Opportunity Zones

Great potential, potential challenges
Opportunity Zones: Great potential, potential challenges

This report has been prepared by UBS Financial Services Inc. and UBS Switzerland AG.

Please see important disclaimer and disclosures at the end of the document.
The Tax Cuts and Jobs Act, enacted in December 2017, provides investors with new tax incentives designed to stimulate long-term private investment in designated economically distressed communities across the US known as Opportunity Zones.

Even as the US has experienced a long run of overall growth and economic prosperity, economic inequality has worsened consistently since the 1970s. Income and wealth gaps have widened sharply over this period, causing economic disparities between geographies as many low-income communities (LICs) have significantly lagged behind the rest of the US.

The Opportunity Zone legislation aims to address these inequalities with incentives for private capital to fill the funding gap and catalyze economic acceleration in these areas. By providing uncapped long-term oriented tax benefits for investors and involving private fund sponsors, this initiative seeks to mobilize committed capital in ways and at scale exceeding past economic development programs. Initially, investments will focus on real estate development, with later-stage investments including private capital investments into operating businesses.

We believe that Opportunity Zones (OZs) represent a powerful incentive that if guided and implemented properly, has the potential to result in meaningful societal and economic benefit. We also recognize the implementation challenges and the risk that the envisioned impact will not actually be achieved. There is no certainty that capital will flow to those areas most in need of investment or that projects will consider local stakeholder needs. Furthermore, it is unlikely that the overall impact of the incentive can be assessed without government-mandated impact reporting requirements, which there are not as of yet. Policymakers, investors, and other stakeholders should work together to address these challenges proactively and ensure the long-term success of the program for both investors and communities.

The following pages outline the key facets of the Opportunity Zone incentive.
Key dates

22 December 2017
*Tax Cuts and Jobs Act* signed into law, introducing Opportunity Zone incentive by adding section 1400Z to the Internal Revenue Code¹

31 March 2018
Deadline for governors to nominate census tracts for designation as Opportunity Zones

9 April 2018
First round of Opportunity Zones designated, covering 18 states

14 June 2018
Final round of Opportunity Zones designated, covering all 50 states, the District of Columbia and five US territories

19 October 2018
Treasury released first round of proposed OZ regulations and guidance

12 December 2018
Executive order established the White House Opportunity and Revitalization Council

*10 January 2019 (POSTPONED INDEFINITELY)*
Treasury to hold public hearing on proposed Opportunity Zone regulations and guidance

31 December 2026
Last day for realization of capital gains eligible for tax-advantaged investment in Qualified Opportunity Funds

31 December 2028
Expiration of Opportunity Zone designations

31 December 2047
Last day for investors to sell Qualified Opportunity Fund investments without losing tax benefit, regardless of Opportunity Zone designation expiry in 2028

¹Specifics of the Opportunity Zone incentive are codified in the Internal Revenue Code Section 1400Z-1, which explains how OZs are defined and designated, and Section 1400Z-2, which outlines special rules for capital gains invested in OZs.

*The public hearing, originally scheduled for January 10, 2019 at 10:00 a.m. is postponed. A new date for a public hearing will be published in the Federal Register once appropriations for the Department of the Treasury have been restored.*
Introduction

The Tax Cuts and Jobs Act ("TCJA"), which was enacted in December 2017, introduced new tax incentives for investors who roll over eligible capital gains into investments in designated Opportunity Zones across the US. The motivation behind this legislation is to stimulate increased long-term private investment into economically distressed rural, urban, and suburban communities where additional capital is most needed. Investors can potentially defer and reduce tax on existing capital gains by reinvesting them into Qualified Opportunity Funds (QOFs), and can eliminate tax on any future fund appreciation if held for at least ten years.

An uncapped approach to a persistent problem
The concept of place-based tax incentives and development programs is not new. Franklin D. Roosevelt’s New Deal programs in the 1930s and Lydon B. Johnson’s Model Cities program in the 1960s shared similar characteristics, many of which were later employed by the Low Income Housing Tax Credit (LIHTC) program in the 1980s, Empowerment Zones / Enterprise Communities / Renewal Communities in the 1990s, and the New Markets Tax Credit (NMTC) program introduced in the year 2000. Academic studies suggest that the NMTC program did have modest positive effect on local communities, but potentially some of that was due to changes in resident composition, rather than improving existing residents’ welfare.2

While similar to NMTC in that it incentivizes multi-year private investment through tax benefits, the OZ incentive differs in that it is not subject to a tax credit allocation process and the amount of tax benefit available to investors is limited only by the size of their own total capital gains. Further, while only certified Community Development Entities (CDE) can apply for NMTC, any investor with capital gains can invest in a QOF. Opportunity Zones therefore present the potential to mobilize far more private investment than past or existing programs.

Additional regulations and guidance are still needed at this point to provide investors and fund sponsors with further clarity on the full set of requirements. However, we believe that the proposed regulations and guidance issued by Treasury in October 2018 provide sufficient detail to enable fund sponsors, particularly those focused on single assets, to begin bringing credible solutions to market.

**Great potential but there are also challenges...**

Opportunity Zones offer exciting prospects for investors, with meaningful tax benefits and a free-market approach that should mobilize new capital into these areas at a scale not previously achieved with past programs. With investors’ accumulated capital gains estimated in the USD 6tr range\(^3\), the promise is significant.

However, investors should also recognize the challenges of actual implementation as well as the inherent risks of investments in these areas. Those focused primarily on the tax benefit should recognize the inherent difficulty of making equity investments in distressed communities. It will be critical to identify investments that can deliver compelling risk-adjusted returns independent of the tax benefit and invest with credible fund sponsors that can source and execute on these opportunities within the guidelines.

The original objective of the legislation is to spur job creation and economic development in low-income communities. Yet, there is no certainty that capital will flow to those areas most in need of investment or that investors and fund sponsors will consider local stakeholder needs. Or that the overall impact of the incentive will be able to be evaluated without government-mandated impact reporting requirements, as are not yet established. We are optimistic that private capital and local stakeholders can work together to ensure benefit for communities and investors alike.

\(^3\) Economic Innovation Group estimate of USD 3.8tr for investors and USD 2.3tr for corporations as of 2017. Please see ‘Sources and methodology’ section for full citation.
Investing in Opportunity Zones

How can investors benefit?

Investors with short-term or long-term taxable capital gains can invest them into Opportunity Zones through specific investment vehicles called Qualified Opportunity Funds. Eligible gains can come from stocks, bonds, business or private investments, property and most other assets, excluding gains from related parties. In order to be eligible for preferential tax treatment, these gains must be reinvested into a QOF within 180 days of when the gain would otherwise have been recognized. It should be noted that only equity investments in QOFs are eligible; debt instruments are not permitted. Additionally, investors should take note that these are federal tax incentives to which not all states conform.

Investors rolling over capital gains into QOFs may be eligible for the following benefits:

- **Deferral** of tax on the original gain until the earlier of December 31, 2026 or sale or exchange of the QOF investment;

- **Reduction** of tax on the original gain through a basis step-up of 10% if the QOF investment is held for more than five years, or 15% if held for more than seven years; and

- **Elimination** of capital gains on any appreciation of the QOF investment if it is held for more than ten years, through a basis step-up to fair market value upon sale or exchange of the QOF.

**Bronx County, New York**
75 designated Opportunity Zones
Source: Getty Images

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4 Individuals, C-corporations (including registered investment companies and REITs), partnerships, S-corporations, trusts and estates are all eligible to invest in QOFs.
5 Net gains on Section 1256 contracts are eligible for deferral, but gains derived from offsetting-positions transactions such as straddles are not eligible for deferral. Depreciation recapture is not eligible for deferral.
6 A partnership’s 180-day rollover window generally begins on the last day of the partnership’s taxable year. When a partnership does not elect deferral but a partner does so with their distributive share, the 180-day window begins on the last day of the partnership’s taxable year or on the same day the partnership’s 180-day window would have started had it elected deferral.
7 An investor may sell their interest in a QOF before 2026 and elect to defer the previously deferred gain again so long as the proceeds of such sale are reinvested in another QOF within 180 days.
8 While 1400Z-2 stipulates that Qualified Opportunity Zone designations expire on December 31, 2028, an investor may step up the basis of a Qualified Opportunity Fund to fair market value, upon sale or exchange, up until December 31, 2047.
Opportunity Zones: Great potential, potential challenges – January 2019

Initial investment
Investor rolls over original capital gain from a previous investment into a Qualified Opportunity Fund (QOF)

5-year basis step-up
Investor receives a 10% step-up in basis after holding QOF investment for 5 years

7-year basis step-up
Investor receives a 15% step-up in basis after holding QOF investment for 7 years. At the end of 2026, deferred original gain is recognized and tax on gain is owed

Tax day
Investor pays tax on deferred original gain recognized in tax year 2026

10-year holding period
Elimination of capital gains on appreciation of QOF investment if held for 10+ years

Note: The above timeline is illustrative of the benefits and investment timeline outlined by Section 1400Z-2 in the Internal Revenue Code.
An illustrative investment example

The following text is an illustration of the tax benefits in action to provide a sense of how investors can potentially benefit. This is an update and expansion of the example created by our Advanced Planning colleagues in their September 2018 tax mechanics note, Qualified Opportunity Zones: Mechanics and tax implications.

We do not provide tax advice. We recommend that recipients take financial and/or tax advice as to the implications of investing in any of the products mentioned herein.

**Scenario**
On January 1, 2019, Helen sells her company with a basis of USD 1mn to an unrelated private equity firm for USD 10mn. At the time of the sale, Helen has a capital gain of USD 9mn, which should result in USD 2,142,000 of capital gains tax at a 23.8% rate. On February 1, 2019, Helen invests her USD 9mn gain in a Qualified Opportunity Fund (within 180 days of January 1, 2019). On her income tax return for tax year 2019, Helen elects to defer the tax on her capital gain until the earlier of the sale of her QOF investment or December 31, 2026. Helen’s initial tax basis in the QOF is zero.

**Up to five-year holding period**
If Helen sells her QOF investment before holding it for five years, she will pay tax on the entire deferred original gain and on any appreciation of the QOF investment.

**Five-year holding period**
If Helen holds her QOF investment until February 1, 2024 (five years), then her basis in the QOF is increased to 10% of the amount of her deferred original gain, so Helen’s new basis in the QOF is USD 900,000. If she sells her QOF investment after five years but before seven years, she will pay tax on 90% of her original capital gain and on any appreciation of the QOF investment.

**Seven-year holding period**
If Helen holds her QOF investment until February 1, 2026 (seven years), then her basis in the QOF is increased by an additional 5% of her deferred original gain, or an additional USD 450,000. Helen’s total basis in the QOF after seven years will be USD 1,350,000. If she sells her QOF investment after seven years, she will pay tax on 85% of her original capital gain and on any appreciation of the QOF investment.

**Payment of tax on 2026 income tax return**
Because the payment of the tax on her original capital gain can be deferred no later than December 31, 2026, Helen still has to pay capital gains tax for that tax year even if she holds the investment for a longer period. On her 2026 federal income tax return (filed in 2027), Helen would report a USD 9mn capital gain but that gain is offset by her new basis in the QOF of USD 1,350,000. Helen’s capital gains tax due is USD 1,820,700 and Helen’s basis in the QOF is increased by her recognized original capital gains. After the payment of tax, Helen’s new basis in the QOF is USD 9mn. Note that proper planning is necessary to ensure that Helen has sufficient liquidity to pay this tax liability in 2026.

**Ten-year holding period**
If after paying the tax, Helen holds the QOF investment until at least February 1, 2029 (ten years), then her basis in the QOF will be stepped-up to its fair market value on the date that it is sold or exchanged. So, Helen would not recognize any post-acquisition capital gains on her investment, and any appreciation of the QOF investment grows tax free. If Helen holds the QOF investment for ten years and sells it on March 1, 2029 for USD 20mn, Helen’s basis is USD 20mn on the date of sale and no additional tax would be due.
**Opportunity Zones: Great potential, potential challenges – January 2019**

An illustrative investment example (cont.)

1 January 2019
Helen sells her company, leaving her with a USD 9mn original capital gain.

1 February 2019
Helen rolls her USD 9mn original capital gain into a QOF and elects to defer her capital gain on her tax year 2019 tax return.

1 January 2023
Helen has yet to hold her QOF investment for five years. If she sells it, she will pay 100% of taxes owed on her deferred original gain, USD 2.1mn, and on any appreciation of the QOF investment.

1 February 2024
Helen has now held her QOF investment for five years. Her basis in the QOF is increased to 10% of her deferred original gain. This means that if she sells her QOF investment before February 1, 2026, she will pay taxes on 90% of her deferred original gain, USD 1.9mn, and 100% of any taxes owed on appreciation of the QOF investment.

1 February 2026
Helen has now held her QOF investment for seven years. Her basis in the QOF is increased to 15% of her deferred original gain. This means that if she sells her QOF investment before or after the end of the deferral period on 12/31/2026, she will pay taxes on 85% of her original gain, USD 1.8mn. Additionally, she would owe 100% tax on any appreciation of the QOF investment at time of sale or exchange. This would not be the case if held for ten-plus years.

15 April 2027 (Tax Day)
Irrespective of whether Helen sold her QOF investment in 2026 or still holds it, she must pay taxes owed on her original gain.

1 February 2029
Helen has now held her QOF investment for more than ten years. Whenever Helen sells or exchanges her QOF investment, her basis will step up to fair market value and she will owe no tax on any appreciation.
Opportunity Zone investments must be made through investment vehicles called Qualified Opportunity Funds. A QOF is a self-certified investment vehicle organized as a partnership or corporation to invest in a single or multiple eligible asset(s) in Opportunity Zones.

Explicit guidelines apply to the investments made by a QOF. A QOF must hold at least 90% of its assets in Qualified Opportunity Zone property. Property is defined to include the following: Qualified stock, qualified partnership interests, or qualified business property (see diagram on next page). QOFs can therefore own OZ business property directly or through stock and partnership interests in QOZ businesses. In instances where a QOF owns QOZ business property, a QOF must make substantial improvements to the property, meaning that improvements must be equivalent to the property’s basis, excluding land.

Fund of fund structures are not permitted, as a QOF cannot own another QOF. QOFs are assessed every six months for compliance with the 90% test; failure results in the QOF paying a monthly underpayment penalty.

Initial focus on real estate; later on businesses
Given the legislation and proposed regulations, we expect that the vast majority of QOFs will initially focus on property of various types that meet the substantial improvement requirement. Furthermore, many of the early QOFs will likely focus on single properties, since additional clarification on multi-asset approaches is still needed to enable more effective portfolio management. We see potential for the incentive to drive investment across multiple real estate types, ranging from mixed-use to multifamily, office, industrial/warehouse, retail and medical/healthcare related properties, given supply/demand dynamics. Projected financial returns and potential to impact surrounding communities will be type- and case-specific and highly dependent on fund sponsor, structure, development plan, community support, and location.

The path to increased investment in OZ-focused operating businesses will depend on further regulatory clarity including how existing businesses might qualify and the elimination or reduction of the proposed requirement that a majority of business revenue must be derived from activity in a QOZ.

Illustration of Qualified Opportunity Fund structure and holdings

*Nonqualified financial property* can mean debt, stock, partnership interests and some derivatives, all unrelated to Opportunity Zone property.
Qualified Opportunity Zone (QOZ) property

What can a Qualified Opportunity Fund own?

<table>
<thead>
<tr>
<th>Qualified OZ stock</th>
<th>Qualified OZ partnership interests</th>
<th>Qualified OZ business property</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Original issue stock in a domestic corporation that is a QOZ business</td>
<td>• Capital or profits-based interest in a domestic partnership that is a QOZ business</td>
<td></td>
</tr>
<tr>
<td>• Acquired solely for cash by QOF after December 31st, 2017</td>
<td>• Acquired solely for cash by QOF after December 31st, 2017</td>
<td></td>
</tr>
<tr>
<td>• At time of issue, corporation was a Qualified OZ business</td>
<td>• At time of issue, partnership was a Qualified OZ business</td>
<td></td>
</tr>
<tr>
<td>• Corporation must remain a Qualified OZ business for substantially all of QOF holding period</td>
<td>• Partnership must remain a Qualified OZ business for substantially all of QOF holding period</td>
<td></td>
</tr>
</tbody>
</table>

What is a Qualified Opportunity Zone business?

<table>
<thead>
<tr>
<th>Qualified OZ business</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Active trade or business organized as a corporation or partnership</td>
</tr>
<tr>
<td>• 70% of assets are QOZ business property</td>
</tr>
<tr>
<td>• Less than 5% of assets can be nonqualified financial property¹²</td>
</tr>
<tr>
<td>• At least 50% of the business’ gross income must be derived from activities in OZ</td>
</tr>
<tr>
<td>• Prohibited from engaging in certain activities¹³</td>
</tr>
</tbody>
</table>

10 Safe harbor working capital provision applies as long as (a) it is held for the acquisition, construction and/or substantial improvement of tangible property in an OZ; (b) there is a written plan for deployment; and (c) the cash and working capital are expended in a manner consistent with the plan Section 1400Z-2(d).

11 “Substantial improvement” means additions to the income tax basis of the property exceeding the beginning adjusted basis of the property (excluding land) over the subsequent 30 month period.

12 “Nonqualified financial property” can mean debt, stock, partnership interests and some derivatives, all unrelated to Opportunity Zone property.

13 Prohibited activities include private or commercial golf courses, country clubs, massage parlors, hot tub facilities, tanning facilities, racetracks or other facilities used for gambling, or any stores where the principal business is the sale of alcoholic beverages for consumption off premises.
Qualified Opportunity Funds in a portfolio context

Investors should consider carefully how Opportunity Zone investments fit into their overall portfolio exposure. Prudent planning and portfolio management are essential in avoiding strategic missteps.

The relative benefit of OZ investments
We quantify the estimated benefit of the tax deferral and step-up on original gain to be approximately 29%, or approximately 3.7% per annum over the seven year period (assuming QOF investment made in 2019 and a 2.6% risk-free rate). 15% of this benefit is due to the basis step-up at the end of seven years, and the remaining 14% is due to time value of delaying the tax payment for seven years.

A 3.7% annual tailwind is a valuable tax advantage and meaningfully increases the attractiveness of QOF investments relative to other assets. The QOF investment could underperform a non-QOZ investment by that amount per annum and the investor would at worst break-even.

The deferral is valuable, but mathematically, the elimination of capital gains tax on QOFs held for ten-plus years is the most compelling part of the tax benefit. Investors should avoid liquidating QOFs early as they would lose these benefits. Using simple assumptions of 10% net annual growth of a QOF investment, a 23.8% tax rate, original gain taxes netted out of the QOF investment in 2026, and ignoring transactions costs, a QOF investment realized at the beginning of the eleventh year would result in an approximately 2.3x multiple (a 39% premium over an equivalent alternative returning 1.7x). Selling just after year seven would result in an approximately 1.5x multiple (a 16% premium over the alternative of approximately 1.3x). The significant multiple increase and premium over alternative illustrate the clear relative benefit of holding through the ten-year mark.

Liquidity. Longevity. or Legacy.14
Within our wealth planning framework, we believe Opportunity Zone investments likely belong in most investors' Legacy strategy, alongside other illiquid investments and/or planning-related vehicles like trusts, donor-advised funds, and private equity.

Investors with significant gains, likely from exiting a business, reducing a concentrated stock position, or some other similar transaction, could dedicate their planned 2019, 2020 and 2021 private real estate and private equity commitments to QOFs and reap a minimum of the five-year tax benefits on investments made during these three vintage years.

• To the extent that an investor has already-realized gains that need to be reinvested, QOFs should be among the candidates for any new private real estate or private equity commitments.

• Investors should not necessarily realize capital gains for the sole purpose of reinvesting into a QOF unless they were al-

14 Timeframes may vary. Strategies are subject to individual client goals, objectives and suitability. This approach is not a promise or guarantee that wealth, or any financial results, can or will be achieved. For more information on this topic and the following text, please see: Crook, Michael, "Liquidity. Longevity. Legacy. A purpose-driven approach to wealth management." https://www.ubs.com/global/en/wealth-management/chief-investment-office/our-research/life-goals/us-wealth-with-purpose.html
ready planning to take that capital gain and reinvest into a similar type of investment (without tax advantages).

**Other portfolio considerations**

Investors should also carefully evaluate the following considerations when incorporating QOF investments into their portfolios.

- **Overall liquidity profile and position sizing.** The illiquid nature of QOF fund vehicles means most investors will have to be selective about how much they allocate and how this changes the liquidity profile of their overall portfolio, particularly if funded with capital gains from liquid securities. Investors should expect to hold QOFs through the fund life and not consider as sources of liquidity, given the relative attractiveness of the tax benefit if held for ten or more years. The significant illiquidity of these structures may limit their overall usefulness for many investors.

- **Liability management.** Investors should plan in advance how to fund the deferred tax on original gains recognized in 2026 and paid in 2027, particularly if they intend to keep holding the QOF investment. Potential funding options include utilizing leverage, liquidity on hand, or expected future distributions.

**QOF-specific considerations**

Investors also need to think carefully about specific QOF investment selection, focusing on the characteristics of the underlying investments and how they might match to investors' needs and objectives beyond tax benefits. Considerations include:

- **Concentration.** Evaluating a single-asset QOF may be more straightforward, but investors are subject to concentration risk. Multi-asset QOFs, on the other hand, offer the benefit of diversification potentially across geography, asset type and property, but returns will be averaged across multiple assets and the impact potentially not as focused, for investors who value that benefit.

- **Returns and impact.** Different investment types offer differing timeline, risk and return profiles as well as differing potential impact outcomes. Ground-up development will have a different risk/return profile to redevelopment, while residential and affordable housing will impact a community differently than operating businesses or mixed-use development. Geographic focus and proximity may be a priority for some investors.

- **Fund sponsor quality and experience.** Given the new nature of the OZ incentive and the risk profile of investing in distressed communities, it is critical to invest with credible fund sponsors that can demonstrate a track record and experience with similar investments, ability to source and execute quality deals through their network, and strong local relationships and community knowledge.
How are Opportunity Zone investments different than 1031 Exchanges?

A 1031 Exchange is a popular transaction type that also enables investors to defer capital gains and federal income tax, specifically on the sale of real estate assets. We summarize the key differences between Qualified Opportunity Funds and 1031 Exchanges in the table below:

<table>
<thead>
<tr>
<th>Source of capital for reinvestment</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Real property held for productive use in a trade or business or for investment</td>
<td>Short- and long-term capital gains on sale of most asset types</td>
</tr>
<tr>
<td></td>
<td>• Gains resulting from sales to related parties (20% common ownership threshold) are not eligible</td>
<td>• Depreciation recapture and gains from offsetting positions like straddles are not eligible</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required reinvestment</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entire net proceeds from transaction must be reinvested</td>
<td>Only the capital gains from an asset sale or exchange can be reinvested</td>
</tr>
<tr>
<td></td>
<td>• Only the capital gains from an asset sale or exchange can be reinvested</td>
<td>• Investor may choose to reinvest only a portion of eligible gains</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reinvestment limitations</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proceeds must be reinvested into a &quot;like-kind&quot; property</td>
<td>Proceeds must be reinvested into a Qualified Opportunity Fund</td>
</tr>
<tr>
<td></td>
<td>• No geographic limitations on reinvestment property (within US)</td>
<td>• QOF by definition have a geographic limitation to designated census tracts and specified property types</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reinvestment timing</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>180-day timeframe to reinvest from close of the original capital gain-generating transaction</td>
<td>180-day timeframe to reinvest from date original capital gain would have otherwise been recognized</td>
</tr>
<tr>
<td></td>
<td>• Target &quot;like-kind&quot; property must be identified within 45 days</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deferral of gain recognition</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Original gain recognition may be deferred indefinitely by continuing to hold or executing another like-kind exchange</td>
<td>Original gain recognition can only be deferred until the earlier of (i) sale or exchange of the QOF investment or (ii) December 31, 2026</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduction of taxable original gain due to basis step-up</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>• 10% basis step-up if QOF investment held for five-plus years; 15% basis step up if held for seven years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elimination of capital gains on future appreciation of reinvested capital</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>• Elimination of capital gains on appreciation of QOF investment via basis step-up to fair market value upon sale or exchange, if held for more than ten years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basis step-up upon death</th>
<th>1031 Exchange</th>
<th>Qualified Opportunity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asset basis is stepped up to fair market value at time of death</td>
<td>No basis step-up upon death if during the original gain deferral period (until 12/31/2026)</td>
</tr>
</tbody>
</table>
Characteristics of Opportunity Zones

Opportunity Zones are economically distressed census tracts where new private investments, meeting specific criteria, may be eligible for preferential tax treatment. The Secretary of Treasury has designated 8,764 census tracts across the 50 states, the District of Columbia, and five US territories as Qualified Opportunity Zones (QOZs). Opportunity Zone designations remain in effect until the end of 2028.

**Locally-driven selection process**
Governors of states and territories were responsible for nominating up to 25% of low-income census tracts in their jurisdiction for approval, based on the community criteria used in the similar New Markets Tax Credit program. These criteria identify low-income communities as those with poverty rates of at least 20% or median family income that does not exceed 80% of the surrounding area. Governors could also nominate a small number of census tracts (up to 5% of total) that do not meet these requirements but are (1) contiguous to at least one low-income tract and (2) have a median family income that does not exceed 125% of at least one contiguous low-income tract. In the end, fewer than 200 (less than 2.3% of all zones) of these contiguous tracts were designated as Opportunity Zones. Nomination decisions were in many cases based on input from the general public and regional economic development organizations; each state used data metrics specific to its needs, with many giving constituents the ability to voice opinion through web-based or other platforms.

**Economic disparity in Opportunity Zones**
OZs represent approximately 12% of all US census tracts and cover nearly 35 million people, approximately 11% of the total US population. Despite some criticism of certain designated tracts, Opportunity Zones overall reflect a clear focus on economically distressed communities that are worse off than the rest of the US and are in need of investment. In fact, approximately 63% of designated Opportunity Zones met both the

Population density and unemployment in Opportunity Zones

![Map of Opportunity Zones with population density and unemployment rates](image)

Source: US Census, IPUMS NHGIS, UBS as of 14 January 2019

15 Per New Markets Tax Credit criteria in Section 45D of the Internal Revenue Code.
16 See methodology and sources section for explanation of calculations and datasets used. All figures are approximate averages based on Census Bureau data.
Opportunity Zones overall reflect a clear focus on economically distressed communities that are worse off than the rest of the US and are in need of investment.

To be eligible, a census tract must be either:

- A low income community
  - Poverty rate of at least 20%
  - Have a median family income not exceeding 80% of area median income (AMI)
- Contiguous to a low-income community
  - Median family income not in excess of 125% of at least one contiguous low-income community
  - Limited to less than 5% of designated tracts per state

<table>
<thead>
<tr>
<th>Poverty Rate</th>
<th>Unemployment Rate</th>
<th>Median Family Income Share of Area Median Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1%</td>
<td>7.4%</td>
<td>98.7%</td>
</tr>
<tr>
<td>31.8%</td>
<td>14.6%</td>
<td>94.5%</td>
</tr>
</tbody>
</table>

Note: Unemployment numbers differ from the monthly Bureau of Labor Statistics figures. These data points were collected over a five-year period and are projections subject to sampling error.

Source: US Census, IPUMS NHGIS, UBS as of 15 January 2019

17 See sources and data methodology section for explanation of calculations and datasets used. All figures are approximate averages based on Census Bureau data.
18 It must be noted that these numbers differ from the Bureau of Labor Statistics. These data points were collected over a 5-year period and are subject to sampling error.
19 Urbanized areas are defined as densely populated areas with a population of 50,000 and greater, while urban clusters are defined as areas with populations between 2,500-50,000. Rural areas are defined as those areas falling outside of the aforementioned urban definitions.
Opportunity Zones: Great potential, potential challenges – January 2019

More renters, higher rent burden in OZs
Average household rent burden levels, in % of renter households; average renter occupied households, in % of households

Note: A rent-burdened household is one in which gross rent is 30% of household income, while a severely rent-burdened household is one in which gross rent is 50% or more of household income.

Source: US Census, IPUMS NHGIS, UBS as of 15 January 2019

Geographic breakdown of OZs
Urbanized areas, urban clusters, and rural areas, in %

Note: Urbanized Areas are defined as densely populated areas with a population of 50,000 and greater, while Urban Clusters are defined as areas with populations between 2,500-50,000. Rural Areas are defined as those areas falling outside of the aforementioned guidelines.

Source: US Census, IPUMS NHGIS, UBS as of 15 January 2019

Poverty rate differentials between OZs and Non-OZs

Source: US Census, IPUMS NHGIS, UBS as of 14 January 2019
A glance at sample Opportunity Zones

The accompanying tables highlight sample Opportunity Zones in different regions around the US. To illustrate the disparity in poverty, unemployment, and income, the zones are compared to their respective counties and states. This is just a small number of the 8,764 OZs that were designated nationwide.

### West

<table>
<thead>
<tr>
<th>Census Tract Name</th>
<th>County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tulare County – Tract 43</td>
<td>Tulare County</td>
<td>California</td>
</tr>
<tr>
<td>Population</td>
<td>7,676</td>
<td>330,467</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>18.2%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>42.0%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>$30,456</td>
<td>$44,871</td>
</tr>
</tbody>
</table>

Source: US Census, Census Reporter, California Department of Finance, UBS as of 15 January 2019

### New England

<table>
<thead>
<tr>
<th>Census Tract Name</th>
<th>County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hampden County – Tract 8009</td>
<td>Hampden County</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Population</td>
<td>4,114</td>
<td>469,188</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>7.4%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>39.7%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>$18,364</td>
<td>$52,205</td>
</tr>
</tbody>
</table>

Source: US Census, Census Reporter, UBS as of 15 January 2019

### Midwest

<table>
<thead>
<tr>
<th>Census Tract Name</th>
<th>County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kane County – Tract 8544</td>
<td>Kane County</td>
<td>Illinois</td>
</tr>
<tr>
<td>Population</td>
<td>14,824</td>
<td>405,046</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>6.6%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>15.6%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>$49,850</td>
<td>$75,628</td>
</tr>
</tbody>
</table>

Source: US Census, Census Reporter, UBS as of 15 January 2019

### New York Metro

<table>
<thead>
<tr>
<th>Census Tract Name</th>
<th>County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronx County – Tract 462.02</td>
<td>Bronx County</td>
<td>New York</td>
</tr>
<tr>
<td>Population</td>
<td>9,690</td>
<td>1,128,491</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>24.7%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>20.4%</td>
<td>29.7%</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>$37,440</td>
<td>$37,397</td>
</tr>
</tbody>
</table>


### Central/Rockies

<table>
<thead>
<tr>
<th>Census Tract Name</th>
<th>County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hidalgo County – Tract 202.01</td>
<td>Hidalgo County</td>
<td>Texas</td>
</tr>
<tr>
<td>Population</td>
<td>7,497</td>
<td>839,539</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>18.2%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>28.9%</td>
<td>31.8%</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>$31,653</td>
<td>$37,097</td>
</tr>
</tbody>
</table>

Source: US Census, Census Reporter, UBS as of 15 January 2019

### Southeast

<table>
<thead>
<tr>
<th>Census Tract Name</th>
<th>County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dougherty County – Tract 2</td>
<td>Dougherty County</td>
<td>Georgia</td>
</tr>
<tr>
<td>Population</td>
<td>3,054</td>
<td>91,522</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>32.9%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>60.2%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Median Family Income</td>
<td>$20,789</td>
<td>$34,541</td>
</tr>
</tbody>
</table>

Source: US Census, Census Reporter, UBS as of 15 January 2019
Key clarifications and next steps

The Tax Cuts and Jobs Act ("TJCA") established the initial framework for the Opportunity Zone incentive\(^{20}\), and directed Treasury to provide further details and clarity to guide implementation. The concept was originally introduced as the Investing in Opportunity Act with bipartisan support, co-sponsored by Senators Tim Scott (R-SC) and Cory Booker (D-NJ), and was subsequently incorporated into the TCJA prior to enactment.

Treasury issued a first round of proposed regulations and guidance in October 2018, which clarified certain investor, fund, and underlying asset requirements. While the proposed regulations addressed a number of key questions, many investors, practitioners, and community stakeholders are awaiting clarification on a number of open items. We expect Treasury to address at least some of these issues in early 2019.

Certain areas require additional clarity

We highlight the following key issues as needing further clarification to enable investments to begin in earnest and to ensure projects benefit communities as well as investors.

- **Management of multi-asset funds.** A key open issue related to management of diversified multi-asset QOF funds is whether fund sponsors can sell an underlying asset and reinvest the proceeds into another qualifying asset without invalidating QOF investors’ benefit, and whether doing so would re-start an investors’ ten-year holding period or continue the existing holding period. In our view, multi-asset QOF vehicles are crucial to mobilizing capital at scale by providing investors the benefit of diversification.

- **Operating business requirements.** Additional guidance is needed on requirements for QOFs targeting investments in operating businesses, including clarification on how much revenue, at minimum, must be generated in the QOZ and whether there are circumstances under which existing businesses already located in a QOZ can qualify. From an impact perspective, operating businesses can be more closely tied into communities and present greater direct potential to stimulate permanent job creation and economic activity. Greater flexibility would be conducive to increased business investment.

- **Impact reporting requirements.** Minimum impact reporting requirements are needed to better align investment activity with the spirit of the Act and enable better understanding and measurement of the impact – or lack thereof – being generated by QOF investments. Without data on capital flows and social/environmental impact metrics, it will be difficult to assess the actual economic and social impact of Opportunity Zone investments on individual communities. In the absence of Treasury requirements on this front, private investors and fund managers should be proactive about tracking and reporting metrics relevant to their investments and the community impact they envision.

\(^{20}\) Specifics of the Opportunity Zone incentive are codified in the Internal Revenue Code Section 1400Z-1, which explains how OZs are defined and designated, and Section 1400Z-2, which outlines special rules for capital gains invested in OZs.
A potential positive: Creation of White House Opportunity and Revitalization Council

The White House also announced the creation of a White House Opportunity and Revitalization Council, whose objective is to further facilitate the flow of capital to Opportunity Zones by aligning federal programs and resources and coordinating with state and local entities in support of community investment. Chaired by the HUD Secretary, the Council comprises representatives from 13 federal agencies including the Departments of Agriculture, Commerce, Labor, Transportation, Health and Human Services, and Education among others.

The creation of the Council is a positive development for private investors and fund sponsors, although details of the Council’s work plan and subsequent recommendations are not yet clear. On its face, the commitment to mobilize resources and better coordinate federal programs and support for states and local communities should help ease the path for greater OZ investment. The Council is explicitly tasked with evaluating "what data, metrics and methodologies can be used to measure the effectiveness of public and private investments in urban and economically distressed communities, including qualified opportunity zones," which is positive from an impact standpoint. Although the statute and proposed regulations have not addressed impact reporting to date, this signals recognition that data and metrics collection and measurement are important.
Will there be impact?
Designation of the Opportunity Zones creates a powerful incentive for significant long-term private investment to flow into economically distressed communities across the US. On the one hand, this is promising from a community perspective since the uncapped nature of the incentive implies potential for capital to move into these areas at a scale not seen with prior programs. The potential for impact is significant, given the economic and other shortfalls seen in Opportunity Zones compared to national averages and areas not designated as OZs.

However, what impact will actually be achieved by the Opportunity Zone incentives overall is unclear due to the current lack of Treasury-mandated reporting requirements and the involvement of private fund sponsors and investors in directing investments. Community development financial institutions (CDFIs) with long track records in community investment are already active in Opportunity Zones and will continue to focus on directing capital to investments in areas where it is most needed. However, other private fund sponsors may have limited experience in employing an impact lens in their approach.

We see potential risks

- Market rate return-focused capital may end up investing, at least initially, in those tracts where the economic situation is less bleak or has already improved at the expense of areas which truly need investment (which the OZ initiative aimed to address). This is the benefit and cost of a market-driven mechanism.

- Regardless of geographic focus, fund sponsors may not proactively and consistently consider the needs of communities and local stakeholders in sourcing, managing and exiting investments.

- Without government-mandated requirements that investments provide impact reporting, it will be challenging to measure the efficacy of both individual projects and the overall initiative.

...which private investors, fund sponsors, and community stakeholders can and should address

If the Opportunity Zone incentive is to be effective in creating measurable long-term impact in these distressed communities, it will be incumbent on fund sponsors, investors, and community leaders to take certain steps to mitigate these risks.

- Sponsors of QOFs should clearly articulate their approach for integrating impact considerations into investment, portfolio management, and reporting processes. Many sponsors and investors are discovering that they already consider the social and economic potential of their investments implicitly as part of their process and are now starting to formalize and codify these efforts. In our view, it will be important for even those investors focused primarily on financial returns to incorporate an understanding of impact and community needs into their approach, especially given the long-term required hold periods.

- Private sector participants should collaborate on efforts to collect market and impact data in the absence of government-mandated reporting, in order to enable investment accountability. Among others, the US Impact Investing Alliance, the Beeck Center for Social Impact and Innovation at Georgetown University, and the NY Federal Reserve have been spearheading efforts to develop a common approach for QOF reporting of market, community engagement, and impact data. Once finalized, we urge QOF sponsors to sign on to this framework and for investors to encourage such efforts.

- QOF sponsors should independently commit or make best efforts to measure standard social and environmental impact metrics relevant to their investments. This will enable sponsors and investors to better assess and manage how their investments contribute to achieving longer-term target outcomes such as changes in median family income and poverty and unemployment rates.

- The Global Impact Investing Network (GIIN) maintains the IRIS metrics database that contains aligned metrics for community investing and other related areas. In our view, funds should track impact metrics on two levels: (1) key data that is relatively independent of investment type or focus and can enable comparison across funds; and (2) outcome data relevant to the specific strategy, geographic focus and objectives of each fund. The first category would allow policymakers and investors to evaluate program progress in the aggregate and compare different solutions, based on common high level transaction data such as size and property type, job creation metrics, business focus and ownership...
Investors and local stakeholders working together collaboratively should enhance the likelihood of long-term success of the projects, of positive local support and integration, and ultimately benefit for communities. This is critical to mitigating impact and investment risk for both communities and investors.

Examples of output metrics that funds should track (on both levels) include but are not limited to:

- Jobs (number of employees at living wage, number of employees from low- and moderate-income communities, employment of targeted disadvantaged groups)
- Affordable housing (number of affordable units, percent of total units that are affordable, number of affordable units created or preserved)
- Environment (Leadership in Energy and Environmental Design (LEED) certification/compliance, other environmental impact standards)
- Community facilities financed (number, value and area)
- Education (school enrollment, attendance, and transition rates)

Finally, local governments and community organizations should undertake proactive efforts to attract capital to the projects with the most need in their respective OZs which could include state and local tax incentives, active outreach and coordination with the newly established White House Council, and other ways to facilitate investment.

Characteristics of Opportunity Zones (OZs) and Low-Income Communities (LICs)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>OZ</th>
<th>Non-OZ, LIC</th>
<th>Non-OZ, Non-LIC</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment &amp; Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate (%)</td>
<td>13.1%</td>
<td>10.3%</td>
<td>5.8%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Poverty Rate (%)</td>
<td>31.8%</td>
<td>25.0%</td>
<td>8.7%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Median Family Income (USD)</td>
<td>$40,544</td>
<td>$46,194</td>
<td>$89,809</td>
<td>$70,266</td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Home Value (USD)</td>
<td>$140,228</td>
<td>$150,867</td>
<td>$288,759</td>
<td>$226,494</td>
</tr>
<tr>
<td>Owner-Occupied Households (%)</td>
<td>46.8%</td>
<td>50.9%</td>
<td>73.3%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Renter-Occupied Households (%)</td>
<td>53.2%</td>
<td>49.1%</td>
<td>26.7%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Rent-Burdened Households (%)²²</td>
<td>48.6%</td>
<td>49.8%</td>
<td>40.1%</td>
<td>44.2%</td>
</tr>
<tr>
<td>Severely Rent-Burdened Households (%)</td>
<td>26.5%</td>
<td>26.4%</td>
<td>19.1%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Over 25 with a Bachelor’s or Associate’s Degree</td>
<td>18.9%</td>
<td>19.6%</td>
<td>31.2%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Welfare</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households With Cash Public Assistance or Food Stamps/SNAP</td>
<td>29.4%</td>
<td>23.1%</td>
<td>7.9%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Civilian Noninstitutionalized Population with Medicaid/Means-Tested Public Coverage</td>
<td>35.0%</td>
<td>29.2%</td>
<td>12.3%</td>
<td>20.4%</td>
</tr>
<tr>
<td>Geographic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Living in Metropolitan Areas (%)</td>
<td>78.7%</td>
<td>82.3%</td>
<td>85.3%</td>
<td>83.6%</td>
</tr>
<tr>
<td>Population Living in Micropolitan Areas (%)</td>
<td>11.5%</td>
<td>9.4%</td>
<td>8.5%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Population Living in Urbanized Areas (%)</td>
<td>70.1%</td>
<td>70.8%</td>
<td>70.7%</td>
<td>70.7%</td>
</tr>
<tr>
<td>Population Living in Urban Cluster Areas (%)</td>
<td>17.0%</td>
<td>10.5%</td>
<td>7.1%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Population Living in Rural Areas (%)</td>
<td>12.9%</td>
<td>16.3%</td>
<td>22.1%</td>
<td>19.1%</td>
</tr>
<tr>
<td>Share of Total Census Tracts (%)</td>
<td>11.7%</td>
<td>32.5%</td>
<td>55.8%</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: US Census, IPUMS NHGIS, UBS as of 15 January 2019

²¹ See sources and data methodology section of this document for an explanation of these figures. All figures are approximate averages based on Census Bureau data.

²² A rent-burdened household is one in which gross rent is 30% of household income, while a severely rent-burdened household is one in which gross rent is 50% or more of household income.
Conclusion

What to expect in 2019
We expect that 2019 will be an active year, as QOF sponsors start to bring credible solutions to market and investors seeking to maximize their tax-deferral and basis step-up work to deploy capital before year-end. Investors should remember that the Opportunity Zone incentive is multi-year in nature and original gains can be realized up until December 31, 2026 and reinvested into QOFs until June 30, 2027 (180 days), so there will be more opportunities to make QOF investments over time.

On the government and regulatory front, we anticipate another round of regulations from Treasury in early 2019, which should provide additional comfort for investors and QOF sponsors to commence investing in earnest in the first half of the year. We also expect to see an action plan from the White House Opportunity and Revitalization Council in the first quarter outlining how it intends to support and facilitate OZ investment activity, followed by more concrete recommendations later in 2019.

Based on our knowledge of current market activity, we see an initial wave of investment focused primarily on real estate. Investment solutions are likely to comprise a mix of targeted single-asset QOFs as well as larger-scale diversified QOFs that will appeal to investors seeking geographic, property and asset type diversification. Absent further near-term regulatory clarity from Treasury, we only expect fund managers to focus on OZ business investments in earnest later this year and onward.

Conclusion
We are optimistic about the potential for Opportunity Zones to mobilize a significant amount of private investment into economically distressed US communities in the coming years. In order to make this incentive a success and drive measurable net positive community benefit, policymakers, investors, fund sponsors and local stakeholders will all need to be proactive about articulating a combined financial and impact strategy, understanding and addressing unintended consequences of their investments, encouraging collaboration, and consistently measuring and reporting on impact metrics.
Sources and data methodology

Sources


U.S. Census Bureau; 2010 Census Summary File 1; Table P1; generated by Andrew Little; using American FactFinder, 2018. <http://factfinder2.census.gov>


Methodology
Area median income: The Department of Housing and Urban Development (HUD) defines the Area Median Income (AMI) as the median income for a given household size within a particular region of the country. HUD uses this statistic in order to determine affordability for other government programs like vouchers and affordable housing. For the purposes of this publication, AMI is calculated at the state level for census tracts outside of metropolitan areas, and at the metropolitan and state levels for census tracts in metropolitan areas. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Civilian noninstitutionalized population with Medicaid/means-tested public coverage: This percentage was calculated per tract by dividing the estimated civilian noninstitutionalized population with cash public assistance or Food Stamps/SNAP by the estimated civilian noninstitutionalized population. Dataset(s): 2012-2016 American Community Survey (ACS), 2010 Census.

Rent-burdened households: This was calculated per tract by dividing the estimated number of households that spend a specified percentage of household income on gross rent by the estimated number of renter-occupied households. A rent-burdened household is one in which gross rent is 30% of household income, while a severely rent-burdened household is one in which gross rent is 50% or more of household income. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Households with cash public assistance or Food Stamps/SNAP percentage: This percentage was calculated per tract by dividing the estimated number of households with cash public assistance or Food Stamps/SNAP by the estimated number of households. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Low-income community designation: This was determined by assessing whether a tract met low income community criteria, those being either 1) a poverty rate of 20% or higher, 2) at most 80% percent of statewide median family income for census tracts not located within a metropolitan area, or 80% of the greater of statewide median family income or the metropolitan area median family income. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Median family income: As per section 45D(e) of the Internal Revenue Code, median income per tract should be evaluated at the family level, which per section 4946(d) is defined as including only one’s “spouse, ancestors, children, grandchildren, great grandchildren, and the spouses of children, grandchildren, and great grandchildren.” Dataset(s): 2012-2016 ACS, 2010 Census.

Metropolitan/micropolitan designation: This was determined by using five year ACS data to map core based statistical areas (Metropolitan, Micropolitan, Rural) to census tracts. First, HUDUSPS was used to map tracts to zip codes. Zip codes were then mapped to CBSA.
codes. Using CBSA criteria, it was determined the CBSA type by zip code. Tracts can have multiple zip codes, but for the most part, all zip codes within a tract have the same CBSA. In cases where tracts had multiple CBSAs we assigned the tract the CBSA that appeared the most for the zip codes within the tract. When the CBSAs appeared equally, we then determined CBSA status by urban status. This was only the case for 64 of 74000+ tracts. Tracts from Puerto Rico were not included in this dataset due to limited data availability. Dataset(s): 2012-2016 ACS, HUDUSPS, 2010 Census.

Owner-occupied households: This percentage was calculated per tract by dividing the estimated number of owner occupied households by the estimated number of total households. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Population age 25+ with Bachelor's or Associate's degree: This percentage was calculated per tract by summing the estimated number of individuals age 25+ who have bachelor's degrees or associate's degrees and dividing that number by the estimated population of individuals age 25+. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Poverty rate: This percentage was calculated per tract by dividing the number of individuals whose income was below the poverty level by the population for whom poverty status is determined (as defined by the American Community Survey). It is important to note that this is done at the individual level, per the definition of poverty rate, as opposed to the household level. Tracts from Puerto Rico were included in this dataset. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Population density: This percentage was calculated by dividing the estimated population in each tract by the square mile land area in each tract. Tracts from Puerto Rico were not included in this dataset due to limited data availability. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Renter-occupied households: This percentage was by calculated by dividing the estimated number of renter-occupied households by the estimated number of total households. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Unemployment rate: This was calculated by dividing the number of estimated unemployed individuals in each tract by the estimated number of individuals in the labor force in each tract. It must be noted that these numbers differ from the Bureau of Labor Statistics. These data points were collected over a five-year period and are subject to sampling error. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Urban/rural designation: Urbanized areas are defined as densely populated areas with populations of 50,000 and greater, while urban clusters are defined as areas with populations between 2,500-50,000. Rural areas are defined as those areas falling outside of the aforementioned definitions. Dataset(s): 2012-2016 American Community Survey, 2010 Census.

Notes on datasets: From Census Bureau: American Community Survey data is based on a sample and is subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variation is represented through the use of a margin of error. In addition to sampling variability, the ACS estimates are subject to nonsampling error. All data excludes census tracts from: American Samoa, Guam, Virgin Islands, Northern Mariana Islands. In certain cases, tracts from the 2010 Census were not identifiable on the 2012-2016 ACS; this represents <1% of all census tracts.

We would like to acknowledge Rupak Mehta, Graduate Talent Program Analyst, for his contribution in the preparation of this report.
Disclaimer

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