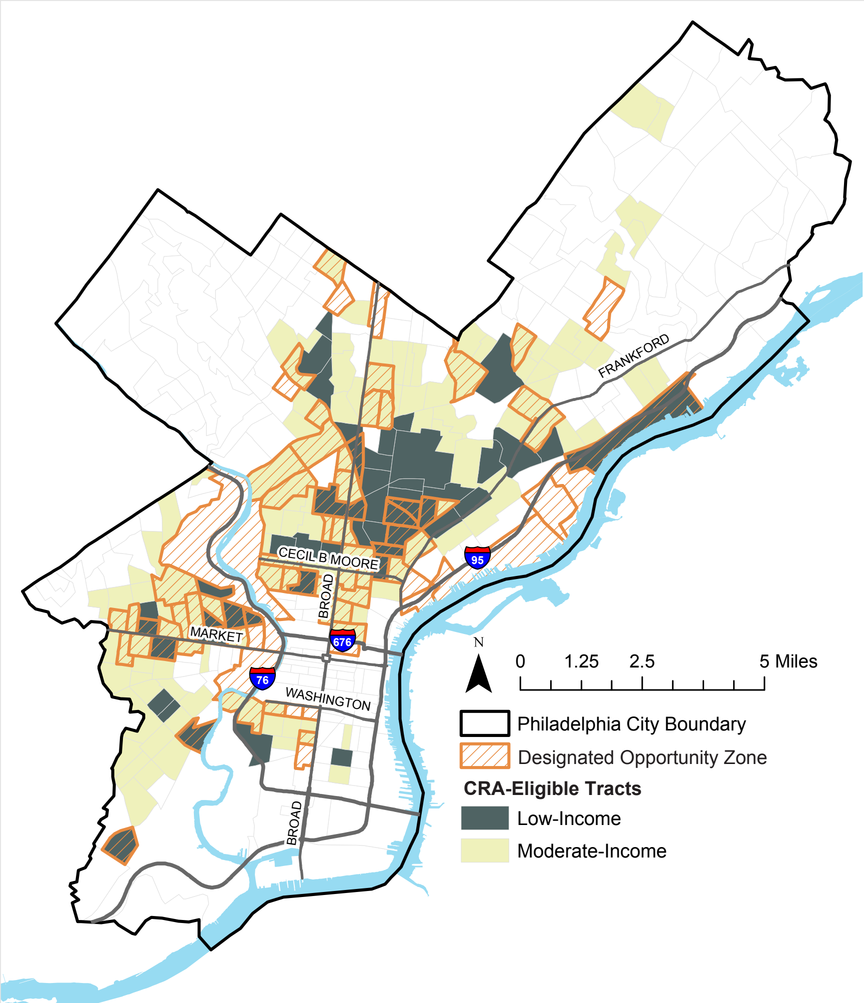
Sources: 2015 American Community Survey 5-year estimates, U.S. Census Bureau; U.S. Census TIGER/Line Shapefiles; Community Development Financial Institutions Fund, U.S. Department of the Treasury

FIGURE A3. PHILADELPHIA'S ZONING AREA SHARES BY OPPORTUNITY ZONE DESIGNATION STATUS



Sources: Philadelphia Department of Planning & Development; Philadelphia Department of Records; Community Development Finance Institutions Fund, U.S. Department of the Treasury

FIGURE A4. PHILADELPHIA'S DESIGNATED OPPORTUNITY ZONES AND CRA-ELIGIBLE TRACTS



Sources: 2015 American Community Survey 5-year estimates, U.S. Census Bureau; U.S. Census TIGER/Line Shapefiles; Community Development Financial Institutions Fund, U.S. Department of the Treasury; 2018 Federal Financial Institutions Examination Council Census Summary File

TABLE A1. OPPORTUNITY ZONES AND GENTRIFYING TRACTS IN MAJOR U.S. CITIES

	No. of Low-Income Communities (LICs)	No. of Opportunity Zones	Share of Opportunity Zones	No. of Gentri-fying Tracts	Share of OZs of Nongentri-fying*	Share of OZs of Gentrifying*	Difference (Gentrify-ing-Nongen-trifying)	Odds Ratio**
Atlanta	81	27	33.3%	10	28.9%	30.0%	1.1%	1.04
Austin, TX	91	19	20.9%	40	21.9%	10.0%	-11.9%	0.46
Baltimore	164	42	25.6%	19	22.7%	26.3%	3.6%	1.16
Boston	117	13	11.1%	28	6.2%	14.3%	8.1%	2.31
Charlotte, NC	90	17	18.9%	17	17.4%	5.9%	-11.5%	0.34
Chicago	539	135	25.0%	30	22.9%	16.7%	-6.2%	0.73
Columbus, OH	140	39	27.9%	20	22.0%	30.0%	8.0%	1.36
Dallas	200	15	7.5%	39	5.8%	12.8%	7.0%	2.21
Denver	72	10	13.9%	30	9.8%	13.3%	3.5%	1.35
El Paso, TX	88	7	8.0%	18	7.4%	0.0%	-7.4%	0.00
Fort Worth, TX	92	6	6.5%	14	6.4%	0.0%	-6.4%	0.00
Houston	349	96	27.5%	47	25.1%	27.7%	2.6%	1.10
Indianapolis	140	36	25.7%	21	22.5%	33.3%	10.9%	1.48
Los Angeles	588	193	32.8%	93	29.4%	26.9%	-2.5%	0.91
Louisville/Jefferson, KY	77	19	24.7%	12	21.7%	8.3%	-13.4%	0.38
Miami	83	28	33.7%	9	34.6%	0.0%	-34.6%	0.00
Nashville-Davidson, TN	80	18	22.5%	34	16.1%	23.5%	7.4%	1.46
New York	1,221	306	25.1%	270	20.7%	23.7%	3.0%	1.15
Oklahoma City	117	19	16.2%	24	11.5%	16.7%	5.2%	1.45
Philadelphia	283	82	29.0%	64	23.7%	35.9%	12.3%	1.52
Phoenix	184	42	22.8%	16	19.4%	12.5%	-6.9%	0.64
Pittsburgh	86	27	31.4%	27	34.7%	3.7%	-31.0%	0.11
Portland, OR	61	11	18.0%	26	18.0%	0.0%	-18.0%	0.00
San Antonio	177	23	13.0%	43	11.6%	2.3%	-9.3%	0.20
San Diego	103	36	35.0%	19	28.1%	15.8%	-12.3%	0.56
San Francisco	66	11	16.7%	17	16.7%	5.9%	-10.8%	0.35
San Jose, CA	92	11	12.0%	25	10.0%	8.0%	-2.0%	0.80
Seattle	37	10	27.0%	12	16.7%	16.7%	0.0%	1.00
Washington, D.C.	97	25	25.8%	28	23.8%	14.3%	-9.5%	0.60
Total	**5,515**	**1,296**	**23.5%**	**1,052**	**20.9%**	**18.8%**	**-2.1%**	**0.90**

Note: * both low-income communities and continuous census tracts are considered as gentrifiable tracts; ** the odds ratio represents the odds of being selected as Opportunity Zones for gentrifying tracts over that for nongentrifying tracts.

Sources: 2010 ACS 5-year estimates; 2017 ACS 5-year estimates; Community Development Financial Institutions Fund, U.S. Department of the Treasury

APPENDIX B DATA AND METHODS

This study primarily uses data from various sources, including the publicly available American Community Survey (ACS) data and TIGER/Line Shapefile data from the U.S. Census Bureau; Opportunity Zone designation data from the U.S. Department of the Treasury; parcel data, real estate transaction data, and property assessment data from the City of Philadelphia; FFIEC CRA data; and Federal Reserve Bank of New York/Equifax Consumer Credit Panel data. A complete list of data sources used in this study can be found in Table B1.

Real Estate Sales

To analyze real estate trends in Philadelphia's neighborhoods, we used property assessment and real estate transfer data compiled by the Philadelphia Office of Property Assessment and the Philadelphia Department of Records, respectively, available through Open Data Philly. Using ArcGIS, we conducted a spatial join to link property-level data to Philadelphia's census tracts. We then merged the real estate transfer data to the respective property parcels.

We focused on single-family homes sales because of the higher volume of sales within these property classes compared with multifamily residential, commercial, or industrial properties. Additionally, single-family homes have a higher within-class uniformity compared with other property classes. To mitigate the bias induced by outliers, we excluded single-family homes sales where the price was less than $1,000 or greater than $1.5 million. Our trends were robust to alternative exclusion thresholds. To remove duplicates, we limited each property parcel to one transaction per month. If there were multiple transactions for the same property parcel in a month, we only included the transaction with the highest price. We constructed a 12-month moving average for sales prices to capture longer-term trends as opposed to month-to-month fluctuations in real estate activity. We then indexed our moving averages, with January 2012 serving as our benchmark month.

Defining Gentrification

The gentrification measure used in this study is quite similar to the one in Ding et al. (2016). We consider all Opportunity Zone–eligible tracts in a city to be gentrifiable and consider a tract to be gentrifying if it experienced both a percent increase above the citywide median increase in either its median gross rent or median home value and an increase above the citywide median increase in its share of college-educated residents from 2010 to 2017, based on data from the ACS 5-year estimates from 2006 to 2010 and ACS 5-year estimates from 2013 to 2017. We consider tracts with reduced property values or rents, even if they experienced changes above the citywide median for the other two indicators, as nongentrifying neighborhoods. This happened mostly in cities with significant declines in property values during the Great Recession, and we believe these neighborhoods are still recovering from the recession. We also excluded tracts without substantial population sizes (fewer than 50 in 2010).

Residential Mobility Analysis

Following the methodology in Ding et al. (2016), we use Federal Reserve Bank of New York/Equifax Consumer Credit Panel (CCP) data to track the residential mobility of vulnerable homeowners. The CCP data consist of an anonymized 5 percent random sample of U.S. consumers in a major credit bureau's total population of eligible individuals, as well as consumers in each sampled individual's household. This sample is constructed by selecting consumers with at least one public record or one credit account currently reported and with one of five numbers in the last two digits of their Social Security numbers (SSNs) (see details in Lee and van der Klaauw, 2010). The CCP data report the credit characteristics for sample members quarterly beginning in 1999. The CCP data allow us to study residential mobility, because the CCP data include census geography identifiers based on the census boundaries associated with each consumer's credit file. By identifying whether an individual has moved across neighborhoods, a "mover" is defined in this study as an individual who lives in a different census tract than he or she lived in one year earlier. Consistent with early literature, we focus on the moving decisions of older residents (55 to 84 years old), as well as residents with lower Equifax risk scores (below 580).

TABLE B1. DATA SOURCES

Topic	Data Source	Level of Analysis	Link
Opportunity Zone Designations	Community Development Financial Institutions Fund, U.S. Department of the Treasury	Census tract	www.cdfifund.gov/Pages/Opportunity-Zones.aspx
Neighborhood Characteristics	(1) 2011–2015 American Community Survey	Census tract	www.census.gov/programs-surveys/acs
	(2) 2015 Longitudinal Employer-Household Dynamics: Workplace Area Characteristics	Census block	lehd.ces.census.gov/data/#lodes
	(3) ZIP Code Business Patterns	Zip code	www.census.gov/data/developers/data-sets/cbp-nonemp-zbp/zbp-api.html
Zoning in Philadelphia	(1) Zoning Base Districts, Philadelphia Department of Records	Parcel-level	www.opendataphilly.org/dataset/zoning-base-districts
	(2) Philadelphia Property Parcels, Philadelphia Department of Records	Parcel-level	www.opendataphilly.org/dataset/property-parcels
CRA-eligible Tracts	2018 Federal Financial Institutions Examination Council Census Summary File	Census tract	www.ffiec.gov/%5C/census/default.aspx
Gentrification	(1) 2006–2010 American Community Survey	Census tract	www.census.gov/programs-surveys/acs
	(2) 2013–2017 American Community Survey	Census tract	www.census.gov/programs-surveys/acs
	(3) Property Assessments Data	Parcel-level	Philadelphia Department of Revenue
Philadelphia Real Estate Sales	(1) Property Assessments, Philadelphia Office of Property Assessment	Parcel-level	www.opendataphilly.org/dataset/opa-property-assessments
	(2) Real Estate Transfers, Philadelphia Department of Records	Parcel-level	https://www.opendataphilly.org/dataset/real-estate-transfers
Residential Mobility	Federal Reserve Bank of New York Consumer Credit Panel/Equifax	Consumer-level	Proprietary data

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