# Census Tracts in Persistent Poverty in Metro Areas and Cities

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This presentation is to inform interested parties of research and to encourage discussion. Any views expressed are those of the author and not those of the U.S. Census Bureau. The Census Bureau has reviewed the data product that forms the basis for this presentation to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data management System (DMS) number: P-7533841, Disclosure Review Board (DRB) approval number: CBDRB-FY24-SEHSDD003-041).

### Background

#### **Key Results From 2023 Report:**

- 10.9% of counties and 11.3% of census tracts were in persistent poverty.
- 28.5 million people (9.0% of U.S. population) lived in a persistent poverty tract, 9 million more than in persistent poverty counties. Around 75% of census tracts in persistent poverty are not in a persistent county.
- Researchers and government agencies have primarily used the geographic unit of county. There is no current consistent method for defining persistent poverty.
- Counties and census tracts in persistent poverty had different spatial distributions. Counties were overrepresented in the South.

#### Persistent Poverty in Counties and Census Tracts

American Community Survey Reports

Craig Benson, Alemayehu Bishaw, and Brian Glassman May 2023

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#### INTRODUCTION

Research has suggested that people living in higher poverty areas experience more acute systemic problems than people in lower poverty areas (e.g., limited access to medical services, healthy and affordable food, quality education, and civic engagement opportunities). Fovernment agencies and researchers have previously identified counties with high rates of poverty over an extended period as targets for increased level of support. While definitions vary, counties are typically considered to be in persistent poverty if they maintained poverty rates of 20 percent or more for the past 30 years.

Persistent poverty is different from and should not be confused with chronic poverty. Chronic poverty identifies individuals and families that are consistently in poverty over time, whereas persistent poverty in this report focuses on geographic locations that have had high poverty rates for an extended time.

To identify counties in persistent poverty, this report incorporates poverty estimates from the 1990 and 2000 Censuses, the 2005-2009 American Community Survey (ACS), 5-year estimates, and the 2015-2019 ACS, 5-year estimates. Other governmental agencies have alternative definitions of persistent poverty for programmatic purposes. This has created a need

\* The Consus Bursus reviewed this data for insustriorized disclosure of confidential information and approved the disclosure avoidable or process practices applied to this release CRDIBE-FY22-SEHDD001-038. All comparative statements have undergone statistical lesting and are statistically significant at the 90 percent confidence level, unless otherwise notice.

\*Refer to <www.ers.usda.gcv/amber-waves/2021/august/ rural-poverty-has-distinct-regional-and-racial-patterns/>. for more consistent methods that can be universally applied, and examples of such are described in this

This report expands upon the persistent poverty literature by examining subcounty geographies (specifically, census tracts) and comparing those results to county results. By using this smaller geography, additional populations that may benefit from targeted intervention are identifiable. In addition, census tracts are explored over a longer time than what has been typically done in other persistent poverty analyses, allowing for comparison with identified persistent poverty counties.

#### HIGHLIGHTS

- From 1989 to 2015–2019, there were 341 counties
   10.9 percent of the total, in persistent poverty.
- Approximately 6.1 percent of the U.S. population in 2019 lived in a persistent poverty county.
- From 1989 to 2015–2019, 8,238 tracts, 11.3 percent of the total, were in persistent poverty.
- Approximately 9.0 percent of the U.S. population 2019 lived in a persistent poverty tract.
- Approximately 9.1 million more people lived in a persistent poverty tract than lived in a persistent poverty county. Census tracts were more geographically precise in identifying persistent poverty populations than counties.
- Over 74 percent of persistent poverty census tracts were not in a persistent poverty county.



U.S. Department of Commerce U.S. CENSUS BUREAU census.gov

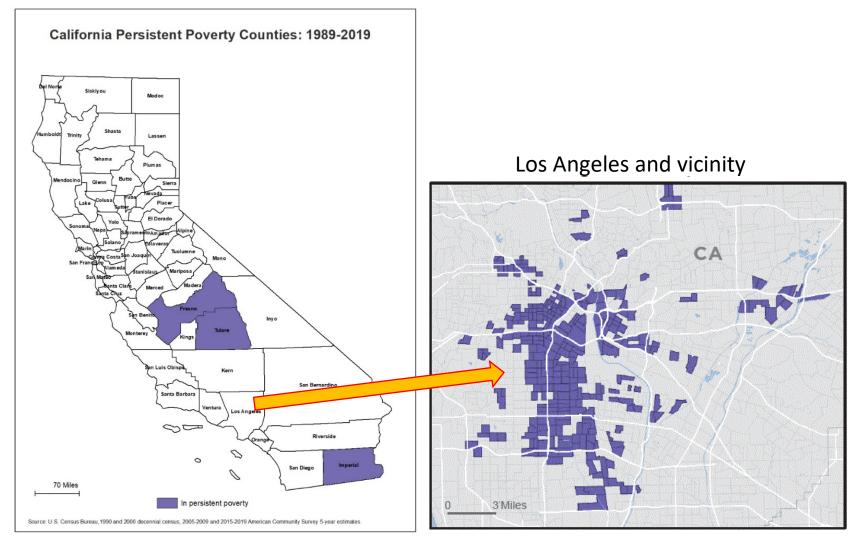


### Background: Basis For Study

- Nearly three-quarters of persistently poor census tracts were not in persistently poor counties.
- Large clusters of tracts were in urban areas.
- This was different from the spatial pattern of counties.



Figure 1. County and Census Tract Comparison



### Background

- Precisely identifying persistent poverty areas is important because research has suggested that people living in high-poverty areas experience more acute systemic problems.
  - Limited access to medical services, healthy and affordable food, quality education, and civic engagement opportunities (Farrigan, 2021).
- This project determined the spatial locations of people living in persistent poverty census tracts in urban areas by analyzing the proportion of the population in the 100 most populous places, cities, and metropolitan statistical areas (metro areas, MSAs).



### Background

#### **How Is Poverty Determined?**

 Comparing annual income to a set of dollar values (poverty thresholds) that vary by family size, number of children, and age of householder that is updated annually.

#### What Is Persistent Poverty?

• The 10-20-30 provision of the 2009 American Recovery and Reinvestment Act stated if an area had a poverty rate of 20% or greater for 30 years, then 10% of any government agency's appropriated programmatic funds should be invested in persistent poverty communities. Agencies may use alternative definitions for programmatic purposes.

#### What Are Area Populations Based on?

- Population totals used the poverty universe from the American Community Survey (ACS), 2015-2019 5-year estimates.
  - The poverty universe excludes; children under the age of 15 who are not related to the householder, people living in institutional group quarters and people living in college dormitories or military barracks.



#### Research Methods: Data Sources

- Census tracts were included in the persistent category if they had a poverty rate of 20% or more at each datapoint.
  - 1990 Decennial Census
  - 2000 Decennial Census
  - 2005-2009 ACS 5-year estimates
  - 2015-2019 ACS 5-year estimates
- This definition of persistent poverty is purely for this project and is one of several viable options. The U.S. Census Bureau takes no official position at this time on how persistent poverty should be defined.
- Other government agencies' definition may be affected by legislation or programspecific need.



#### Research Methods: Geographic Considerations

Importance of identifying persistent poverty in the most populous areas.

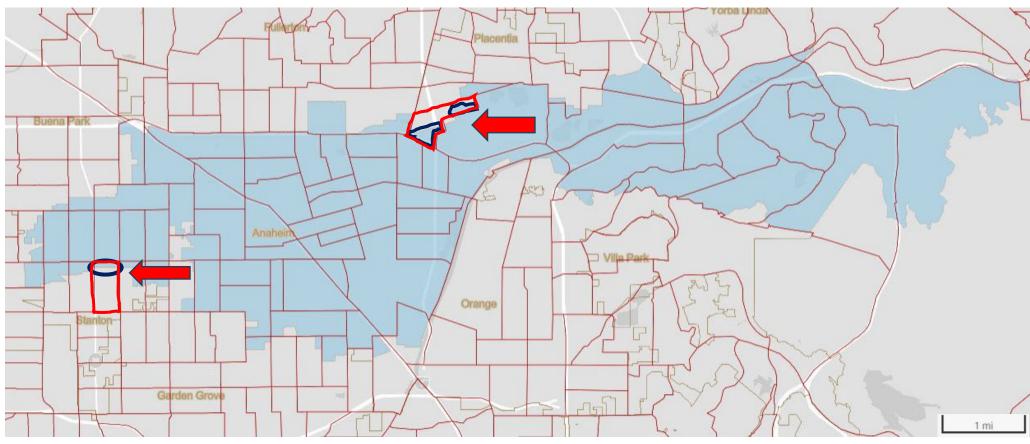
#### **Levels of Geographic Analysis**

- Census tracts: Because of changes after each decennial census, harmonized census tract data from IPUMS were used to establish a set of consistent tracts across the project span. The geographic center (centroid) was used to determine inclusion in individual cities.
- Metropolitan statistical area (metro area or MSA): 100 most populous analyzed. They represent more than two-thirds of U.S. population.
- Census places can include cities and towns. The 100 most populous were used in this analysis. Together they amount to 20% of U.S. population.



## Research Methods: Geographic Considerations

Figure 2: Census Tracts in Anaheim, CA



Source: https://data.census.gov

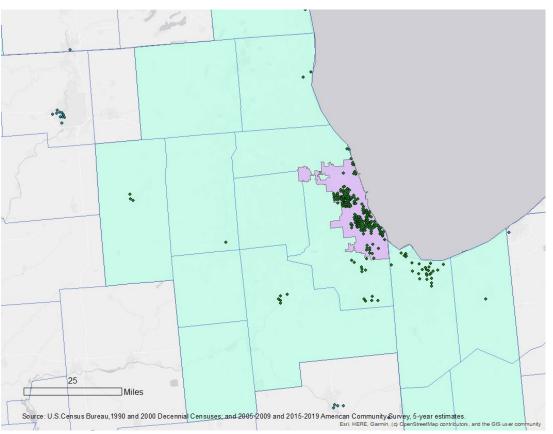


Both census tracts (bright red) were in persistent poverty, but their geographic center was in another city and not included in the Anaheim city persistent poverty population. The dark blue is the portion of the tract in Anaheim.

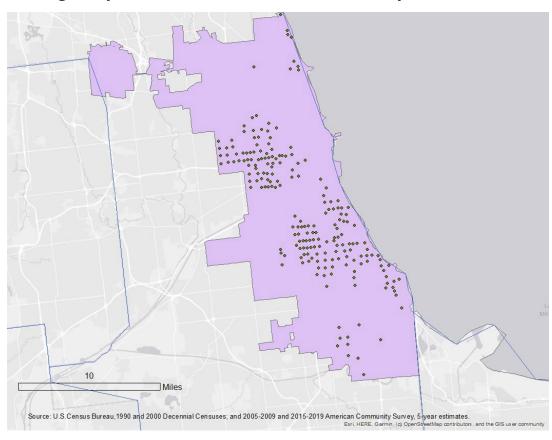
### Research Methods: Geographic Relationships

Figures 3-4.

#### **Chicago-Naperville-Elgin MSA Census Tracts in Persistent Poverty**



#### **Chicago City Census Tracts in Persistent Poverty**





Census tract in persistent poverty

Chicago city boundary

County boundary

Chicago -Naperville-Elgin metro area

#### Results: All U.S. Tracts in Persistent Poverty

Figure 5: Persistently Poor Tracts *Within* Persistently Poor Counties

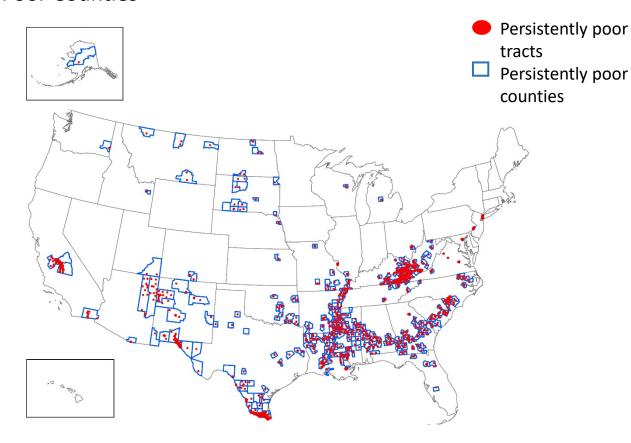
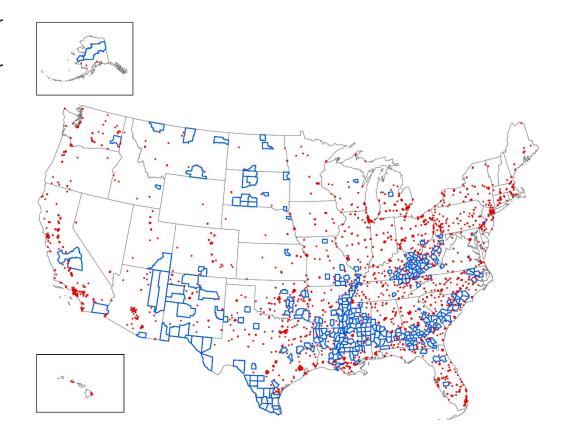


Figure 6: Persistently Poor Tracts *Outside* Persistently Poor Counties





• The 100 most populous cities had a large range of population, from 216,341 to 8,278,322 people (2019). The total population represented just below 20% of U.S. population.

Table 1. Census Tracts With Centroids in the 100 Most Populous Cities	Total number of tracts	Percent of U.S. total tracts	Number of tracts in persistent poverty	Percent of tracts in persistent poverty	Percent of U.S. total tracts in persistent poverty
Census tracts in most populous cities	15,234	20.9	3,306	21.7	40.1
U.S. census tracts	73,057	100	8,238	11.3	100



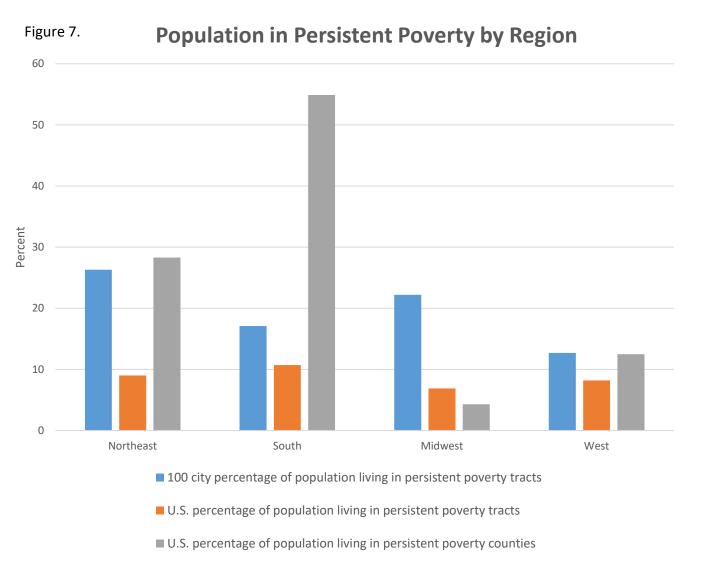
Table 2. Population in Persistent Poverty	Population living in persistent poverty tract	Percent of population living in persistent poverty tract	Percent of U.S. population living in a persistent poverty tract
Census tracts in most populous cities	11,368,801	18.1	39.9
U.S. census tracts	28,491,163	9.0	100



- 12 cities had 30% or more of their population living in a persistent poverty census tract.
- 19 cities had less than 4% and 9 had no population in persistent poverty. 7 of the 9 were in the West.
- The West also had the three lowest percentages for cities with more than 1 million in population (San Jose, 1.9%; San Diego, 10.4%; and Phoenix, 14.1%).
- 33 cities had more than 100,000 people living in persistent poverty tracts.

Table 3. Cities with 30 Percent or More of Population Living in Persistent Tracts	Percent of population		
Detroit, Michigan	53.9		
Laredo, TX	50.1		
Miami, Florida	48.9		
Cleveland, Ohio	47.3		
Buffalo, New York	46.3		
Baton Rouge, Louisiana	42.6		
Newark, New Jersey	39.8		
Milwaukee, Wisconsin	32.7		
Fresno, California	31.1		
Atlanta, Georgia	31.0		
Philadelphia, Pennsylvania	30.4		
El Paso, TX	30.1		







### Results: 100 Most Populous Metro Areas

• The metro areas had a population of 212,791,816, or 67.2% of U.S. population (2019).

Table 4. Census Tracts in the 100 Most Populous MSAs	Number of tracts	Percent of U.S. total tracts	Number of tracts in persistent poverty	Percent of tracts in persistent poverty	Percent of U.S. total in persistent poverty
Census tracts in most populous MSAs	46,900	64.2	4,931	10.5	59.9
U.S. census tracts	73,057	100	8,238	11.3	100



### Results: 100 Most Populous Metro Areas

• More than 17 million out of the total 28 million people living in a persistent poverty census tract were in the 100 most populous metro areas.

Table 5. Census Tracts in 100 Most Populous MSAs	Population living in persistent poverty tract	Percent of population living in persistent poverty tract	Percent of US total living in a persistent poverty tract
Census tracts in most populous MSAs	17,379,598	8.2	61.0
U.S. census tracts	28,491,163	9.0	100



#### Results: 100 Most Populous Metro Areas

- The range of percentage of population in persistent poverty tracts was 1.1% to 75.2%.
- 3 MSAs (McAllen-Edinburg-Mission, TX; El Paso, TX; and Fresno, CA) had more than 30% of population living in persistent tracts. 42 had more than 100,000 people living in a persistent tract.
- 22 metro areas had less than 4%. 7 had less than 2% of population living in persistent tracts -all in the west or south.
- Regional analysis showed less variation than cities, with all census regions having between 7.4% and 10% of population living in a persistent tract.



## Results: Undetected Persistent Poverty Population

- Over 2 million people in New York City lived in a persistent poverty tract.
- After excluding 2 in-city counties in persistent poverty, there were more than 530,000 people living in a persistently poor tract.

Table 6. New York City (NYC) Census Tract Persistent Poverty by County	2019 population	Total tracts	Tracts in persistent poverty	Tract population in persistent poverty	Percent of tracts in persistent poverty	Percent of population in persistent poverty
NYC tracts total	8,278,322	2,164	442	2,069,481	20.4	25.0
NYC tracts in PP county	3,964,880	1,099	352	1,530,904	32.0	38.6
NYC tracts not in PP county	4,313,442	1,065	90	538,577	8.5	12.5



## Results: Previously Unaccounted Population

#### **Cities:**

After persistent counties were excluded, the city tracts accounted for 30% of the total U.S. population living in a persistent poverty census tract.

#### **Metro Areas:**

• After persistent counties were excluded, there were 4,027 tracts and 13,660,171 people, nearly 48% of the total U.S. population that lived in a persistent tract.

Table 7. Exclusion of Persistent Counties	Tract population in persistent poverty county	Persistent population not in persistent county	Remaining percent of population	Remaining percent of total U.S. population in persistent tracts	Percent of total US population not in a persistent county
Most populous cities	2,828,777	8,540,024	15.6	30.0	42.1
Most populous MSAs	3,719,427	13,660,171	6.7	47.9	67.4



#### Conclusions

- Unlike counties, persistent poverty in the most populous cities and MSAs was more evenly distributed, with no over-representation in the South.
- In the most populous cities, 21.7% of tracts and 18.1% of people (11,368,801) lived in a persistent poverty census tract. This population total was nearly 40% of all people in the nation living in a persistent census tract.
- In the most populous MSAs, 10.5% of tracts and 8.2% of people (17,379,598) lived in a persistent tract. This was more than 60% of all population in the U.S. that lived in a persistent poverty census tract.



#### Conclusions

- By excluding persistent poverty counties that were in the boundaries of cities and MSAs, over 13 million people in large MSAs could be identified. Twothirds of all tracts not in a persistent county nationally were found in these large MSAs.
- In this geography-oriented look at poverty, organizations that provide support may benefit from seeing the size of populations that live in the most populous areas that may be affected by long-term poverty.



### Future Work and Project Limitations:

- Use of smaller geographic units to create more precision in census tract populations that cross city boundaries.
- This project spatially found 60% of all persistent poverty census tracts in the most populous MSAs. Future extensions may include investigation in other areas such as smaller metro and micro areas, rural areas, and informal geographic regions (Native American lands, the Southwest border, Appalachia, Mississippi delta, etc.).
- Because census tracts boundaries don't geographically nest within cities like they do in counties, it makes it challenging to identify persistent poverty without using geoprocessing techniques.



# Contact Information - Location of Additional Poverty Data/Publications

- Craig Benson Survey Statistician, Poverty Statistics Branch, U.S. Census Bureau
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  - (301) 763-2315
- Poverty reports, including the May 2023 report, from the Census Bureau can be found at <a href="https://www.census.gov/topics/income-poverty/poverty.html">https://www.census.gov/topics/income-poverty/poverty.html</a>. This report should be available within a few months on this page.
- The most recent ACS data, including poverty and tables for many other demographic, social, and economic variables, can be found at <a href="https://data.census.gov/">https://data.census.gov/</a>.

