Introduction and Key Findings

Opportunity Zones (OZ) are not the U.S. government’s first attempt to incentivize private investment in low-income and high-poverty communities. However, the structure of the OZ incentive is a sharp departure from previous attempts, which have been characterized by limited uptake and geographic reach, enormous complexity, and ambiguous economic benefits. Thus, OZs are an experiment in what place-based policy can achieve through a more decentralized, flexible, and scalable model. They are also an experiment in whether an incentive linked to the tax treatment of capital gains can generate widespread and economically productive activity in low-income and high-poverty communities.

The emerging evidence suggests that Opportunity Zones have already achieved a combination of expansive geographic reach, large-scale private investment, and significant economic effects that is unique in the history of U.S. place-based policy.

Two new papers provide the clearest assessment yet of the national scope and effects of OZ investment. The first, a November 2022 research paper authored by two economists with the U.S. Department of the Treasury, David Coyne and Craig Johnson, uses preliminary IRS data for tax years 2018 through 2020 to provide a survey of the amount and reach of early OZ investment. The second, a November 2022 working paper by University of California-Berkeley economist Harrison Wheeler, uses building permits data to document whether the incentive elicited a development response in and around communities designated as Opportunity Zones.

To learn more about the details of the OZ incentive model, go to https://eig.org/opportunity-zones/.
While many questions remain unanswered, the emerging evidence suggests that Opportunity Zones have already achieved a combination of expansive geographic reach, large-scale private investment, and significant economic effects that is unique in the history of U.S. place-based policy.

Key findings from these papers include:

- **OZ investment reached approximately 3,800 communities** from mid-2018 through 2020, representing nearly half (48 percent) of the total number of designated OZ communities nationwide. For comparison, it took 18 years for New Markets Tax Credit (NMTC) investments to reach an equivalent number of communities.
- **OZ investment is going to communities that are substantially more economically distressed than the rest of the country.** Ranked from lowest to highest levels of need, they average in the 87th percentile for poverty, 81st for median household income, and 80th for unemployment.
- **Total OZ equity investment reached at least $48 billion** by the end of 2020. This capital was raised from roughly 21,000 individual and 4,000 corporate OZ investors and deployed into 7,800 Qualified Opportunity Funds.
- **OZ designation caused a “large and immediate” increase in new commercial and residential development activity** such that the likelihood of investment in a given month jumped by over 20 percent in designated tracts across 47 studied cities.
- **Rather than crowding out local activity, OZ designations carried positive economic spillovers into neighboring communities and boosted development at a city-wide scale.**
- **In addition to boosting the supply of housing, OZ designations improved local home values by 3.4 percent** from 2017 to 2020 with no observed increase in rents.

Combined, these findings signal that Opportunity Zones are shaping up to be a consequential policy that holds important lessons for the future of place-based policy interventions. In the following brief, we examine the emerging evidence on the OZ incentive and use the latest findings to revisit early debates over its design and effectiveness.

**Multi-year data on the scale of OZ investment activity is finally becoming available**

The Coyne and Johnson paper draws directly from IRS tax filings of OZ investors for the years 2018, 2019, and 2020, providing the most comprehensive and geographically detailed estimates of OZ investment activity yet available. Prior studies from the Government Accountability Office and scholars Patrick Kennedy and Harrison Wheeler contained data only through 2019 (Kennedy and Wheeler have published one update since the original paper, but their sample is still limited to digital filings and only covers about 78 percent of...
total observed investment). The additional year is critical because the IRS did not issue final OZ regulations until December 2019, making 2020 the first year of a fully-implemented OZ policy. The Coyne and Johnson paper captures all OZ tax filings for 2018, most digital and paper filings for 2019, and digital filings for 2020 (with some effort made to estimate the likely values of the missing paper filings). As such, the study's findings are best read as conservative estimates of the extent of OZ activity over the period studied.

**OZ investment has already achieved enormous geographic reach**

The number of census tracts with confirmed Opportunity Zones investment activity is rising sharply as more complete and current data becomes available. By the end of 2020, fully 48 percent of OZs had received investment–up from 26 percent in 2019. This amounts to a total of roughly 3,800 communities in the two and a half years from the time of OZ community designations in mid-2018 to the end of the study window. To put that figure into context, it took 18 years for investment utilizing the New Markets Tax Credit (NMTC), previously the largest place-targeted tax incentive, to reach an equivalent number of communities.

The documented early reach of OZ investment is without precedent for a federal place-based tax incentive. However, the available evidence suggests that the number of designated communities with OZ investments has grown significantly higher since the period studied by Coyne and Johnson. Private data collected by Novogradac and Company, which administers a regular survey of Opportunity Fund managers, suggests that the amount of OZ equity raised more than doubled between December 2020 and December 2022, growing by 125 percent. Even if one assumes that the geographic spread of OZ investment slowed considerably with each incremental dollar raised after 2020, the incentive is on track to achieve extraordinary spatial coverage by the end of the statutory window for qualifying investments in 2027. For example, under an extremely conservative scenario in which the rate of geographic spread halved in 2021 and halved again in 2022, it would still mean that nearly two-thirds of designated communities (approaching 5,000 census tracts) received investment in just over four years.

By the end of 2020, every state and most, if not all, major commuting zones had received OZ investment. The share of designated communities with confirmed OZ activity ranged from highs of three-quarters of designated tracts in Colorado, Oregon, and Utah (and

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2 All three studies rely on privileged access to confidential IRS records, since the federal government has not otherwise established a process for making data on OZ investment activity publicly available.
3 Importantly, the Coyne and Johnson paper covers only OZ activity in the 50 states and DC, excluding territories. This (a smaller denominator of 7,826 tracts versus 8,764 including territories) partially explains the different results between it and the updated Kennedy and Wheeler paper (2022). The remaining differences are explained by Coyne and Johnson's larger sample size of tax returns.
4 Commuting zones findings are derived from Kennedy and Wheeler, 2021.
four-fifths in the District of Columbia), to a low of one-fifth of all eligible tracts in Illinois. There are clear regional patterns in the penetration of OZ investment across states, with Western states leading.

The results allow observers to draw several additional inferences. The sheer breadth of investment coverage across states—including 60 percent of OZs in Vermont, 64 percent in Mississippi, and 68 percent in South Dakota—confirms that the OZ incentive is useful outside of major markets. The geographic diversity of OZ investment also implies a diversity of use cases, as investment activity is likely to reflect the variability of local conditions across states and regions. What additional factors explain state-level differences will be the subject of future EIG research.
Communities receiving OZ investment are some of the highest need in the country

The IRS data analyzed by Coyne and Johnson confirms that areas receiving OZ investment are on average among the highest-need communities in the United States.

Communities that received qualifying investment by the end of 2020 are substantially more economically distressed than the nation as a whole, with an average median household income (MHI) of $37,300 compared to $61,700 for all U.S. tracts, a poverty rate (29 percent) nearly double the national rate and an unemployment rate in the double digits. Translated to percentiles ranked from lowest to highest levels of need, the average Opportunity Zone that has received investment is in the 87th percentile for poverty, 81st for MHI, and 80th for unemployment.\(^5\)

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Socioeconomic characteristics of OZs receiving QOZ property investment compared to all census tracts

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>OZs that received investment in 2020</th>
<th>All tracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>26%</td>
<td>13%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>With at least a Bachelor’s degree</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Homeowner</td>
<td>42%</td>
<td>63%</td>
</tr>
<tr>
<td>Average median household income</td>
<td>$37,300</td>
<td>$61,700</td>
</tr>
<tr>
<td>Average poverty rate</td>
<td>29%</td>
<td>16%</td>
</tr>
<tr>
<td>Average unemployment rate</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>Average median home value</td>
<td>$177,700</td>
<td>$245,900</td>
</tr>
</tbody>
</table>

Source: EIG analysis of 2017 ACS 5-year estimates and Coyne & Johnson 2022

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\(^5\) MHI rankings are inverted such that low incomes (towards $0) get higher ranks (towards 100) to align with the other measures.
Even when weighting the averages for the amount of OZ investment each tract has seen, invested OZs rank at the 85th percentile for poverty and 70th for MHI. Demographically, OZs that received investment are disproportionately home to minorities. The Black share of the population is double what it is across all tracts and the Hispanic share is 7 percentage points higher.⁶

The chart below counts the number of census tracts at various median household income levels and spotlights where OZs fall in the full national distribution of communities. OZs are clearly skewed to the left (lower income) while trailing into some middle-income brackets. The distribution reflects differing income levels across states (low-income tracts in high-income states may fall toward the middle of the distribution nationally). A tiny share of higher-income designations was able to qualify thanks to sufficiently high poverty rates, but such tracts are rare exceptions.⁷

Coyne and Johnson break the distribution of OZ investment dollars in 2020 down by deciles of median household income (see next figure). OZ investment was skewed some-

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⁶ Coyne and Johnson include Hispanics in their calculation of the white share in OZs that received investment. Because this double counts many Hispanics, only Black and Hispanic shares are presented here.

⁷ To qualify as an eligible “low income community” (LIC), a census tract must have either a poverty rate of at least 20 percent or a median family income less than 80 percent of the relevant benchmark area. In rare circumstances, wide gaps can open up between the two measures.
what rightward, with the 10 percent highest-MHI OZs absorbing over 20 percent of total investment dollars. (Most tracts in the top decile of OZs rank near or just above the middle of the distribution nationally.) The distribution of investment flattens quickly across the other nine deciles from there.

Meanwhile, the lowest-income 10 percent of OZs received a proportional 10 percent of investment in the study window, or $1.8 billion in OZ equity. These neighborhoods are among the very lowest income in the country, with MHIs below $21,000. On average, 51 percent of their population lives in poverty, and the unemployment rate averages 19 percent. Three-quarters of the population belongs to a minority group.

It is especially noteworthy that bottom-decile census tracts were able to attract a proportional share of investment given the disintermediated nature of the incentive, which puts all eligible areas on equal terms without any guarantee of investment. Importantly, the lowest-income one-third of OZs (the bottom three deciles in the chart below plus some of the fourth) all count among the lowest-income 10 percent of census tracts nationwide, revealing that OZs have unlocked billions in equity capital for a meaningful share of the country’s most severely distressed communities. This finding runs counter to the assertions of some early OZ critics who claimed that investors would simply avoid such areas altogether.

**Share of total OZ investment, sorted by OZ median household income decile, 2020**

![Graph showing distribution of OZ investment by median household income decile.]

Only 5 percent of OZs (427) have an MHI above the national median. These OZs fall into the bottom decile of all U.S. tracts.

Source: EIG analysis of 2017 ACS 5-year estimates and Coyne & Johnson 2022
While these early findings are promising, it remains to be seen how the distribution of investment may change over time. For example, while it is not surprising that investors would initially lean towards relatively less distressed communities within the high-need universe of designations, it would be useful to see changes in how investment is deployed as market expertise in using the incentive is normalized over time. Additionally, we need information on the number of individual investments made across different types of OZ communities to provide a fuller picture. For example, we cannot determine from the Coyne and Johnson paper whether the aggregate results in the most distressed OZs are being driven by a smaller handful of large investments or a large concentration of more modest investments; each would tell us something different about how OZ investment is being put to work within communities.

A broad and growing investor base underpins the expansive geography of OZ investment

The rapidly expanding map of OZ investment activity is powered by a diffuse and growing investor base. The number of OZ investors and the volume of equity capital raised both scaled rapidly after the incentive took effect. According to Coyne and Johnson's calculations, Qualified Opportunity Funds (QOFs) held $48 billion in assets by the end of 2020, rising steeply from $4 billion in 2018\(^8\) and $30 billion in 2019.\(^9\) The number of QOFs stood at 7,800, aggregating investment from 21,000 individual and 4,000 corporate investors. In this, OZs appear to be tapping into a largely different investor pool from the established legacy programs: The authors note that, whereas 95 percent of NMTC investors are corporations, 85 percent of OZ investors are individuals. These figures exclude numerous paper filings that the authors had not yet transcribed, setting lower bounds for actual 2020 values.

In the end, the more complete and current samples in the Coyne and Johnson paper revise upward previous estimates of the scale and reach of OZ investment. The Kennedy and Wheeler paper counted 2,756 QOFs with $18.9 billion in assets at the close of 2019, compared to Coyne and Johnson's 5,800 QOFs with $30 billion that year. Similarly, Kennedy and Wheeler originally estimated that 16 percent of designated communities had received investment in 2019; Coyne and Johnson now put that figure at 26 percent for that year and 48 percent by the end of the next one. In short, our understanding of the scale and reach of Oppor-
Opportunity Zones has dramatically changed with one more year of data and a more complete tally of tax filings.\footnote{The number of unprocessed returns excluded from the Coyne and Johnson analysis is small: below 2 percent for 2018 returns and under 6 percent for 2019 returns. They included transcribed paper returns for 2018 and 2019 to create a complete universe of tax returns, but were unable to do so for 2020.} This is one of the clearest examples of how data that formed the basis for the earliest assessments of OZs have been revised to such a degree that they now paint a completely different picture.

Why does the broad participation among investors and funds matter in achieving OZ’s core policy goals? Simply put, the driving force behind the diffuse geography of OZ investment is its diffuse investor base, which was encouraged by the flexible and decentralized structure of the incentive itself. Novogradac finds that more than three-quarters of QOFs they track are focused on a single city—and often on a single investment. Kennedy and Wheeler find a significant investor base in every state. Case studies like the one in rural Brookville, Indiana, demonstrate how OZs have opened up a new avenue to reinvest local wealth in the community. The emerging evidence strongly suggests that the more nimble structure of OZs compared to previous development incentives has unlocked a more distributed and adaptable pool of capital, one that is reaching a variety of places in a variety of ways.

**OZ designation produced “large and immediate” development effects for target communities**

The IRS data provides insight into the scope and scale of OZ activity nationwide in its early period, but to what extent was this activity caused by the incentive itself, and what were its effects on local economies? A new working paper by Harrison Wheeler addresses these questions with findings that suggest that OZs are breaking new ground in federal place-based policy.

Wheeler’s paper draws on building permits issued through June 2022 across 47 large cities and 12,000 census tracts to examine the effect that OZ designation had on new construction and home values. The findings can be summarized as follows:

- **OZ designation produced a “large and immediate boost” in local commercial and residential development in the areas studied.** Wheeler’s new findings build on prior research that established that OZs were delivering “economically significant” levels of investment per capita that were “large relative to prior federal place-based programs.” Specifically, he finds a 2.9 percentage point increase in the probability of new development occurring in a given month as a result of OZ designation—a jump of over 20 percent. This step-change increase in activity is clearly visible in the figure below,
adapted from his paper. Wheeler found no systematic difference in new development during the four years prior to OZ designations between designated tracts and eligible tracts that were not designated. These findings clearly establish that the OZ incentive is overall catalyzing new economic activity rather than simply providing a windfall for investments that would have been made regardless.

- **OZs designation produced positive economic spillovers for neighboring communities.** Rather than crowding out nearby activity, OZ designation appears to have increased the probability of new development in neighboring census tracts. This is precisely what one would expect to see if the OZ incentive is succeeding in revaluing targeted neighborhoods. What is more, this finding addresses one of the key concerns surrounding place-targeted policies—that they may simply redistribute economic activity from one area to another. Wheeler finds that OZs delivered benefits at a city-wide scale as well, boosting development on average by 2.7 percent and median home values by 0.6 percent.

- **OZ designation has boosted housing values and supply but held rents in check.** As with development trends, Wheeler finds that “rents and home values trend comparably in OZs and eligible non-OZs prior to the program.” However, after the incentive took effect, he finds that housing values—closely associated with local wealth—increased within OZs, but rents—a key indicator of local displacement pressure—did not. It ap-
pears that the increased development interest in OZs has helped increase the value of residential property in designated areas, but that the supply created by new development has held rents stable. While this is consistent with the growing body of literature on the relationship between local housing supply and rental affordability, some observers were nonetheless certain that OZ investment would inevitably cause a large increase in rents. In the end, Wheeler finds that OZ designation led to a 3.4 percent increase in median home value in designated communities from 2017 to 2020. The increase in housing values alone was enough to exceed the cost of the OZ incentive during the period studied.

Any one of these three findings would be significant, but in combination, they suggest that OZs could mark a breakthrough in the evolution of place-based policies.

Having established that actual OZ designations produced large economic effects, Wheeler proceeds to model a “locally optimal” approach to OZ designation that would have maximized the resulting increase in home values on a city-wide scale. Given the strong spillover effects, he finds that optimal OZs would cluster together, often in central areas adjacent to downtown cores. Wheeler’s optimal OZs are more strongly correlated with higher poverty rates, but actual OZs are more strongly correlated with lower incomes. (The complex dynamics of spillovers and potential for property value increase and development response drive “optimality” in his framework, as opposed to absolute levels of underlying distress.) Ultimately, he finds that more deliberately targeting and clustering OZs towards “optimal” neighborhoods could have increased investment activity by another 70 percent over the already substantial effects observed from actual OZ designations.

This exercise is most valuable in two ways. First, it validates that the OZ incentive model is highly effective at spurring redevelopment activity in certain types of distressed communities—a crucial insight given the unique nature of the policy. Second, Wheeler’s modeling can help lawmakers better understand precisely what types of communities are most likely to be responsive to OZ designation from a pure development perspective. This too is a significant advance in matching incentive to locality. Ex ante, it was impossible to predict with any certainty how and where the market would respond to the new incentive. But with multiple years of data now in hand, it becomes clear that areas with many vacant lots, low property values, zoning for multifamily and commercial development, and proximity to infrastructure and jobs seem to be most responsive to the OZ incentive; comparably low-income areas that are more fully built-out with single-family residences and farther from urban cores appear to be less effective designations. In our view, this speaks to the benefits of a relatively flexible and large-scale designation process that allowed such learning to take place to inform future place-targeted interventions.
We should be careful to note that maximizing the volume of development or increase in property values is only one dimension in any policymaker’s optimization function. The designations that optimize property values might, for example, also be the optimal designations to improve local incomes, poverty rates, employment outcomes, or business activity—or they might not. Further research will be necessary to explore the impact of OZ designation—and the interaction of OZ designation with community characteristics—on those dimensions. Most long-term barometers of success are downstream from the reinvestment activity that Wheeler documents, however, and that is what makes his paper so important: it examines the most revealing metric at this particular stage in the life of the policy. The building permits issued in the study window will take several years to translate into new residences and commercial spaces, and those may, in turn, spur a longer process of neighborhood revitalization. Wheeler’s results show that the prerequisites for downstream, multidimensional success are being met.

**Discussion**

What does this new data tell us about the economic activity actually resulting from OZs that we didn't already know? Quite a lot, it turns out.

We now know, for example, that the OZ incentive has succeeded in attracting the kind of widespread participation among investors necessary to generate new economic activity in designated communities at a large scale. We know that investment has been deployed across an unprecedented number of communities relative to previous place-based incentive programs. We know the high-need nature of those communities closely reflects the original intent of the policy despite occasional outliers. And we know that the OZ incentive appears to have significantly changed both the behavior of investors and the trajectories of designated census tracts in ways that could not have been predicted based on prior trends. What is more, we now have compelling evidence that, rather than crowding out local activity, the OZ incentive is delivering positive spillovers to surrounding neighborhoods and at a city-wide scale. And we know that it has increased the local supply of housing and boosted local housing wealth, all while generating no increase in rents. These are profoundly important insights.

Early perceptions of the OZ incentive were heavily shaped by outliers, anecdotes, and incomplete data. The growing body of multi-year evidence allows us to revisit early predictions and critiques about the policy. Critics cited the original Kennedy and Wheeler paper, for example, to assert that the policy was falling woefully short of its goals in terms of geographic reach and amount of new investment. Such assertions no longer withstand scrutiny. Other critics pointed to tracts like one in Long Island City, New York—an outlier that falls in the 99.9th percentile of all OZ designations by income—as an indication

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11 The optimization function may be different in the smaller cities or rural areas outside of Wheeler’s sample, too.
that investment would simply flow to the highest end of the community distribution. This claim—which revealed both a lack of understanding of markets and a deep lack of faith in the economic potential of low-income communities—can now be totally discarded. Still, others claimed (confidently and without evidence) that the OZ incentive would predominantly reward activity that would have happened anyway. The new data reveals the opposite to be true. Perhaps most pernicious were arguments against OZs on the grounds that efforts to improve struggling communities were a threat to local residents due to the supposedly inevitable increases in rents that would follow. Here again, one of the loudest critiques fails to survive contact with empirical evidence.

While we can now put to rest many threshold questions about the policy, many of the most important questions remain unanswered. It will be years before we know whether the economic effects observed to date prove durable. Likewise, we are perhaps a decade or more away from knowing the longer-term effects of OZs on local poverty rates, employment, housing, or business creation. The early evidence is promising, with scholars such as Alina Arefeva and colleagues finding evidence of large gains in jobs and business establishments in designated communities and positive spillovers to neighboring ones, corroborating the picture presented by Wheeler's research. Nevertheless, it remains far too early to measure the policy's durable impacts.

These open questions urgently underscore the need for more information about the nature and location of OZ investment. The papers analyzed in this brief put to rest any doubts about the significance of the OZ incentive: it is moving tens of billions of dollars into thousands of low-income and high-poverty communities and generating significant economic effects. But we know too little about the size and diversity of OZ investment activity in the targeted neighborhoods themselves, and we in the research community are not armed with the data necessary to closely examine the extent to which the policy will improve the welfare of local residents over time.

It is clearly in the public's interest to have access to fine-grained geographic summary statistics on OZ activity. Encouragingly, lawmakers in both parties agree. The bipartisan Opportunity Zones Transparency, Extension, and Improvement Act introduced in 2022 would make such data available, bringing significant transparency to the market to evaluate the effectiveness of the OZ incentive while still protecting crucial taxpayer data. The legislation would also require the U.S. Department of the Treasury itself to study and report on outcomes in designated communities over time. The act would go further, too: sunsetting high-income zones that slipped into the mix and adopting various other improvements to reflect early lessons of the OZ experiment. The evidence examined in this analysis should motivate Congress to make Opportunity Zones a more transparent, carefully measured, and powerful tool in a new generation of policies to uplift needy communities and regions.