Where We Stand (WWS): Review of Data

Purpose: This is a part of a series of working papers that provides documentation on data points used to measure regional success. The papers highlight methodological issues and nuances that affect how the data should be interpreted and used. They are living documents that will build on previous work and provide one location to reference key information about these topics.

Have something to add to the discussion on data for this topic? Please email us at
wws@ewgateway.org

Topic: Population

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* This is a living document that will be updated periodically. Check for updates at
www.ewgateway.org/wws

Data Details

This section provides information about the source, definition, and notes about the source or the specific data that are important to keep in mind when working with this data.

Source Detail

Source: U.S. Census Bureau, Population Estimates

Definitions:

> **Population Change:** Percent change in population over a specified time period
>
> **Net Migration:** Change in population due to net migration, expressed as a percent of the base year population estimate.
>
> **Largest City Population:** Percent of the population that lives in the largest city of each region

Additional Sources for Population Data

Source A. U.S. Bureau of Economic Analysis (BEA) – while not official, the BEA is another source for trend data. The BEA provides estimates for 1969 to 2022 (as of October 2024) with all data adjusted to current MSA boundaries.

Note: Counts of population are also available through the American Community Survey (ACS), but the Population Estimates are the official data to use for total population and ACS data are better suited for characteristics of the population.

What is being measured?

This vitality metric measures the increase or decrease in the number of residents in a community over a specified period of time. There are several challenges with comparable data for this metric as well as a broad challenge of a limited view that often portrays population change as a result of people's choice to move.

Quantitative challenges include geography revisions, non-comparable data over time, and selection of time period.

- The Census regularly revises MSA boundaries. EWG and others adapt to this by aggregating county data to the MSA level, but not everyone is aware of when this adaptation is necessary.
- Some data are not comparable over time. An example is data on race and ethnicity. On several occasions, the Census Bureau has revised the options that individuals can select for their race and ethnicity. In some regions, this led to an increase in the multiracial population group, for example, but the changes were attributable more to the survey instrument than to a change in the resident population. See WWS 8 Update 10 for more on this.
- Further, the Census advises to not compare population estimates that are based on different decennial censuses. After each decennial census the Census Bureau revises annual population estimates for the previous decade; as of this writing (September 2024), however, these intercensal estimates are not available for 2010 to 2019.[1]
- Lastly, the selection of the time period for analysis may affect results. A 1-year analysis may show the latest trends but may also turn out to be a statistical fluke. A 10- or 15-year trend may be more stable but lack timeliness.

Most discussions of population change focus on migration. However, births and deaths also play a large role in population change. The CDC estimates that 30 to 60% of some of the leading causes of death are preventable and premature among people under age 80.[2] Addressing societal challenges such as homicides and racial disparities could reduce the death rate and be a regional growth strategy.

Measure of Vitality

This section discusses to what degree the variable is a good indicator of regional success.

What makes these good measures of success?
- In-migration indicates that a region's attributes lead people to move there, and out-migration indicates there may be aspects of a community that make it a less desirable location to live.
- Population growth can stimulate economic activity as well as provide funds for public services.
- Increased population, particularly increased density of population, can create economies of scale that make funding public services more efficient.
- An increase in the largest city population is often thought of as an indicator of a healthy region as well as an indicator of the vitality of the region. The central parts of the metropolitan regions are generally the oldest parts of a region, and tend to be hubs of

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[1] The Census Bureau releases intercensal estimates that are based on both the 2010 and 2020 decennial census counts. These intercensal estimates are likely to differ from currently available population estimates. The Bureau of Economic Analysis (BEA) generated their own such estimates while waiting for the Census Bureau. Based on preliminary estimates from BEA, it is anticipated that there will be significant revisions for a few of the peer regions.
2 Spencer, M. R., et al. (2024). *Surveillance for violent deaths — National violent death reporting system, 48 states, the District of Columbia, and Puerto Rico, 2021.* MMWR Surveillance Summaries, 73(2), 1–37. https://doi.org/10.15585/mmwr.ss7302a1

activity, including convention centers, sporting facilities, cultural and arts institutions, and tourist destinations.

- Both EWG LRP and GSL have chosen support for the central core of the region as a goal for their plans.

What is problematic about these measures or why is it not necessarily a good predictor of success?

- Population growth can negatively affect quality of life through increased housing costs, congestion, pollution, and less space for parks and green space. Population growth may also lead to increased infrastructure costs and demand for social services.
- Population growth does not always lead to prosperity: Some Sunbelt regions have fast-growing populations, but consistently lag the country in income levels. While a population decrease is usually perceived as a negative, a decrease can occur for neutral or even positive reasons. The population of the United States is aging, and the birth rate is declining. This is not necessarily a bad thing, but rather, a circumstance that requires adaptation. The U.S. Census Bureau produces national population projections using several demographic scenarios. In most scenarios, immigration is the largest contributor to U.S. population growth. The exception is in the zero-immigration hypothetical scenario, which would mean the U.S. population would start declining in 2024.[3]
- Regions that have large net in-migration also tend to have a substantial number of people leaving the region, indicating that the population is in flux. There is also value in having a stable population with deep roots in a community. High growth regions, including Orlando, Austin, Raleigh, and Jacksonville, tend to have larger percentages of people moving out of the MSA while older and larger regions, mostly in the Northeast and Midwest have smaller proportions.[4]
- Further, most U.S. residents do not move and those who do are most likely to move within the same MSA. For the peer regions, an average of 95.6% of residents did not move out of their home MSA within a given year, according to American Community Survey data.[5] Large growth regions, including Orlando, Austin, Raleigh, and Jacksonville, tend to have larger percentages of people moving out of the MSA while older and larger regions, mostly in the Northeast and Midwest have smaller proportions.[6] See the data spotlight discussion below for more.
- Largest City population is not necessarily a good regional success measure because different perspectives exist on the necessity for successful regions to have a healthy core.

***Data Note.* Where do people move and why?**

Most people in the U.S. do not move in any given year, and the share who do so has been in a long-term decline. Further, most people who move do not move far.

[3] U.S. Census Bureau. "2023 National Population Projections Show a Slower Growing, Older, More Diverse Nation a Century from Now." *U.S. Census Bureau Press Release*, Sept. 13, 2023. https://www.census.gov/newsroom/press-releases/2023/population-projections.html.
[4] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019, Meto-to-Metro Area Migration Flows.
[5] Metro Area-to-Metro Area Migration Flows accessed at https://www.census.gov/data/tables/2019/demo/geographic-mobility/metro-to-metro-migration.html
[6] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019, Metro-to-Metro Area Migration Flows

The percentage of U.S. residents that move in a given year has decreased from 20.2% in 1948 to 17% in the 1990s, 8.9% in 2019, and 8.4% in 2021.[7,8,9] Research suggests that this is in part due to people not having to move to obtain better jobs because the labor markets have become more similar.[10] A recent study found that less than 2% of job seekers moved for a job in the first quarter of 2023, compared to about 8% in 2018 and about one-third in the 1980s and 1990s.[11]

A small share of movers migrates to a different U.S. region. Inter-regional migrants constituted about 10.7% of movers, or 1.3% of the U.S. population, in 2022. The Northeast had the highest percentage of non-movers, and the South had the lowest percentage.[12] The share of non-movers among the peer regions ranges from 81.7% in Austin to 90.6% in New York. The percentage in St. Louis (86.4) was close to the peer region average (85.3%).

Most of those who did move remained within the same MSA, although there is considerable variation among regions. The range extends from San Jose, where 58.7% of movers remained within the MSA, to Chicago, where 80.7% did so. St. Louis had the 4th highest percentage (77.4), about the same as New York and Cleveland. In total, 2.9% of the populations of all of the peer regions moved to a different MSA in the 2015-2019 time period.

On average for the peer regions, 95.6% did not move out of their home MSA. The range is not large from 93.3% for Orlando to 97.9% in New York. Orlando is joined at the bottom of the table by other large growth regions, including Austin, Raleigh, and Jacksonville. At the top of the table are older and larger regions, most of which are in the Northeast and Midwest. Los Angeles is an exception, ranking 4th.[13]

Why People Move. People decide where to live for a variety of reasons. Reasons for moving can be complex and can change throughout a lifetime. Broadly, there are three categories of why people live where they do—employment, social ties (family/friends), and quality of life factors.

Census data indicates that the most common reasons for moving are house-related followed by family-related, categories that relate to quality of life and social ties. According to the data, employment is the reason for a move for a smaller share of people. The Census does not have a category for quality-of-life factors, but research indicates that one-third of movers and one-third of natives chose their place of residence due to quality-of-life factors, over employment or family reasons.[14]

[7] Current population survey annual social and economic supplement (CPS ASEC).
[8] U.S. Census Bureau. (2022). *United States migration continued to decline from 2020 to 2021*. https://www.census.gov/library/stories/2022/03/united-states-migration-continued-decline-from-2020-to-2021.html
[9] Frey, W. H. (2021). *U.S. population growth hits 80-year low, capping off a year of demographic stagnation*. Brookings. https://www.brookings.edu/articles/us-population-growth-hits-80-year-low-capping-off-a-year-of-demographic-stagnation/
[10] Hellerstein, J. K. (2013). *Why are Americans moving less?* Federal Reserve Bank of Minneapolis. https://www.minneapolisfed.org/article/2013/why-are-americans-moving-less
[11] Chasnoff, M. (2023, May 30). *Workers aren't relocating for new jobs anymore – and not just because of remote work.* St. Louis Business Journal. https://www.bizjournals.com/stlouis/news/2023/05/30/remote-work-hybrid-housing-costs-mortgage-move.html?utm_source=st&utm_medium=en&utm_campaign=me&utm_content=SL&ana=e_SL_me&j=31646388&senddate=2023-05-31
[12] U.S. Census Bureau, American Community Survey 1-year estimates, 2022 (S0702).
[13] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019, Meto-to-Metro Area Migration Flows
[14] Knight Foundation, & Gallup. (2020). *Community ties: Understanding what attaches people to the place where they live.* https://knightfoundation.org/wp-content/uploads/2020/05/Community-Ties-Final-pg.pdf

Data Note: Which are the most populous regions?

While the regions have traded ranks, most of the regions that are among the 50 most populous in 2022, have been among this group for decades. Census population estimates for 2023 indicate that there are a few additional changes to the top 50 in the last year, but a comparison of 1969 to 2022 finds that 44 of the WWS peer regions were among the 50 in 1969 also.

The following are the exceptions based on BEA data, which used comparable/current MSA boundaries:

Comparing 1969 vs. 2022
Six MSAs have moved into the top 50 (Rank in 1969/Rank in 2022):
1. Austin: 80th to 26th with 532.4% increase in population
2. Las Vegas: 116th to 29th with 768.5% increase in population
3. Jacksonville: 57th to 38th with 170.5% increase in population
4. Raleigh: 101st to 41st with 377.6% increase in population
5. Salt Lake City: 66th to 46th with 165.7% increase in population
6. Orlando: 64th to 22nd with 441.8% increase in population

Six MSAs dropped out of the top 50:

1. Rochester, NY: 37thto 52nd despite an 11.8% increase in population
2. Dayton, OH: 42nd to 75th with 0.4% increase in population
3. Bridgeport, CT: 43rd to 59th) with 23.3% increase in population
4. New Haven, CT: 46th to 70th with 16.4% increase in population
5. Albany, NY: 47th to 64th with 22.1% increase in population
6. Worcester, MA-CT: 48th to 57th with 36.6% increase in population

In addition, Honolulu was among the top 50 in 1980 and 1990 but was not among the top 50 in 1969 or 2022. From 1969 to 2022, the region experienced a 65% increase in population.

Peer Region Analysis

Summary

In recent decades the St. Louis MSA has had a stable population. With slow growth from 1980 to 2020 and a small decline since 2020, it stood as the 23rd most populous U.S. region in 2023. While population growth can be an indicator of regional health, other factors are important to consider in assessing the vitality of a region. Among the peer regions with large increases in population, there are mixed results across the other vitality metrics. While St. Louis has not had population growth in the last few years, per capita income remains higher than in six of the fastest growing peer regions, and the St. Louis has less out-migration than most of the peer regions.

Ranking Analysis

Population Change

The peer region comparisons on population change for the two time periods indicate that while population change can be an indication of success, population growth does not necessarily result in positive outcomes on other metrics. Conversely, some regions are strong without population growth.

The nine fastest-growing regions in both periods were all in the Sunbelt. These regions also tend to have had the largest increases in employment, net migration, and population of their largest city.

Orlando, Nashville, Jacksonville, and Dallas are among the largest population gainers but are only in the middle of the pack on median household income and educational attainment and rank lower than the U.S. on housing affordability and health insurance coverage.

Houston, Tampa, San Antonio, and Las Vegas are among the largest population gainers but are also among the most challenged regions on many of the vitality metrics, including poverty, health insurance, well-being, and educational attainment.

San Jose and Boston rank among the most favorable regions on many vitality metrics, including the well-being score as well as other metrics that are important to quality of life such as health care coverage, income metrics, and infant mortality rate. However, these regions have been about average on population change with San Jose experiencing a population decrease from 2019 to 2023.

Population Change
Percent change, 2019-2023

Rank	Region	Value
1	Austin	11.0
2	Jacksonville	9.7
3	Nashville	8.7
4	Raleigh	8.4
5	Orlando	8.0
6	Dallas	6.9
7	Houston	6.3
8	Charlotte	6.2
9	San Antonio	6.0
10	Indianapolis	5.0
11	Atlanta	5.0
12	Oklahoma City	4.8
13	Tampa	4.5
14	Richmond	4.3
15	Providence	3.4
16	Salt Lake City	3.0
17	Kansas City	2.8
18	Las Vegas	2.7
19	Columbus	2.6
20	Birmingham	2.6
21	Buffalo	2.4
22	Sacramento	2.4
23	Cincinnati	2.4
24	Phoenix	2.3
25	Philadelphia	2.3
26	Virginia Beach	2.2
United States		**2.0**
27	Minneapolis	2.0
28	Washington, D.C.	1.8
29	Louisville	1.8
30	Seattle	1.7
31	New York	1.7
32	Denver	1.4
33	Baltimore	1.1
34	Riverside	1.0
35	Boston	0.9
36	Pittsburgh	0.8
37	Portland	0.6
38	Cleveland	0.6
39	Detroit	0.5
40	Miami	0.3
41	Chicago	-0.2
42	St. Louis	-0.3
43	Memphis	-0.8
44	Milwaukee	-1.1
45	San Diego	-1.8
46	San Jose	-2.0
47	Los Angeles	-2.9
48	San Francisco	-3.3
49	New Orleans	-5.0

Source: U.S. Census Bureau, Population Estimates

Population Change
Percent change, 2010-2023

Rank	Region	Value
1	Austin	43.2
2	Raleigh	32.7
3	Orlando	31.7
4	Nashville	27.4
5	Jacksonville	27.0
6	Dallas	26.7
7	Houston	26.3
8	San Antonio	25.6
9	Charlotte	24.7
10	Phoenix	20.6
11	Tampa	19.9
12	Las Vegas	19.7
13	Atlanta	19.4
14	Denver	17.6
15	Oklahoma City	17.5
16	Seattle	17.3
17	Salt Lake City	16.2
18	Indianapolis	15.3
19	Columbus	14.4
20	Richmond	13.6
21	Washington, D.C.	13.1
22	Sacramento	12.4
23	Portland	12.4
24	Minneapolis	11.1
25	Miami	10.7
26	Riverside	10.5
27	Kansas City	10.3
United States		**8.3**
28	Boston	7.7
29	Louisville	6.9
30	Cincinnati	6.5
31	Virginia Beach	5.8
32	San Jose	5.7
33	San Diego	5.4
34	San Francisco	5.1
35	Birmingham	4.9
36	Providence	4.7
37	Philadelphia	4.6
38	Baltimore	4.4
39	New York	3.4
40	Buffalo	1.8
41	Memphis	1.4
42	Detroit	1.2
43	St. Louis	0.2
44	Milwaukee	0.2
45	New Orleans	0.1
46	Los Angeles	-0.3
47	Chicago	-0.4
48	Cleveland	-0.8
49	Pittsburgh	-1.0

Source: U.S. Census Bureau, Population Estimates

There is not a strong association between population growth and income. Of the 10 fastest-growing regions from 2019 to 2023, only four had per capita income levels that were higher than that of St. Louis and four were in the bottom half of the peer regions on this income variable. Further, the two regions with the highest per capita income levels experienced population decline from 2019 to 2023 and were below the U.S. average for change from 2010 to 2023.

The slowest growing regions also tend to have high levels of segregation and concentrated poverty. These fall into two groups: low-income southern regions, including Birmingham, Memphis, and New Orleans, and traditionally industrial regions in the north, including Detroit, Cleveland, and Buffalo.

Regions that experience large net migration often see high levels of both in-migration and out-migration. **St. Louis** is 43rd with one of the lowest rates of in-migration (2.9%), but the region has the 14ᵗʰ lowest rate of out-migration (3.1%). Some of the regions with large net migration experience large amounts of in-migration as well as large amounts of out-migration. For example, **Orlando**, **Austin**, and **Raleigh** have the three largest in-migration and net migration rates but had some of the highest rates of out-migration, ranking 10th, 12th, and 8th, respectively.

Change in Largest City Population

Percent change, 2010-2022

1	Orlando	32.40
2	Seattle	23.10
3	Charlotte	22.04
4	Austin	21.52
5	Oklahoma City	19.69
6	Denver	18.98
7	Tampa	18.42
8	Jacksonville	18.20
9	Raleigh	17.93
10	Atlanta	16.88
11	Columbus	15.08
12	Phoenix	13.67
13	Nashville	13.28
14	Sacramento	13.22
15	Miami	12.52
16	Las Vegas	12.28
17	Richmond	12.21
18	Washington, D.C.	11.64
19	Minneapolis	11.11
20	San Antonio	11.01
21	Kansas City	10.74
22	Houston	10.03
23	Salt Lake City	9.78
24	Portland	8.78
25	Dallas	8.51
26	New Orleans	7.54
27	Indianapolis	7.33
28	Providence	6.66
29	San Diego	6.09
Peer Average		**6.05**
30	Buffalo	5.79
31	Riverside	5.55
32	Boston	5.33
33	Louisville	4.82
34	Cincinnati	4.18
35	Virginia Beach	4.05
36	Philadelphia	2.70
37	San Jose	1.98
38	New York	1.97
39	Los Angeles	0.77
40	San Francisco	0.40
41	Pittsburgh	-0.79
42	Chicago	-1.14
43	Hartford	-3.26
44	Memphis	-4.73
45	Milwaukee	-5.25
46	Birmingham	-7.12
47	Baltimore	-8.19
48	Cleveland	-8.88
49	**St. Louis**	**-10.25**
50	Detroit	-13.11

Source: U.S. Census Bureau, Population Estimates

Net Migration

Percent of 2020 population, 2020-2023

1	Jacksonville	5.9
2	Austin	5.6
3	Tampa	5.4
4	Raleigh	5.0
5	Orlando	4.5
6	San Antonio	4.2
7	Charlotte	4.2
8	Dallas	4.0
9	Phoenix	3.4
10	Nashville	3.2
11	Houston	3.1
12	Oklahoma City	2.7
13	Richmond	2.3
14	Las Vegas	2.2
15	Atlanta	2.0
16	Hartford	1.5
17	Indianapolis	1.4
18	Columbus	1.0
19	Riverside	0.9
United States		**0.8**
20	Miami	0.6
21	Kansas City	0.6
22	Cincinnati	0.6
23	Providence	0.5
24	Birmingham	0.5
25	Louisville	0.3
26	Sacramento	0.3
27	Denver	0.1
28	Pittsburgh	-0.1
29	Philadelphia	-0.2
30	Virginia Beach	-0.2
31	Buffalo	-0.3
32	Cleveland	-0.5
33	**St. Louis**	**-0.5**
34	Seattle	-0.6
35	Minneapolis	-0.6
36	Baltimore	-0.7
37	Portland	-0.8
38	Washington, D.C.	-0.8
39	Boston	-0.8
40	Detroit	-0.9
41	Memphis	-1.1
42	Milwaukee	-1.1
43	Salt Lake City	-1.2
44	San Diego	-1.8
45	Chicago	-2.3
46	Los Angeles	-3.3
47	New York	-3.3
48	San Jose	-3.6
49	San Francisco	-4.3
50	New Orleans	-4.7

Source: U.S. Census Bureau, Population Estimates

Over the last decade, some of the peer regions have experienced substantial growth in population of their largest cities while others have seen decreases. Regions with growing central cities, such as **Orlando**, **Charlotte**, **Austin**, and **Raleigh**, also experienced some of the largest growth in employment and regional population and had relatively high rates of net migration. Regions with central city population decreases also experienced relatively large decreases in regional employment and population and had high regional homicide rates.

Like other regions in the Midwest and South, the central city in the **St. Louis** MSA has experienced population decline. Among the peer regions, only **Detroit** had a larger decrease than the city of St. Louis.

## East-West Gateway (EWG) Region Analysis

Population

Population in the EWG region has had modest growth over the past few decades but recently experienced a small decrease in population. The central part of the region has experienced decreases in population while there has been an increase in the outer portions. Table 1-01 provides the population by county for 2010, 2019, and 2023. Map 1-01 provides the change in population across the region from 2010 to 2020.

Table 1-01. Population					
East-West Gateway region by county, 2010, 2019, and 2023					
				Percent Change	
	2010	2019	2023	2010-2023	2019-2023
Madison	269,282	263,609	262,752	-2.4	-0.3
Monroe	32,957	34,738	34,957	6.1	0.6
St. Clair	270,056	259,889	251,018	-7.0	-3.4
Franklin	101,492	103,860	106,404	4.8	2.4
Jefferson	218,733	225,402	231,230	5.7	2.6
St. Charles	360,485	401,625	416,659	15.6	3.7
St. Louis	998,954	995,467	987,059	-1.2	-0.8
City of St. Louis	319,294	300,887	281,754	-11.8	-6.4
EWG Region	2,571,253	2,585,477	2,571,833	0.0	-0.5

Source: U.S. Census Bureau, Decennial Census, Population estimates vintages 2020 and 2023

Map 1-01

Popluation Change, 2010-2020
East-West Gateway Region
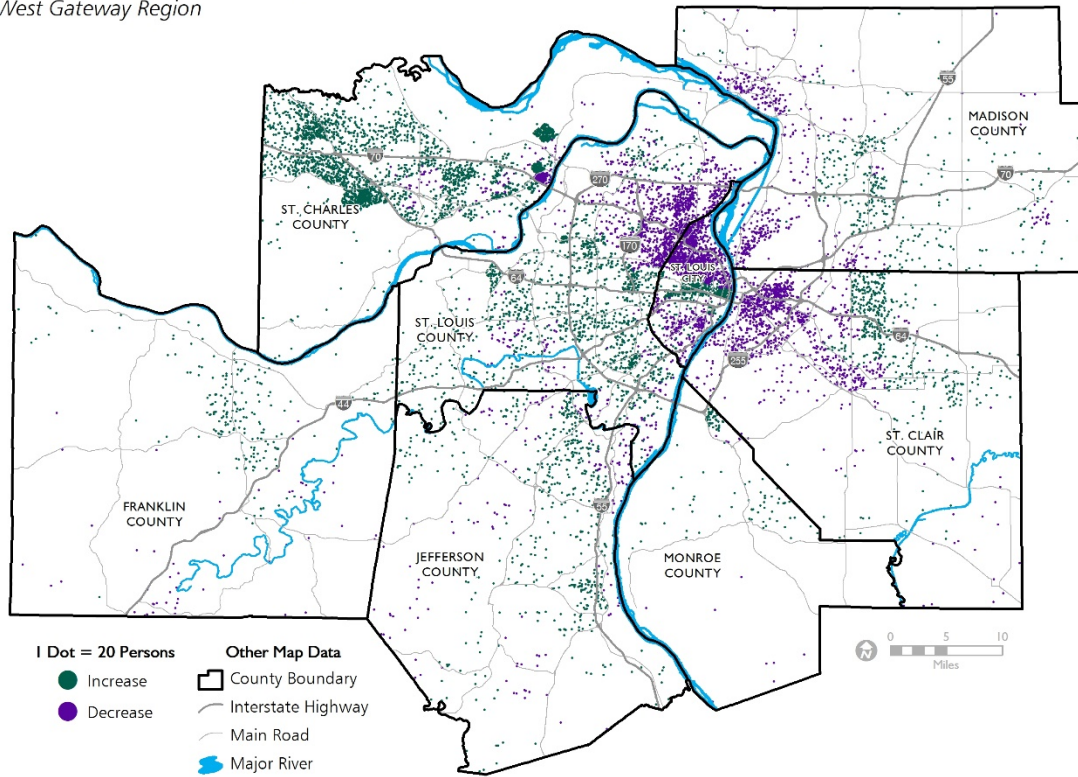
1 Dot = 20 Persons
- Increase
- Decrease

Other Map Data
- County Boundary
- Interstate Highway
- Main Road
- Major River

Dots are randomly placed within 2020 Census tracts.
Tract boundaries are not shown on the map.

Sources: 2020 Census State Redistricting Data
(Public Law 94-171) Summary File Illinois, Missouri;
East-West Gateway Council of Governments

EAST-WEST GATEWAY
Council of Governments
October 2024

Ideas for Exploration/Next Steps

Case Studies

The following regions are interesting on this variable. They are regions that do not fit the mold or have something else of interest in regard to this variable.

- Indianapolis is the only region that was among the top 10 regions in net migration but was not in the top 10 for population change in either time period. Also, it is the Midwest peer region with the largest population increases.
- San Jose and Boston are two of the peer regions that are strong on a large number of other vital statistics but were not among the top population gainers. San Jose actually had a population decrease from 2019 to 2023.
- Some additional ideas for case studies, including Chicago and Pittsburgh, https://www.governing.com/archive/gov-population-city-growth-thriving.html

Research Questions

The following are ideas for further exploration. If you have researched these or other relevant topics or are interested in doing so, please share with us at wws@ewgateay.org.

- Explore natural change in population more and its relationship with overall population change as well as how racial disparities and other gaps in death rates affect natural change.
- More research on why older regions have higher proportions of non-movers. Is it due to social ties, established culture, stable environments, less opportunity for social mobility or other factors?
- Population dependency ratio is a good metric to review with population because this can capture some of the potential negative aspects of population growth, or decline. Is there a shrinking share of the population that is of working age with more children, and/or older adults, who tend to rely more on social benefits?