



Transportation Equity Assessment Report for the St. Louis Region

December 2022



EAST-WEST GATEWAY
Council of Governments
Creating Solutions Across Jurisdictional Boundaries





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Researchers and writers from ICF included Sunil Dhuri, Haley Eggert, Michael Grant, Ella Rosenkranz, Sherry Steine, and Hannah Twaddell. Researchers and writers from EWG included Stephen Ducker, James Fister, Saranya Konala, Ted LaBoube, Jason Lange, Mary Grace Lewandowski, Marcie Meystrik, John Posey, Mary Rocchio, and Derek Wetherell.

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1. INTRODUCTION

The East West Gateway Council of Governments (EWG) seeks to ensure that the transportation system meets the needs of all residents throughout the St. Louis region. While the long-range transportation plan looks ahead to the year 2050, this analysis provides a look back in history over the past 100 years, exploring how transportation investments have shaped development, affected different population groups, and reverberate today. This study includes:

- a historical analysis of changes in regional demographics, federal and local policies, and transportation investments since the early 20th century;
- an analysis of current safety, access, mobility, and environmental issues facing different population groups within the region; and
- a detailed exploration of the distribution of transportation investments over the past 20 years.

WHAT IS EQUITY?

Equity is a term that can be difficult to define, and there are varying perspectives on what is equitable. However, the broad concept of equity is focused on fairness and providing all people with access to opportunities, so that no one is limited or burdened due to characteristics such as their race, ethnicity, income, age, or disability.

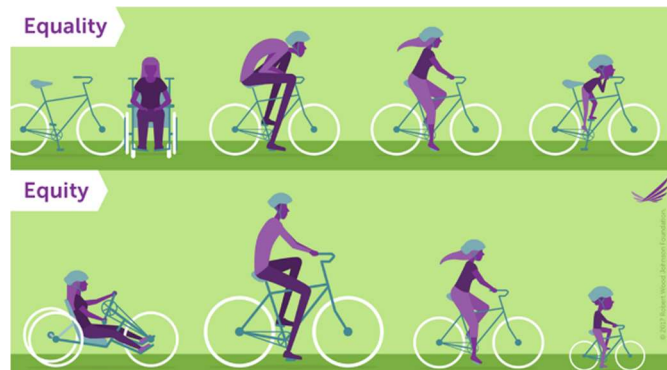
As shown in Figure 1 from the Robert Wood Johnson Foundation, equity is not the same as equality and does not mean providing everyone with the same solutions. Equity recognizes that there often are different needs, barriers, or challenges facing different populations, and equity means tailoring solutions and providing appropriate investments to help meet these needs.

While equity is a consideration in most aspects of society, including education and health care, it is a particularly important concept in transportation planning since transportation is critical for accessing life needs, including jobs, education, and health care. Some populations are more likely than others to face barriers in mobility and access, including people of racial and ethnic minority groups, low-income persons, no-vehicle households, persons with disabilities, individuals with limited English proficiency, seniors and others that have been traditionally underserved. Understanding the needs and barriers facing these populations therefore is important for developing investments and policies that provide quality access for everyone.

As the metropolitan planning organization (MPO) for the St. Louis region, EWG allocates federal transportation dollars. Therefore, how the federal government defines equity is an important guidepost for this assessment.

The Federal Highway Administration defines transportation equity as follows: “Equity in transportation seeks fairness in mobility and accessibility to meet the needs of all community members. A central goal

Figure 1. Graphic on the Meaning of Equity from the Robert Wood Johnson Foundation





of transportation is to facilitate social and economic opportunities by providing equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally underserved.”¹

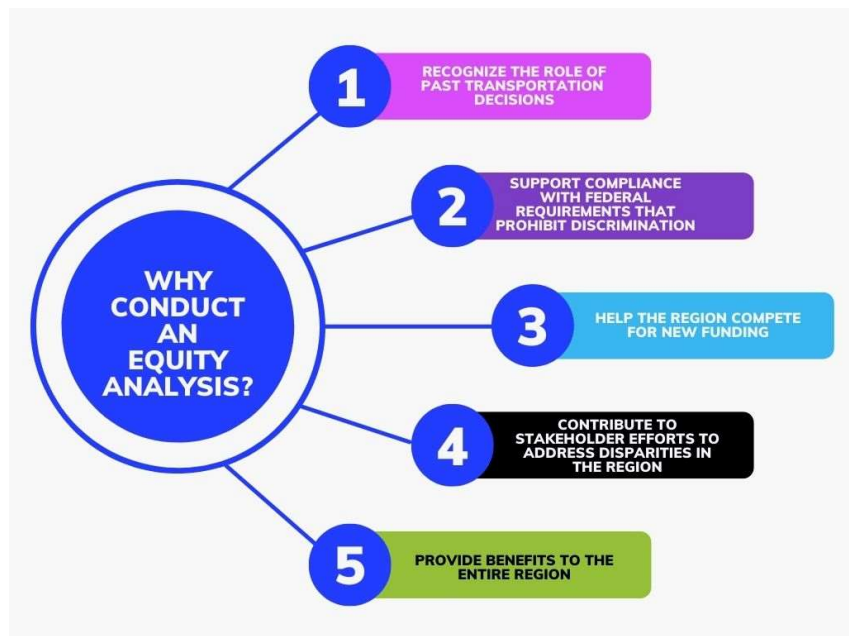
Beyond access, equity in transportation is often defined to reflect a fair distribution of the benefits and burdens of transportation. This aspect of equity recognizes that minority and low-income communities have historically been most harmed by transportation decisions such as highways that disrupted and dislocated communities. These effects have been long-lasting and these communities are often disproportionately burdened with the adverse effects of living near heavy traffic with high levels of air pollution and traffic noise. The U.S. Department of Transportation (USDOT) Equity Action Plan (January 2022) notes that past investments in highways often harmed minority neighborhoods, and there was a failure to invest in transit that serves communities that most need affordable transportation options.² Communities today continue to contend with the results. The equity efforts of USDOT include actions to thoughtfully address historic inequities and positively impact historically underserved or overburdened communities.

PURPOSE: WHY CONDUCT THIS EQUITY INVESTMENT ANALYSIS?

EWG has explored equity as part of previous long-range transportation planning efforts, including the *Connected 2045* plan, and regularly reports on issues such as racial disparities in the *Where We Stand* series. With the look forward to 2050 and plans for new investments, this is a valuable time to look back at previous investments and decisions. EWG is conducting this analysis now for several reasons.

First, the agency recognizes that transportation investments can assist in creating a more equitable region and that past transportation decisions have played a role in the inequities that are present today in the region and nation. The current socio-economic landscape in the region creates a challenge for ensuring that all populations have fair and equitable access to the opportunities afforded to others. Understanding the history leading to these conditions can provide insight into how to prioritize funds, plans, investments, and policies moving forward.

Figure 2. Why East-West Gateway Conducted the Equity Investment Analysis



¹ Federal Highway Administration. 2019. “Environmental Justice, Title VI, Non-Discrimination, and Equity.” https://www.fhwa.dot.gov/environment/environmental_justice/equity/

² U.S. Department of Transportation. 2022. “Equity Action Plan.” https://www.transportation.gov/sites/dot.gov/files/2022-04/Equity_Action_Plan.pdf



This analysis will help EWG and partner agencies:

- to better understand how regional transportation investments and decisions have affected different population groups;
- to better understand the needs of different communities;
- to develop recommendations for enhancing the transportation planning process to ensure decisions and investments are made in a way that is fair;
- make transportation investment decisions that provide a better quality of life for all;
- reveal opportunities to address specific needs of disadvantaged, underserved, or overburdened communities; and
- help address negative impacts of past transportation investment decisions.

Second, EWG is required to **comply with federal laws and requirements that prohibit discrimination**.

This equity analysis will allow the agency to ensure compliance with these laws and better understand how past decisions have impacted these populations. The most relevant requirements and federal policies that support equity include the following:

- Title VI of the Civil Rights Act of 1964, which prohibits discrimination based on race, color, and national origin in programs receiving federal assistance, and related authorities that prohibit discrimination based on sex, age, disability, income, and limited English proficiency.
- Executive Order (EO) 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” which requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority populations and low-income populations, and the associated USDOT Environmental Justice (EJ) order establishing EJ policies and procedures related to their activities.
- EO 13985, “Advancing Racial Equity and Support for Underserved Communities through the Federal Government,” signed in 2021, which lays out a policy of allocating federal resources to advance fairness and opportunity. Many of the new programs are designed to support equity and have an equity component as part of evaluation factors.
- EO 13166, “Improving Access to Services for Persons with Limited English Proficiency,” which directs federal agencies and recipients of federal funds to improve access to services for persons who do not speak English as their primary language and have limited ability to read, speak, write, or understand English.

Third, there are new federal funding opportunities designed to address equity. This equity investment assessment can **help the region be better prepared to compete for discretionary funds**. The Infrastructure Investment and Jobs Act (IIJA) of 2021 includes \$550 billion for new programs and \$650 billion for the continuation of core programs, which have been previously authorized under the Fixing America’s Surface Transportation (FAST) Act and other authorizations. This equity analysis will position the St. Louis region to compete for additional federal funding as it becomes available.

Fourth, there are many stakeholders in St. Louis working on the deep-rooted and prevalent equity issues in the region. EWG hopes this **effort will be a valuable contribution in moving the region forward on addressing this critical component to the health of the region**. As part of the *Where We Stand* series,



EWG has documented persistent disparities between Black and White residents.³ These studies note that Black residents are disproportionately represented in areas of concentrated poverty, and among peer regions,⁴ St. Louis has the fifth largest gap between Black and White residents in terms of the percent of poor residents living in areas of concentrated poverty.⁵ The Ferguson Commission Report highlighted challenges in the region and the need of the St. Louis region to address disparity and equity in economic development, crime, safety, and transportation access.⁶ The report considered transportation as a significant priority to achieving equity.⁷

The City of St. Louis Equity Indicators Project, a collaboration between the City of St. Louis, Forward Through Ferguson, and United Way, is measuring racial equity across 72 indicators to quantify conditions and assess progress over time.⁸ Moreover, many organizations in the region are focusing on equity and inclusiveness to support a more prosperous region. For instance, Greater STL Inc. has initiatives to support diverse and underrepresented business owners in establishing and growing their businesses. The St. Louis Area Agency on Aging, Mid-East Area Agency on Aging, and other organizations are also working to address the unique needs of older populations and persons with disabilities.

Finally, it is important to recognize that **actions that support equity will benefit the entire region**. As an example, for a person using a wheelchair, wider sidewalks, curb cuts, ramps, and improved intersection crossings would enhance their accessibility. At the same time, these improvements also help people pushing strollers, older people, and generally improve the walking environment for all people. As a second example, for a low-income household without a personal vehicle, providing efficient transit services to access jobs and education is critical. These services also benefit the broader community by increasing businesses' ability to fill their workforce, strengthening the regional economy, and providing options to other people who may choose to use transit rather than drive. By ensuring that all people have access to opportunities, equitable decision-making benefits everyone in the region.

³ East-West Gateway Council of Governments. 2018. Where We Stand 8th Edition.

https://www.ewgateway.org/wp-content/uploads/2019/01/wws08_revised_2019-01.pdf

⁴ In the Where We Stand series, East-West Gateway ranks St. Louis among the 50 most populous U.S. metropolitan statistical areas, referred to as "the peer regions."

⁵ East-West Gateway Council of Governments. 2022. Where We Stand Data Tables.

<https://www.ewgateway.org/research-center/where-we-stand/>

⁶ The Ferguson Commission. 2015. "Forward through Ferguson: A Path Toward Racial Equity."

https://3680or2khmk3bzkp33juiea1-wpengine.netdna-ssl.com/wp-content/uploads/2015/09/101415_FergusonCommissionReport.pdf

⁷ Ibid.

⁸ City of St. Louis. 2011-2022. "About the Equity Indicators."

<https://www.stlouis-mo.gov/government/departments/mayor/initiatives/resilience/equity/about/index.cfm>



REPORT STRUCTURE

Building upon the work by EWG to explore equity in previous long-range transportation plans, this report explores equity of transportation investments made within the St. Louis region. The report is divided into four main sections:

- **Historical Context on Transportation Policy, Investments, and Impacts on Communities** – This section describes the historical context of regional immigration and settlement patterns; transportation policies and investments; and housing, land use, and economic development policies over the past 100 years that have led to the region’s current conditions.
- **Transportation Equity: Current Needs and Challenges** – This section provides data on current transportation access and outcomes for different population groups within the region, as well as information on identified needs and challenges facing different populations.
- **Analysis of Transportation Investments Since 2005** – This section includes a detailed analysis of transportation investments that have been made over the past 20 years, including an assessment of the distribution of projects across project types and geography, overlaid with socio-demographic characteristics.
- **Recommendations** – Finally, the document concludes with recommendations for ways to strengthen and support an equitable planning and decision-making process for the St. Louis region.



2. HISTORICAL CONTEXT ON TRANSPORTATION POLICY, INVESTMENTS, AND IMPACTS ON COMMUNITIES

This section of the equity assessment provides a historical analysis of transportation investments and decisions going back over one hundred years within the broader context of population and demographic changes within the St. Louis region. The purpose is to provide an understanding of how transportation policy and investment decisions were made and how they led to the system that exists today. This section also discusses housing, land use, and economic development policies to highlight their connections to and effects on transportation access. The historical analysis provides a foundational understanding of how transportation has both shaped and responded to changes in urban form and how transportation policy has affected communities and different population groups.

“Knowing who came from where, when they came, and what happened to them once they were here is central to understanding the history of St. Louis. These waves of immigrants have had their impact on the direction and growth of the city. They have influenced politics, growth patterns, and industrial growth through their views, heritage and skills brought to St. Louis.”

Jeffrey Smith, History Professor, Lindenwood University

EARLY SETTLEMENTS TO CIVIL WAR

The St. Louis region has a history of immigration that has shaped its culture and landscape. Nearly 1,000 years ago, the largest city in North America was Cahokia, the center of the Mississippian culture, whose monumental structures can still be found in Madison County, Illinois. Subsequent Native American tribes settled in the area, including the Osage, Missouri, Kansas, Oto, Iowa, and Omaha tribes.

St. Louis was founded in 1764 by French fur traders. The site was selected because it was near the confluence of the Mississippi and Missouri rivers. In 1804, St. Louis became part of the United States as a piece of the Louisiana Purchase. The region prospered because of river commerce; with the development of the steamboat, St. Louis played a major role in trade between the eastern and western United States.

The population in the St. Louis region rose rapidly in the early settlement years. Between 1810 and 1820, the population of St. Louis increased 228 percent, and then doubled in size between 1835 and 1840, and once again by 1845.⁹

Early arrivals to the city included immigrants from England, Ireland, and Germany, as well as Americans from other regions. In the wake of the German revolts of 1848 and the Irish Potato Famine, St. Louis attracted thousands of immigrants eager to find a new life. Irish immigrants congregated in the “Kerry Patch” area on the near north side and around Cheltenham (also known as “Dogtown,” near the

⁹ Jeffrey E. Smith. September 1995. “A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8.” <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>



present-day intersection of Hampton and Manchester). Germans established their own neighborhoods as well, including Hyde Park in the northern part of the city. Immigrants also took advantage of available farmland in counties surrounding the central city. In 1890, German immigrants and persons of German ancestry “constituted an overwhelming majority in St. Charles County.”¹⁰ By 1850, 43 percent of all St. Louisans were born in either Ireland or Germany,¹¹ and by 1860, St. Louis was the most foreign-born city in the country.¹²

Americans also moved to St. Louis, both from the East Coast and the South, often bringing different values and perspectives on slavery. Race relations in St. Louis were complex, in part because the city was in a border state that permitted slavery. At the time of the 1820 Census, about 10,000 slaves lived in Missouri, which was the equivalent of about one-fifth of the state population. At the same time, only 347 “free colored persons” lived in Missouri.¹³ As the city grew, slavery existed alongside free Black people. Although employment opportunities for most Black residents were limited to low-paying jobs, a “Black Aristocracy” of merchants and professionals achieved local prominence.¹⁴ Despite their wealth, affluent Black residents did not have the same rights as their White counterparts, as they remained subject to curfews, faced bans on education, and were prohibited from testifying in court against Whites.¹⁵

During the 1850s, St. Louis was a major slave auctioning center. Simultaneously, abolitionists ran newspapers and aided fugitives fleeing to freedom. At this time, about 5 percent of the people living in St. Louis were Black residents, two-thirds of whom were enslaved.¹⁶ The Dred Scott case began in St. Louis and ultimately went on to the U.S. Supreme Court. The result was the infamous ruling in 1857, which held that all persons of African descent were not U.S. citizens and had no right to sue in federal court. The decision also held that the Missouri Compromise – passed to balance the power between slave and non-slave states – was unconstitutional.¹⁷ The decision contributed to tensions that resulted in the Civil War.¹⁸

¹⁰ Steve Ehlmann. 2004. *Crossroads: A History of St. Charles County, Missouri*. Lindenwood University Press, St. Charles, Missouri. P. 149.

¹¹ Jeffrey E. Smith. September 1995. “A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8.” <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-African-American-Experience.cfm>

¹² Kelly Moffitt. November 30, 2015. “‘Ethnic St. Louis’ highlights communities that once made the city ‘most foreign-born in the U.S.’” <https://news.stlpublicradio.org/show/st-louis-on-the-air/2015-11-30/ethnic-st-louis-highlights-communities-that-once-made-the-city-most-foreign-born-in-the-u-s>

¹³ Court.RCHP.Com. July 14, 2018. “St. Louis Arch A Symbol of ‘Negro Removal’?” <http://court.rchp.com/st-louis-arch-a-symbol-of-negro-removal/>

¹⁴ World Population Review. 2022. “St. Louis, Missouri Population 2022.” <https://worldpopulationreview.com/us-cities/st-louis-mo-population>

¹⁵ Jeffrey E. Smith. September 1995. “A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8.” <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-African-American-Experience.cfm>

¹⁶ Ibid.

¹⁷ History.com. August 26, 2020. “Dred Scott Case.” <https://www.history.com/topics/black-history/dred-scott-case>

¹⁸ Roberta Alexander. 2007. *Dred Scott: The Decision that Sparked a Civil War*. N. KY Law Rev 34, p. 643.



MIGRATION AND BOOMING INDUSTRIAL REGION

Following the Civil War and the period immediately following, which is known as reconstruction, the St. Louis region continued to grow as an industrial center. A rising demand for factory workers in the United States and economic crises in southern and eastern parts of Europe led to a large migration from Italy, Poland, and Austria-Hungary, starting in the mid-1870s.¹⁹ In many large cities, including St. Louis, new immigrants frequently worked long hours in factories, and lived in overcrowded tenements. The near south side of St. Louis was one part of the city in which tenements housed workers who had jobs in nearby foundries, cotton factories, and breweries.²⁰

During the late 19th century, there were significant waves of Black resident migration into the St. Louis region. Following the end of political reconstruction in 1877 and the adoption of “Jim Crow” laws across the South that enforced White supremacy, thousands of southern Black residents migrated north to cities like St. Louis. By 1880, the city’s Black resident population increased to 6.4 percent of the total population.²¹ By 1900, St. Louis had more than 35,000 Black residents, a population second only to Baltimore.²²

During the 1910s, there was another significant wave of immigration into the St. Louis region (as shown by the foreign-born population in Table 1), corresponding with unprecedented levels of immigration to America.

By the early 20th century, St. Louis was one of the leading manufacturing regions in the country, along with regions such as Detroit, Pittsburgh, Cleveland, and Buffalo. Manufacturing was heavily concentrated in the city, although several large facilities were also established in other parts of the region such as East St. Louis²³, St. Charles²⁴, and Alton.²⁵

Table 1. Foreign-Born Population

City of St. Louis, 1910 Census

Country of Origin	Population
Germany	68,450
Russia	18,758
Ireland	17,001
Austria	16,847
Hungary	12,036
England, Scotland, and Wales	10,188
Italy	9,219
Switzerland	3,935
All Other	22,303
Total	178,737

Source: University of Minnesota, IPUMS/NHGIS, www.nhgis.org; EWG generated table

¹⁹ Ewa Morawska. 2009. Labor Migrations of Poles in the Atlantic World Economy, 1880-1914. *Comparative Studies in Society and History* 31(2), 237-272.

²⁰ Jeffrey E. Smith. September 1995. “A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 9.” <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>

²¹ Ibid.

²² Jeannette Cooperman. October 17, 2014. “The Story of Segregation in St. Louis.” <https://www.stlmag.com/news/the-color-line-race-in-st.-louis/>

²³ Federal Reserve Bank of St. Louis. December 31, 2002. “East St. Louis: One City’s Story.” <https://www.stlouisfed.org/publications/bridges/winter-20022003/east-st-louis-one-citys-story>

²⁴ Ehlmann, op.cit., p. 196.

²⁵ Susan Thomson. 2009. Community Profile: Alton Comes to Grip with Industrial Decline. Federal Reserve Bank of St. Louis. <https://www.stlouisfed.org/publications/regional-economist/october-2009/alton-comes-to-grip-with-industrial-decline>



During World War I, a decline in European immigration opened new employment opportunities for Black residents, resulting in additional migration to industrial regions, including St. Louis. This period is referred to as the Great Migration. The same was true during World War II, during which time the Black resident population in St. Louis increased by about 41 percent.²⁶

The time period of the 1910s and 1920s saw frequent labor relations clashes, as workers struggled to gain increased wages and better working conditions while employers tried to suppress organized labor. White workers often resented Black newcomers due to competition for jobs and housing and fear they would be undercut by Black workers willing to accept lower wages. The East St. Louis race riot of 1917 resulted in the deaths of between 39 and 150 Black residents.²⁷

The industrial base of the region continued to grow, and by 1940, the St. Louis region was one of the top 10 manufacturing regions in the country. The city of St. Louis population eventually hit its peak in 1950, when St. Louis was the 8th largest city in the country with a population of about 856,800. At the time, 48 percent of the population in the region lived in the city of St. Louis. A majority (65 percent) of the business establishments and more than half of the jobs in the region were also located in the city of St. Louis.²⁸ The region was a hub of national commerce, with a robust network of roads, streetcars, passenger train terminals, and freight terminals.

East St. Louis was a thriving industrial community, built by industrial and financial magnates including Andrew Carnegie and J. P. Morgan.²⁹ St. Charles also boasted manufacturing facilities including factories owned by the American Car and Foundry Company and the Robert, Johnson and Rand Shoe Company.³⁰ Employment was readily available, and factories operated 24 hours a day.³¹

The dominant form of transit in St. Louis from the 1890s to the 1950s was the streetcar. The first electric streetcar opened to the public in 1888. In 1899, streetcar properties were consolidated under the United Railways Company, and a single corporation would own the streetcar lines in the city of St. Louis thereafter. By 1900 there were over 1,400 streetcars running on 450 miles of track. In 1915, streetcars provided 357 million trips, and in 1926, streetcars carried 73 percent of vehicular passengers in the central business district, running down almost every major street.³²

²⁶ Ibid.

²⁷ Smithsonian Institution. June 30, 2017. "The East St. Louis Race Riot Left Dozens Dead, Devastating a Community on the Rise." <https://www.smithsonianmag.com/smithsonian-institution/east-st-louis-race-riot-left-dozens-dead-devastating-community-on-the-rise-180963885/>

²⁸ East-West Gateway Coordinating Council, "Transportation Redefined: A Plan for the Region's Future", 1992. <http://www2.ewgateway.org/pdf/files/library/trans/transredefined-1992.pdf>

²⁹ Federal Reserve Bank of St. Louis. December 31, 2002. "East St. Louis: Once City's Story." <https://www.stlouisfed.org/publications/bridges/winter-20022003/east-st-louis-one-citys-story>

³⁰ Ehlmann, op. cit., p. 196.

³¹ Federal Reserve Bank of St. Louis. December 31, 2002. "East St. Louis: Once City's Story." <https://www.stlouisfed.org/publications/bridges/winter-20022003/east-st-louis-one-citys-story>

³² Information on streetcars taken from Mark Tranel. 2004. "The St. Louis Transportation Transformation." Chapter in *St. Louis Metromorphosis: Past Trends and Future Directions*, edited by Brady Baybeck and E. Terrence Jones. Missouri Historical Society Press.



Segregation in Housing

Throughout this period of growth, many recent arrivals lived in ethnic Irish, German, Polish, or Italian neighborhoods, and Black residents were segregated from White neighborhoods. Around the time of World War I and thereafter, a growing isolationist movement and nativist sentiments led to restrictions on immigration (i.e., Emergency Quota Act of 1921, National Origins Act of 1924), with new policies that prohibited Asian immigrants and severely limited the entry of Eastern and Southern Europeans. During a period that saw a sharp rise in White supremacy in America, organizations spread fears about immigration and pseudo-scientific theories about the distinctions between races and the threat of racial mixing.³³

In 1916, St. Louis became the first city in the nation to pass a segregation ordinance by referendum. By a three to one margin, voters in St. Louis enacted an ordinance, which mandated that no one could move to a block on which greater than 75 percent of the residents were of another race. The following year, in the case of *Buchanan v. Warley*, the U.S. Supreme Court ruled that racial zoning violated the 14th Amendment to the U.S. Constitution. After the ruling, some private associations in St. Louis established racial covenants that contractually bound home owners to sell only to White home buyers (see Figure 3).^{34, 35}

Deed covenants typically had terms of 20 to 50 years, which applied to both original property owners and successive owners. By the 1940s, there were 380 neighborhood deed covenants in place in the city of St. Louis, each one affecting hundreds of properties. These deed covenants had also been implemented in St. Louis County, at a time when new suburban housing developments were established. It is estimated that 80 percent of new suburban housing in the St. Louis region developed in the 1940s contained these agreements.³⁶

³³ History is Now Magazine, January 22, 2019. <http://www.historyisnowmagazine.com/blog/2019/1/20/scared-america-1920s-america-nativism-and-restrictions-on-immigration#.YvIP5C7MJyw=>

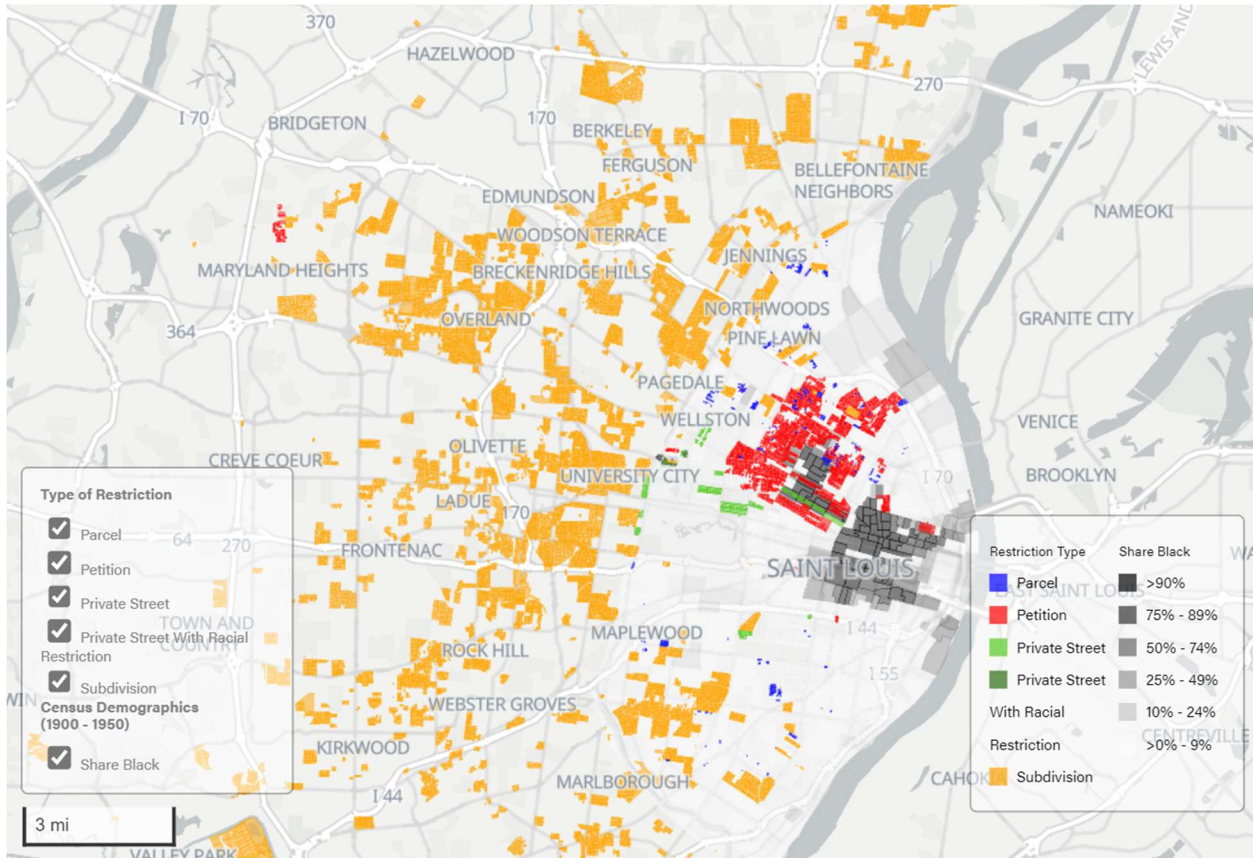
³⁴ Jeffrey E. Smith. September 1995. "A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8." <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>

³⁵ Jeannette Cooperman. October 17, 2014. "The Story of Segregation in St. Louis." <https://www.stlmag.com/news/the-color-line-race-in-st.-louis/>

³⁶ For the Sake of All. 2018. "Segregation in St. Louis: Dismantling the Divide." <https://cpb-us-w2.wpmucdn.com/sites.wustl.edu/dist/3/1454/files/2018/06/Segregation-in-St.-Louis-Dismantling-the-Divide-22ih4vw.pdf>



Figure 3. Racial Restrictions in Greater St. Louis, 1940³⁷



One group, called the Marcus Avenue Improvement Association, tried to ban Black people from moving into an area bound by Kingshighway, Natural Bridge, Newstead, and Easton by attaching a 50-year covenant to each property forbidding sales of each house to “persons not of Caucasian race.” The enforcement of racially restrictive covenants was ruled unconstitutional in the Shelley v. Kraemer case in 1948, which addressed the case of a Black family in St. Louis that had moved into a neighborhood with such a covenant. In that case, the U.S. Supreme Court held that such covenants by private parties do not violate the 14th Amendment of the constitution but state action to enforce them in court did violate the Equal Protection Clause of the 14th Amendment.³⁸ While considered unenforceable, these covenants remained on the deeds of properties. The Federal Fair Housing Act of 1968 codified that the practice of writing racial covenants into deeds was illegal, but it was not until June 2022 that a Missouri law was passed to ban discriminatory restrictive covenants on recorded deeds.³⁹ Even after this type of discrimination in housing was made illegal, barriers remained for non-whites with regard to property ownership. Banks, realtors, and sometimes local governments reinforced segregated housing practices

³⁷ St. Louis Metropolitan Equal Housing & Opportunity Council, "Racially Restrictive Covenants", accessed at <https://ehocstl.org/restrictive-covenants/>

³⁸ Jeffrey E. Smith. September 1995. "A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8." <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>

³⁹ Missouri Independent. June 30, 2022. "New Missouri law mandates removal of discriminatory covenants from property deeds."



by design or neglect. Segregation was also encouraged by federal programs such as urban renewal projects and public housing efforts, as described further below.⁴⁰

THE POST WWII ERA AND THE IMPACTS OF TRANSPORTATION AND HOUSING POLICIES

The Post-World War II era saw a dramatic change in development patterns across the United States, driven in part by federal policies that drove growth of the suburbs. These included Federal Housing Administration (FHA) subsidies, slum clearance policies, and transportation policies, including the construction of the Interstate Highway System and policies that led to the decline of streetcar networks and public transit. Federal housing and transportation policy played a major role in shaping development patterns from the 1940s through the 1970s and beyond.

Highway Development

The Federal-Aid Highway Act of 1944 authorized construction of a national highway network. While it did not provide funding to implement the idea, the law stimulated a flurry of local planning activities in anticipation of future funding. At the same time, officials throughout the country and in cities like St. Louis were concerned about growing congestion in urban areas due to the increasing use of automobiles. To address urban mobility needs, between 1945 and 1948, the St. Louis Public Service Company purchased 725 new buses and 100 new streetcars and greatly expanded its service.⁴¹

Federal policy, however, strongly tipped the scales toward the automobile with the passage of the Federal-Aid Highway Act of 1956, which authorized an expenditure of \$25 billion over 10 years to build 41,000 miles of roadway.⁴² The companion Highway Revenue Act created the Highway Trust Fund, which is funded primarily by a motor fuels tax. The federal government paid 90 percent of the cost of new construction projects using these funds, which led planners throughout the country to initiate expansion of highway networks. In the St. Louis region, the first Interstate highway project completed was I-70 from downtown St. Louis to St. Charles County.

Housing Policies and Redlining

While highways were being planned and developed, FHA subsidies helped build the suburbs through low down payments, and long-term, fixed-rate mortgages. The FHA had the power to give or deny mortgages and refused to insure mortgages on older houses in urban neighborhoods. Established in 1933 as one of the “New Deal” programs, the Home Owners’ Loan Corporation (HOLC) assisted homeowners who were in default on their mortgages. From 1934 to 1962, FHA helped finance more than \$120 billion in loans. In current dollars, this sum would exceed \$1 trillion. Most home buyers

⁴⁰ Jeffrey E. Smith. September 1995. “A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8.” <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>

⁴¹ East-West Gateway Coordinating Council, “Transportation Redefined: A Plan for the Region’s Future”, 1992. <http://www2.ewgateway.org/pdffiles/library/trans/transredefined-1992.pdf>

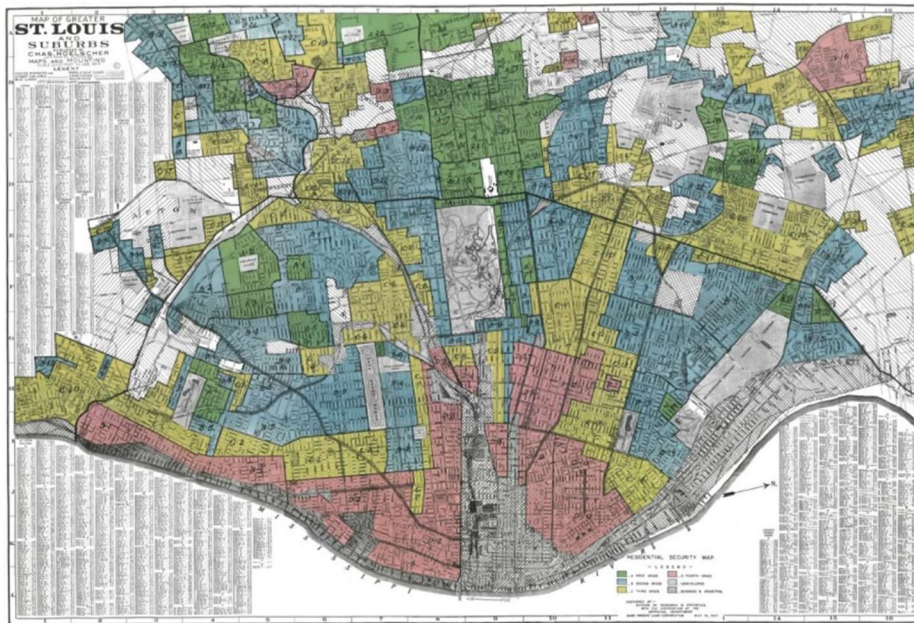
⁴² Richard F. Weingroff. 1996. “Federal-Aid Highway Act of 1956: Creating the Interstate System.” <https://highways.dot.gov/public-roads/summer-1996/federal-aid-highway-act-1956-creating-interstate-system>



eligible for the FHA mortgages were White, with less than 2 percent of loans going to minority households.^{43,44}

The FHA developed a national system of appraisal standards that tied property value and loan eligibility to race. HOLC examiners consulted with local bank loan officers, city officials, appraisers, and realtors to create “residential security” maps of cities. These maps graded neighborhoods into four categories to address risk, color coded as follows: green (or A) for “best”, blue (or B) for “still desirable”, yellow (or C) for “definitely declining”, and red (or D) for “hazardous” for mortgage lending. Neighborhoods with significant Black populations received low ratings and were denied loans, a practice that became known as “redlining.”⁴⁵ See Figure 4.

Figure 4. A Redlining Map of St. Louis.⁴⁶



This practice set off a spiral of effects: lack of home maintenance loans forced deferred maintenance, which over time would frequently result in deteriorating housing stock. Denial of loans for purchasing in Black neighborhoods essentially destroyed the mortgage market in these areas and led to declining property values.⁴⁷ The subsidies for all-White development, combined with financial penalties for areas with a significant Black presence, created a powerful incentive for suburban communities to exclude

⁴³ Richard Rothstein. October 15, 2014. “The Making of Ferguson.” <https://www.epi.org/publication/making-ferguson/>

⁴⁴ Robert Fishman. 2000. “The American Metropolis at Century’s End: Past and Future Influences.” <http://www-personal.umich.edu/~mlassite/fishman.pdf>

⁴⁵ NCRC, “HOLC ‘Redlining’ Maps: The persistent structure of segregation and economic inequality.” https://ncrc.org/wp-content/uploads/dlm_uploads/2018/02/NCRC-Research-HOLC-10.pdf

⁴⁶ Mapping Inequality, “Redlining in New Deal America.” <https://dsl.richmond.edu/panorama/redlining>

⁴⁷ Margaret Garb. September 22, 2017. “No Place Like Home: St. Louis’ Eminent Domain History.” <https://humanities.wustl.edu/features/Margaret-Garb-St-Louis-Eminent-Domain>



Black residents.⁴⁸ Thus, federal housing policies created financial incentives for maintaining segregated housing patterns in the 1950s and 1960s, and in large part, Black households did not benefit from the wealth creation associated with homeownership.

Local policies reinforced these patterns. When land became attractive to developers, local governments used eminent domain to demolish historic Black communities in St. Louis County. Examples include Malcolm Terrace in Creve Coeur and Elmwood Park in Olivette.⁴⁹ Zoning policies also played a key role in reinforcing segregation. New zoning mandates emphasized large-lot and single-family homes, which were effective in excluding low-income and Black households from living in or near the growing suburbs in St. Louis. Some historic Black neighborhoods in the region were also annexed or rezoned. Elmwood Park, for example, was a predominantly Black neighborhood of 37 homes that was annexed by the adjacent city of Olivette in 1950 to “straighten its borders.” Later, Elmwood Park was rezoned for industrial uses and Olivette took ownership of properties through eminent domain. St. Louis County also razed 170 homes in the neighborhood for industrial development and more expensive housing around the same time.⁵⁰

Federal housing and transportation policies encouraged suburbanization and the resulting White flight from the urban core. At the same time, Black residents experienced housing discrimination and were denied mortgage loans to purchase homes in many of the growing suburbs. Federal policies incentivized complementary policies at local levels, such as zoning policies that limited development to single-family homes that were unaffordable or inaccessible to lower-income households. Historian Richard Rothstein writes, “equity that families have in their homes is the main source of wealth for middle-class Americans. Black residents’ families today, whose parents and grandparents were denied participation in the equity-accumulating boom of the 1950s and 1960s, have great difficulty catching up now.”⁵¹ As a result, Rothstein concludes that the current Black-White wealth disparity “is almost entirely attributable to federal housing policy implemented through the 20th century.”⁵²

Highways Displacement and Urban Renewal

Across the country, construction of Interstate highways was frequently associated with the demolition of Black communities.⁵³ In many cases, highways also became barriers that separated Black neighborhoods from White neighborhoods, and from economic opportunities.⁵⁴ Urban renewal efforts

⁴⁸ Robert Fishman. 2000. “The American Metropolis at Century’s End: Past and Future Influences.” <http://www-personal.umich.edu/~mllassite/fishman.pdf>

⁴⁹ Colin Gordon. 2015. “How Racism Became Policy in Ferguson.” <https://www.dissentmagazine.org/blog/how-racism-became-policy-in-ferguson>

⁵⁰ For the Sake of All. 2018. “Segregation in St. Louis: Dismantling the Divide.” <https://cpb-us-w2.wpmucdn.com/sites.wustl.edu/dist/3/1454/files/2018/06/Segregation-in-St.-Louis-Dismantling-the-Divide-22ih4vw.pdf>

⁵¹ Richard Rothstein. 2017. *The Color of Law: A Forgotten History of How Our Government Segregated America*. Livewright Publishing, New York.

⁵² Terry Gross. 2017. Interview with Richard Rothstein. National Public Radio, May 3. <https://www.npr.org/2017/05/03/526655831/a-forgotten-history-of-how-the-u-s-government-segregated-america>

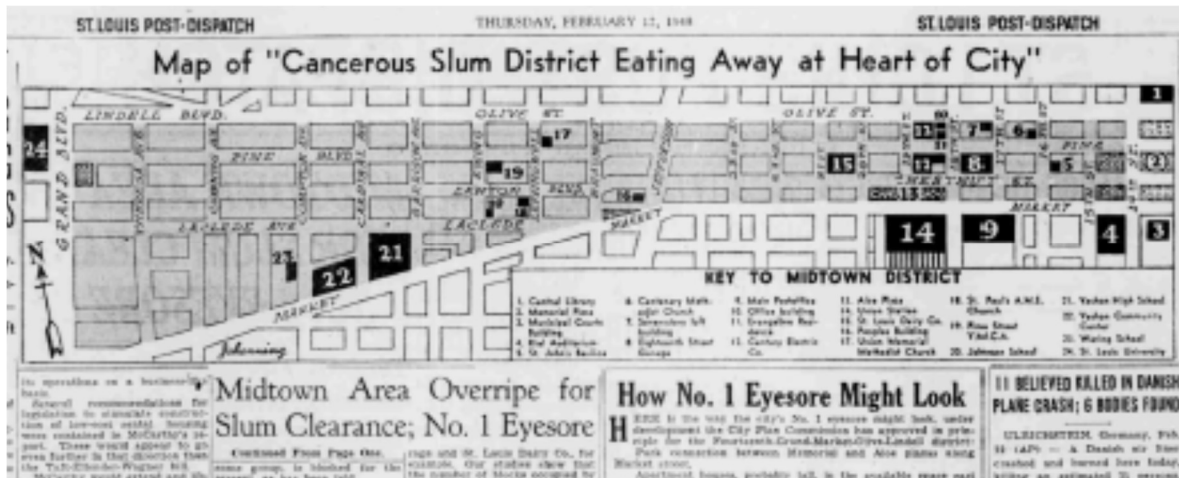
⁵³ Deborah Archer. 2021. *Transportation Policy and the Underdevelopment of Black Communities*. 106 *Iowa Law Review* 2125; NYU School of Law, Public Law Research Paper No. 21-12. <https://ssrn.com/abstract=3797364>

⁵⁴ Margaret Garb. September 22, 2017. “No Place Like Home: St. Louis’ Eminent Domain History.” <https://humanities.wustl.edu/features/Margaret-Garb-St-Louis-Eminent-Domain>



in the 1950s and 1960s focused on clearing what were considered “blighted” communities. This resulted in the demolition of working-class communities with the intent of replacing them with highways and more modern development (see Figure 5 for St. Louis Post-Dispatch article describing “slum clearance” plans).

Figure 5. St. Louis Post-Dispatch Article Describing Slum Clearance Plans.



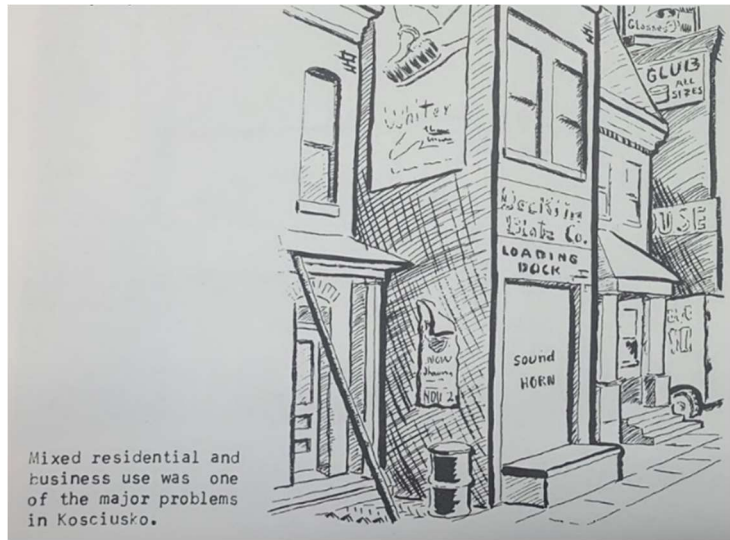
With many residents moving to newer homes in suburbs, the city of St. Louis, like many other cities around the country, undertook urban renewal efforts with the stated intent to make the city more attractive to middle-income residents. The city’s Land Clearance for Redevelopment Authority (LCRA) used federally-assisted urban renewal funds and city funds to clear land for expressways and redevelopment while also highlighting the large amount of private investment these efforts would spur. In 1962, a public bond issue to pay for a new downtown sports stadium was passed, which led to the demolition of the city’s Chinatown.⁵⁵ Construction for the Gateway Arch began in 1963.

⁵⁵ Ling, Huping, 2004. Chinese St. Louis: From Enclave to Cultural Community. Temple University Press.



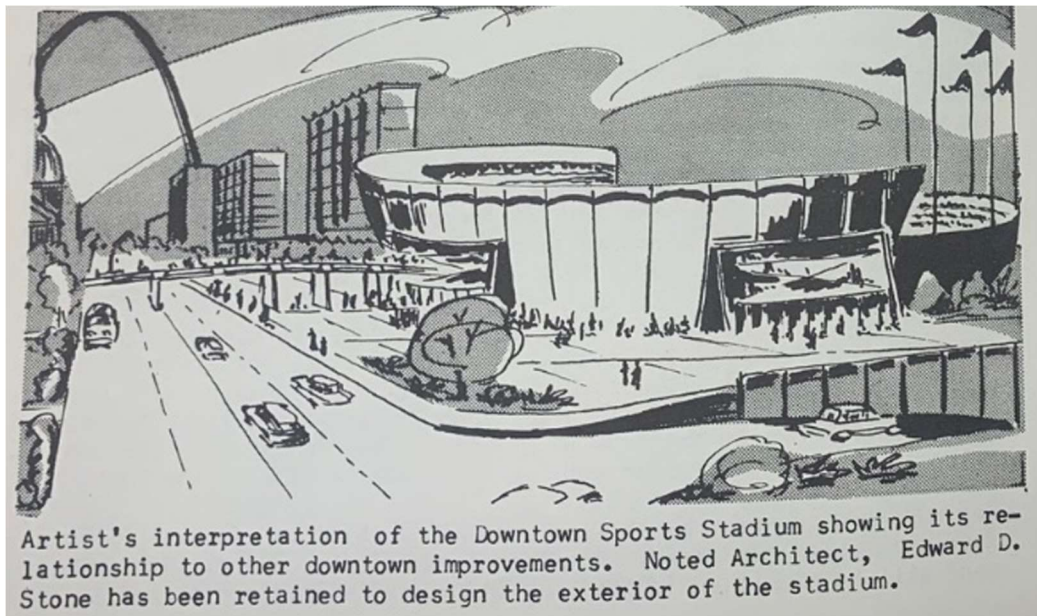
Planning for urban renewal encouraged replacement of mixed-use, dense urban development with what was viewed as more modern, typically auto-oriented uses. The LCRA noted, “mixed residential and business use was one of the major problems...” in the Kosciusko community (see Figure 6). The city went on to describe plans to redesign and rebuild the area with a new shopping center containing “new, modern quarters with adequate off-street parking” and converting a twelve-block area into “six super blocks with off-street parking for 3000 automobiles.”⁵⁶ Describing plans for a new stadium downtown, the LCRA noted, “The stadium site is ideal. It will be adjacent to the terminus of a new eight-lane, toll-free bridge and the hub of four major expressways...The first phase of development includes the \$15 million stadium, parking garages for 7400 cars, a \$5 million motel, a restaurant, bowling alleys and office buildings.” See Figure 7 for image from pamphlet, “Facts about Urban Renewal in St. Louis.”⁵⁷

Figure 6. Image from St. Louis Land Clearance Authority Commissioners’ “Facts about Urban Renewal in St. Louis,” Noting Problems with Mixed Use Development.



Mixed residential and business use was one of the major problems in Kosciusko.

Figure 7. Image from St. Louis Land Clearance Authority Commissioners’ “Facts about Urban Renewal in St. Louis,” Showing a Vision for a New Downtown Sports Stadium.



Artist's interpretation of the Downtown Sports Stadium showing its relationship to other downtown improvements. Noted Architect, Edward D. Stone has been retained to design the exterior of the stadium.

⁵⁶ City of St. Louis Land Clearance Authority. Undated [est. 1963], “Facts about Urban Renewal in St. Louis.”

⁵⁷ Ibid.



Mill Creek Valley

The demolition of the Mill Creek Valley neighborhood shows how federal policies related to transportation and urban development intersected with local planning decisions, resulting in increased segregation and a widening of racial wealth disparities. During the early 20th century, Mill Creek Valley was a vibrant predominantly Black neighborhood. Due to large migrations of Black residents from the South, by 1900 it was an established community.⁵⁸ Mill Creek Valley was home to 20,000 residents, including teachers, janitors, cooks, laundresses, railroad porters, and musicians. It was also home to the city’s largest concentration of Black-owned businesses, including shops, grocery stores, saloons, and banks. Several large churches served as backbone institutions for the community. Some of the only banks willing to provide housing and small business loans to Black residents were based in Mill Creek Valley. Residents lived in the area between 20th Street and Grand, extending south from Olive to the railroad tracks. Some 95 percent of this population was Black.⁵⁹

Federal urban renewal policies billed as “slum clearance” programs contributed to the demise of Mill Creek Valley. The 1949 Housing Act provided for individual grants of up to \$500 million for the demolition of buildings deemed to be in poor condition. The city of St. Louis accepted federal dollars for slum clearance. In 1954, the city of St. Louis passed a \$10 million bond issue to redevelop the area.^{60, 61} The largest slum clearance project was in the Mill Creek Valley, which razed

Figure 8. EWG generated map of 2015 satellite imagery with 1950 Sanborn parcel maps overlaid in yellow: Mill Creek Valley.

The overlaid parcels (yellow) depict residential and commercial buildings that existed before the demolition of Mill Creek Valley, while the current satellite imagery shows what stands there today. Sanborn Maps are detailed maps that were created of U.S. cities and towns in the 19th and 20th centuries, originally published by the Sanborn Map Company.



⁵⁸ Jeffrey E. Smith. September 1995. “A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8.” <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Margaret Garb. September 22, 2017. “No Place Like Home: St. Louis’ Eminent Domain History.” <https://humanities.wustl.edu/features/Margaret-Garb-St-Louis-Eminent-Domain>



5,600 residential units over 465 acres and displaced approximately 20,000 residents.⁶² The demolition of Mill Creek Valley began in 1959 to make way for Laclede Town, Grand Towers, the Ozark Expressway (now U.S. 40), and a 22-acre extension of St. Louis University.⁶³ Most of the residents of Mill Creek Valley were squeezed into already overcrowded segregated communities north of Delmar and many relocated to the new Pruitt-Igoe housing complex.⁶⁴ The relocation of displaced residents to the

Figure 9. EWG generated map of 2015 satellite imagery with 1950 Sanborn parcel maps overlaid in yellow: Mill Creek Valley.



area between Delmar and Natural Bridge (on both sides of Grand) further accelerated Black migration to inner-ring suburbs such as Wellston and Pine Lawn.⁶⁵ Following the demolition, at the time one of the nation's largest urban renewal projects, there was an exceptionally slow reinvestment process, leaving a vast clearing in the area. Today, the area consists of sports fields and stadiums, Harris-Stowe State University, highway entrance ramps, and an office park.⁶⁶ As shown in Figures 8 and 9, there are now various roadways, parking facilities, and larger corporate developments in place of what used to be a dense, vibrant neighborhood. These maps show parcel outlines and building footprints from 1950 Sanborn Maps overlaid with current aerial imagery. The parcel lines are shown in yellow.

⁶² Tim O'Neil. August 7, 1954. "Decision to clear Mill Creek Valley Changed the Face of the City. St. Louis Post-Dispatch." https://www.stltoday.com/news/archives/aug-7-1954-decision-to-clear-mill-creek-valley-changed-the-face-of-the-city/article_04738cde-b0f8-5688-a20e-6fd86266d1ac.html

⁶³ Jeffrey E. Smith. September 1995. "A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8." <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>

⁶⁴ Tim O'Neil. August 7, 1954. "Decision to clear Mill Creek Valley Changed the Face of the City. St. Louis Post-Dispatch." https://www.stltoday.com/news/archives/aug-7-1954-decision-to-clear-mill-creek-valley-changed-the-face-of-the-city/article_04738cde-b0f8-5688-a20e-6fd86266d1ac.html

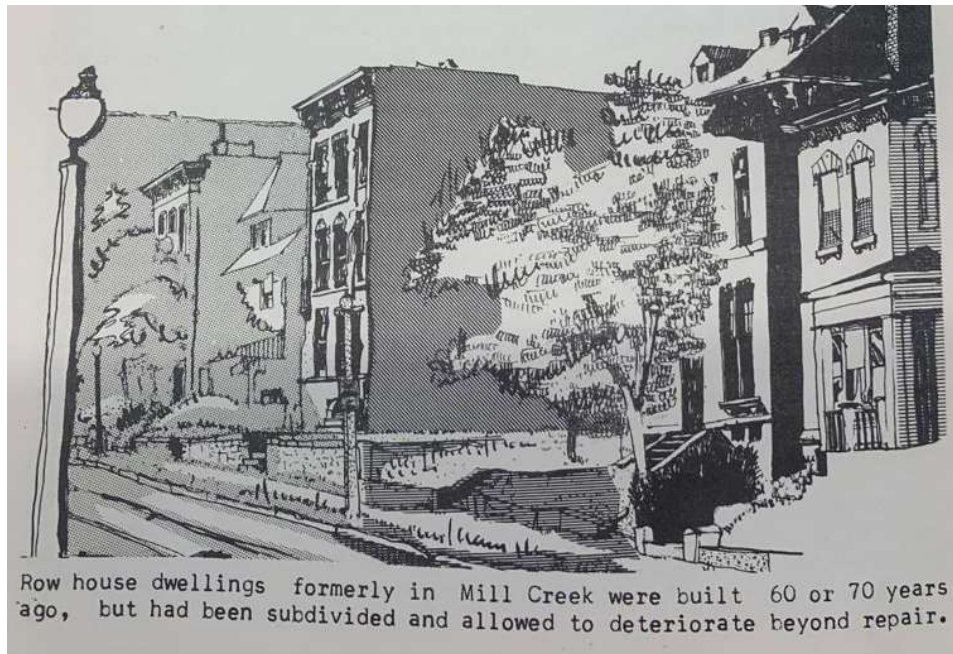
⁶⁵ Jeffrey E. Smith. September 1995. "A Preservation Plan for St. Louis Part I: Historic Contexts, Chapter 8." <https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/preservation-plan/Part-I-Peopling-St-Louis.cfm>

⁶⁶ Margaret Garb. September 22, 2017. "No Place Like Home: St. Louis' Eminent Domain History." <https://humanities.wustl.edu/features/Margaret-Garb-St-Louis-Eminent-Domain>



Figure 10 shows a rendering from the St. Louis Land Clearance for Redevelopment Authority, which reinforces the Mill Creek Valley community as “approximately 100 blocks of hopeless residential slum which was a blot on the national reputation of St. Louis.”⁶⁷ In contrast, former residents of Mill Creek Valley described it as a vibrant neighborhood, “an important part of Black St. Louis,” and, “an important part of St. Louis history.”

Figure 10. Image from St. Louis Land Clearance for Redevelopment Authority “Facts about Urban Renewal in St. Louis” showing Row House Dwelling formerly in Mill Creek Valley.



“We have to remember that when Mill Creek was destroyed, many of the Black residents were able to move to areas west of Jefferson, despite the cost of housing. That’s important because the press described the residents of Mill Creek as poor; the fact that they could relocate belies the myth that this was a completely poor neighborhood.”

- Judith A., Former Mill Creek Valley Resident

They cited Market Street as a commercial center with stores, doctors’ offices, lawyers’ offices, and a restaurant that served as a popular meeting point for executives coming from the Peoples’ Finance Building across the street. They also referenced the Black-owned businesses around Mill Creek Valley, including drug stores, restaurants and several movie theaters. Another key part of the community they pointed to were the 40 churches in Mill Creek Valley, many of which relocated after the neighborhood was destroyed and redeveloped.⁶⁸

According to these former residents, transportation played a key role in Mill Creek Valley, and the streetcar that ran through the neighborhood was essential for important trips to work, school, and doctor appointments. They also stated that Mill Creek Valley was a walkable neighborhood, and they would often walk downtown.⁶⁹

⁶⁷ City of St. Louis Land Clearance Authority. Undated [est. 1963], “Facts about Urban Renewal in St. Louis.”

⁶⁸ Interview with former residents of Mill Creek Valley conducted by East-West Gateway Council of Governments. July 28, 2022.

⁶⁹ Ibid.



Displacement and Divided Communities

Not all slum clearance programs of the 1950s and 1960s were directly related to transportation. However, documents show that transportation construction contributed to the demolition of low-income housing. For example, the 1952 *Expressway Plan for St. Louis and Adjacent Missouri Area* offers several responses to the question, “Why do we need expressways?” One response noted that “Expressway development will aid in clearance of the slum belt which now surrounds central business district.”⁷⁰ In addition, referring to demolitions in Mill Creek Valley, city planner Harland Bartholomew was quoted as saying, “One of the great advantages of this central area, east of Grand, is in connection with the need for an express highway to the west. A combination of slum clearance and rebuilding here, with construction of an express highway would be the most logical way to go about replanning of the area.”⁷¹

Other areas in St. Louis were also demolished for highway construction.

Figures 11 through 15 show building footprints for some of the other areas in the city that were demolished, again using Sanborn parcel maps overlaid on satellite imagery from 2015. Today, Interstate 70 runs along the eastern edge of the Hyde Park neighborhood in north St. Louis. The area under the current highway footprint was once predominantly residential. Figure 11 shows blocks that were demolished in the Hyde Park neighborhood due to the construction of I-70. These figures illustrate the nature of the neighborhoods that were razed directly because of highway construction in the 1950s and 1960s.

Figure 11. EWG generated map of 2015 satellite imagery with 1950 Sanborn parcel maps overlaid in yellow: Hyde Park



⁷⁰ Streets and Traffic Committee, City Plan Commission. 1952. *Expressway Plan for the St. Louis Urban Area: Statement and Review Accompanying the Recommendations of the Streets and Traffic Committee of the City Plan Commission.*

⁷¹ Richard G. Baumhoff. February 12, 1948. *Midtown Area Overripe for Slum Clearance Job; No. 1 Eyesore of St. Louis.* St. Louis Post-Dispatch.



In addition to demolishing blocks, and sometimes entire neighborhoods, highway construction in some cases divided communities. Figures 12 and 13 show neighborhoods divided by the construction of Interstate 44. Figure 12 shows how the highway divides the Gate District neighborhood from the Fox Park neighborhood. Once part of an integrated street grid, the surviving blocks on Oregon Avenue and California Avenue are now dead ends on either side of the Interstate, making it more difficult for residents to access stores, schools, or churches on the other side.

Figure 12. EWG generated map of 2015 satellite imagery with 1950 Sanborn parcel maps overlaid in yellow: Gate District.





Figure 13 shows the effect of Interstate 44 on The Hill neighborhood. Blocks along Pattison Avenue were divided from the main section of The Hill, isolating residents from the many retail and employment sites south of Interstate 44. There are also some businesses on the north side of Interstate 44 that are now isolated from most of the neighborhood.

Figure 13. EWG generated map of 2015 satellite imagery with 1950 Sanborn parcel maps overlaid in yellow: The Hill.



Suburban communities were largely built around interstates, with adequate buffers to reduce adverse effects. By contrast, urban neighborhoods into which interstates were inserted disproportionately suffer from noise, pollution, and disruption of the street grid. Jerry Blair, former EWG Director of Transportation, writes that interstates were, “constructed according to uniform design standards and the need for speed, safety, and reliability, interstates did not fit comfortably within the urban landscape. Lacking integration with other plans and policies, they became a destructive rather than positive force for change in cities.”⁷²

Figure 14 shows the loss of an entire neighborhood in East St. Louis in St. Clair County, which was replaced by the interchange for I-70, I-64, and I-55 in Illinois.

Figure 15 shows the effect of I-70 on the city of Jennings and Pine Lawn in St. Louis County. Several streets no longer cross I-70 including Hamilton Avenue and Irving Avenue and many homes were lost near the interchange of the interstate and Jennings Station Rd.

⁷² Jerry Blair. 2007. “Pursuing an Elusive End: Highway and Transit Planning in St. Louis.” Chapter 11 in *St. Louis Plans: The Ideal and the Real St. Louis*, edited by Mark Tranel. Pp. 327-372. Missouri Historical Society Press.



Figure 14. EWG generated map of 2015 satellite imagery with 1950 Sanborn parcel maps overlaid in yellow: East-St. Louis.

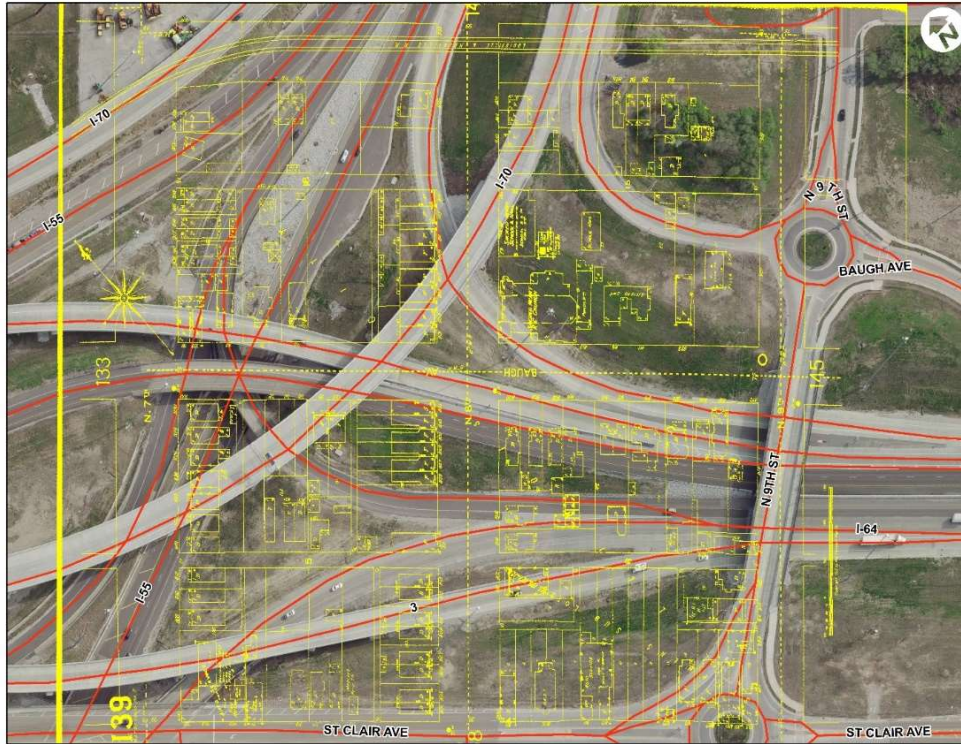
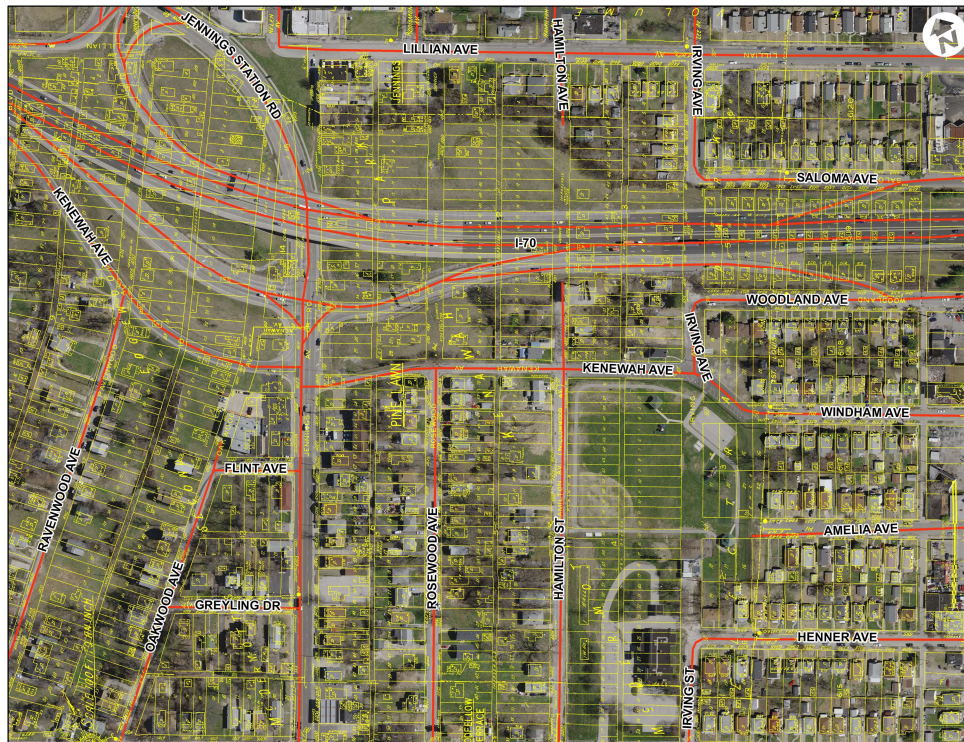


Figure 15. EWG generated map of 2015 satellite imagery with 1950 Sanborn parcel maps overlaid in yellow: Jennings/Pine Lawn.



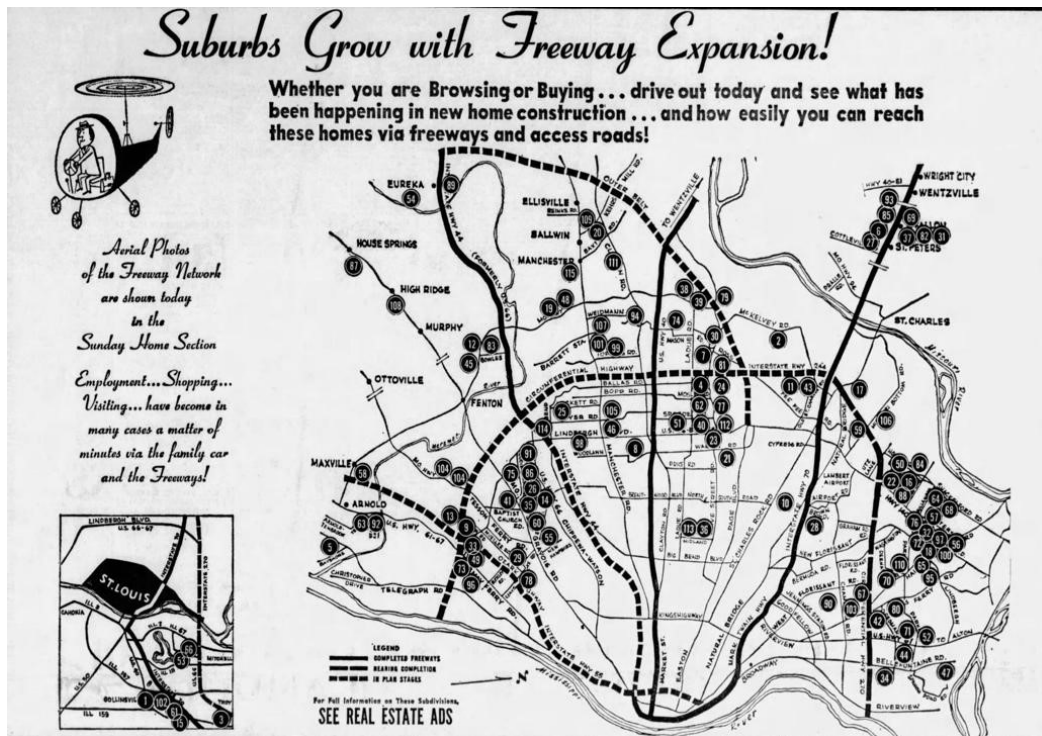


Suburbanization

While urban renewal efforts were purported to attract development to the city of St. Louis, the combination of highway and housing policies created strong incentives toward suburbanization and a departure from the city, with new developments accessible only by auto. Between 1950 and 1960, the city of St. Louis lost 100,000 residents while St. Louis County gained 300,000.⁷³ Since discriminatory housing policies prevented Black residents from taking advantage of new suburban developments, most of the city’s population loss in the 1960s was caused by White out-migration.

The new mobility afforded by highways led to new suburban shopping centers, drive-in movie theaters, fast-food restaurants, and other auto-oriented developments, many of which were out of reach for low-income populations without a personal vehicle. During the planning of I-270 in the mid-to-late 1960s, it was thought that this highway would form an outer boundary for urban growth. However, the increased access to land provided by the freeway in combination with other interstates fueled growth beyond the “outer belt.” Areas around and beyond I-270 experienced rapid residential and commercial development following construction of the outer belt.⁷⁴ Newspapers from the time clearly show how freeway development and new suburban development were linked, with new developments marketed based on their access to new highways (see Figure 16 for example). While the new housing opportunities led to large scale suburbanization of the region, these opportunities were not accessible to all.

Figure 16. St. Louis Post-Dispatch, August 2, 1963



⁷³ East-West Gateway Coordinating Council. 1992. “Transportation Redefined: A Plan for the Region’s Future”. <http://www2.ewgateway.org/pdf/files/library/trans/transredefined-1992.pdf>

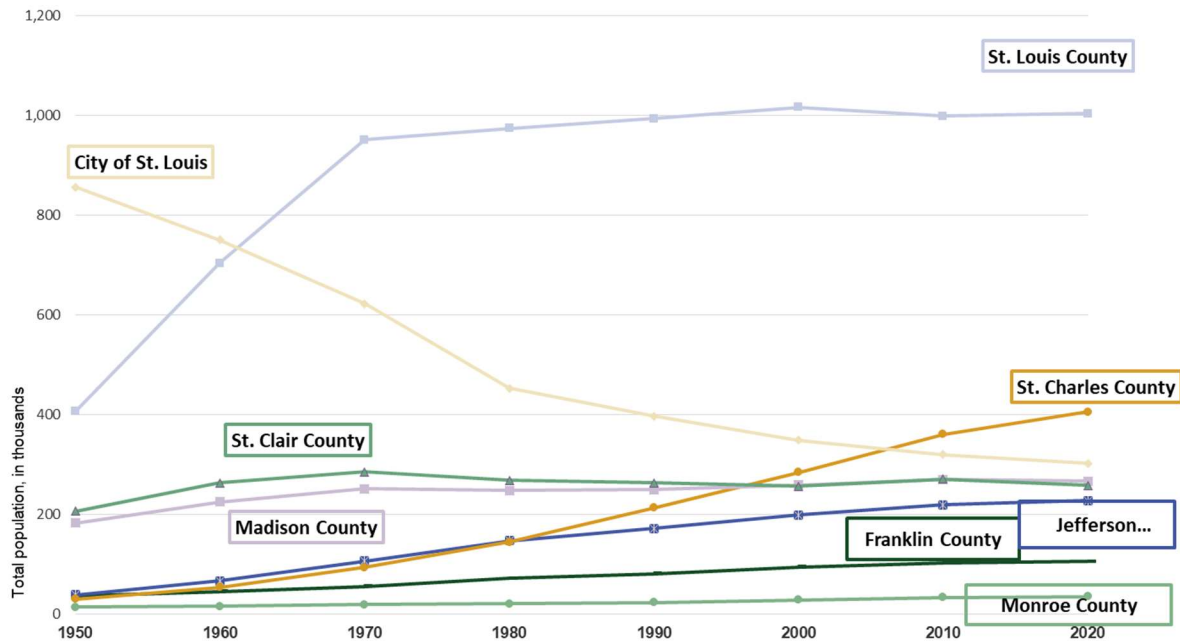
⁷⁴ Ibid.



Population Shifts Away from the Core, Leaving Areas Segregated and in Persistent Poverty

The result was a decline in population in the core and a shift towards the growing suburbs. Since the city of St. Louis high population mark in 1950, at more than 850,000 people, the number of residents has fallen to about 300,000 in 2020. St. Clair County’s population also has slightly declined since 1970. From 1950 to 1970, St. Louis County absorbed most of the population leaving the city, and since 1970, St. Charles County has had the most robust growth, as shown in Figure 17. The remainder of the counties in the region have seen small increases in population over this time period.

Figure 17. Population
Total population in thousands
East-West Gateway Region by County, 1950 to 2020



Source: U.S. Census Bureau, Decennial Censuses

Thus, federal, local, and private sector forces converged to create a racially segregated landscape in the St. Louis region. Figures 18 through 25 show some of the effects of these policies. Figure 18 shows Black and White populations in 1950. It shows that the Black population was strongly concentrated in portions of North City, East St. Louis, Illinois riverfront communities (e.g., Brooklyn and Venice), and isolated enclaves in St. Louis County (e.g., Kinloch). By 1960, as the Mill Creek Valley demolitions were underway, the Black population was pushed north and west between Page and Natural Bridge avenues. Whites had also pushed westward, occupying most of the area now bound by I-270. By 1970, Black residents were the predominant group north of Delmar, except for a few neighborhoods, such as Old North St. Louis. Figure 20 shows the early effects of the Fair Housing Act of 1968. The new federal law opened housing opportunities for Black residents. Many with the means to do so left their overcrowded neighborhoods in North City, with most relocating to North County. White residents continued pushing into West County and began moving to St. Charles County in large numbers. Figures 21 through 25 show the continuation of these trends, with White residents continuing to move further away from downtown in both Missouri and Illinois, while Black residents remain strongly concentrated in North City, North County, and East St. Louis.



Figure 18. Population: Race, East-West Gateway Region, 1950 Census

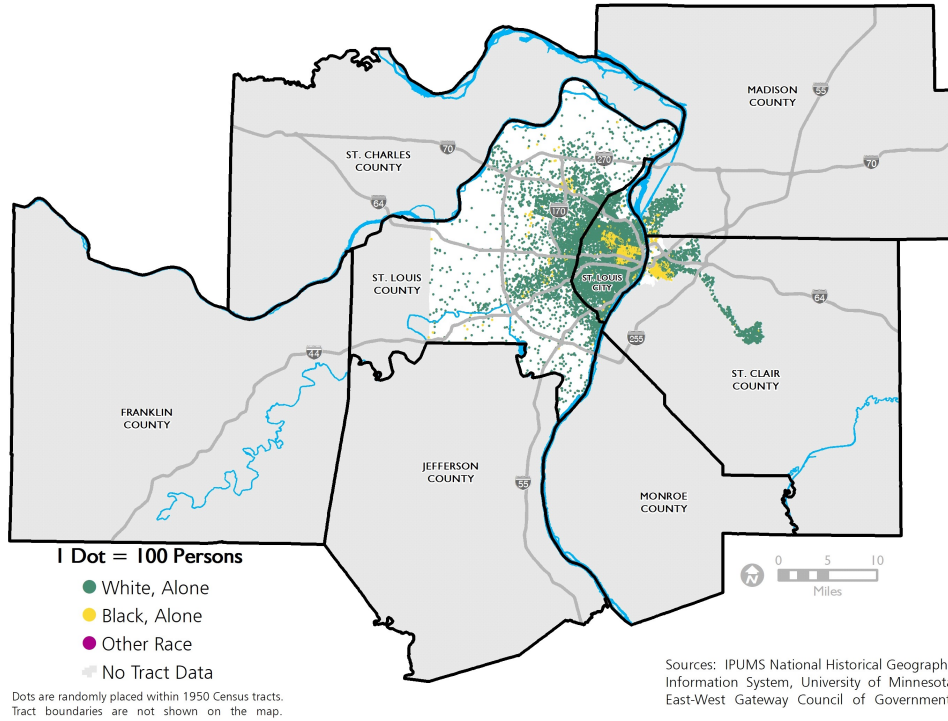


Figure 19. Population: Race, East-West Gateway Region, 1960 Census

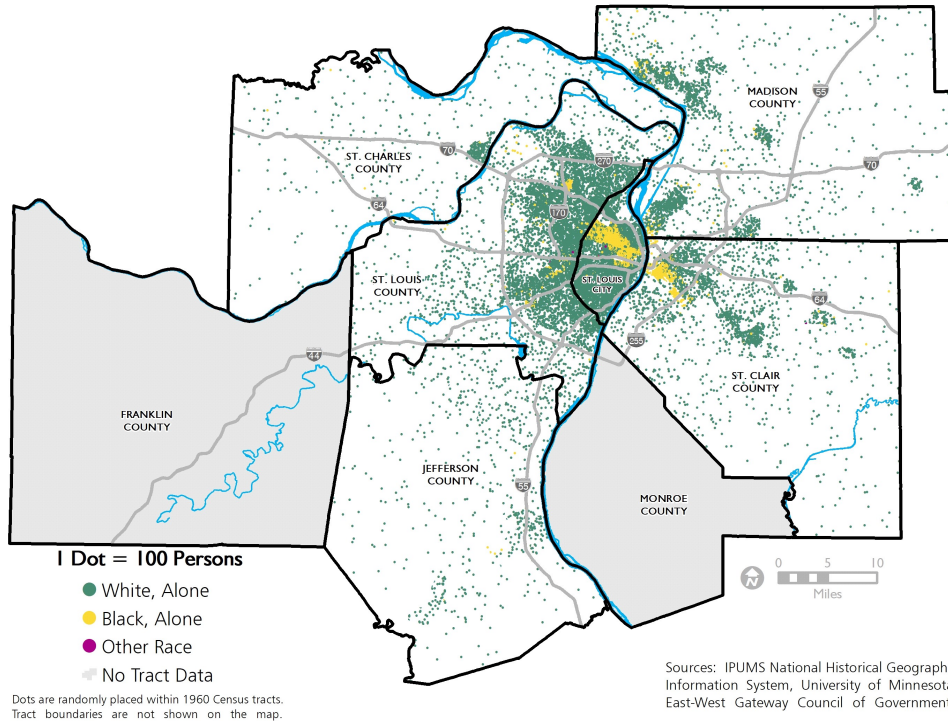




Figure 20. Population: Race, East-West Gateway Region, 1970 Census

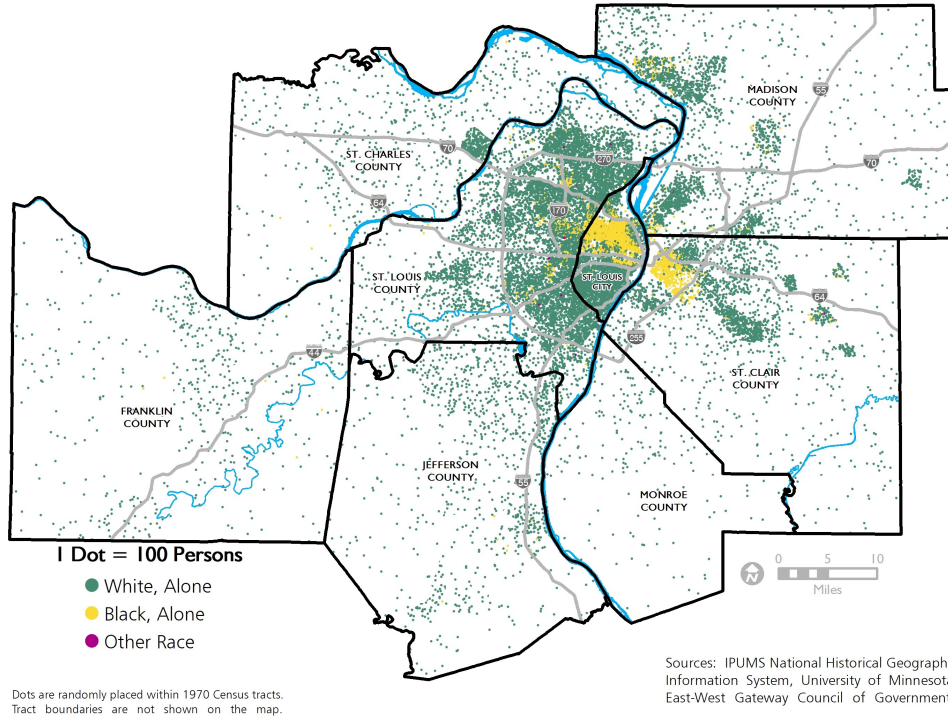


Figure 21. Population: Race, East-West Gateway Region, 1980 Census

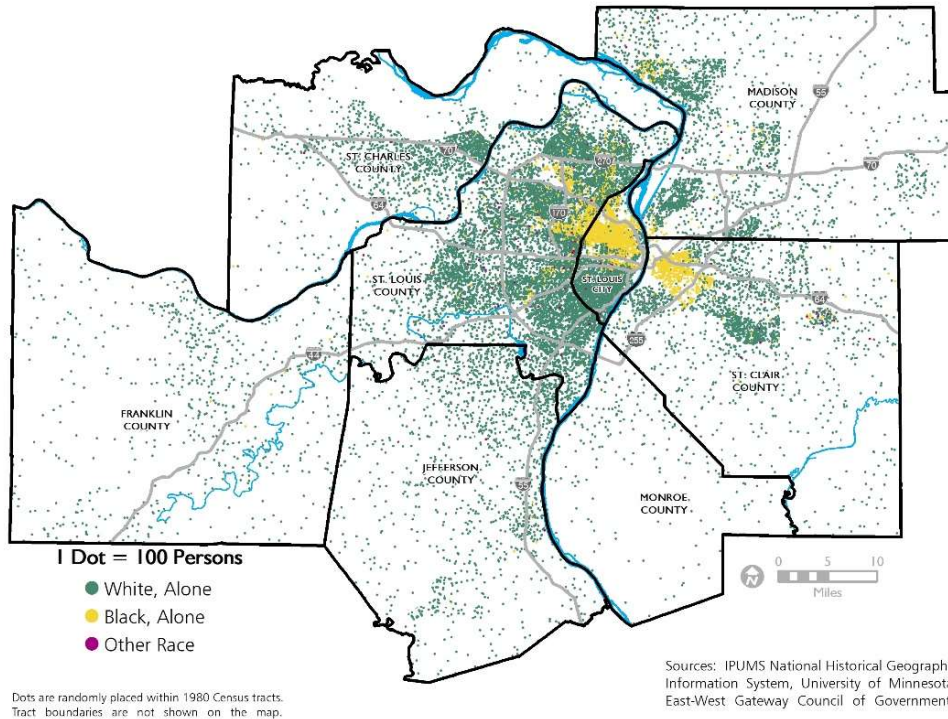




Figure 22. Population: Race, East-West Gateway Region, 1990 Census

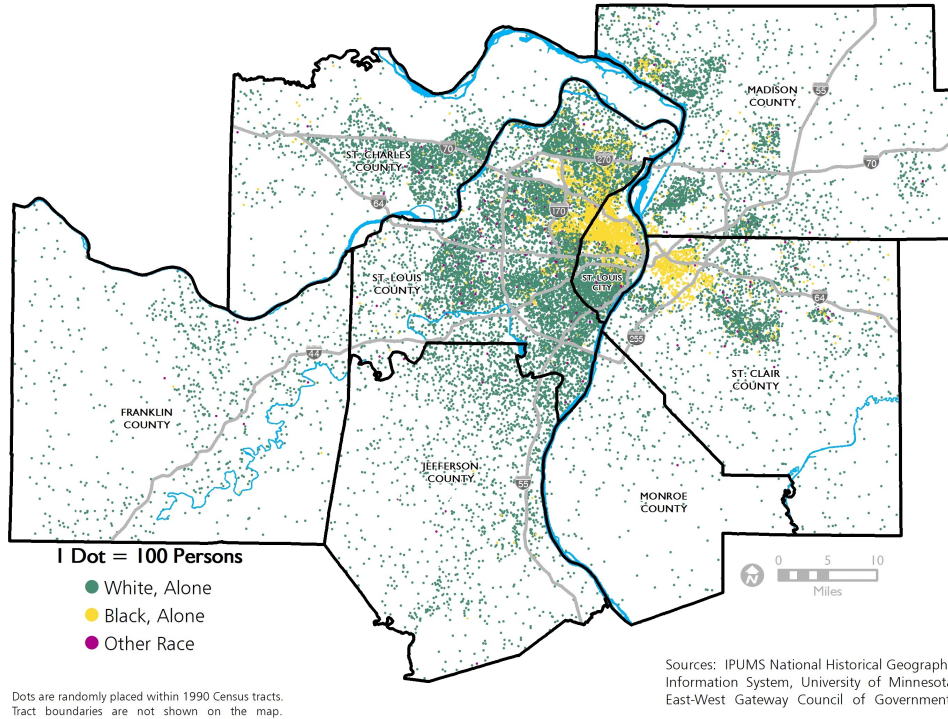


Figure 23. Population: Race, East-West Gateway Region, 2000 Census

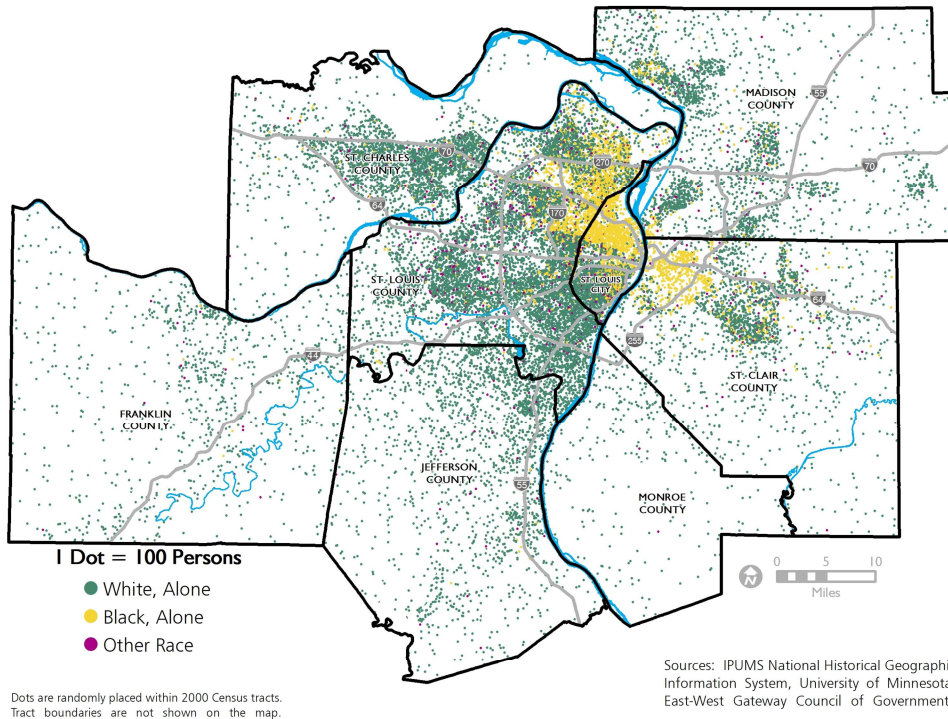
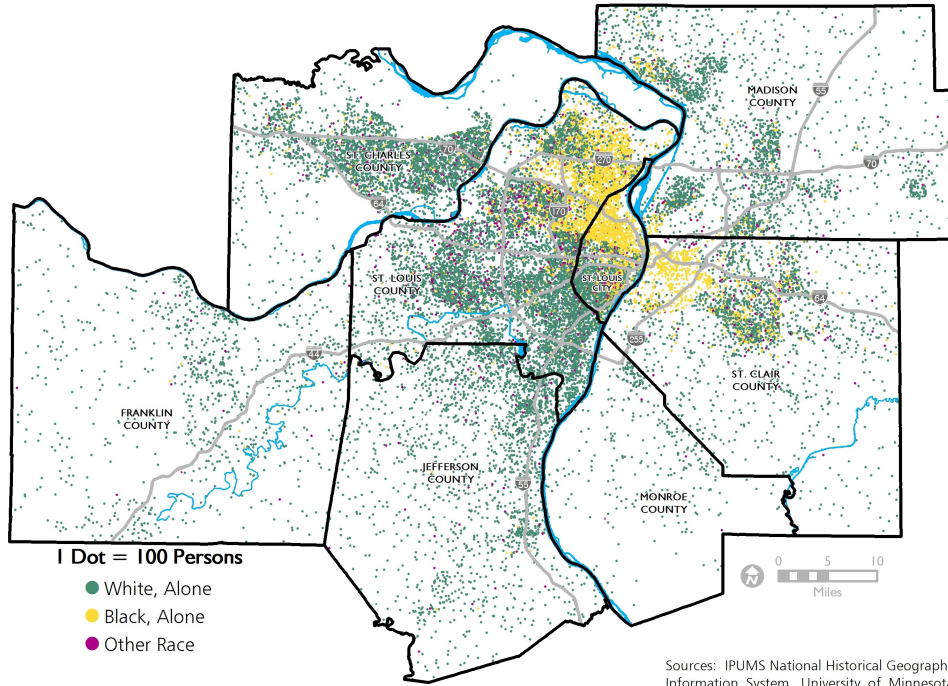


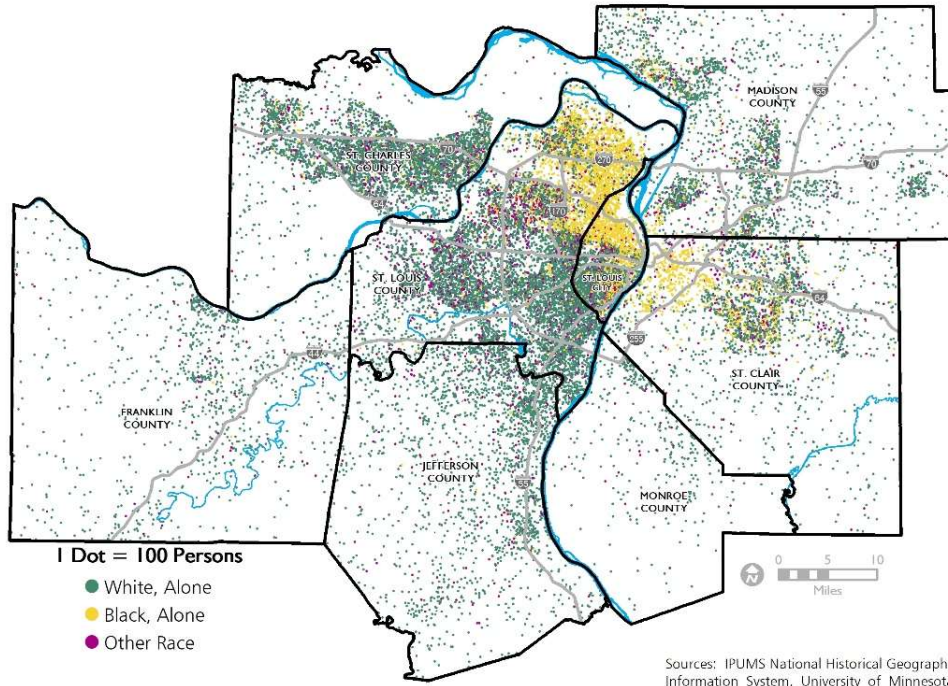


Figure 24. Population: Race, East-West Gateway Region, 2010 Census



Dots are randomly placed within 2010 Census tracts. Tract boundaries are not shown on the map.

Figure 25. Population: Race, East-West Gateway Region, 2020 Census



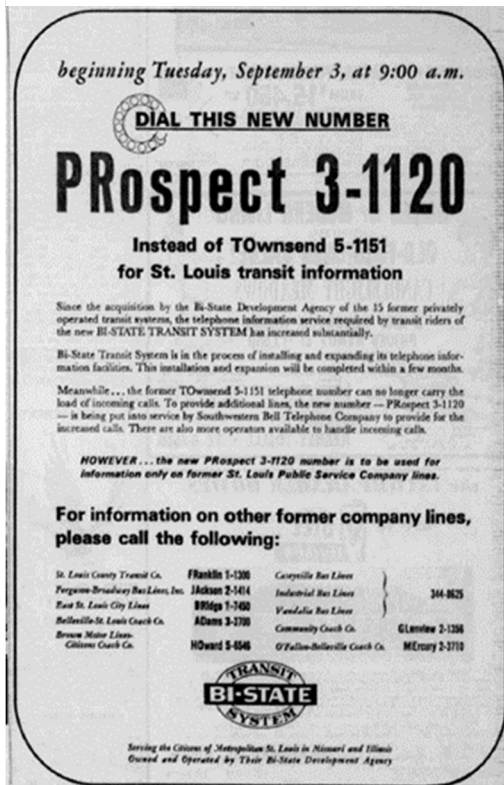
Dots are randomly placed within 2020 Census tracts. Tract boundaries are not shown on the map.



Declines in Public Transit Use and Services

Over the same period, the rise of automobile travel led to declining ridership for transit across the United States. In 1946, streetcars and buses still carried over 340 million trips. By 1957, this figure had been cut in half, and in 1963, transit carried just 87 million trips. Aside from the oil crisis during the 1970s, ridership has not reached this level again.⁷⁵

Figure 26. Advertisement in St. Louis Post-Dispatch regarding Changes to Transit Service September 1, 1963



In response to declining ridership, public transportation service underwent significant changes. At the end of World War II, transit service in the St. Louis region was provided by more than 15 private companies, which operated an elaborate network of streetcars and buses. These operators had a lack of connectivity and transfer options, which was viewed as hindering ridership.⁷⁶ Over time, transit agencies moved away from electric streetcars to motorized buses to provide more flexibility of service. During the early 1960s, a study commissioned by the city of St. Louis and St. Louis County recommended a more unified, regional approach to transit, and in 1963, operations, facilities, and assets of 15 transit providers in St. Louis were taken over by the Bi-State Development Agency (see Figure 26).⁷⁷ In 1963, the newly formed agency bought out the private providers and consolidated services. It terminated the last streetcar in 1966, moving to entirely bus services.

As more households moved to single-family homes on larger lots in suburban areas without the density or street network to support transit, transit ridership continued to decline. This increased the cost-per-passenger, which led the transit agency to seek additional local funding.⁷⁸ The Urban Mass Transportation Act of 1964, for the first time,

authorized federal capital grants for mass transit. As suburbanization accelerated and population density in the core of the region declined, ridership declined as well, leading to financial problems that plagued Bi-State for decades. In 1973, Bi-State announced that it would be forced to shut down bus service without additional financial support. In response, the Missouri legislature authorized local sales taxes to support transit. And, in 1994, an emergency loan and the passage of sales taxes in the city of St. Louis and St. Louis County saved Bi-State from ceasing operations entirely.

⁷⁵ Information on streetcars taken from Mark Tranel. 2004. "The St. Louis Transportation Transformation." Chapter in *St. Louis Metromorphosis: Past Trends and Future Directions*, edited by Brady Baybeck and E. Terrence Jones. Missouri Historical Society Press.

⁷⁶ Metro. "History." <https://www.metrostlouis.org/history/>

⁷⁷ Metro. 2022. "History." <https://www.metrostlouis.org/history/>

⁷⁸ Ibid.



As in many urban areas around the country, suburbs tended to be more affluent and whiter than the central city. A growing highway network connected the new suburbs to an abundance of opportunities. Those who could not afford to move, or were not able to move due to discrimination, often were unable to afford a car and were left with a shrinking public transportation network that did not reach growing areas of employment. As a result, these communities were often left disconnected from jobs, education, and other opportunities.⁷⁹

Decline in Manufacturing

In 1960, the manufacturing sector was the economic foundation of the St. Louis economy. During the Great Migration in the early 20th century, thousands of Black residents came to St. Louis to find jobs in factories.⁸⁰ As manufacturing throughout the United States and in the region declined, many households were affected by the loss of jobs. Second to Detroit, St. Louis was a major manufacturer of automobiles.⁸¹ General Motors, Chrysler, and Ford Motor Company had assembly plants in the St. Louis region.⁸² St. Louis Black middle- and upper-middle-class communities, such as the Ville, prospered because of the plentiful jobs in the manufacturing industry.⁸³

Corresponding with the overall general decline in manufacturing in the United States, many of the slowest growing regions of the country from 1969 to 2019 were those near the top of the list in manufacturing employment in 1940 (such as Buffalo, Cleveland, Pittsburgh, and Detroit). Over the last 50 years, the St. Louis region has been a slow-growth region, with employment growth ranking 44th out of the 50 most populous metropolitan statistical areas (MSAs). This was also a period of rapid suburbanization, associated with post-World War II federal housing and transportation policies, resulting in loss of population in the central core of the region. Since the 1950s, the city of St. Louis population declined by 63 percent, the highest percentage of any major U.S. city.⁸⁴ During the period of the 1960s through the 1970s, close to 70 percent of businesses in East St. Louis left, and East St. Louis lost 55 percent of its residents.⁸⁵ While working class people of all races were affected when manufacturing began to disappear, young Black residents were often particularly disadvantaged as they sought to enter the labor force. Separated by a geographic distance from entry-level jobs, lack of transit services, and lacking social networks to share information about opportunities in suburbs, these communities faced hurdles in transitioning to the new service economy.⁸⁶

⁷⁹ Deborah N. Archer. 2021. "Transportation Policy and the Underdevelopment of Black Communities." https://ilr.law.uiowa.edu/assets/Uploads/E2_Archer_1.pdf

⁸⁰ Elizabeth Brotherton-Bunch. April 3, 2018. "Black Workers Were Also Hurt by Factory Job Loss — Even More Than Their White Counterparts." <https://www.americanmanufacturing.org/blog/black-workers-were-also-hurt-by-factory-job-loss-even-more-than-their-white-counterparts/>

⁸¹ Ibid.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ World Population Review. 2022. "St. Louis, Missouri Population 2022." <https://worldpopulationreview.com/us-cities/st-louis-mo-population>

⁸⁵ Ibid.

⁸⁶ East-West Gateway Council of Governments. 2015. "Where We Stand: The Strategic Assessment of the St. Louis Region 7th Edition." <https://www.ewgateway.org/library-post/where-we-stand-7th-edition/>



FROM THE 1960S ONWARD

Evolving Federal Transportation and Equity Policies

The adverse effects of highways and demolitions resulted in some backlash.^{87,88} Recognizing the negative impacts that highway development and other policies were having on some communities, the period from the 1960s onward moved toward a focus on more inclusive decision-making to account for community and environmental concerns. Congress enacted a series of legislation over time to help mitigate negative impacts caused by highway development by protecting parks, historic districts, and other environmentally sensitive areas, as well as requiring relocation housing for anyone displaced by construction. The 1962 Federal Highway Act mandated greater levels of local input into highway construction. The Act required, as a condition of receiving federal funds, transportation planning that was “cooperative, continuous, and comprehensive.” In response to the 1962 law, metropolitan planning organizations (MPOs) were formed across the country to meet the new conditions for federal transportation aid, and in 1965, the East-West Gateway Coordinating Council was formed.⁸⁹ Later legislation and executive action addressed concerns about persons with disabilities and environmental justice for low-income communities and minority communities.⁹⁰ Some of the notable laws and actions are as follows:

- **Civil Rights Act of 1964:** “Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color or national origin by recipients of federal financial assistance.” The act applies to any agency or organization that receives federal aid, which includes MPOs (such as EWG), state DOTs, local agencies (e.g., counties and municipalities), and transit agencies. Examples of discrimination include denying benefits/services, providing inferior benefits/services, and segregation, along with any other differential treatment based on race, color, or national origin.⁹¹
- **Older Americans Act (1965):** The Older Americans Act was enacted in 1965 with the intention of providing diverse services for older Americans with the greatest social or economic need. The original law was updated and reauthorized several times, most recently in 2020. The reauthorization of 2016 highlighted improvements to transportation for older people, as well as people with disabilities. It requires the Assistant Secretary of Aging to aid states relating to “efficient, person-centered transportation services.”⁹²

⁸⁷ Jeffrey Brinkman and Jeffrey Lin. 2019. “Freeway Revolts! Federal Reserve Bank of Philadelphia, Working Paper 19-29.”

⁸⁸ Deborah N. Archer. 2021. “Transportation Policy and the Underdevelopment of Black Communities.” https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3797364

⁸⁹ East-West Gateway, op. cit.

⁹⁰ Deborah N. Archer. October 2020. “White Men’s Roads Through Black Men’s Homes: Advancing Racial Equity Through Highway Reconstruction.” <https://cdn.vanderbilt.edu/vu-wp0/wp-content/uploads/sites/278/2020/10/19130728/White-Mens-Roads-Through-Black-Mens-Homes-Advancing-Racial-Equity-Through-Highway-Reconstruction.pdf>

⁹¹ Thomas W. Sanchez and Marc Brennan. August 1, 2010. “Transportation and Civil Rights.” [https://www.prrac.org/transportation-and-civil-rights/#:~:text=Title percent20VI percent20of percent20the percent20Civil percent20Rights percent20Act percent20of percent201964 percent20prohibits,\(MPOs\) percent20and percent20transit percent20agencies.](https://www.prrac.org/transportation-and-civil-rights/#:~:text=Title%20VI%20of%20the%20Civil%20Rights%20Act%20of%201964%20prohibits,(MPOs)%20and%20transit%20agencies.)

⁹² Teresa Yao. August 1, 2016. “Key Changes of the Older Americans Act Reauthorization Act of 2016.” https://www.americanbar.org/groups/law_aging/publications/bifocal/vol_37/issue_6_august2016/older-americans-act-reauthorization-2016-overview/



- **Fair Housing Act (1968):** “The 1968 Act expanded on previous acts and prohibited discrimination concerning the sale, rental, and financing of housing based on race, religion, national origin, sex, (and as amended) handicap and family status.”⁹³
- **National Environmental Policy Act (NEPA) (1970):** “NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.” Actions that require use of the NEPA process include decisions on permit applications, adopting federal land management actions, and constructing publicly owned facilities, such as highways.⁹⁴
- **Americans with Disabilities Act (ADA) of 1990:** Requirements under the ADA apply to public and private ground transportation providers. General requirements relate to rider information, assistance equipment and accessible features, adequate time to board, service animals, priority seating and signs, and operator training. Additional requirements relate to architecture, transit facilities, and paratransit. Requirements can vary based on the type of transportation service provided (i.e., fixed- route, paratransit, private entities).⁹⁵
- **Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991:** ISTEA was a watershed in transportation legislation, calling for a more integrated planning process and emphasizing including key stakeholders not traditionally involved in the transportation planning process. ISTEA placed more responsibility on MPOs for planning and allocating funding in their areas by giving funds directly to them, along with requiring MPOs and state DOTs to develop 20-year regional plans.⁹⁶
- **Executive Order (EO) 12898 on Environmental Justice (1994):** This executive order focuses on addressing environmental justice in minority and low-income populations in relation to federal actions. The executive order requires federal agencies to identify and address disproportionately negative impacts on human health or environmental effects on minority and low-income populations caused by their actions, develop a strategy to implement environmental justice, and promote nondiscrimination in federal programs that impact human health and the environment.⁹⁷

More recently, several additional policy actions have been taken to advance equity, including **EO 13166 on Improving Access to Services for Persons with Limited English Proficiency (2000)**, **EO 13985 on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (2021)**, and **EO 14008 on Tackling the Climate Crisis at Home and Abroad**, which includes the Justice40 Initiative, which seeks a goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities. The U.S. Department of Transportation subsequently developed an

⁹³ U.S. Department of Housing and Urban Development. History of Fair Housing.

https://www.hud.gov/program_offices/fair_housing_equal_opp/aboutfheo/history

⁹⁴ U.S. Environmental Protection Agency. N.d. “What is the National Environmental Policy Act?”

<https://www.epa.gov/nepa/what-national-environmental-policy-act>

⁹⁵ ADA National Network. N.d. “The ADA & Accessible Ground Transportation.” <https://adata.org/factsheet/ADA-accessible-transportation>

⁹⁶ FHWA. January 1, 1995. “Guide to Metropolitan Transportation Planning under ISTEA: How the Pieces Fit Together.” <https://rosap.ntl.bts.gov/view/dot/3630>

⁹⁷ U.S. Environmental Protection Agency. February 16, 1994. “Summary of Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.”

<https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice>



Equity Action Plan, which highlights ways in which the agency will expand access to opportunity to all communities while focusing on underserved, overburdened, and disadvantaged communities.

New Transportation Investments

ISTEA was a transportation authorization that led to what has been considered a new era in transportation, placing new emphasis on multimodal transportation and programs. The act presented an overall intermodal approach to highway and transit funding with collaborative planning requirements, giving significant additional powers to MPOs. It crafted new programs focused on congestion mitigation, air quality, bicycle and pedestrian programs, and scenic byways and recreational trails, among others. Subsequent transportation reauthorizations have fostered broader consideration of different types of investments.⁹⁸

During the 1970s and 1980s, St. Louis transportation made major progress with increasing accessible transportation options for the disabled population. At the time, Bi-State became one of the first transit agencies in the country to operate wheelchair-lift equipped buses in their regular service, and in 1980, introduced Call-A-Ride, a demand-response service designed to ensure accessible transportation for passengers with disabilities.⁹⁹

Rapid transit was a topic of interest to regional leaders and very ambitious studies and plans were published in 1955 and 1971.¹⁰⁰ In 1982, East-West Gateway authorized a light rail study, with alignment and preliminary engineering completed by 1988. In 1990, Bi-State began construction of the MetroLink light rail system, and was able to debut the system in 1993, serving one million passengers after just one month of operating.¹⁰¹ On July 31, 1993, MetroLink began its service along 14 miles of track, connecting 16 stations from St. Louis County to St. Clair County. In 1994, MetroLink expanded service to Lambert Airport and added a new East Riverfront station. MetroLink added a second station at Lambert Airport in 1998.¹⁰² Other expansions followed. In 2001, eight new stations, from 5th & Missouri in East St. Louis to Southwestern Illinois College in Belleville, were opened. The line was extended to Shiloh-Scott in 2003. In 2006, the Cross-County MetroLink Extension expanded MetroLink service into mid-St. Louis County, connecting Shrewsbury to Forest Park.

To save costs in the 2000s, Metro implemented a redesign of transit services which expanded MetroBus service and frequency while requiring fewer buses and operator hours.¹⁰³ In 2009, funding challenges forced Metro to temporarily reduce service until the state of Missouri provided a one-time emergency appropriation. Following the restoration of service, Metro developed a 30-year transit plan known as

⁹⁸ FHWA. 2001. "Legacy of a Landmark: ISTEA After 10 Years." [https://highways.dot.gov/public-roads/novemberdecember-2001/legacy-landmark-istea-after-10-years#:~:text=ISTEA percent20also percent20funded percent20a percent20variety percent20of percent20special percent20programs,conducting percent20research percent20and percent20development percent20to percent20resolve percent20highway percent20problems](https://highways.dot.gov/public-roads/novemberdecember-2001/legacy-landmark-istea-after-10-years#:~:text=ISTEA%20also%20funded%20a%20variety%20of%20special%20programs,conducting%20research%20and%20development%20to%20resolve%20highway%20problems).

⁹⁹ Ibid.

¹⁰⁰ Jerry Blair. 2007. "Pursuing an Elusive End: Highway and Transit Planning in St. Louis." Chapter in *St. Louis Plans: The Ideal and the Real St. Louis*, edited by Mark Tranel. Missouri Historical Society Press.

¹⁰¹ Metro. "History." <https://www.metrostlouis.org/history/>

¹⁰² Metro. N.d. "History." [https://www.metrostlouis.org/history/#:~:text=MetroLink percent20expanded percent20service percent20to percent20Lambert,than percent20just percent20rising percent20ridership percent20numbers](https://www.metrostlouis.org/history/#:~:text=MetroLink%20expanded%20service%20to%20Lambert,than%20just%20rising%20ridership%20numbers).

¹⁰³ Ibid.



Moving Transit Forward. In April 2010, St. Louis County passed a tax initiative to provide new funding for Metro, allowing it to restore MetroBus, MetroLink, and Call-A-Ride services to pre-reduction levels.

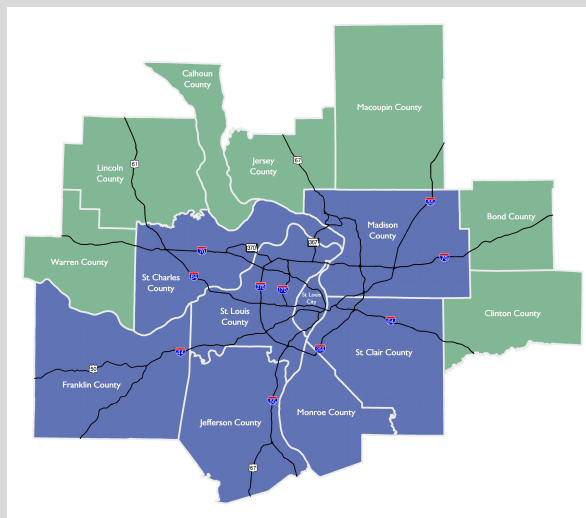
With the passage of the Infrastructure Investment and Jobs Act (IIJA) in 2021, historic levels of new investment are now available to modernize the nation’s roads, bridges, transit, rail, ports, airports, broadband, and other infrastructure. IIJA includes many grants and technical assistance activities designed to support equitable access, including a Reconnecting Communities Pilot Program, which provides grants to remove, retrofit, or mitigate highways or other transportation facilities that create barriers to community connectivity.

IMPLICATIONS AND LASTING IMPACTS OF PAST DECISIONS

While new laws and approaches are designed to avoid discrimination and redress past decisions that adversely affected communities, past decisions and discriminatory practices have lingering effects in the St. Louis region and around the country. Evidence of these lasting impacts in St. Louis, include the lack of diversity and high segregation in the region, the prevalent and persistent disparities between Black and White residents, the Delmar Divide as a stark example of the extreme differences between neighbors in the St. Louis region, the residential departure from the city of St. Louis as exemplified by the high residential vacancy rate, and the spatial mismatch of jobs and housing.

Throughout the report, the following terms are used to refer to the following geographies:

1. The East-West Gateway (EWG) region is the city of St. Louis and the surrounding seven counties: Franklin, Jefferson, St. Charles, and St. Louis counties in Missouri and Madison, Monroe, and St. Clair counties in Illinois. These are shown in blue on the map below.
2. The St. Louis Metropolitan Statistical Area (MSA) is the EWG region plus the eight counties shown in green on the map.
3. Peer Regions: EWG produces the [Where We Stand \(WWS\) publication series](#) in which the St. Louis MSA is ranked among the 50 most populous U.S. regions, referred to as the peer regions. MSAs are used in WWS because they are a geography that is designated by the federal government and is defined based on consistent methodology of population and commuting patterns.





DIVERSITY, SEGREGATION, AND RACIAL DISPARITY

The St. Louis region has become more diverse in recent years, but with the population primarily made up of White and Black residents, the region continues to be less racially diverse than many of its peers. . Among the peer regions, St. Louis is also one of the most segregated for Black and White residents.

As part of its publication series, *Where We Stand (WWS)*, East-West Gateway ranks St. Louis among the 50 most populous regions in the country (referred to as the peer regions) on a range of topics. As described in the text box, these comparisons use the St. Louis 15-county MSA.

Diffusion Score: According to the 2020 Census, 11.4 percent of the U.S. population is of a race or ethnic group other than the three largest groups, which are White (not Hispanic or Latino), Hispanic or Latino, and Black (not Hispanic or Latino). This is referred to as the “diffusion score.” Table 2 ranks the peer regions on the score, which indicates whether the population is concentrated among a few racial groups or is more diverse. A higher score indicates a more diverse population. St. Louis ranks 42nd with a score of 7.3, among the 10 least diverse peer regions. For St. Louis, the three largest groups are White, Black, and multiracial (all not Hispanic or Latino).

Segregation: Over the past few decades, St. Louis has become more integrated but at a slower pace than many of the peer regions. St. Louis remains highly segregated for the two largest population groups, Black and White residents.

According to one measure of segregation, St. Louis is the 6th most Black-White segregated among the peer regions. Table 3 provides the dissimilarity index scores, which ranges from 0 to 100 with a score of 0 meaning the community is completely integrated and a score of 100 meaning the community is completely segregated.

**Table 2.
Diffusion Score**

Percent of population not in the three largest racial/ethnic groups, 2020

1	Las Vegas	17.5
2	New York	16.7
3	Washington, D.C.	16.5
4	Oklahoma City	15.7
5	Seattle	15.6
6	Sacramento	14.9
7	San Francisco	13.7
8	Boston	13.0
9	Dallas	12.3
10	Minneapolis	12.0
11	Houston	11.8
11	Raleigh	11.8
13	Baltimore	11.6
14	Riverside	11.5
14	Austin	11.5
	United States	11.4
16	Atlanta	11.1
16	Portland	11.1
18	Philadelphia	11.0
19	San Diego	10.8
20	Virginia Beach	10.5
20	Phoenix	10.5
20	Chicago	10.5
23	Los Angeles	10.4
24	Columbus	10.2
25	Denver	10.1
26	Orlando	10.0
27	Hartford	9.8
28	Jacksonville	9.6
28	Detroit	9.6
30	Richmond	9.4
31	Kansas City	9.3
31	Providence	9.3
33	Charlotte	8.9
34	Tampa	8.7
34	Buffalo	8.7
36	Indianapolis	8.6
37	Salt Lake City	8.5
38	Milwaukee	8.4
39	Cincinnati	7.8
39	Nashville	7.8
41	Louisville	7.5
42	St. Louis	7.3
43	New Orleans	7.2
44	San Jose	7.1
45	Cleveland	6.9
46	San Antonio	6.4
47	Miami	6.3
48	Memphis	6.0
49	Pittsburgh	5.6
50	Birmingham	5.4

Source: U.S. Census Bureau, Decennial Census

**Table 3.
Racial Segregation**

Black-White segregation scores based on the dissimilarity index, 2016-2020

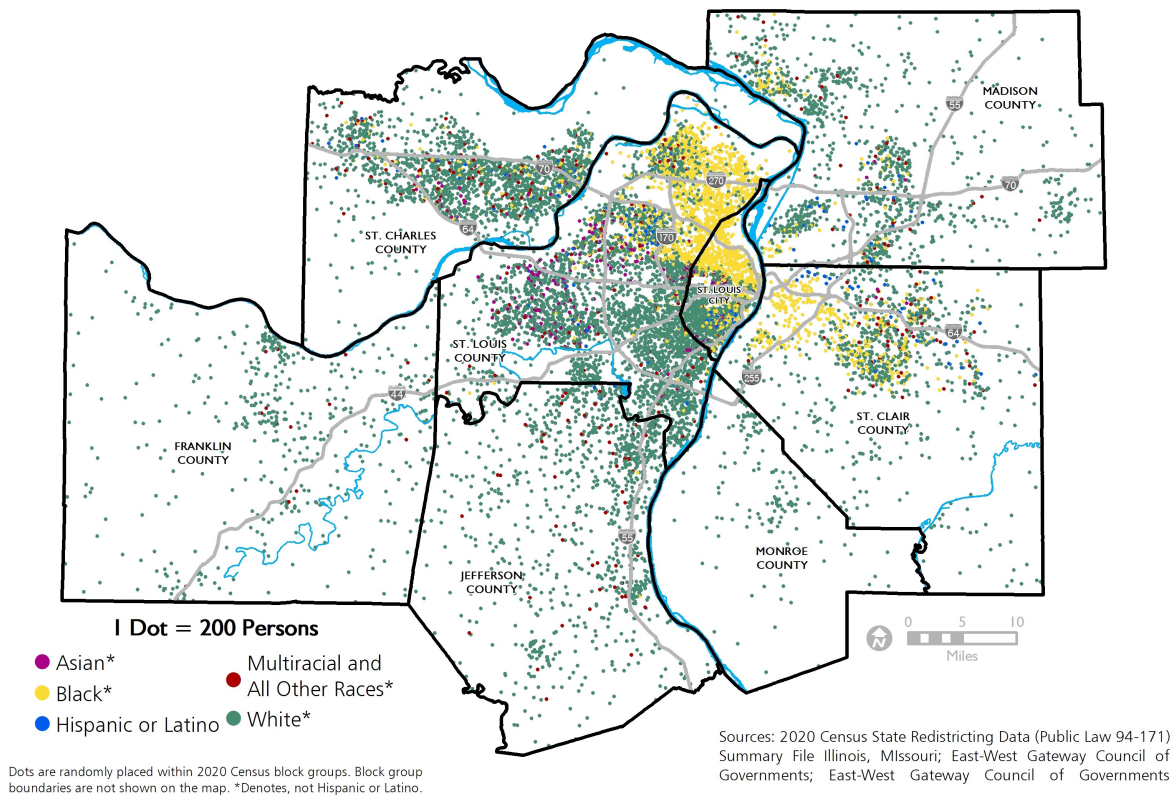
1	Milwaukee	79.3
2	New York	76.0
3	Chicago	74.8
4	Detroit	73.3
5	Cleveland	73.1
6	St. Louis	71.7
7	Buffalo	68.8
8	Cincinnati	67.5
9	Philadelphia	67.0
10	Los Angeles	66.1
	United States	65.9
11	Pittsburgh	65.3
12	Miami	65.1
13	Hartford	65.0
14	Boston	64.9
15	Birmingham	64.1
16	Indianapolis	64.0
17	Baltimore	63.7
18	New Orleans	63.5
19	Columbus	63.2
20	Denver	62.6
21	Memphis	61.3
22	Washington, D.C.	61.1
23	Houston	60.9
24	San Francisco	60.5
25	Atlanta	60.4
26	Kansas City	58.6
27	Louisville	57.7
28	Sacramento	57.7
29	Providence	57.2
30	Minneapolis	56.9
31	Dallas	56.4
32	Salt Lake City	55.5
33	Jacksonville	55.2
34	Tampa	54.9
35	San Diego	54.4
36	Charlotte	53.7
37	Richmond	53.6
38	Nashville	53.4
39	Seattle	53.0
40	Oklahoma City	52.5
41	Orlando	52.4
42	Portland	52.4
43	Austin	51.8
44	San Antonio	51.4
45	Phoenix	51.0
46	Riverside	48.5
47	San Jose	48.4
48	Virginia Beach	47.6
49	Raleigh	44.6
50	Las Vegas	42.7

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (B03002)



The EWG region is largely comprised of White and Black residents and these population groups are concentrated in different areas of the region. Figure 27 displays the population in the EWG region by race based on the 2020 Decennial Census data. Each dot is equal to 200 persons. In 2020, the two largest population groups (White, not Hispanic or Latino and Black, not Hispanic or Latino) made up nearly 90 percent of the regional population. Black residents (yellow dots) are more heavily concentrated in the northern portions of the city of St. Louis and St. Louis as well as in the metro east portion of Illinois.

Figure 27. Population by Race and Ethnicity, East-West Gateway Region, 2020





Racial Disparity: As part of the WWS series, EWG documents prevalent and persistent disparities between Black and White residents. Across metrics in many categories, Black residents in the St. Louis region do not face the same opportunities and face disproportional burdens compared to their White counterparts. The following are a few examples of these disparities. These tables show that gaps exist between Blacks and Whites throughout the country with the gaps in St. Louis being large relative to the peer regions.

As of 2021, as shown on Table 4, Black residents in the St. Louis region were nearly three times (2.61) more likely to be unemployed than White residents, ranking 8th among the peer regions. The unemployment rate for White workers in St. Louis was 3.8 percent compared to 10.5 percent for Black workers.

The gap in education attainment rates is one that has been closing, but as of 2021, Whites in St. Louis were 1.76 times more likely to have a Bachelor’s degree than Black adults, 38.9 percent of White adults compared to 22.5 percent of Black adults. Table 5 shows that this disparity ranks 21st among the peer regions, higher than the country as a whole and more than half of the peer regions.¹⁰⁴

Table 4.

Racial Disparity in Unemployment Rate

Ratio of non-Hispanic black to non-Hispanic white unemployment rate, 2021

1	Milwaukee	4.15
2	Memphis	3.94
3	Cleveland	2.94
4	Chicago	2.93
5	Birmingham	2.77
6	Kansas City	2.64
7	Detroit	2.61
8	St. Louis	2.61
9	Oklahoma City	2.57
10	Virginia Beach	2.55
11	Richmond	2.54
12	Indianapolis	2.50
13	Minneapolis	2.49
14	Washington, D.C.	2.47
15	Buffalo	2.39
16	New Orleans	2.38
17	Houston	2.38
18	Raleigh	2.36
19	Pittsburgh	2.34
20	Louisville	2.30
21	Denver	2.11
	United States	2.10
22	Seattle	2.10
23	Dallas	2.09
24	Baltimore	2.08
25	Philadelphia	2.07
26	Atlanta	2.03
27	Charlotte	2.02
28	Cincinnati	1.95
29	Columbus	1.93
30	Sacramento	1.88
31	San Diego	1.87
32	Las Vegas	1.82
33	Nashville	1.80
34	Tampa	1.79
35	Orlando	1.78
36	Phoenix	1.78
37	Boston	1.77
38	New York	1.76
39	Hartford	1.65
40	Riverside	1.64
41	San Antonio	1.62
42	Miami	1.59
43	Los Angeles	1.53
44	San Francisco	1.51
45	Portland	1.51
46	Austin	1.49
47	Jacksonville	1.37
48	Providence	1.34

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (S0201)

Table 5.

Racial Disparity in Higher Education

Ratio of non-Hispanic black to non-Hispanic white, adults aged 25 and older, with a bachelor’s degree or higher, 2021

1	Milwaukee	2.67
2	Miami	2.12
3	San Francisco	2.12
4	Cleveland	2.05
5	Kansas City	2.04
6	Memphis	2.03
7	New Orleans	2.01
8	Philadelphia	1.95
9	Hartford	1.92
10	New York	1.89
11	Minneapolis	1.88
12	Chicago	1.88
13	Denver	1.87
14	Richmond	1.87
15	Buffalo	1.85
16	Detroit	1.84
17	Columbus	1.83
18	San Diego	1.83
19	Cincinnati	1.78
20	Los Angeles	1.77
21	St. Louis	1.76
22	Seattle	1.75
23	Louisville	1.73
24	Washington, D.C.	1.73
25	Orlando	1.71
26	Boston	1.70
27	Birmingham	1.68
28	Sacramento	1.68
29	Baltimore	1.65
30	Pittsburgh	1.62
31	Raleigh	1.61
32	Indianapolis	1.61
33	Virginia Beach	1.57
	United States	1.57
34	Portland	1.56
35	Providence	1.56
36	Jacksonville	1.54
37	Austin	1.54
38	Dallas	1.51
39	San Antonio	1.48
40	Houston	1.47
41	Las Vegas	1.45
42	Oklahoma City	1.45
43	Nashville	1.42
44	Atlanta	1.36
45	Phoenix	1.36
46	Charlotte	1.33
47	Tampa	1.30
48	Riverside	1.24

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (S0201)

¹⁰⁴ East-West Gateway Council of Governments. 2022. Where We Stand Data Tables. <https://www.ewgateway.org/research-center/where-we-stand/>



The last table (Table 6) here shows an aspect that is particularly relevant to access to opportunities and transportation planning. Black residents are disproportionately represented in areas of concentrated poverty. Among peer regions, St. Louis has the 5th largest gap between Black and White residents in terms of the percent of poor residents living in areas of concentrated poverty.¹⁰⁵ Areas of concentrated poverty are associated with less access to jobs, higher crime, reduced opportunities to build wealth, and poorer health outcomes. A poverty rate of 40 percent or more is one of the criteria used by the U.S. Department of Housing and Urban Development to designate “concentrated areas of poverty.”¹⁰⁶ In the St. Louis MSA, in the 2016-2020 time period, 5.3 percent of low-income residents lived in one of these areas. As shown on Table 6, low-income Black residents in St. Louis are nine times more likely to live in an area of concentrated poverty than White low-income residents.

Table 6.
Racial Disparity in Concentrated Poverty

Ratio of black to non-Hispanic white residents, 2016-2020

1	Denver	53.28
2	Nashville	13.86
3	Miami	12.82
4	New Orleans	10.52
5	St. Louis	9.25
6	Chicago	8.13
7	Jacksonville	7.88
8	Baltimore	7.78
9	Kansas City	6.99
10	Birmingham	6.52
11	Portland	6.31
12	Tampa	6.18
13	Charlotte	6.02
14	Hartford	5.68
15	Houston	5.40
16	Virginia Beach	5.33
17	Richmond	4.35
18	Atlanta	4.29
19	Buffalo	4.24
20	Philadelphia	4.04
21	Phoenix	3.73
22	Louisville	3.72
23	Riverside	3.60
24	Cleveland	3.57
25	Memphis	3.56
26	Indianapolis	3.45
27	Las Vegas	3.44
28	Dallas	3.42
29	Washington, D.C.	3.38
30	Milwaukee	3.34
31	Detroit	3.31
32	Pittsburgh	3.28
33	Oklahoma City	2.99
United States		2.94
34	Los Angeles	2.85
35	Cincinnati	2.77
36	San Antonio	2.74
37	San Jose	2.56
38	Providence	2.25
39	Boston	2.09
40	Sacramento	1.94
41	Columbus	1.82
42	Minneapolis	1.72
43	Orlando	1.55
44	New York	1.30
45	Austin	1.08
46	San Francisco	0.95
47	Raleigh	0.80
48	San Diego	0.61
49	Seattle	0.51
50	Salt Lake City	0.00

Source: U.S. Census Bureau,
American Community Survey
5-Year Estimates
(B17001, B17001B, B17001H)

¹⁰⁵ East-West Gateway Council of Governments. June 2017. “Where We Stand, Addressing Racial Equity for a Sustainable Region.” <https://www.ewgateway.org/wp-content/uploads/2018/01/WWS7EdNo4.pdf>

¹⁰⁶ Freddie Mac. Spotlight on Underserved Markets.

https://mf.freddiemac.com/docs/Affordable_Housing_in_Areas_of_Concentrated_Poverty.pdf



Delmar Divide

Delmar is an east-west boulevard that runs from downtown St. Louis into St. Louis County. Within the city of St. Louis, poverty rates are significantly higher in tracts that are north of Delmar, a phenomenon referred to as “the Delmar Divide” (see Figure 28).

The divide was exacerbated by the displacement of Black communities during urban renewal projects and highway expansion. There are significant differences in income, home value, and education levels in the areas separated by the Delmar Divide. A 2014 study found that a tract immediately north of Delmar was 99 percent Black, with a median home value of \$78,000, median household income of \$22,000, and adult college attainment of only 5 percent. An adjacent tract directly south of Delmar was 70 percent White, with a median home value of \$310,000, median household income of \$47,000, and 67 percent college attainment.¹⁰⁷ Large disparities are also present in education access, health outcomes, access to healthy and nutritious foods, access to employment, and in many cases access to reliable transportation modes.

Figure 28. Satellite imagery showing two census tracts north and south of Delmar Boulevard (from a report produced by Washington University in St. Louis and St. Louis University).



¹⁰⁷ For the Sake of All, Washington University in St. Louis and St. Louis University. May 30, 2014. “A report on the health and well-being of Black residents in St. Louis and why it matters for everyone.” http://mediad.publicbroadcasting.net/p/kwmu/files/FSOA_Final_Report.pdf



Vacancies

As transportation investments and housing policies together encouraged suburbanization and the outward expansion of development, these policies played key roles in population decline in the city of St. Louis, leading to high residential vacancy rates. Currently, about 25,000 of the city's 127,000 parcels are considered vacant properties (see Figure 29).¹⁰⁸ These vacant properties decrease property values for neighboring homes and lots and necessitate significant spending by city government due to maintenance needs. In 2016, the Forestry Division alone spent more than \$5 million on maintenance for vacant lots and buildings. This excludes the additional funding needed by the Building Division each year for board-ups.¹⁰⁹ In addition to the financial costs, vacant properties can be strongly tied to negative health and safety impacts. These properties are often associated with increased crime, dumping, arson, theft, and sanitation problems.¹¹⁰

Figure 29. STL Vacancy Collaborative “Vacant Property Explorer” Map showing vacant buildings and empty lots in the Southeast portion of St. Louis, 2022. <https://www.stlvacancytools.com/>



Spatial Mismatch and Challenges in Accessing Jobs

The term “spatial mismatch” was coined by John Kain in 1965 to describe the growing distance in many metropolitan regions between low-income residents and suitable jobs.¹¹¹ Like many other metropolitan areas, the St. Louis region experienced this phenomenon. In 1969, 42 percent of all jobs in the EWG region were in the city of St. Louis. By 2020, the percentage had shrunk to 17 percent.¹¹² As jobs moved

¹⁰⁸ STL Vacancy Collaborative, Vacant Property Explorer, www.stlvacancytools.com.

¹⁰⁹ St. Louis University School of Law and Tower Grove Neighborhoods Community Development Corporation. 2018. “A Guide to Understanding and Addressing Vacant Property in the City of St. Louis.” https://www.stlvacancy.com/uploads/1/2/7/4/127463804/vacantlandstrategyguidedraftfinalcompressed_spreads_.pdf

¹¹⁰ Ibid

¹¹¹ Kain J (1968) Housing segregation, negro employment, and metropolitan decentralization. *The Quarterly Journal of Economics* 82:175–197

¹¹² Bureau of Economic Analysis. 2022. Regional Data: Table CAINC30.



outward, the proportion of jobs accessible by transit has decreased. In 2021, only 54 percent of the 1.2 million jobs in the region were located within a quarter mile of a transit stop.¹¹³

The effects of the spatial mismatch on low-income populations have long been understood by regional planners. A 1990 EWG employment access study, subtitled “A Study of the Transportation Needs of the Economically Disadvantaged in the St. Louis Region,” offered the following conclusions:

*The primary conclusion of this report is to confirm the existence of a serious mobility problem among the economically disadvantaged population of the St. Louis Region. Lack of mobility potentially affects other groups of the population as well. It has a definite impact on the lives of individuals and on the economy of the region... The second main conclusion of the study is that lack of mobility is one of a number of factors contributing to poverty. Improved personal mobility, although important, is only part of a wider social and economic answer to the problem of poverty.*¹¹⁴

IMPLICATIONS FOR TRANSPORTATION POLICY AND INVESTMENTS TODAY

The historical analysis shows that past transportation policies and investments have contributed to racial and economic inequity in the St. Louis region and in communities throughout the country. The clearance of areas for highways contributed to the loss of affordable housing, and new highways divided communities. Investments in highways, together with housing policies, contributed to segregated housing patterns, White flight from the urban core, and a spatial mismatch between low-income workers and jobs in fast-growing parts of the region. Many Black residents were excluded from the opportunity for wealth creation through homeownership in new communities and were left in communities in decline with a shrinking transit network that did not connect to growing employment opportunities.

Understanding this history is valuable for several reasons. It demonstrates that the disinvestment and challenges faced by some communities was not simply the result of free markets. The region’s urban form was shaped by both federal policies and local planning decisions that generated wealth and mobility options for some communities while others experienced disinvestment, destruction, and lack of access to opportunities. Recognizing the role transportation policies played, transportation planners and decision-makers should learn from the mistakes of the past and consider the consequences of transportation policies and investments on all people in the region. Moreover, transportation policies today can play a role in helping to address the burdens on historically disadvantaged and overburdened communities, and ensure that all people – regardless of race, ethnicity, income, age, and ability – have access to opportunities, which will build a stronger regional economy. New funding for federal investments in transportation creates a unique opportunity to build a transportation system that helps support the needs of all people within the region.

¹¹³ East-West Gateway Council of Governments. 2022. Employment Transit Access. <http://www.onestl.org/indicators/connected/metric/employment-transit-access>

¹¹⁴ East-West Gateway Coordinating Council. 1990. Employment Accessibility Study: A Study of the Transportation Needs of the Economically Disadvantaged in the St. Louis Region.



3. TRANSPORTATION EQUITY: CURRENT NEEDS AND CHALLENGES

Today, people throughout the St. Louis region experience the transportation system in various ways. They have different options available to them, they face diverse challenges, and they are exposed to different environments, elements, and pollutants. This section focuses on six population groups that face barriers related to transportation or are disproportionately affected by the negative effects of past transportation decisions. These groups, referred to as “transportation equity populations (TEP),” deserve specific consideration when it comes to building and maintaining an equitable transportation system. They are people of minority races and ethnicities, those with income below the poverty level, seniors (aged 65 and older), those with limited English proficiency (LEP), persons with disabilities, and no-vehicle households.

This current conditions section provides an overview of where the people of the TEPs live throughout the region, describes characteristics of TEPs, discusses how TEPs interact with the transportation system, and analyzes how the transportation system serves the people in the region with a focus on the TEPs.

DEMOGRAPHIC PROFILE: TRANSPORTATION EQUITY POPULATION GROUPS

People from each of the six transportation equity population (TEPs) groups live in each of the counties of the EWG region, although some of the population groups (minority, poverty, no-vehicle households, and LEP persons) are more highly concentrated in the central part of the region. The senior and disabled populations are more spread throughout the footprint of the region.

In past planning, EWG has considered the needs of the TEPs by identifying areas where there were high concentrations of the TEPs. The agency referred to them as “environmental justice (EJ) areas.” As part of the transportation equity assessment, EWG planners and researchers reviewed data and determined that a better approach is to consider all of the individuals in these groups. The EJ areas only captured a portion of each of the TEP groups, ranging from about 10 percent of seniors to about 50 percent of the minority population.

Table 7 provides the number of people in each population group by county and the percentage of the county population represented by each group. These categories are not mutually exclusive. The following pages provide more detail on each of these population groups and where they live in the EWG region.



Table 7. Transportation Equity Population (TEP) Groups

Number of population group and percent of county population

East-West Gateway Region by County, 2016-2020

	Madison	Monroe	St. Clair	Franklin	Jefferson	St. Charles	St. Louis	City of St. Louis	EWG Region
Total Population	264,403	34,444	261,186	103,629	224,777	398,472	996,179	304,709	2,587,799
Minority Population	40,985	1,288	101,819	5,664	16,504	53,418	350,556	170,840	741,074
Percent of County Population	15.5	3.7	39.0	5.5	7.3	13.4	35.2	56.1	28.6
Poverty Population	32,152	1,061	37,001	9,787	20,106	18,683	90,637	60,598	270,025
Percent of County Population	12.4	3.1	14.4	9.6	9.1	4.8	9.3	20.4	10.4
Disabled Population	38,647	3,356	36,331	14,350	30,608	40,265	115,442	46,061	325,060
Percent of County Population	14.8	9.8	14.2	14.0	13.7	10.2	11.7	15.3	12.6
Senior Population	45,628	6,126	41,097	17,987	33,717	60,571	179,993	41,612	426,731
Percent of County Population	17.3	17.8	15.7	17.4	15.0	15.2	18.1	13.7	16.5
Zero Vehicle Households	5,954	392	9,060	1,504	2,788	4,187	25,430	26,880	76,195
Percent of County Population	5.5	2.9	8.7	3.7	3.3	2.8	6.2	18.7	7.2
Limited English Proficiency (LEP) Population	2,751	246	4,139	483	1,833	5,878	28,409	10,407	54,146
Percent of County Population	1.1	0.8	1.7	0.5	0.9	1.6	3.0	3.6	2.1

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2016-2020 (DP05, B01001, B16004, S1810, DP04, S1701)

MINORITY POPULATIONS

There is a long history of discrimination against minority populations. The historical analysis discusses the past transportation decisions that have had disproportionately negative impacts on minority populations, particularly Black residents. These and other policies have led to the housing segregation that is present today and has resulted in fewer opportunities for minorities. Therefore, it is important to understand how the transportation system performs for people of different race and ethnic groups. Moreover, understanding how transportation investments affect minority populations supports federal requirements to ensure non-discrimination on the basis of race, color, and national origin under Title VI of the Civil Right Act.

The FHWA EJ Order and USDOT EJ Order define a “minority” individual as a person who identifies with one or more of the following categories: (1) Black: a person having origins in any of the black racial groups of Africa; (2) Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race; (3) Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent; (4) American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition; or (5) Native Hawaiian and Other Pacific Islander: a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.”

Source: FHWA Environmental Justice Guide, April 1, 2015



This section and throughout this assessment, the term “minority” is used. This term is used throughout federal policies to refer to all population groups that are not “White (not Hispanic or Latino).” The St. Louis region is not as diverse as many other large metropolitan regions, but minority population groups are increasing in the region. When added together, the “minority” population groups make up the majority of the population in the city of St. Louis and more than one-third of the population in each St. Clair and St. Louis counties.

Race and Ethnicity in Comparison to Peer Regions

Tables 8 through 13 display the percent of the population that is comprised of each race and ethnic group for St. Louis, the United States, and the peer regions according to the 2020 Decennial Census. White (not Hispanic or Latino) is the largest racial group in the United States, St. Louis, and most of the peer regions. St. Louis ranks 7th with one of the largest proportions of White population, at 70.3 percent, compared to 57.8 percent nationally.

The remainder of the tables provide data on all of the minority population groups. The St. Louis MSA has larger proportions of Black residents and multiracial residents than is seen for the country as whole. The region has small proportions of the other minority groups (Hispanic or Latino, Asian, and other races) compared to the national proportions. St. Louis has the 16th largest Black population, making up 17.8 percent of the population. Black (not Hispanic or Latino) is the second largest group for St. Louis and the third largest group nationally. The Hispanic or Latino population is the second largest group for the United States and five of the peer regions. St. Louis has the second smallest Hispanic or Latino population among the peer regions, accounting for 3.8 percent of the MSA population. The Asian population makes up significant percentages of the population in some of the peer regions, but only about 5.9 percent of the U.S. population and 2.9 percent of the St. Louis MSA population. The last group is people who identify with any other race than those already mentioned. These individuals make up less than 1 percent of the population in St. Louis and about 1.4 percent of the national population.

Table 8.
White Population
(Not Hispanic or
Latino)

Percent of total population, 2020		
1	Pittsburgh	82.2
2	Cincinnati	75.9
3	Buffalo	73.0
4	Minneapolis	71.8
5	Providence	71.6
6	Louisville	71.5
7	St. Louis	70.3
8	Columbus	69.1
9	Portland	68.7
10	Kansas City	68.5
11	Nashville	68.3
12	Salt Lake City	68.3
13	Indianapolis	68.2
14	Cleveland	67.4
15	Boston	66.6
16	Milwaukee	64.1
17	Hartford	63.9
18	Detroit	63.7
19	Denver	61.2
20	Tampa	59.5
21	Birmingham	59.4
22	Jacksonville	59.4
23	Oklahoma City	59.3
24	Philadelphia	59.1
25	Raleigh	58.3
26	Seattle	57.9
United States 57.8		
27	Charlotte	57.8
28	Richmond	55.3
29	Phoenix	53.6
30	Baltimore	52.7
31	Virginia Beach	52.3
32	Chicago	50.2
33	Austin	49.6
34	New Orleans	48.3
35	Sacramento	48.3
36	Atlanta	43.7
37	Orlando	43.5
38	New York	43.3
39	San Diego	43.1
40	Dallas	42.8
41	Washington, D.C.	42.3
42	Memphis	41.3
43	Las Vegas	39.4
44	San Francisco	36.2
45	Houston	33.7
46	San Antonio	32.8
47	Riverside	29.4
48	Miami	29.1
49	San Jose	28.8
50	Los Angeles	28.5

Source: U.S. Census Bureau,
Decennial Census

Table 9.
Black Population
(Not Hispanic or
Latino)

Percent of total population, 2020		
1	Memphis	45.5
2	Atlanta	33.2
3	New Orleans	32.9
4	Virginia Beach	29.6
5	Birmingham	29.3
6	Baltimore	28.2
7	Richmond	27.4
8	Washington, D.C.	24.1
9	Detroit	21.7
10	Charlotte	21.5
11	Jacksonville	20.8
12	Philadelphia	19.8
13	Cleveland	19.3
14	Miami	18.8
15	Raleigh	17.9
16	St. Louis	17.8
17	Houston	17.0
18	Chicago	16.1
19	Milwaukee	15.9
20	Dallas	15.7
21	Columbus	15.5
22	New York	14.9
23	Indianapolis	14.8
24	Louisville	14.6
25	Orlando	14.5
26	Nashville	14.2
27	Buffalo	12.5
28	Las Vegas	12.1
United States 12.1		
29	Cincinnati	12.0
30	Kansas City	11.8
31	Tampa	11.2
32	Hartford	10.8
33	Oklahoma City	10.1
34	Minneapolis	9.0
35	Pittsburgh	8.3
36	Riverside	7.0
37	Boston	6.9
38	San Francisco	6.8
39	Sacramento	6.6
40	Austin	6.6
41	San Antonio	6.5
42	Los Angeles	6.1
43	Seattle	6.0
44	Phoenix	5.5
45	Denver	5.3
46	Providence	4.7
47	San Diego	4.4
48	Portland	2.9
49	San Jose	2.1
50	Salt Lake City	1.8

Source: U.S. Census Bureau,
Decennial Census



Table 10.

Hispanic and Latino Population

Percent of total population, 2020

1	San Antonio	54.3
2	Riverside	51.6
3	Miami	45.9
4	Los Angeles	44.6
5	Houston	37.5
6	San Diego	33.9
7	Orlando	32.0
8	Austin	31.9
9	Las Vegas	31.0
10	Phoenix	30.4
11	Dallas	29.3
12	San Jose	26.3
13	New York	25.2
14	Denver	23.3
15	Chicago	23.3
16	San Francisco	22.9
17	Sacramento	22.2
18	Tampa	20.5
19	Salt Lake City	19.2
	United States	18.7
20	Washington, D.C.	17.1
21	Hartford	15.5
22	Oklahoma City	14.9
23	Providence	14.1
24	Portland	13.2
25	Atlanta	12.0
26	Raleigh	12.0
27	Boston	11.8
28	Charlotte	11.7
29	Milwaukee	11.6
30	New Orleans	11.6
31	Seattle	11.2
32	Kansas City	10.5
33	Jacksonville	10.2
34	Philadelphia	10.2
35	Nashville	9.7
36	Indianapolis	8.4
37	Richmond	7.9
38	Baltimore	7.6
39	Virginia Beach	7.5
40	Memphis	7.1
41	Minneapolis	6.6
42	Louisville	6.5
43	Cleveland	6.4
44	Birmingham	5.8
45	Buffalo	5.8
46	Columbus	5.2
47	Detroit	5.0
48	Cincinnati	4.2
49	St. Louis	3.8
50	Pittsburgh	2.2

Source: U.S. Census Bureau, Decennial Census

Table 11.

Asian Population (Not Hispanic or Latino)

Percent of total population, 2020

1	San Jose	37.8
2	San Francisco	27.2
3	Los Angeles	16.5
4	Seattle	15.2
5	Sacramento	14.6
6	New York	12.4
7	San Diego	12.1
8	Washington, D.C.	10.9
9	Las Vegas	10.2
10	Boston	8.6
11	Houston	8.3
12	Dallas	7.9
13	Riverside	7.4
14	Minneapolis	7.2
15	Chicago	7.1
16	Portland	7.0
17	Raleigh	7.0
18	Austin	7.0
19	Philadelphia	6.6
20	Atlanta	6.5
21	Baltimore	6.3
	United States	5.9
22	Hartford	5.5
23	Columbus	4.9
24	Detroit	4.8
25	Orlando	4.6
26	Denver	4.5
27	Richmond	4.3
28	Charlotte	4.3
29	Phoenix	4.2
30	Milwaukee	4.2
31	Buffalo	4.2
32	Jacksonville	4.1
33	Virginia Beach	4.0
34	Salt Lake City	4.0
35	Tampa	3.9
36	Indianapolis	3.8
37	Oklahoma City	3.2
38	Providence	3.1
39	Nashville	3.1
40	Kansas City	3.0
41	Cincinnati	3.0
42	New Orleans	2.9
43	St. Louis	2.9
44	Pittsburgh	2.9
45	San Antonio	2.8
46	Miami	2.6
47	Cleveland	2.6
48	Louisville	2.5
49	Memphis	2.4
50	Birmingham	1.7

Source: U.S. Census Bureau, Decennial Census

Table 12.

Other Races Population (Not Hispanic or Latino)

Percent of population identifying as American Indian, Pacific Islander, or Some Other Race, 2020

1	Oklahoma City	4.0
2	Salt Lake City	2.8
3	Phoenix	2.4
4	Seattle	2.4
5	Sacramento	1.9
6	Las Vegas	1.8
7	Portland	1.7
8	San Francisco	1.6
9	Boston	1.5
10	Providence	1.5
	United States	1.4
11	San Diego	1.3
12	Riverside	1.3
13	New York	1.3
14	Orlando	1.2
15	Denver	1.1
16	San Jose	1.0
17	Minneapolis	1.0
18	Virginia Beach	1.0
19	Kansas City	1.0
20	Buffalo	1.0
21	Los Angeles	1.0
22	Jacksonville	0.9
23	Richmond	0.9
24	Miami	0.9
25	Washington, D.C.	0.9
26	Atlanta	0.9
27	New Orleans	0.8
28	Tampa	0.8
29	Dallas	0.8
30	Charlotte	0.8
31	Raleigh	0.8
32	Austin	0.8
33	San Antonio	0.8
34	Baltimore	0.8
35	Milwaukee	0.7
36	Houston	0.7
37	Hartford	0.7
38	Philadelphia	0.7
39	Nashville	0.7
40	Columbus	0.7
41	Louisville	0.7
42	Indianapolis	0.7
43	Detroit	0.6
44	St. Louis	0.6
45	Cincinnati	0.6
46	Memphis	0.6
47	Cleveland	0.5
48	Birmingham	0.5
49	Pittsburgh	0.5
50	Chicago	0.5

Source: U.S. Census Bureau, Decennial Census

Table 13.

Multiracial Population (Not Hispanic or Latino)

Percent of population identifying as two or more races, 2020

1	Oklahoma City	8.4
2	Seattle	7.3
3	Portland	6.4
4	Sacramento	6.3
5	Virginia Beach	5.5
6	Las Vegas	5.5
7	San Francisco	5.3
8	Kansas City	5.3
9	San Diego	5.1
10	Providence	5.0
11	Washington, D.C.	4.7
12	Columbus	4.6
13	Boston	4.6
14	Jacksonville	4.6
15	St. Louis	4.5
16	Baltimore	4.5
17	Minneapolis	4.5
18	Denver	4.5
19	Louisville	4.4
20	Cincinnati	4.3
21	Orlando	4.3
22	Richmond	4.2
23	Detroit	4.1
	United States	4.1
24	Austin	4.1
25	Indianapolis	4.1
26	Nashville	4.0
27	Tampa	4.0
28	San Jose	4.0
29	Raleigh	4.0
30	Pittsburgh	3.9
31	Salt Lake City	3.9
32	Phoenix	3.9
33	Charlotte	3.8
34	Cleveland	3.8
35	Atlanta	3.8
36	Philadelphia	3.7
37	Hartford	3.6
38	Dallas	3.6
39	Buffalo	3.6
40	Milwaukee	3.5
41	New Orleans	3.5
42	Riverside	3.3
43	Los Angeles	3.3
44	Birmingham	3.2
45	New York	3.1
46	Memphis	3.1
47	Chicago	2.9
48	Houston	2.9
49	San Antonio	2.8
50	Miami	2.8

Source: U.S. Census Bureau, Decennial Census



Change in Racial and Ethnic Composition

The U.S. Census Bureau made some changes to the 2020 Census survey that created the ability to more precisely capture the race and ethnicity of the U.S. population. Therefore, some of the changes seen between the 2020 Census results and earlier decennial censuses are due to the survey revisions. That being said, differences in the results of the race and ethnicity of the population between 2010 and 2020 reveal a few notable changes for the St. Louis region.¹¹⁵

First, there has been an increase in the population that identifies with more than one race. The multiracial population increased in all peer regions between 2010 and 2020, with the multiracial population doubling in most of the peer regions, as shown on Table 14. In St. Louis, the multiracial population nearly tripled, increasing from 44,757 people in 2010 to 128,019 in 2020 and increasing from 1.5 percent of the population in 2010 to 4 percent of the population in 2020. The largest growth was among those who identify as White (not Hispanic or Latino) and American Indian.

Second, the Hispanic or Latino population increased in the country as a whole and all the peer regions, including the St. Louis MSA. The Hispanic or Latino population in the United States increased 23 percent between 2010 and 2020, accounting for about half of the U.S. net population growth. In St. Louis, the Hispanic or Latino population increased 48.1 percent. See Table 15 for change in the Hispanic or Latino population. The largest Hispanic population comes from Mexico, concentrated mostly in the Dutchtown, Gravois Park, and Benton Park West neighborhoods, as well as in communities such as Fairmont City, Collinsville, Overland, and Breckenridge Hills.¹¹⁶

Table 14.
Change in Multiracial (not Hispanic or Latino) Population

Percent change, 2010-2020		
1	Birmingham	249.3
2	Austin	218.3
3	Nashville	199.6
4	Orlando	190.6
5	Charlotte	189.4
6	St. Louis	186.0
7	Raleigh	185.1
8	New Orleans	183.3
9	Cincinnati	179.5
10	Memphis	176.6
11	Dallas	175.9
12	Pittsburgh	174.6
13	Houston	170.3
14	Boston	170.0
15	Jacksonville	169.7
16	Kansas City	169.6
17	Tampa	169.1
18	San Antonio	168.9
19	Louisville	168.8
20	Indianapolis	162.1
21	Miami	153.7
22	Denver	153.4
23	Atlanta	152.1
24	Richmond	149.5
25	Providence	140.7
26	Phoenix	139.7
27	Buffalo	139.6
28	Columbus	139.5
29	Cleveland	138.2
30	Salt Lake City	136.1
31	Portland	127.2
	United States	127.1
32	Philadelphia	127.0
33	Oklahoma City	126.4
34	Baltimore	126.0
35	Detroit	124.2
36	Hartford	123.7
37	Minneapolis	120.2
38	Milwaukee	114.8
39	Chicago	114.5
40	Virginia Beach	109.4
41	New York	106.5
42	Washington, D.C.	104.6
43	Las Vegas	100.7
44	Seattle	93.9
45	Sacramento	78.9
46	San Diego	76.1
47	Riverside	67.6
48	Los Angeles	64.1
49	San Francisco	60.9
50	San Jose	47.1

Source: U.S. Census Bureau, Decennial Census

Table 15.
Change in Hispanic or Latino Population

Percent change, 2010-2020		
1	Nashville	78.2
2	Pittsburgh	76.6
3	Jacksonville	76.4
4	Baltimore	74.4
5	Cincinnati	72.2
6	Louisville	71.3
7	Richmond	70.2
8	Columbus	66.0
9	New Orleans	59.4
10	Orlando	58.9
11	Indianapolis	58.1
12	Charlotte	53.5
13	Oklahoma City	49.6
14	Virginia Beach	49.5
15	Raleigh	48.1
15	St. Louis	48.1
17	Seattle	45.6
18	Buffalo	45.3
19	Memphis	45.2
20	Providence	44.7
21	Tampa	44.2
22	Boston	41.5
23	Washington, D.C.	41.2
24	Kansas City	38.3
25	Portland	37.3
25	Birmingham	37.3
27	Cleveland	36.4
28	Minneapolis	36.2
29	Philadelphia	35.9
30	Austin	35.2
31	Atlanta	33.3
32	Salt Lake City	32.3
33	Detroit	30.9
34	Dallas	27.6
35	Houston	27.3
36	Hartford	24.3
37	Milwaukee	23.9
38	Las Vegas	23.3
	United States	23.0
39	Sacramento	22.9
40	Miami	21.7
41	Denver	21.1
42	San Antonio	20.0
43	Phoenix	19.2
44	Riverside	18.9
45	New York	17.1
46	San Francisco	15.7
47	Chicago	14.4
48	San Diego	12.9
49	Los Angeles	3.3
50	San Jose	3.2

Source: U.S. Census Bureau, Decennial Census

¹¹⁵ For a more detailed discussion of the population changes and racial composition of St. Louis and the peer regions, see the Where We Stand Update 10 and accompanying white paper at www.ewgateway.org/www.

¹¹⁶ Ibid.



Third, about 21,998 Asians moved into the region between 2010 and 2020, growing the Asian community by 36.9 percent, particularly in St. Louis and St. Charles counties.¹¹⁷ The largest Asian ethnic groups include Vietnamese, Chinese, and Asian Indians.

Location of Minority Populations

White (not Hispanic or Latino) is the largest group in each of the counties of the region except the city of St. Louis. Black (not Hispanic or Latino) is the largest group in the city of St. Louis and is the second largest group in St. Louis, St. Clair, St. Charles, and Madison counties. The second largest group in Monroe County is the Hispanic or Latino population and in Franklin and Jefferson counties it is the multiracial (not Hispanic or Latino) population.¹¹⁸ Table 16 displays the number of people in each racial and ethnic group in the region as well as the percentage of the population of each county.¹¹⁹

Table 16. Race and Ethnicity of Population								
Percent of county and regional population								
East-West Gateway Region by County, 2016-2020								
County	Minority Population Groups					Minority Population	White (not Hispanic or Latino)	
	Black (not Hispanic or Latino)	Hispanic or Latino	Multiracial (not Hispanic or Latino)	Asian (not Hispanic or Latino)	Other (not Hispanic or Latino)			
Madison	8.5	3.4	2.4	1.0	0.2	15.5	84.5	
Monroe	0.3	1.6	0.6	1.1	0.2	3.7	96.3	
St. Clair	29.7	4.2	3.1	1.4	0.5	39.0	61.0	
Franklin	0.7	1.8	2.1	0.5	0.4	5.5	94.5	
Jefferson	0.9	2.0	3.4	0.8	0.3	7.3	92.7	
St. Charles	4.5	3.4	2.7	2.6	0.3	13.4	86.6	
St. Louis	24.2	3.0	3.1	4.4	0.5	35.2	64.8	
City of St. Louis	45.4	4.1	2.5	3.4	0.6	56.1	43.9	
EWG Region	500,165	82,195	73,873	73,796	11,045	741,074	1,846,725	

Source: U.S. Census Bureau, American Community Survey 5-Year, 2016-2020 (DP05)

¹¹⁷ Eric Schmid. January 3, 2022. "Educational opportunities help fuel Asian population growth in the St. Louis region." <https://news.stlpublicradio.org/culture-history/2022-01-03/educational-opportunities-help-fuel-asian-population-growth-in-the-st-louis-region>

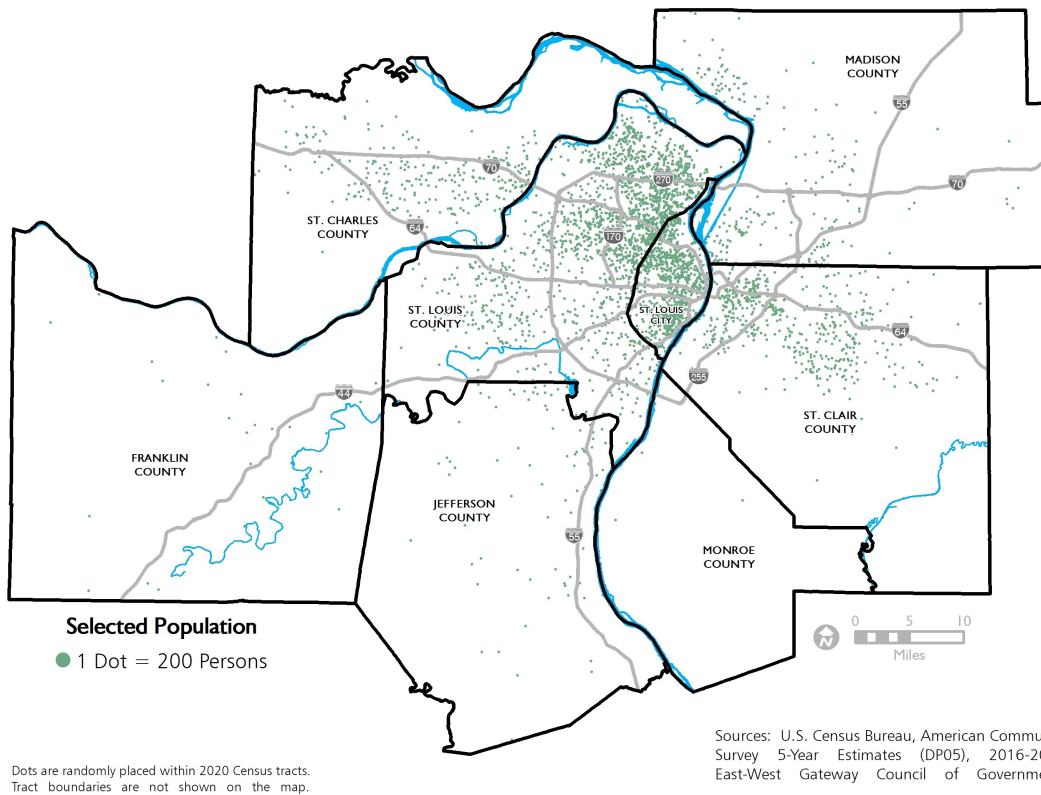
¹¹⁸ Note, this table uses 5-year estimates from the American Community Survey 2016-2020 while the Where We Stand tables use 2020 Decennial Census data.

¹¹⁹ For a more detailed discussion of the population changes and racial composition of St. Louis and the peer regions, see the Where We Stand Update 10 and accompanying white paper at www.ewgateway.org/www.



Figure 30 shows the location of residence of the minority population groups in the EWG region. Each dot (randomly placed within the census tract) represents 200 people. This includes people of many different races, ethnicities, and origins. There are people of racial and ethnic minorities in each of the counties of the EWG region, but these population groups are more highly concentrated in the city of St. Louis and St. Louis County. In the city, the area north of Delmar Boulevard is about 94 percent Black, while the southern part is about 26 percent Black.¹²⁰ East St. Louis is about 96.6 percent Black.¹²¹ About 7.2 percent of the regional minority population lives in St. Charles County, although there are no census tracts in the county that are over 50 percent minority.

Figure 30. Minority Population, East-West Gateway Region, 2020



¹²⁰ World Population Review. 2022. "St. Louis, Missouri Population 2022." <https://worldpopulationreview.com/us-cities/st-louis-mo-population>

¹²¹ United States Census Bureau. 2021. <https://www.census.gov/quickfacts/fact/table/eaststlouiscityillinois/LND110210>



POVERTY POPULATION

People who live with incomes below the poverty level are included in the analysis because the cost of transportation can be substantial and a barrier for people without the means to afford it. In addition to those who live below the poverty level, this section also provides some information on those who have incomes below 200 percent of the poverty level because people living with incomes at these levels also likely face challenges in meeting their transportation needs.

Poverty and Low-Income Populations in the St. Louis Region

The Census Bureau determines poverty status based on family size and composition.¹²² For example, for a four-person family with two children, an income of less than \$27,479 was considered poverty in 2021; an income of \$16,379 or less is considered poverty level for a two-person family with a head of the household aged 65 and older with no children.

Table 17 shows that 10.6 percent of the population of the St. Louis MSA lived in a household that received less income than the federal poverty level in 2021. This is lower than the national average of 12.8 percent. The federal poverty level is based on a ratio of food expenses to non-food expenses that was accurate in the 1960s but has changed dramatically over the last 50 years. As a result, it has long been recognized that the official poverty threshold is out of date. Organizations and government agencies have responded by generating different ways of measuring whether households earn enough income to meet basic needs.

Table 17.

Poverty Rate

Individuals living in poverty as a percent of total population, 2021

1	New Orleans	18.4
2	Memphis	16.9
3	Las Vegas	15.1
4	Oklahoma City	14.5
5	Birmingham	14.3
6	Houston	14.1
7	Buffalo	13.5
8	San Antonio	13.4
9	Detroit	13.4
10	Miami	13.3
11	Los Angeles	13.1
12	Tampa	13.0
13	Cleveland	13.0
14	New York	12.9
15	Orlando	12.9
	United States	12.8
16	Milwaukee	12.4
17	Riverside	12.3
18	Philadelphia	12.3
19	Columbus	12.2
20	Jacksonville	12.2
21	Cincinnati	12.1
22	Louisville	12.1
23	Sacramento	11.8
24	Providence	11.6
25	Atlanta	11.6
26	Chicago	11.5
27	Pittsburgh	11.2
28	Phoenix	11.1
29	Dallas	11.0
30	Virginia Beach	10.7
31	Charlotte	10.7
32	Baltimore	10.7
33	St. Louis	10.6
34	Nashville	10.6
35	San Diego	10.6
36	Indianapolis	10.6
37	Richmond	10.5
38	Austin	10.3
39	Hartford	10.1
40	Raleigh	10.1
41	Portland	10.0
42	Kansas City	9.7
43	Boston	9.3
44	San Francisco	9.0
45	Washington, D.C.	8.7
46	Seattle	8.6
47	Denver	8.4
48	Salt Lake City	8.2
49	Minneapolis	8.0
50	San Jose	6.9

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B17001)

Table 18.

Low-Income Population

Population with income at 200% of poverty level or below as a percent of total population, 2021

1	Memphis	37.6
2	New Orleans	35.0
3	Las Vegas	33.7
4	Oklahoma City	33.0
5	Miami	32.8
6	San Antonio	32.0
7	Houston	31.4
8	Orlando	31.0
9	Birmingham	30.9
10	Riverside	29.8
11	Los Angeles	29.4
12	Tampa	28.9
	United States	28.6
13	Detroit	28.6
14	Buffalo	28.5
15	Jacksonville	28.2
16	Cleveland	28.1
17	Louisville	28.1
18	Dallas	27.1
19	Milwaukee	26.9
20	Phoenix	26.5
21	Columbus	26.4
22	Charlotte	26.1
23	Atlanta	26.0
24	New York	26.0
25	Chicago	25.6
26	Providence	25.5
27	Indianapolis	25.2
28	Cincinnati	25.1
29	Nashville	25.1
30	Sacramento	25.0
31	Virginia Beach	24.8
32	Philadelphia	24.6
33	Pittsburgh	24.3
34	St. Louis	24.0
35	Richmond	23.9
36	San Diego	23.8
37	Kansas City	23.8
38	Austin	22.9
39	Raleigh	22.6
40	Salt Lake City	22.4
41	Portland	22.3
42	Hartford	22.0
43	Baltimore	21.9
44	Denver	19.3
45	Minneapolis	19.3
46	Boston	19.1
47	San Francisco	18.8
48	Seattle	18.1
49	Washington, D.C.	17.7
50	San Jose	15.3

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B17002)

¹²² U.S. Census Bureau, Poverty Thresholds by Size of Family and Number of Children, accessed October 2022 at <http://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>



One commonly used method is using 200 percent of the federal poverty level as a threshold for “low-income” population. For a family of four in 2021, that would have been \$52,958. Based on this definition, approximately 24 percent of the regional population was in a low-income household in 2021, as shown in Table 18.

Locations of Persons in Poverty

Table 19 shows the number of people by county who lived below the poverty level and below 200 percent of the poverty level in 2021. The city of St. Louis had the highest share of its population below the poverty level (20.4 percent) and with low-income (40.6 percent). However, many counties with a relatively low share of population in poverty had thousands of residents living below the poverty level, and tens of thousands of low-income residents.

People with these low incomes live throughout the region in urban, suburban, and rural areas. Figure 31 maps the locations of persons in poverty throughout the St. Louis region.

Table 19. Poverty and Low-Income Population

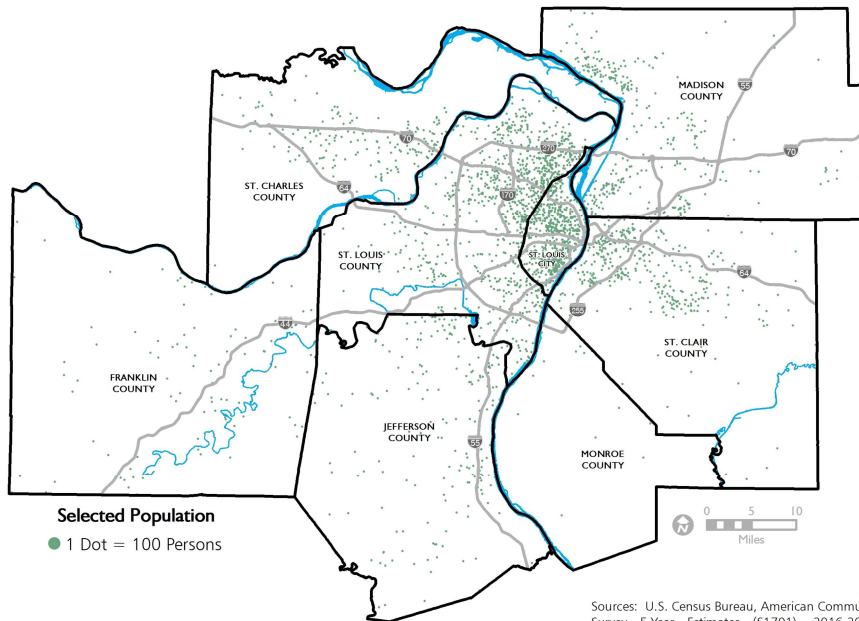
East-West Gateway Region by County, 2021

County	Below the Poverty Level		Below 200% of Poverty Level	
	Number	Percent	Number	Percent
Madison	28,842	11.2	65,103	25.2
Monroe	1,061	3.1	3,615	10.6
St. Clair	30,778	12.3	67,721	27.1
Franklin	9,596	9.2	25,808	24.8
Jefferson	18,487	8.2	55,685	24.7
St. Charles	19,678	4.9	49,062	12.1
St. Louis	101,140	10.3	225,158	23.0
City of St. Louis	58,394	20.4	116,070	40.6
EWG Region	270,025	10.7	625,733	24.7

Note: For the East-West Gateway region and Monroe County, 2020 5-year ACS data was used due to a small sample size for Monroe County.

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B17002)

Figure 31. Poverty Population, East-West Gateway Region, 2020



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

Sources: U.S. Census Bureau, American Community Survey 5-Year Estimates (S1701), 2016-2020; East-West Gateway Council of Governments



SENIORS

Seniors are included in the equity analysis because as people age, they are more likely to have mobility impairments, such as difficulty walking or the inability to drive. Since some areas do not have public transportation, seniors may become more dependent on others, such as family members, to drive them. Seniors with limited income are also of concern.

Seniors in the St. Louis Region

In 2021, 17.6 percent of the St. Louis MSA population was aged 65 years or older. This is the 8th highest percentage among the peer regions, as shown in Table 20. The senior population has increased in size and as a proportion of the population. Just in the last 11 years, the percentage has increased 4.2 points from 13.4 percent (2010). Over the next 25 years, the number of St. Louis residents aged 65 or older is projected to increase by 40 percent, an increase of about 290,000 people. According to East-West Gateway projections, by 2045 one out of every four people in the region will be aged 65 or older.

“People want to live in places where they know others, where they have a social network. Transitions and changes are difficult for everyone, but particularly for older adults. So, it’s very disruptive when they have to move out of a neighborhood, in many ways.”

Anneliese S., Stakeholder Interviewee

Table 20.
Seniors

Population aged 65 and older as a percent of total population, 2021

1	Pittsburgh	20.8
2	Tampa	20.2
3	Cleveland	19.4
4	Buffalo	19.1
5	Miami	19.0
6	Hartford	18.2
7	Providence	18.0
8	St. Louis	17.6
9	Detroit	17.3
10	New Orleans	17.3
United States		16.8
11	Louisville	16.8
12	Philadelphia	16.8
13	Jacksonville	16.8
14	Birmingham	16.7
15	New York	16.7
16	San Francisco	16.7
17	Richmond	16.6
18	Boston	16.5
19	Milwaukee	16.5
20	Baltimore	16.3
21	Phoenix	16.3
22	Sacramento	16.2
23	Cincinnati	15.9
24	Portland	15.9
25	Kansas City	15.7
26	Chicago	15.6
27	Orlando	15.5
28	Virginia Beach	15.5
29	Las Vegas	15.4
30	Minneapolis	15.0
31	Memphis	14.9
32	Los Angeles	14.9
33	San Diego	14.9
34	Oklahoma City	14.7
35	San Jose	14.4
36	Indianapolis	14.3
37	Charlotte	14.3
38	Nashville	14.1
39	Seattle	14.0
40	Washington, D.C.	14.0
41	Columbus	13.9
42	Denver	13.8
43	Riverside	13.6
44	San Antonio	13.6
45	Atlanta	13.1
46	Raleigh	12.9
47	Houston	12.1
48	Dallas	11.9
49	Austin	11.7
50	Salt Lake City	11.5

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B01001)



About one-third (32.3 percent) of the non-institutionalized senior population in the St. Louis MSA had a disability in 2021.¹²³ This is about average among the peer regions, as shown in Table 21. Among seniors in the St. Louis MSA, the most common disability was ambulatory, affecting 20.9 percent (96,871 seniors) of seniors. This was followed by an independent living disability (13.5 percent of seniors, 62,754), hearing (12.8 percent, 59,239 seniors), cognitive (7.1 percent, 32,758 seniors), self-care (6.9 percent, 31,792 seniors), and vision (5.8 percent, 27,078 seniors).¹²⁴

About 9 percent of seniors in the St. Louis MSA were living below the poverty line in 2021, an increase from 8.2 percent in 2010. The rate in 2021 was lower than in many of the peer regions, ranking 32nd, as shown in Table 22.

Location of Senior Population

Senior populations are located throughout the St. Louis region, as seen in Table 23 and on Figure 32. Table 23 shows the total number of seniors by county and the number of seniors who live in poverty in the St. Louis region by county. There are a total of 480,267 seniors in the St. Louis MSA, most of whom live in the East-West Gateway region. Most seniors live in the central portion of the region with 38 percent of the senior MSA population in St. Louis County and nearly 10 percent in each St. Clair County and the city of St. Louis. There are more than 167,000 senior residents living in the outer counties of St. Charles, Madison, Franklin, and Jefferson, and the senior population has grown more in these outer counties with increases from 2010 to 2021 of 65.9 percent, 27.4 percent, 41 percent, and 51.1 percent, respectively. This is compared to increases between 24.7 percent and 29 percent for the three inner county-level jurisdictions.

Table 21.

Seniors with Disabilities

Percent of adults aged 65 and older, 2021

1	Oklahoma City	38.1
2	San Antonio	37.5
3	Birmingham	36.0
4	New Orleans	35.9
5	Louisville	35.8
6	Riverside	34.1
7	Cincinnati	33.7
8	Las Vegas	33.6
9	Cleveland	33.1
10	Virginia Beach	33.0
11	Houston	32.9
12	Indianapolis	32.8
13	Tampa	32.7
14	Detroit	32.7
	United States	32.6
15	Kansas City	32.5
16	St. Louis	32.3
17	Los Angeles	32.1
18	Columbus	32.0
19	Austin	31.8
20	Seattle	31.8
21	Richmond	31.6
22	Atlanta	31.6
23	Raleigh	31.6
24	Portland	31.5
25	Sacramento	31.4
26	Memphis	31.4
27	Buffalo	31.2
28	Dallas	31.1
29	Nashville	31.1
30	Phoenix	31.1
31	Pittsburgh	31.0
32	Providence	30.9
33	San Jose	30.8
34	Charlotte	30.8
35	Miami	30.8
36	Philadelphia	30.7
37	Jacksonville	30.6
38	New York	30.5
39	Orlando	30.5
40	San Diego	30.4
41	San Francisco	30.2
42	Baltimore	30.2
43	Chicago	29.9
44	Denver	29.6
45	Boston	29.3
46	Salt Lake City	28.3
47	Hartford	28.0
48	Washington, D.C.	27.2
49	Milwaukee	27.1
50	Minneapolis	26.9

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B18101)

Table 22.

Seniors in Poverty

Percent of adults aged 65 and older, 2021

1	Miami	16.0
2	Memphis	13.7
3	New Orleans	12.9
4	Los Angeles	12.9
5	New York	12.5
6	Houston	11.5
7	Tampa	11.3
8	Las Vegas	10.8
9	Riverside	10.7
10	Boston	10.7
11	Birmingham	10.6
12	Providence	10.6
13	Philadelphia	10.4
14	Chicago	10.3
	United States	10.3
15	Detroit	10.2
16	Cleveland	10.2
17	San Francisco	10.0
18	Baltimore	10.0
19	San Antonio	9.9
20	Buffalo	9.9
21	Austin	9.7
22	Sacramento	9.7
23	Orlando	9.7
24	Milwaukee	9.7
25	Pittsburgh	9.6
26	San Diego	9.5
27	San Jose	9.4
28	Oklahoma City	9.3
29	Jacksonville	9.2
30	Dallas	9.1
31	Portland	9.1
32	St. Louis	9.0
33	Raleigh	9.0
34	Virginia Beach	9.0
35	Phoenix	9.0
36	Charlotte	8.8
37	Atlanta	8.8
38	Hartford	8.7
39	Louisville	8.7
40	Salt Lake City	8.6
41	Indianapolis	8.4
42	Cincinnati	8.3
43	Seattle	8.3
44	Nashville	8.1
45	Kansas City	8.0
46	Minneapolis	7.9
47	Denver	7.7
48	Richmond	7.6
49	Washington, D.C.	7.6
50	Columbus	7.3

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B17001)

¹²³ Non-institutional population excludes people living in an institutional setting, such as nursing homes, prisons, jails, mental health hospitals, and juvenile correctional facilities.

¹²⁴ U.S. Census Bureau, American Community Survey 1-Year Estimates (S1810).



Among the counties in the St. Louis region, the city of St. Louis had the largest proportion of seniors in poverty, 16.8 percent or 7,194 seniors in 2021. St. Louis County, the most populous county in the region, had the largest absolute number of seniors in poverty within the region, 14,953 seniors. St. Charles County had the smallest proportion of seniors in poverty, 4.9 percent, and Franklin County had the fewest absolute number of seniors in poverty, 1,600 seniors.

Table 23. Senior Population and Seniors in Poverty

Adults aged 65 and older in poverty

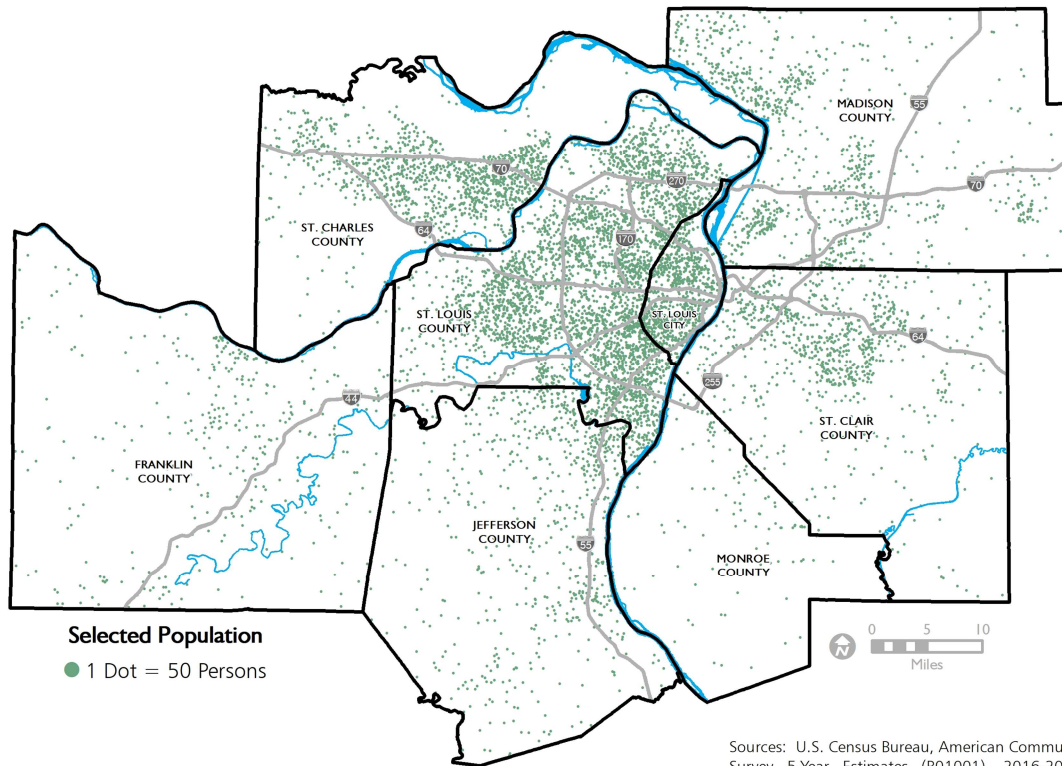
St. Louis Region by County, 2010 and 2021

County	Total Seniors		Seniors in Poverty		Percent of Seniors in Poverty		Absolute Change	Percent Change	Percentage Point Change
	2010	2021	2010	2021	2010	2021	2010-2021	2010-2021	2010-2021
Madison	36,764	46,837	1,899	4,647	5.2	9.9	2,748	144.7	4.7
St. Clair	32,805	42,326	3,353	4,366	10.2	10.3	1,013	30.2	0.1
Franklin	13,705	19,320	1,096	1,600	8.0	8.3	504	46.0	0.3
Jefferson	23,680	35,787	2,280	2,787	9.6	7.8	507	22.2	-1.8
St. Charles	39,634	65,758	1,919	3,200	4.8	4.9	1,281	66.8	0.1
St. Louis	141,844	182,506	10,318	14,953	7.3	8.2	4,635	44.9	0.9
City of St. Louis	34,276	42,736	6,473	7,194	18.9	16.8	721	11.1	-2.1
EWG Region (except Monroe)	322,708	435,270	27,338	38,747	8.5	8.9	11,409	41.7	0.4
St. Louis MSA	360,050	480,267	29,435	43,232	8.2	9.0	13,797	46.9	0.8

Note: Monroe County is excluded the data is unavailable due to a small sample size.

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B17001)

Figure 32. Senior Population, East-West Gateway Region, 2020



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

Sources: U.S. Census Bureau, American Community Survey 5-Year Estimates (B01001), 2016-2020; East-West Gateway Council of Governments



PERSONS WITH DISABILITIES

People with disabilities are included in the analysis because they have specific needs, including being more likely to be transit dependent. It is important to consider the needs of people with disabilities who live throughout the region, particularly those who are low-income. The type of disability is also important to consider.

Population with a Disability in the St. Louis Region

The U.S Census Bureau records data on six categories of disabilities: ambulatory, independent living, hearing, cognitive, self-care, and vision. Table 24 provides the number of people with each of the six categories of disabilities by county for the EWG region. The most common disability in the region is ambulatory (relating to walking) difficulty, which affects nearly 170,000 residents in the region. The largest number of people with this disability live in St. Louis County. There are also a number of people in each county with an ambulatory disability and each other type of disability.

“My family has a history of Parkinson’s and there’s gonna come a day when I am still relatively young, but won’t be able to drive. Being able to live somewhere with transit and get to somewhere with transit that are walkable and safe when I get there, and not disconnected and disparate is really important.”

George K., Missouri Resident

Table 24. Disability of Disabled Population
Number of disabled people by disability

East-West Gateway Region by County, 2016-2020

County	Total Disabled Population	Ambulatory Difficulty	Cognitive Difficulty	Independent Living Difficulty	Hearing Difficulty	Self-Care Difficulty	Vision Difficulty
Madison	38,647	20,753	14,561	14,096	11,310	7,425	6,244
Monroe	3,356	1,699	999	1,006	1,383	471	362
St. Clair	36,331	19,807	12,590	12,023	9,746	7,793	6,750
Franklin	14,350	7,333	5,256	4,679	4,626	2,765	1,987
Jefferson	30,608	15,247	11,541	10,274	8,534	5,055	4,248
St. Charles	40,265	18,633	14,029	12,603	12,606	6,481	6,151
St. Louis	115,442	60,316	42,161	42,230	29,066	23,818	19,608
City of St. Louis	46,061	26,100	18,730	16,677	9,068	9,309	10,237
EWG Region	325,060	169,888	119,867	113,588	86,339	63,117	55,587

Source: U.S. Census Bureau, American Community Survey 5-Year, 2016-2020 (S1810)



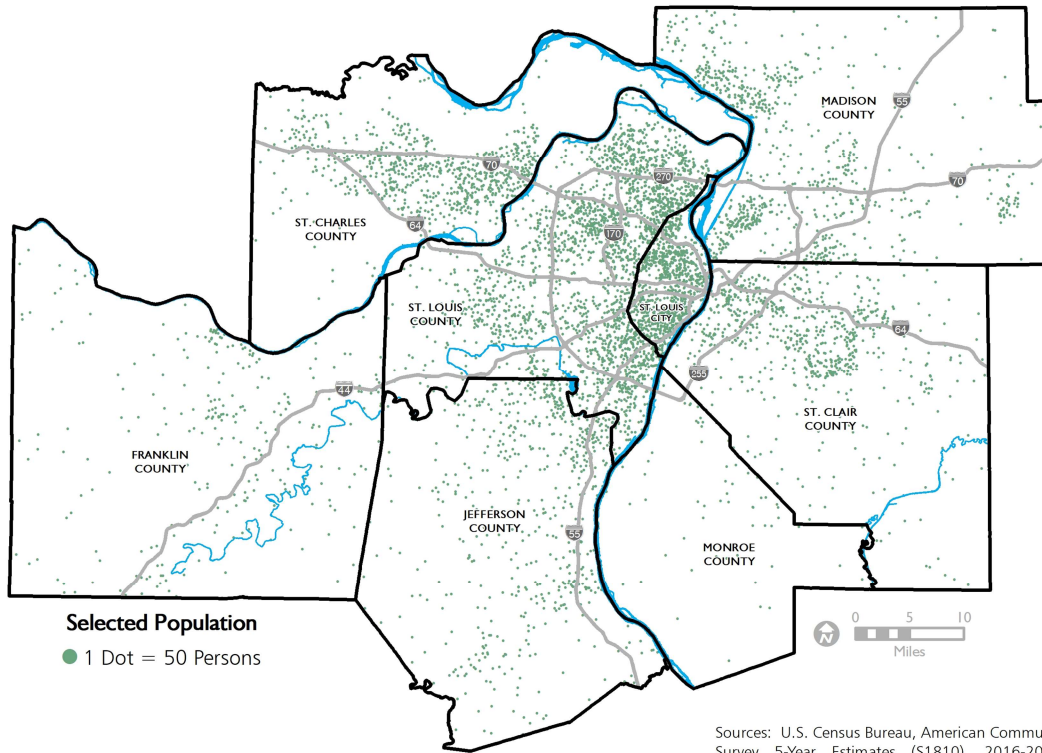
Locations of Persons with a Disability

People with disabilities live throughout the region and are not highly concentrated in particular areas. As shown on Table 24 and Figure 33, there are people with all disability types in each of the counties of the region.

“I have trouble using fixed route [services] and trying to cross streets to get to the bus stop as a blind person with hearing loss. My guide dog can't stand in the sun for long when temps are in the 90s and there is high humidity.”

- Anonymous Survey Taker

Figure 33. Persons with a Disability, East-West Gateway Region, 2020



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

Sources: U.S. Census Bureau, American Community Survey 5-Year Estimates (S1810), 2016-2020; East-West Gateway Council of Governments



LIMITED ENGLISH PROFICIENCY (LEP) POPULATIONS

People with limited English proficiency are included in the equity analysis because a limited understanding of the English language can limit a person’s transportation options. It is important to consider the needs of the LEP population throughout the region.

LEP Population in the St. Louis Region

Among the peer regions, the St. Louis MSA has the second smallest proportion of the population that is LEP. Almost all households in the MSA have one or more member over age 14 that speaks English very well (see Table 25).¹²⁵ Yet, there are 10,906 households in the MSA without a member who speaks English very well. Business and community leaders have recognized a need to attract more immigrants to St. Louis in order to increase the size of the population and the workforce. Several regional initiatives are working toward this end.¹²⁶ Addressing the needs of the LEP population will provide important support for these endeavors.

In the most recent [LEP Plan](#), based on the U.S. Census Bureau 2016-2019 American Community Survey 5-Year Estimated, EWG found that 2.3 percent of the regional was LEP. This included people who indicated on the Census survey that they speak English “less than very well.” In the EWG region, more than half (58 percent) of the LEP population speaks one of three language groups. The most common language spoken by the LEP population is Spanish, which accounts for 30.6 percent of the LEP population. The next most common are in the Russian, Polish, or other Slavic language groups, representing 13 percent of LEP persons. The third most common is speakers of Mandarin or Cantonese Chinese languages, making up 12 percent of the LEP population. These three groups are the only ones that account for more than 10 percent of the LEP population. Yet, they still make up a small percentage of the EWG region population with LEP Spanish speakers accounting for 0.7 percent of the regional population.¹²⁷

Location of LEP Populations

Table 26 and Figure 34 show that there are LEP residents in each county of the region. Most of the LEP population lives in St. Louis County, the city of St. Louis, and St. Charles County.

Table 25.
Limited English Proficiency

Percent of all households, 2021	
1	Miami 14.7
2	Los Angeles 10.8
3	San Jose 10.1
4	New York 9.7
5	Houston 9.0
6	San Francisco 8.4
7	Riverside 6.7
8	Orlando 6.5
9	Boston 6.3
10	Las Vegas 6.1
11	Dallas 6.0
12	Providence 5.7
13	San Diego 5.6
14	Chicago 5.6
15	Tampa 5.1
16	Washington, D.C. 5.0
17	Seattle 4.9
18	Hartford 4.8
19	San Antonio 4.8
20	Sacramento 4.7
21	Austin 4.5
United States 4.2	
22	Philadelphia 3.9
23	Salt Lake City 3.5
24	Phoenix 3.5
25	Atlanta 3.4
26	Charlotte 3.1
27	Denver 3.1
28	Nashville 2.8
29	Portland 2.7
30	New Orleans 2.6
31	Minneapolis 2.6
32	Jacksonville 2.5
33	Detroit 2.5
34	Raleigh 2.4
35	Louisville 2.4
36	Columbus 2.4
37	Cleveland 2.2
38	Oklahoma City 2.2
39	Indianapolis 2.2
40	Milwaukee 2.2
41	Baltimore 2.2
42	Buffalo 2.0
43	Richmond 1.9
44	Kansas City 1.7
45	Memphis 1.6
46	Virginia Beach 1.4
47	Birmingham 1.3
48	Cincinnati 1.3
49	St. Louis 1.0
50	Pittsburgh 0.8

Source: U.S. Census Bureau,
American Community Survey
1-Year Estimates (B16002)

¹²⁵ The U.S. Census Bureau asks respondents to the American Community Survey who speak a language other than English at home to assess their English skills in the following categories: very well, well, not well, and not at all.

¹²⁶ St. Louis Mosaic Project, accessed November 2022 at stlmosaicproject.org/about-us.html

¹²⁷ LEP Plan, East-West Gateway Council of Governments, 2021, accessed at <https://www.ewgateway.org/about-us/what-we-do/title-vi/>



Table 26. Limited English Proficiency (LEP) Persons and Households

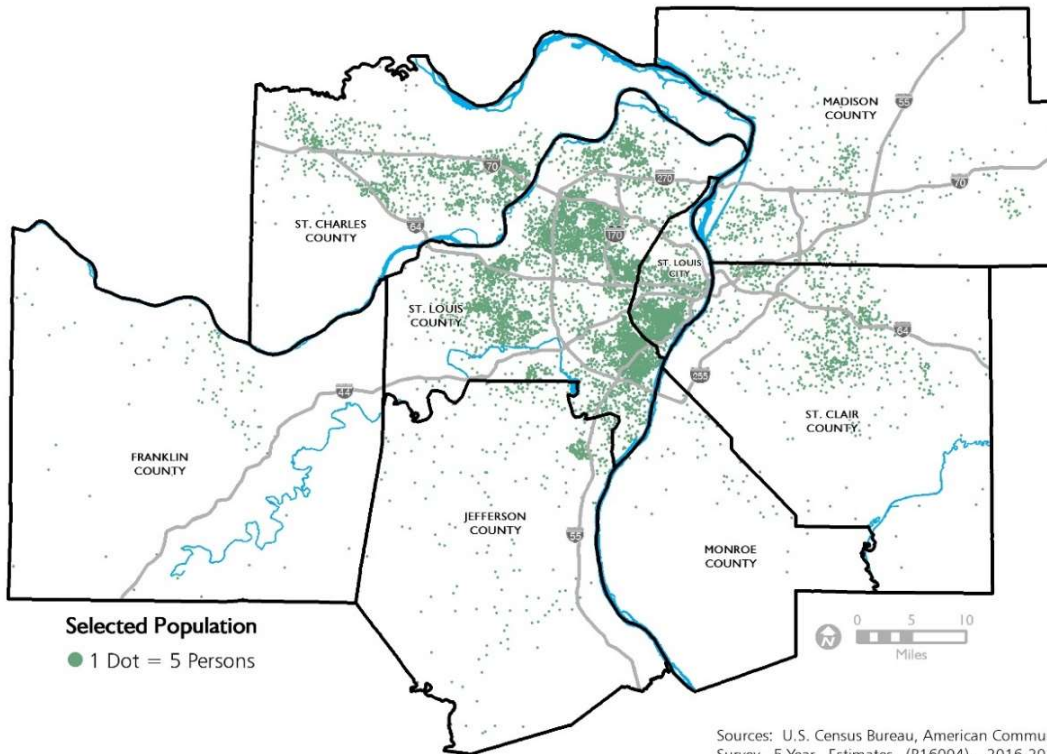
Persons over age 5 and households with no one over 14 years of age who report speaking English less than "very well"

East-West Gateway Region by County, 2016-2020

County	Total Population over Age 5	LEP Persons over Age 5		Total Households	LEP Households	
		Number	Percent		Number	Percent
Madison	249,287	2,751	1.1	108,429	449	0.4
Monroe	32,487	246	0.8	13,576	53	0.4
St. Clair	244,694	4,139	1.7	104,631	733	0.7
Franklin	97,483	483	0.5	41,127	43	0.1
Jefferson	211,690	1,833	0.9	84,978	336	0.4
St. Charles	375,044	5,878	1.6	149,472	838	0.6
St. Louis	937,629	28,409	3.0	409,658	6,737	1.6
City of St. Louis	285,659	10,407	3.6	143,566	3,358	2.3
EWG Region	2,433,973	54,146	2.2	1,055,437	12,547	1.2

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (B16004, C16002)

Figure 34. Limited English Proficiency Population, East-West Gateway Region, 2020



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

Sources: U.S. Census Bureau, American Community Survey 5-Year Estimates (B16004), 2016-2020; East-West Gateway Council of Governments



NO-VEHICLE HOUSEHOLDS

No-vehicle households are examined in this equity analysis since not having a vehicle places limitations on mobility and access to jobs and other opportunities compared to those with a vehicle in the St. Louis region.

No-Vehicle Households in the St. Louis Region

Compared to the peer regions, St. Louis was about average for no-vehicle households, ranking 23rd with 6.5 percent of households not possessing a vehicle, slightly lower than the average for the United States (8 percent). Table 27 shows the percentage of households without a vehicle in 2021 for the peer regions and the United States. Many regions with the largest shares of no-vehicle households are also MSAs with extensive transit systems and with greater population density relative to the other peer regions.

“To buy a car requires credit. New arrivals don’t have credit to buy a car. So there’s a lot of challenges here.”

— Mohamad A., Missouri Resident

Table 28. No-Vehicle Households			
Percent of households without access to a vehicle			
East-West Gateway Region by County 2010, 2015, and 2021			
County	2010	2015	2021
Madison	5.7	6.7	4.7
Monroe	2.8	4.0	2.9
St. Clair	7.8	9.4	6.4
Franklin	5.5	4.7	5.5
Jefferson	4.3	3.9	3.7
St. Charles	2.9	2.9	2.8
St. Louis	6.5	6.5	6.0
City of St. Louis	21.6	19.7	17.7
St. Louis MSA	7.7	7.6	6.5

Notes: For Monroe County, data are from the 5-year ACS for 2006-2010, 2011-2015, and 2016-2020 due to small sample sizes.

Source: U.S. Census Bureau, American Community Survey 1-Year (DP04); U.S. Census Bureau, American Community Survey 5-Year (DP04)

Table 27.

No-Vehicle Households

Households without access to a vehicle as a percent of all households, 2021

1	New York	29.8
2	Philadelphia	12.4
3	Boston	12.3
4	Chicago	11.5
5	San Francisco	11.3
6	Buffalo	11.1
7	Washington, D.C.	10.3
8	New Orleans	9.4
9	Baltimore	9.2
10	Cleveland	9.2
11	Providence	9.0
12	Pittsburgh	8.8
13	Milwaukee	8.7
14	Hartford	8.6
	United States	8.0
15	Seattle	7.8
16	Miami	7.8
17	Los Angeles	7.6
18	Las Vegas	7.5
19	Portland	7.4
20	Louisville	7.3
21	Detroit	7.2
22	Minneapolis	6.7
23	St. Louis	6.5
24	Virginia Beach	6.5
25	Cincinnati	6.5
26	Memphis	6.4
27	Richmond	6.3
28	Tampa	6.0
29	Houston	5.8
30	Denver	5.8
31	Sacramento	5.6
32	Columbus	5.5
33	San Diego	5.5
34	Oklahoma City	5.2
35	San Jose	5.2
36	San Antonio	5.2
37	Kansas City	5.1
38	Jacksonville	5.0
39	Raleigh	5.0
40	Atlanta	4.8
41	Indianapolis	4.7
42	Orlando	4.7
43	Salt Lake City	4.7
44	Birmingham	4.7
45	Charlotte	4.7
46	Phoenix	4.7
47	Dallas	4.5
48	Riverside	4.4
49	Austin	4.1
50	Nashville	4.0

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B25045)



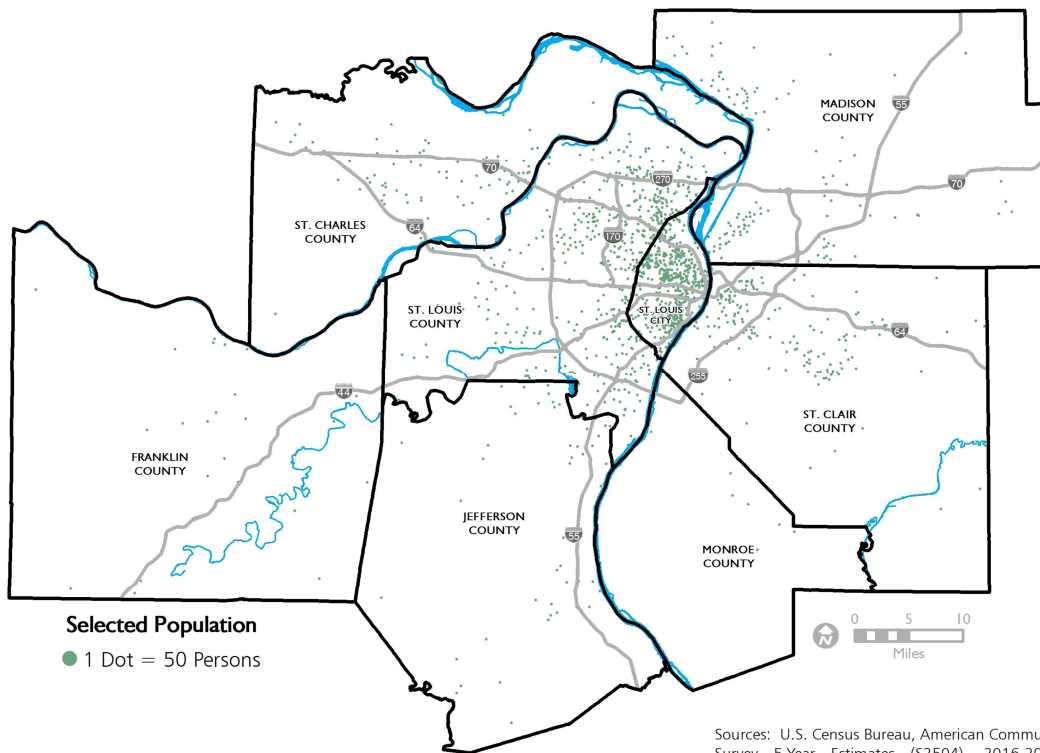
Locations of No-Vehicle Households

There are households without access to a vehicle throughout the St. Louis region. These households are most prevalent in the city of St. Louis, St. Clair County, and St. Louis County. In 2021, 17.7, 6.4, and 6.0 percent, respectively, of households did not have access to a vehicle in these counties. Monroe and St. Charles counties had the smallest proportions at about 3 percent of households. Table 28 provides the percentages by county and for the St. Louis MSA for 2010, 2015, and 2021.

For the St. Louis MSA, the proportion of households without access to a vehicle decreased from 7.7 in 2010 to 6.5 percent in 2021. Most counties in the EWG region experienced a decrease in the percentage of households without a vehicle over this time period. The exceptions are Monroe, Franklin, and St. Charles counties, where the proportions were about the same in 2010 and 2021. The largest change was in the city of St. Louis where the percent of no-vehicle households decreased from 21.6 to 17.7 percent.

As seen on Figure 35, the highest concentrations of no-vehicle households are in the northern part of the city of St. Louis, the southeast part of the city, and western St. Clair County, as well as a small portion (one census tract) in Madison County.

Figure 35. No-Vehicle Households, East-West Gateway Region, 2020



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

Sources: U.S. Census Bureau, American Community Survey 5-Year Estimates (S2504), 2016-2020; East-West Gateway Council of Governments



TRAVEL PROFILE

This section of the equity analysis provides a travel profile for the St. Louis region. The profile provides an overview of how people interact with the transportation system, including primary modes used, average travel times, and number of vehicles available to households. Data are provided for the entire population as well as, when possible, for the transportation equity populations (TEP) described in the previous section.

In St. Louis, most households have one or more vehicle, a majority of workers commute using single-occupancy vehicles, and commute times are short relative to times in other large metropolitan areas. These trends are generally consistent among people of different race and ethnic groups, income levels, ages, and abilities as well as in all county-level jurisdictions of the East-West Gateway (EWG) region. However, there are some differences in how people experience the transportation infrastructure of the region.

- White (not Hispanic or Latino) and moderate to high-income commuters use single-occupancy vehicles at higher rates than their counterparts.
- Minority households and commuters with disabilities have lower vehicle access and are more likely to use a non-single occupancy vehicle (SOV) transportation options, particularly public transit.
- People who reside in the core of the region are less likely to have access to a vehicle, more likely to take non-SOV transportation options, and tend to have shorter commute times than people who live in the outer parts of the region.
- The average commute time for commuters who drive alone is about half that of those who use public transit.

COMMUTE MODE

Workers in St. Louis are most likely to commute by driving alone, also referred to as “single-occupancy vehicle (SOV).” This is particularly true of commuters who are White (not Hispanic or Latino), of higher income, or without a disability.

Data in this section describes the primary mode of transportation used by workers, as reported by the U.S. Census Bureau American Community Survey (ACS). The Census Bureau asks people about their primary mode of transportation used to travel to work. Therefore, data does not include information on non-work trips and does not consider what mode people would choose to take if all modes were an option.

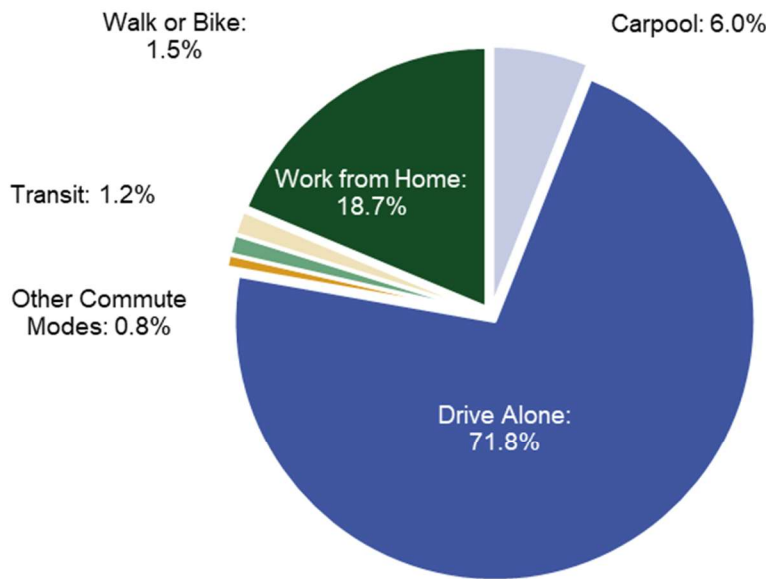
Table 29 shows the percentage of workers aged 16 years and older who used a commute mode other than driving alone. In the St. Louis MSA, 28.2 percent of workers commuted to work using a non-SOV in 2021, ranking 40th among the peer regions and lower than the United States as a whole (32.2 percent). Non-SOV commute modes are any transportation mode that is not driving a private vehicle by oneself, including those who telecommute and use modes that are grouped together in the “other modes” category.



In 2019, 15.8 percent of workers used non-SOV modes. The 12 percentage point change was mostly due to the increase in the percent of people who worked from home, which went from 5.1 percent in 2019 to 18.7 percent in 2021. As of 2021, work from home became the most common non-SOV mode. In previous years, it was carpooling.

In 2021, most commuters (71.8 percent) in the St. Louis MSA drove to work alone, as shown in Figure 36. This was much lower than in 2019 (83.2 percent), but a higher rate than for the United States (69.3 percent) in 2021. In the St. Louis MSA, carpooling was used by 6 percent of commuters in 2021. Walking, biking, public transportation, and other commuter modes (motorcycle, taxicab, and other) combined made up less than 4 percent of commuters.

Figure 36. Commute Mode
Workers aged 16 years and older by commute mode
St. Louis MSA, 2021



Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B08006)

Table 29.

Non-Single Occupancy Vehicle Travel

Percent of workers commuting by all modes except driving alone by car, van, or truck, 2021

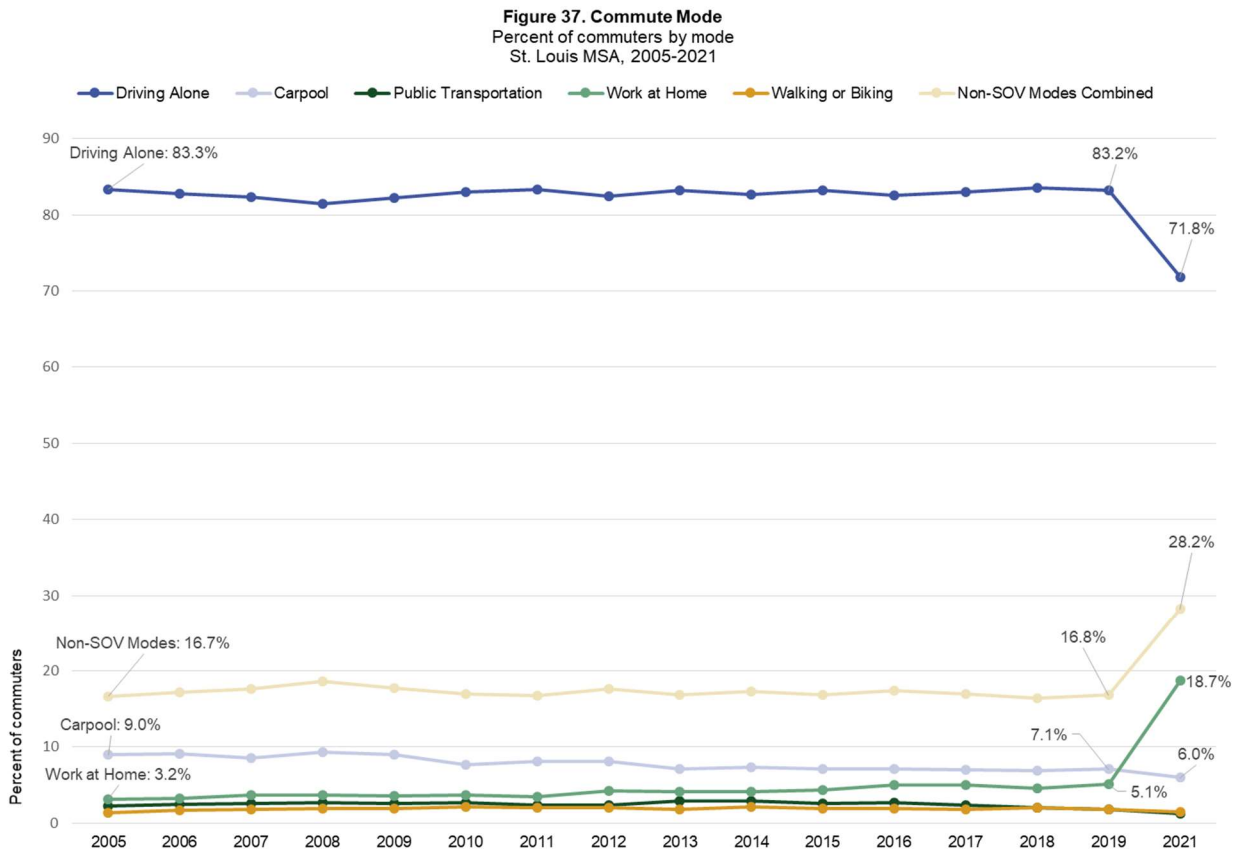
1	New York	56.0
2	San Francisco	52.9
3	Washington, D.C.	48.6
4	San Jose	47.3
5	Boston	44.9
6	Seattle	44.8
7	Austin	42.9
8	Portland	41.1
9	Raleigh	39.8
10	Philadelphia	39.3
11	Denver	39.3
12	Chicago	38.6
13	Minneapolis	37.9
14	Salt Lake City	37.0
15	Los Angeles	36.8
16	Phoenix	36.5
17	San Diego	36.4
18	Sacramento	35.8
19	Atlanta	35.7
20	Charlotte	34.8
21	Baltimore	34.7
22	Pittsburgh	33.5
23	Columbus	32.9
24	Dallas	32.4
25	Tampa	32.2
26	Hartford	32.2
	United States	32.2
27	Richmond	31.6
28	San Antonio	31.1
29	Orlando	31.1
30	Miami	30.9
31	Nashville	30.6
32	Detroit	30.0
33	Las Vegas	29.4
34	Houston	29.4
35	Kansas City	29.3
36	Jacksonville	29.3
37	Milwaukee	29.2
38	Providence	29.2
39	Cleveland	28.7
40	St. Louis	28.2
41	Indianapolis	27.9
42	Cincinnati	27.6
43	Virginia Beach	27.0
44	Buffalo	26.7
45	Riverside	26.7
46	New Orleans	26.4
47	Louisville	26.3
48	Oklahoma City	24.3
49	Birmingham	23.7
50	Memphis	21.9

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B08006)



Within the St. Louis MSA, the proportion of commuters using non-single occupancy vehicle commute modes has been fairly stable from year to year. Figure 37 shows the commute mode share by mode from 2005 to 2021. From 2005 to 2019, the proportion of commuters using each mode changed very little. The most notable changes over that time frame are a 1.9 percentage point decrease in the share of commuters carpooling and a 1.9 percentage point increase in the share of commuters working from home. Since each of those modes are non-SOVs, the proportion of non-SOV commuters remained almost the same in 2019 as it was in 2005.

The largest change in commute mode share occurred from 2019 to 2021. From 2019 to 2021, the proportion of commuters in the St. Louis MSA driving alone decreased by 11.4 percentage points while the proportion of commuters working from home increased by 13.6 percentage points. The large and sudden change in commute mode share was the result of COVID-19 and the mass adoption of remote working. Since the change happened over a short period and in response to a public health emergency, the long-term effect on commute mode share is unknown. Public transit and walking or biking each decreased by less than half a percent, and carpooling decreased by just over 1 percent.

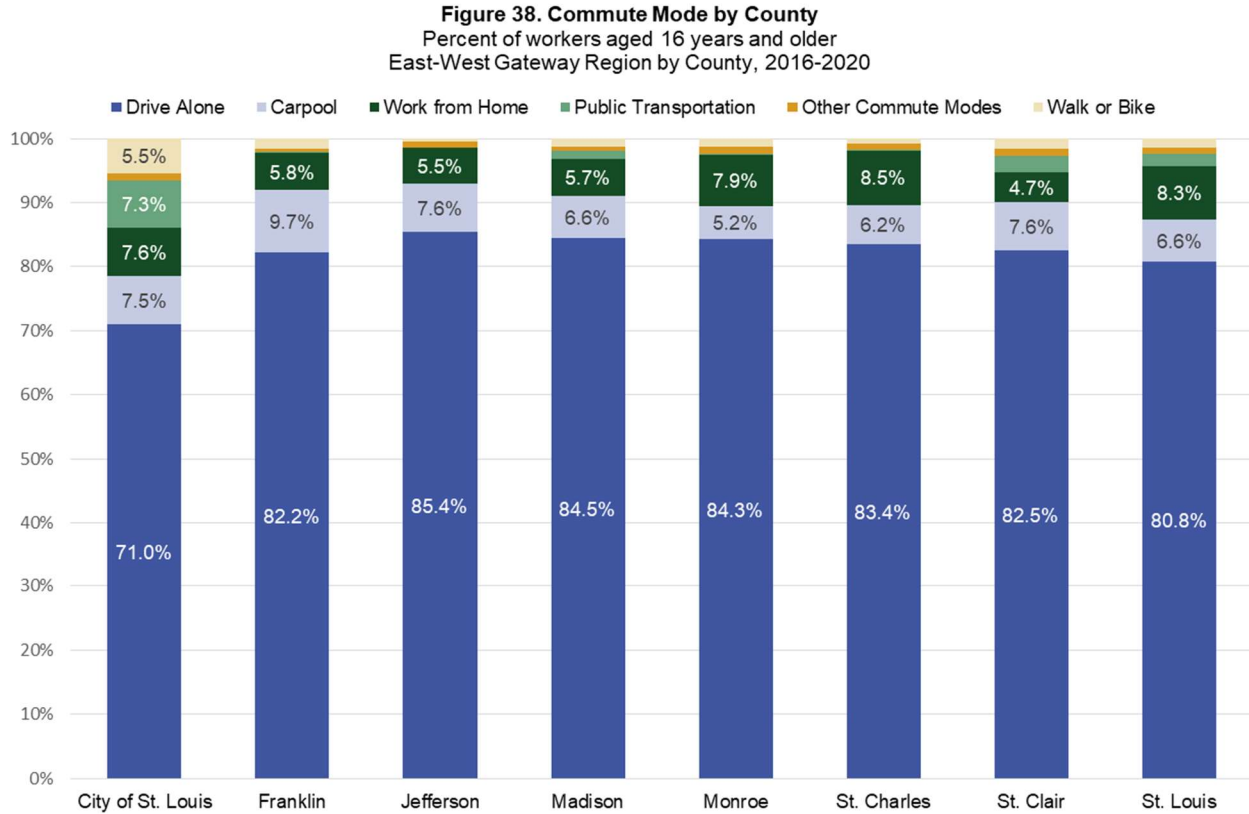


Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B08006)



Commute Modes in East-West Gateway Region by Location

Figure 38 shows the distribution of commuters by county for the East-West Gateway (EWG) region. The distribution of commute modes is similar for each of the counties that make up the region.



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (B08006)

In seven of the county-level jurisdictions, more than 90 percent of commuters used three modes of transportation in 2020—driving alone, carpooling, and working from home.¹²⁸ The city of St. Louis was the one exception, with a lower rate of commuters driving alone and higher rates of public transit usage and walking or biking compared to the other counties. The city has the lowest rate of driving alone, 71 percent. The second lowest rate of driving alone was 80.8 percent in St. Louis County. Jefferson County had the highest rate, 85.4 percent.

The prevalence of driving alone throughout the region can be seen on Figure 39. The map looks similar to the population distribution throughout the region because of the ubiquity of driving alone. This is in stark contrast to the maps for the other modes of commuting, shown in Figures 40 through 44.

As with the St. Louis MSA as a whole, carpooling and working from home were the second and third most common commute modes for all counties in the EWG region in the 2016-2020 time period. In

¹²⁸ The most recent data available at the county level is through the American Community Survey 5-Year estimates for the 2016-2020 time period.



Figures 40 and 41, the two commute modes are found widely throughout the region and show a similar distribution to driving alone, albeit less dense.

While more common in the city of St. Louis, public transportation and walking or biking are not frequently used modes of commuting throughout the region. Figures 42 through 44 show the number of residents that use these three modes.

Public transportation, shown in Figure 42, is predominantly used by residents in the city of St. Louis and the northern portion of St. Louis County. The usage of public transit outside of the core of the region is sparse or nearly nonexistent.

Figure 43 shows that biking is most common among city of St. Louis residents, particularly those who live in or near the central corridor.

Commuting by walking, shown on Figure 44 is spread throughout the city of St. Louis and St. Louis County with concentrations in the areas with the greatest population density, including the downtowns of Clayton and the city of St. Louis and the Central West End neighborhood.



Figures 39-44. Locations of Commuters by Mode, East-West Gateway Region, 2020

Figure 39 (Dot = 150 persons), Figures 40-44 (Dot = 30 persons)

Figure 39 - Commuters Who Drive Alone

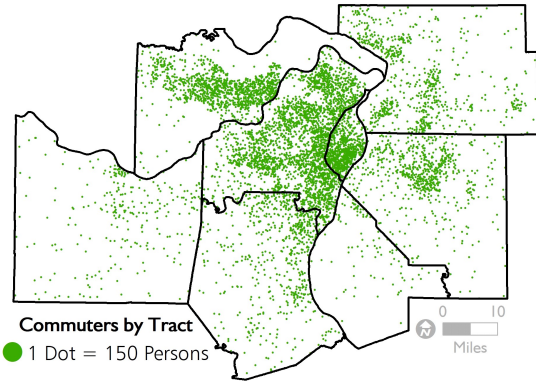


Figure 40 - Commuters Who Carpool

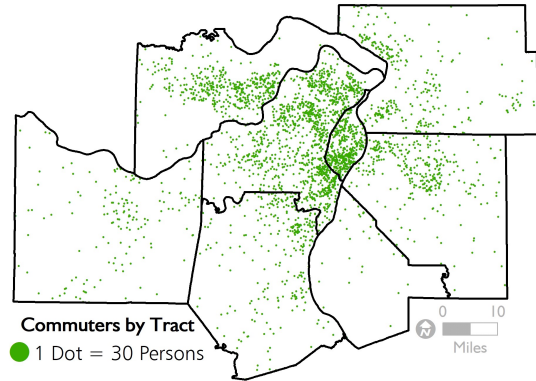


Figure 41 - Commuters Who Work From Home

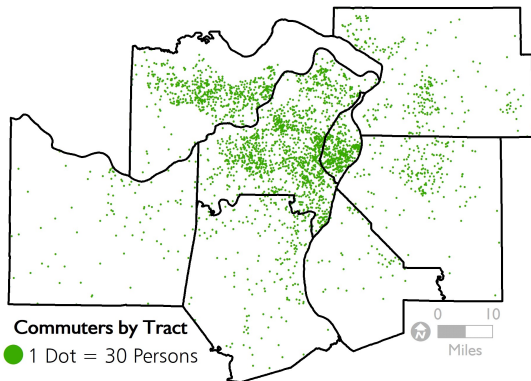


Figure 42 - Commuters Who Use Public Transit

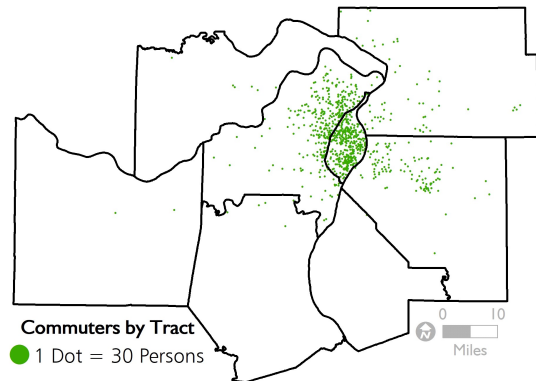


Figure 43 - Commuters Who Bike

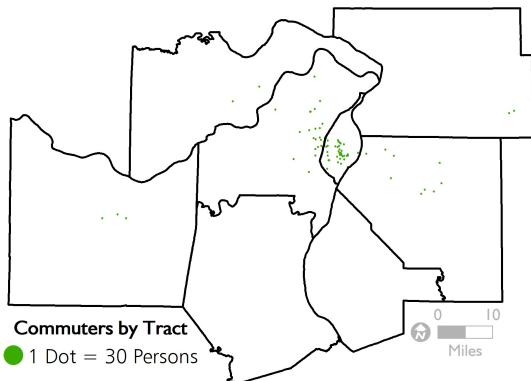
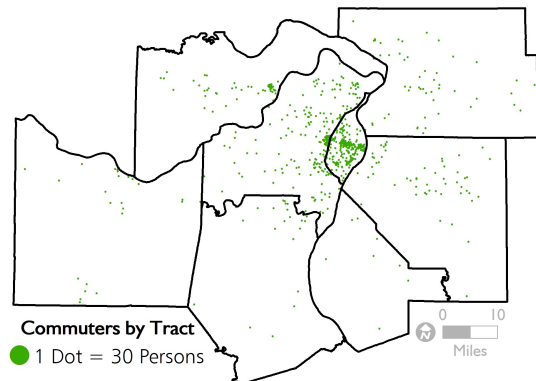


Figure 44 - Commuters Who Walk



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2016-2020)

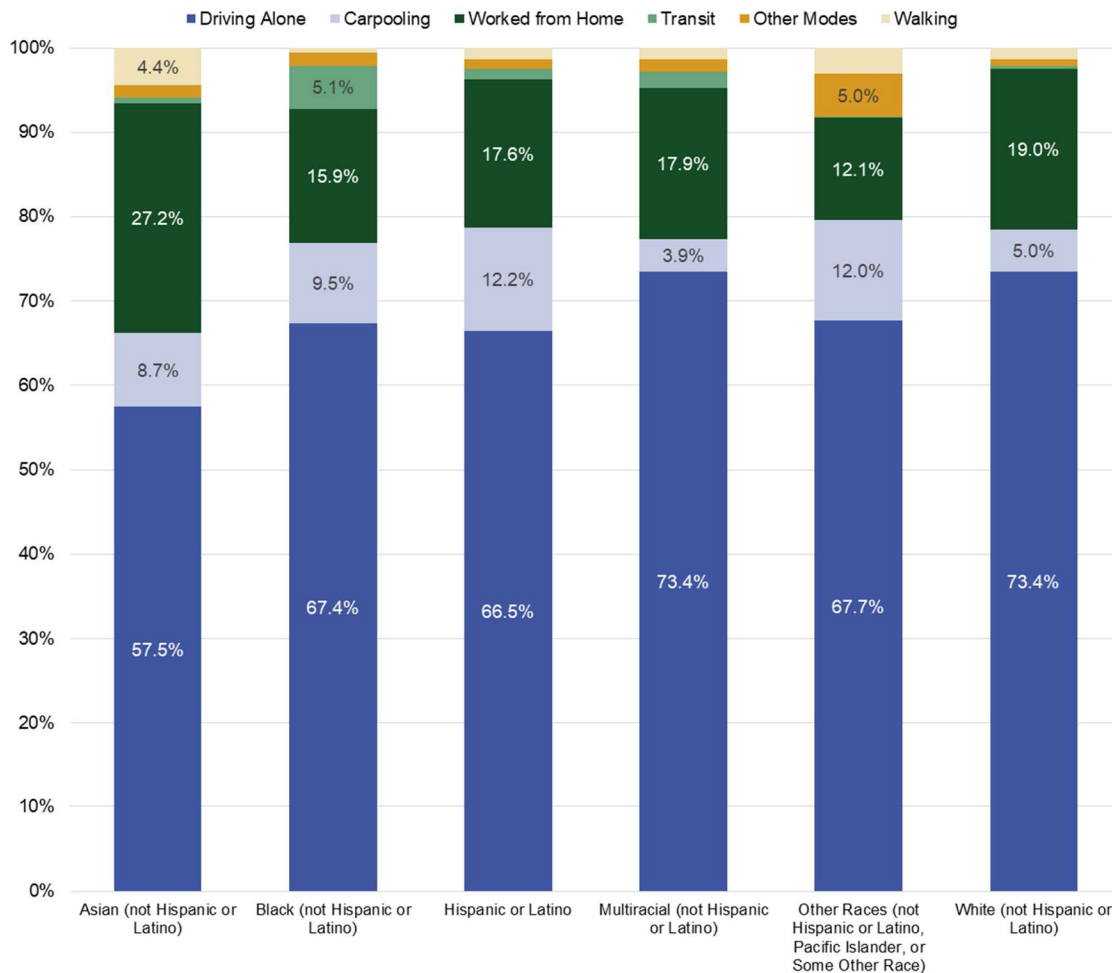


Commute Modes by Race and Ethnicity

The most common commute mode in the EWG region for people of all races and ethnicities in 2021 was driving alone, and the second most common for most population groups was working from home. Figure 45 shows the distribution of commute modes by race and ethnicity for the St. Louis MSA. Over half of commuters in all race/ethnic groups drove alone to work in 2021. White (not Hispanic or Latino) workers were the most likely to drive alone (73.4 percent) and Asian (non-Hispanic or Latino) workers were the least likely to drive alone (57.5 percent) due to a much larger share working from home.

Black (not Hispanic or Latino) workers were the most likely to use public transit (5.1 percent) and White (not Hispanic or Latino) workers are the least likely (0.7 percent) to use public transit. The number of Black (not Hispanic or Latino) commuters using public transit as their main mode of transportation to work (14,496 workers) was nearly twice the number of White workers using public transit (7,407 workers). In 2021, Black commuters accounted for more than half (58.8 percent) of those using transit

Figure 45. Commute Mode
Commuters 16 years and older by commute mode and by race and ethnicity
St. Louis MSA, 2021



Note: St. Louis MSA data for Other Races (not Hispanic or Latino) have been calculated by East-West Gateway using U.S. Census data.
Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (SO201)



as their main mode to travel to work. White commuters were the next largest group, accounting for 30 percent.

Working from home has been growing in popularity, increasing from about 3.7 percent of workers in the EWG region in 2010 to 5.2 percent in 2019 to 18.7 percent in 2021, following the COVID-19 pandemic. Asian (non-Hispanic or Latino) workers have the highest share reporting working from home followed by White (non-Hispanic or Latino) workers.

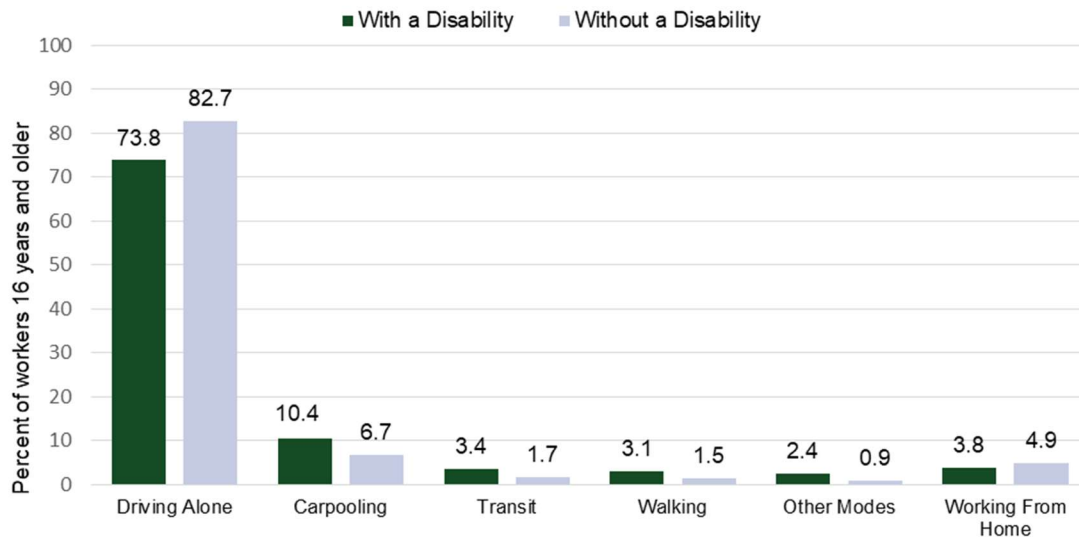
Walking is the primary commute mode for about 23,000 workers in the region, about 1,300 fewer than those who take transit. Walkers account for about 1.7 percent of commuters. Asians (3.4 percent) are the most likely to use this mode.

About 17,600 workers in the region use “other modes,” including biking, taxis, and motorcycles. Together, these modes are most common among people in the “some other race” category (3.3 percent) and least common among White (not Hispanic or Latino) and Black workers, accounting for 1.2 percent of each group of commuters.

Commute Modes by Disability Status

Workers in the region who have disabilities are less likely to drive alone and more likely to use a non-SOV mode of transportation than those without a disability. Figure 46 shows the percentage of workers with and without disabilities that use each mode of transportation in the St. Louis MSA. In 2019, 73.8 percent (66,799) of workers with disabilities drove to work alone in St. Louis, compared to 82.7 percent for those without disabilities.¹²⁹ Workers with disabilities in St. Louis were at least twice as likely as those without disabilities to use public transportation, walk, and commute using other forms of transportation.

Figure 46. Commute Mode by Disability Status
Workers aged 16 years and older by commute mode and by disability status, St. Louis MSA, 2019



Source: IPUMS-USA, University of Minnesota

¹²⁹ Note, as of November 2022, the more recent data available for this topic is 2019.



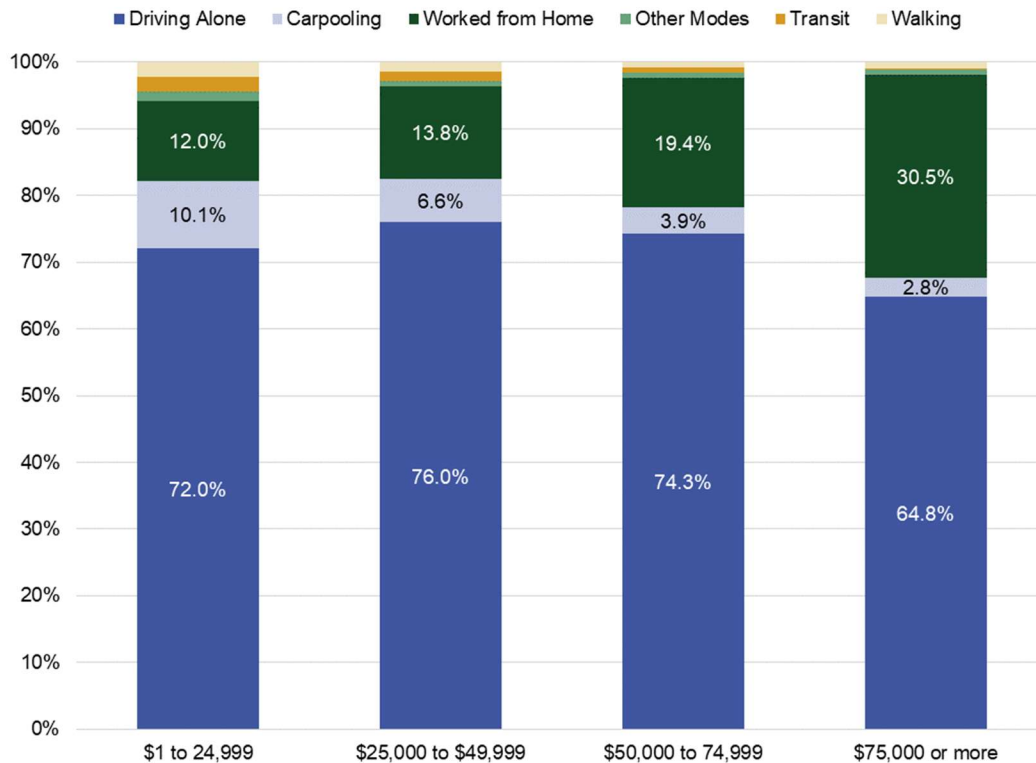
Commute Modes by Income

Among all income groups, the most common mode choices are driving alone, working from home, and carpooling. Driving alone is the most frequently used mode by people of all income levels. Low-income workers are the most likely to carpool, walk, and take public transit. The highest income earners are the most likely to work from home and least likely to carpool or use transit.

Figure 47 shows the distribution of commute modes for workers by four income groups: those earning less than \$25,000 (low income), those earning between \$25,000 and \$49,999 (low-middle), between \$50,000 and \$74,999 (high-middle), and those earning \$75,000 or more (high). Each of these income groups makes up between 20 and 30 percent of the regional workforce.

Compared with the highest earning group, the lowest earners were eight times more likely to use public transportation and twice as likely to walk. Commuters earning less than \$25,000 accounted for more than 47 percent of all transit commuters and 41 percent of all walking commuters.

Figure 47. Commute Mode
Commuters 16 years and older by commute mode and income
St. Louis MSA, 2021



Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B08119)



TRAVEL TIME

The average travel time to commuter to work for the St. Louis MSA is low for most workers relative to travel times in other large metropolitan regions. Within the St. Louis region, commuters using public transportation and commuting from the outer parts of the region generally have longer commute times than those using other modes and who live in the central portion of the region.

Table 30 shows the average commute time, for all modes except teleworking, in 2021 for the peer regions and the United States as a whole. In 2021, the St. Louis MSA had an average commute time of 24.4 minutes, shorter than for more than two-thirds of the peer regions and less than for the United States (25.6 minutes).

Figure 48 shows the travel time to work by census tract for the East-West Gateway (EWG) region for the 2016-2020 time period. People who lived in the outer parts of the region, including large areas of Franklin and Jefferson counties in Missouri and Monroe County in Illinois, faced higher average travel times than much of the region.

The average travel time for the counties in the EWG region and for the MSA have not changed significantly over the last 20 years. Table 31 shows the average travel time for the St. Louis MSA and for the counties in the EWG region for 2000, 2010, 2019, and 2021. The average travel time for the St. Louis MSA decreased by 1.6 minutes from 2019 to 2021, but is less than half a minute shorter than it was in 2010. The city of St. Louis experienced the largest change with a decrease from 25.1 minutes in 2000 to 20.8 minutes in 2021.

People who live in Jefferson, Franklin, and Monroe counties had longer average commute times than the St. Louis MSA as a whole for all years included in Table 31. Most recently, workers in Monroe and Jefferson counties had the longest average commute times, with mean journey to work times of 29.6 and 28.9 minutes, respectively. Franklin County was not far behind at 27.4 minutes. These longer commutes generally reflect the more rural nature of these areas and likely longer trip distances to access jobs. The lowest travel times in the region were in the city of St. Louis (20.8 minutes) and St. Louis County (23.1 minutes).

Table 30.
Average Commute Time

In minutes, 2021

1	New York	34.2
2	Riverside	32.2
3	Washington, D.C.	31.0
4	Atlanta	29.6
5	Chicago	29.0
6	Houston	28.9
7	San Francisco	28.8
8	Seattle	28.5
9	Los Angeles	28.4
10	Boston	28.4
11	Orlando	28.3
12	Miami	28.3
13	Baltimore	27.7
14	Philadelphia	27.6
15	Dallas	27.3
16	Denver	26.7
17	Tampa	26.7
18	Sacramento	26.5
19	Raleigh	26.5
20	Birmingham	26.2
21	Nashville	26.2
22	Austin	26.1
23	Pittsburgh	25.8
24	San Antonio	25.8
25	Charlotte	25.7
	United States	25.6
26	Phoenix	25.6
27	Providence	25.6
28	Detroit	25.4
29	Jacksonville	25.2
30	New Orleans	25.0
31	Indianapolis	24.9
32	Richmond	24.9
33	Portland	24.6
34	San Diego	24.5
35	Las Vegas	24.4
36	St. Louis	24.4
37	San Jose	24.3
38	Virginia Beach	24.2
39	Cincinnati	24.1
40	Cleveland	23.9
41	Memphis	23.8
42	Columbus	23.7
43	Hartford	23.5
44	Minneapolis	23.3
45	Oklahoma City	23.3
46	Kansas City	23.0
47	Louisville	22.8
48	Milwaukee	22.0
49	Salt Lake City	21.7
50	Buffalo	20.7

Source: U.S. Census Bureau,
American Community Survey
1-Year Estimates (B08013, B08302)



Table 31. Average Travel Time
Average travel time to work (in minutes) for workers aged 16 years and older who did not work from home

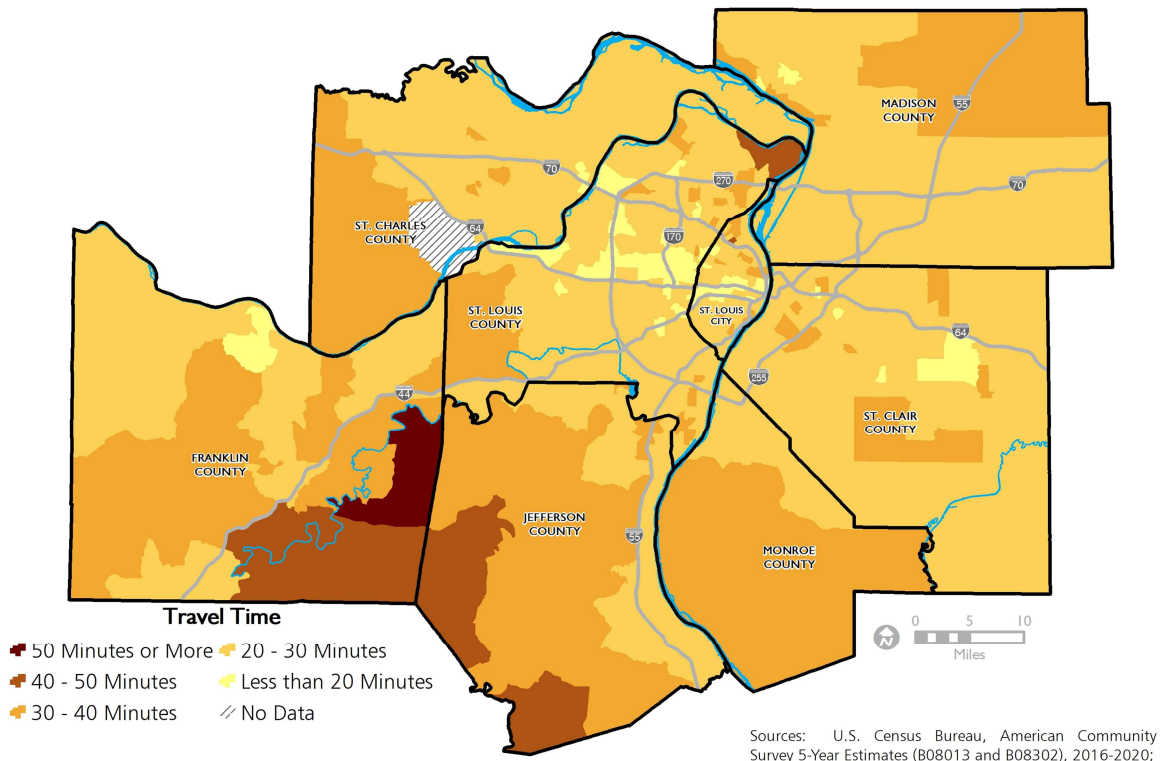
East-West Gateway Region by County, 2000, 2010, 2019, and 2021

	2000	2010	2019	2021
Madison	24.3	23.6	25.2	24.4
Monroe	29.4	29.3	29.6	Not Available
St. Clair	24.7	23.1	25.9	23.6
Franklin	29.2	25.8	27.6	27.4
Jefferson	31.1	29.9	30.5	28.9
St. Charles	26.4	24.8	26.2	24.3
St. Louis	24.0	23.1	24.6	23.1
City of St. Louis	25.1	24.6	24.2	20.8
St. Louis MSA	25.6	24.8	26.0	24.4

Note: Due to small sample sizes, American Community Survey 5-year data was used for Monroe County. For the year 2000, Decennial Census data was used for all counties and the St. Louis MSA.

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B08013, B08302); U.S. Census Bureau, Decennial Census

Figure 48. Average Travel Time to Work, East-West Gateway Region, 2016-2020



Data is depicted by 2020 Census tracts. Tract boundaries are not shown on the map.

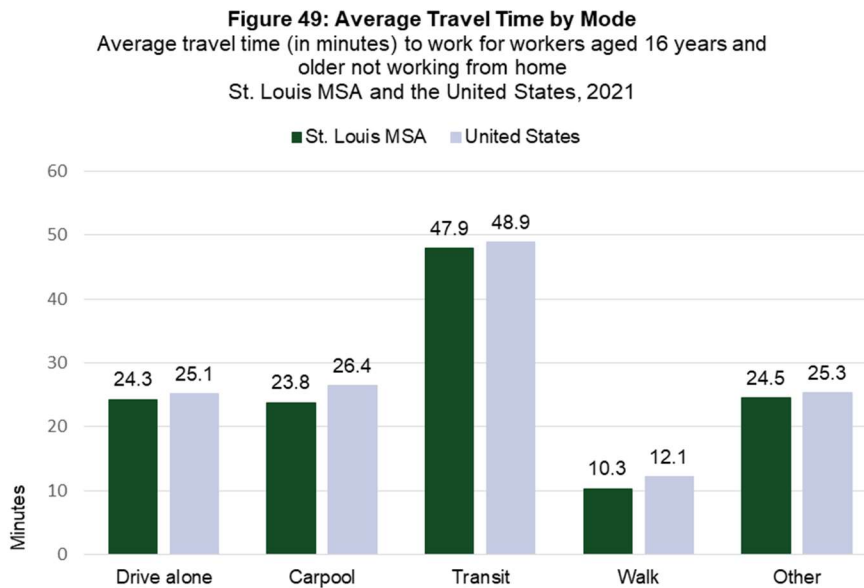


Travel Time by Mode

Average travel times vary quite a bit depending on what mode a person uses, but the average travel time for each mode is about the same for the St. Louis MSA and the United States. Figure 49 shows the average travel time by commute mode for the St. Louis MSA and the country as a whole in 2021.

For the St. Louis MSA, the average commute time for workers driving alone, the most popular commute mode in the region, was 24.3 minutes. Comparatively, the average commute time of a worker taking public transportation was nearly twice as long, 47.9 minutes. Carpooling was similar in time to driving alone, 23.8 minutes. Other modes, which includes motorcycles and bicycling, averaged 24.5 minutes. People who walk to work had the shortest travel times, averaging 10.3 minutes.

The disparity in average commute times by single-occupancy vehicle versus by transit are very different across the country. Table 32 shows the ratio of average commute times for the two modes for the 50 most populous regions in the country and the United States. In both St. Louis and the United States as a whole, average transit commute times are nearly twice as long as driving commute times. The largest disparity is in Las Vegas where average transit commute times are 2.63 times as long as driving, 61.6 minutes and 23.4 minutes, respectively. Note, the distances traveled and covered by people taking different modes varies.



Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (B08136, B08006)

Table 32.

Disparity in Average Travel Time

Ratio of average commute times for public transit commuters and drivers, 2021

1	Las Vegas	2.63
2	Indianapolis	2.24
3	Kansas City	2.22
4	Detroit	2.09
5	San Jose	2.02
6	San Diego	2.01
7	Hartford	2.00
8	Salt Lake City	1.98
9	Tampa	1.97
10	St. Louis	1.97
11	Buffalo	1.96
	United States	1.95
12	Phoenix	1.94
13	Cleveland	1.93
14	Charlotte	1.93
15	Jacksonville	1.92
16	Orlando	1.91
17	Denver	1.89
18	Oklahoma City	1.89
19	Nashville	1.88
20	Sacramento	1.88
21	Milwaukee	1.83
22	Baltimore	1.81
23	Dallas	1.80
24	Portland	1.79
25	New York	1.76
26	Columbus	1.76
27	Riverside	1.76
28	Miami	1.74
29	Minneapolis	1.73
30	Chicago	1.72
31	Providence	1.72
32	Los Angeles	1.72
33	San Francisco	1.69
34	San Antonio	1.69
35	Seattle	1.68
36	Boston	1.68
37	Austin	1.67
38	Philadelphia	1.61
39	Cincinnati	1.60
40	Atlanta	1.59
41	Houston	1.58
42	Virginia Beach	1.57
43	Washington, D.C.	1.53
44	Louisville	1.53
45	Pittsburgh	1.52
46	New Orleans	1.48
47	Memphis	1.46
48	Richmond	1.41
49	Raleigh	1.26
50	Birmingham	0.62

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (S0802)

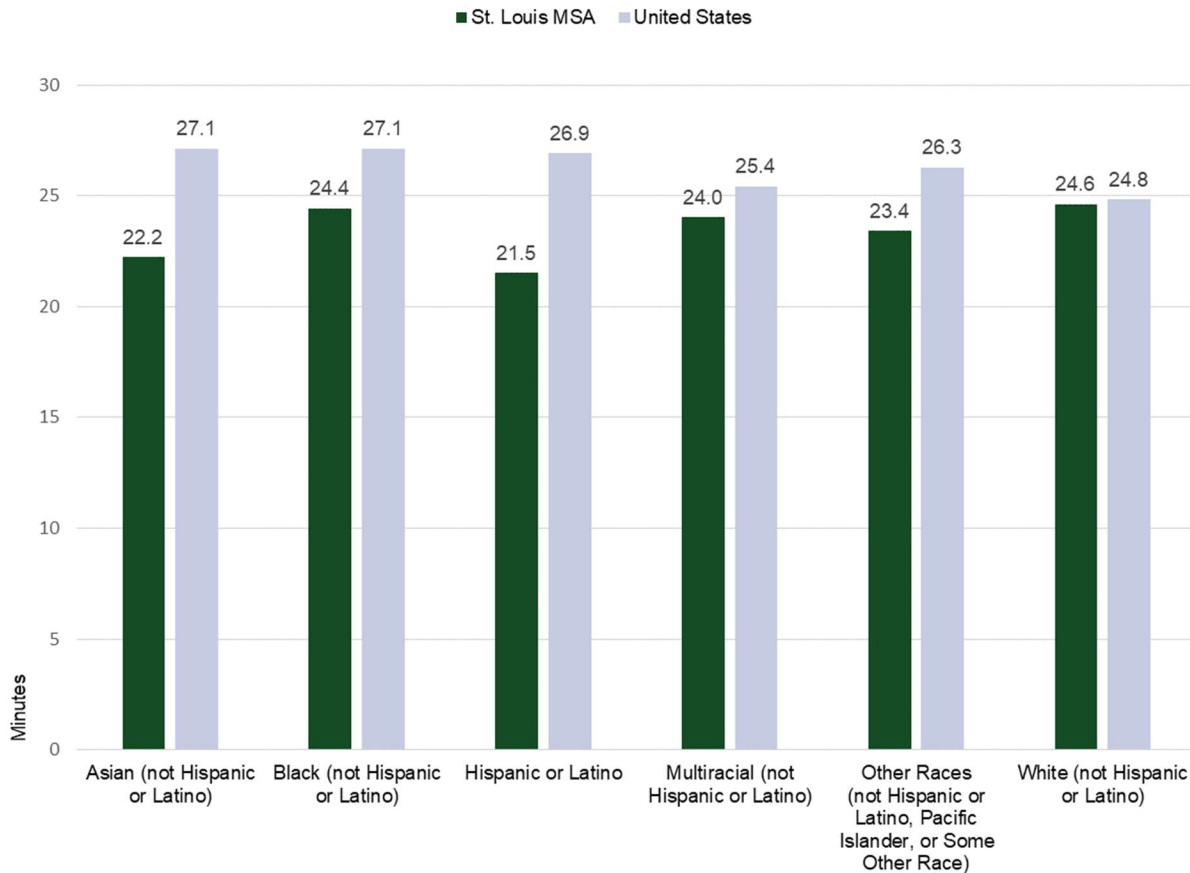


Travel Time by Race and Ethnicity

In 2021, the average travel time was fairly similar across racial and ethnic groups for the St. Louis MSA with a slightly larger difference seen at that national level. Figure 50 shows the average travel time by race and ethnicity for the MSA and for the United States.

In the St. Louis MSA, the range of average travel times was small (3.1 minutes), from 21.5 minutes for Hispanic and Latino workers to 24.6 minutes for White (not Hispanic or Latino) workers. White (not Hispanic or Latino) commuters had a slightly longer average travel time (24.6 minutes) compared to other race and ethnicity groups in the region. This is likely due to the concentration of White residents in the outer portions of the region and greater access to personal vehicles. Black (not Hispanic or Latino) workers had about the same average travel times as White workers, despite a larger percentage of workers taking transit. Nationally, the range was smaller (2.3 minutes), from 24.8 minutes for White (not Hispanic or Latino) workers to 27.1 minutes for both Asian and Black (not Hispanic or Latino) workers.

Figure 50. Average Travel Time by Race and Ethnicity
Average travel time (in minutes)
St. Louis MSA and the United States, 2021



Note: Due to small sample sizes, data for the Other Races categories are from IPUMS-USA 5-Year 2016-2020 samples.
Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (S0201); IPUMS-USA, University of Minnesota



Travel Time by Income

Figure 51 shows the median household income and average travel time in 2020 by census tract for the EWG region. Areas with high income levels and relatively short commutes are shown in bright red. This includes west St. Louis County communities, such as Ladue, Creve Coeur, Frontenac, and Town and Country. At the other extreme, places with relatively low-income levels and relatively long commutes are shown in dark blue. This includes many of the rural portions of the region, such as parts of western St. Charles County, western Franklin County, southern parts of Jefferson and Monroe counties, and eastern St. Clair and Madison counties. Places with relatively high incomes and relatively long commutes are shown in purple. These include areas such as Chesterfield, Washington, and Edwardsville. Areas with relatively low incomes and relatively short commutes are shown in white. These include portions of northern city of St. Louis, north St. Louis County, East St. Louis, and riverfront communities in the Madison County.

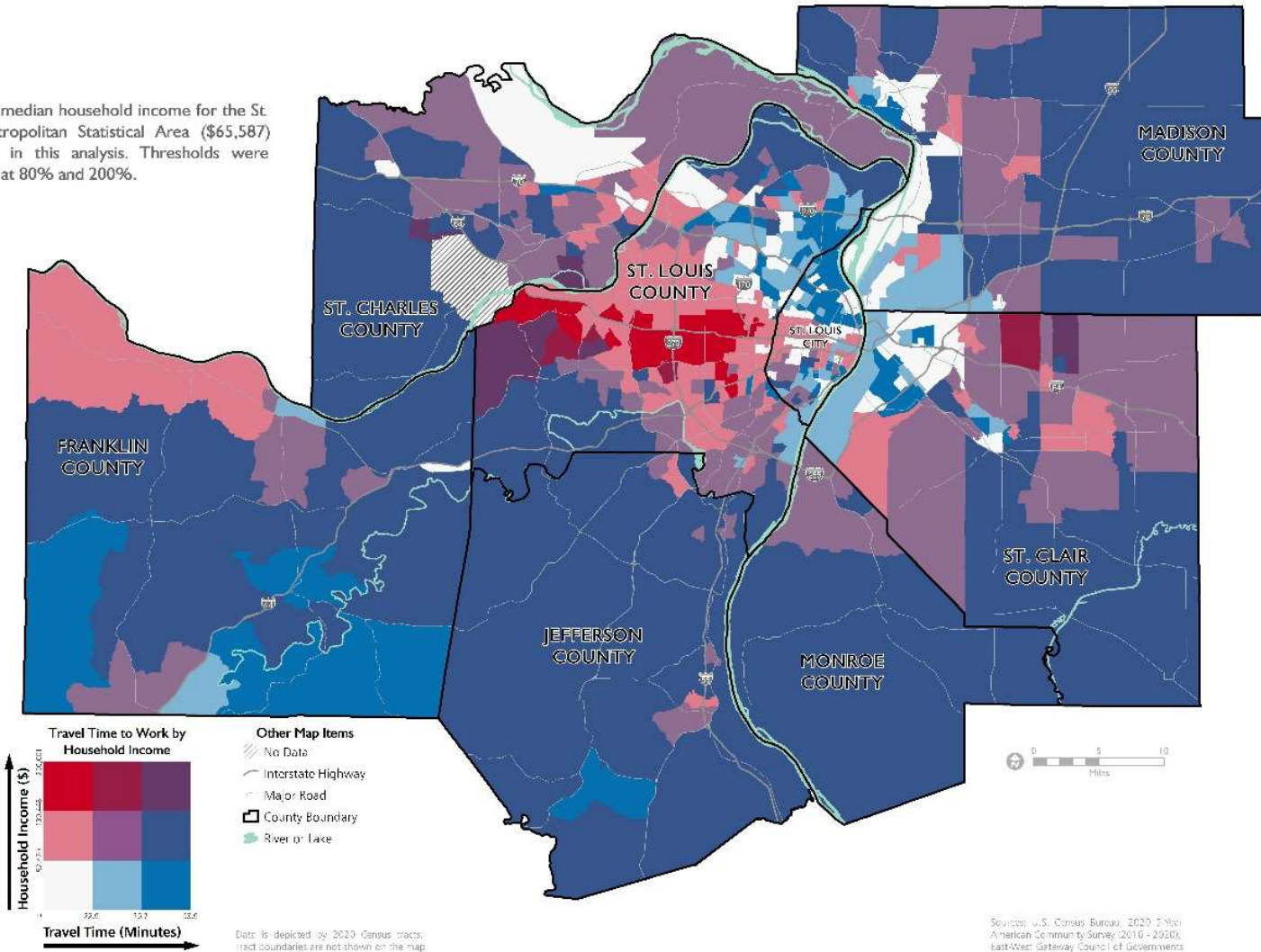
““Having a car is very expensive today. People need public transit...”

- Kevin. C., Stakeholder Interviewee



Figure 51. Average Travel Time to Work by Median Household Income, 2020

The 2020 median household income for the St. Louis Metropolitan Statistical Area (\$65,587) was used in this analysis. Thresholds were calculated at 80% and 200%.





NUMBER OF VEHICLES AVAILABLE TO HOUSEHOLDS

In 2021, the vast majority of the households in the St. Louis region had access to at least one vehicle with most having access to more than one. Black (not Hispanic or Latino) households and households located in the city of St. Louis are the most likely to not have a vehicle. Seniors and people with disabilities are also more likely to be in no-vehicle households when compared to the general population.

Table 33 shows the percentage and number of vehicles per household for the EWG region by county in 2021. Among the eight counties of the EWG region, no-vehicle households are most common within the city of St. Louis and least common in St. Charles and Monroe counties. The city of St. Louis has the highest proportion of no-vehicle households (17.7 percent) and single-vehicle households (48.2 percent). Comparatively, less than 3 percent of households had no vehicles in each St. Charles County and Monroe County.

Most households in the region have two or more vehicles with households in counties located in the outer portions of the region generally having more cars than counties in the core. The city of St. Louis is the only county-level jurisdiction where most households have fewer than two cars. In St. Charles, Monroe, Franklin, and Jefferson counties 60 percent or more of households had at least two vehicles. In Franklin and Monroe counties more than 30 percent of households have three or more vehicles.

Figure 52 shows that the areas with the largest percentages of no-vehicle households are in the northern and southeast parts of the city of St. Louis and western St. Clair County, shown in red on the map.

Table 33. Number of Vehicles				
Number and percent of households by number of vehicles				
East-West Gateway Region by County, 2021				
	0	1	2	3 or more
	Vehicles	Vehicle	Vehicles	Vehicles
Percent of households				
Madison	4.7	32.9	39.1	23.2
Monroe	2.9	21.2	43.2	32.7
St. Clair	6.4	33.0	38.7	21.9
Franklin	5.5	24.4	36.8	33.2
Jefferson	3.7	25.4	44.1	26.8
St. Charles	2.8	24.2	46.7	26.2
St. Louis	6.0	37.8	38.3	17.9
City of St. Louis	17.7	48.2	25.7	8.4
EWG Region	7.2	34.1	38.3	20.4
St. Louis MSA	6.5	33.8	38.5	21.2
Number of Households				
Madison	5,173	36,148	42,985	25,512
Monroe	392	2,882	5,862	4,440
St. Clair	6,340	32,623	38,271	21,692
Franklin	2,291	10,086	15,219	13,705
Jefferson	3,311	22,554	39,166	23,775
St. Charles	4,435	38,254	73,768	41,450
St. Louis	24,850	155,979	158,148	73,856
City of St. Louis	24,680	67,326	35,964	11,766
EWG Region	76,195	359,553	403,952	215,737
St. Louis MSA	74,540	386,710	440,768	242,093

Note: For Monroe County and the EWG Region, 2020 5-Year ACS data was used due to a small sample size for Monroe County.

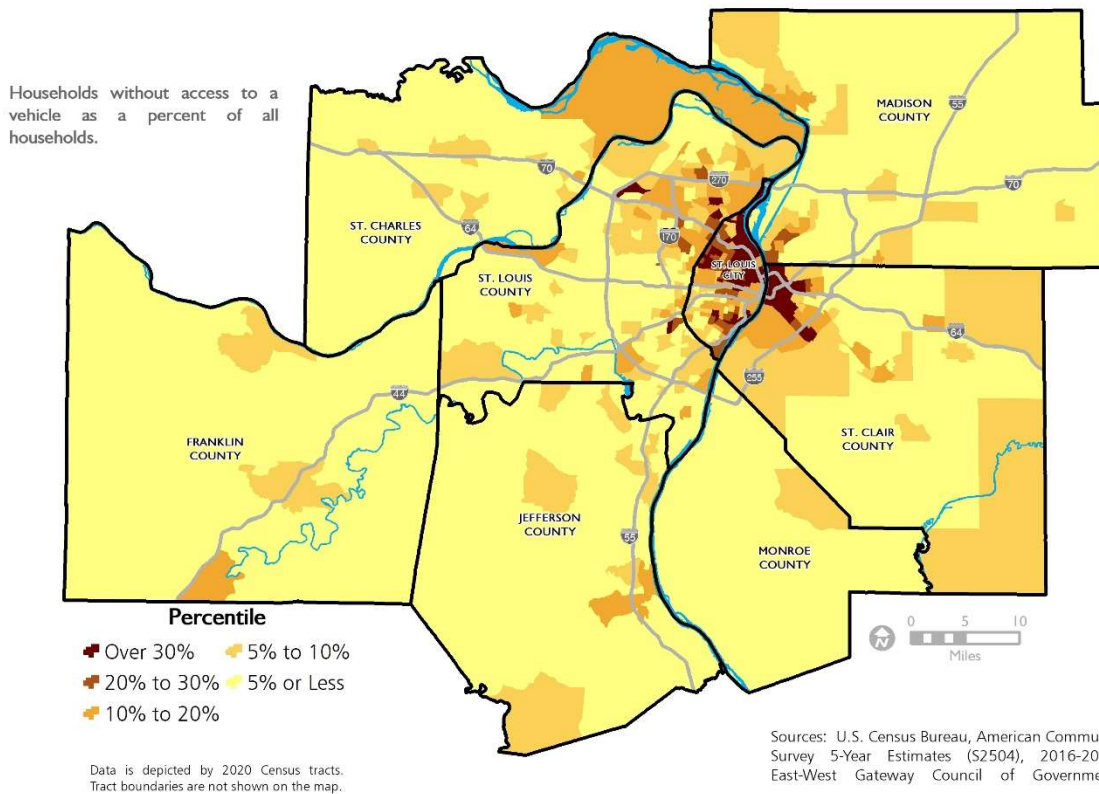
Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (DP04), U.S. Census Bureau, American Community Survey 5-year (DP04)



“Prioritizing development of the metro and bus system will give those who may already be forced to use it more equitable access to the city, and that’s more important than developing access for people (like me) who already own a vehicle. St. Louis is presently a “driving” city, and owning a vehicle should not be a prerequisite to being able to live here.”

- Anonymous Survey Taker

Figure 52. Share of No-Vehicle Households by Census Tract, 2016-2020





Populations in No-Vehicle Households

In St. Louis, no-vehicle households are more common among seniors and people with disabilities. Figure 53 shows the proportion of these population groups and the total population residing in no-vehicle households for the St. Louis MSA and the United States in 2019.

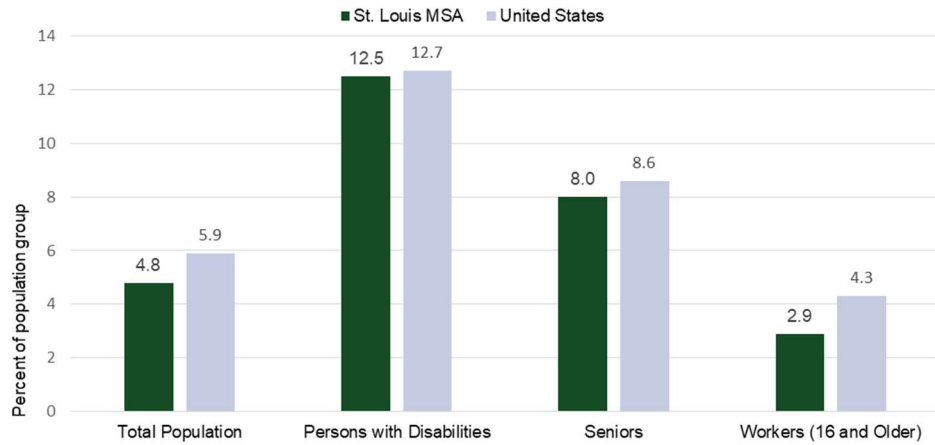
Overall, 4.8 percent (135,665) of the total population in the St. Louis MSA resided in a no-vehicle household, which was slightly lower than for the country as a whole (5.9 percent).

In the St. Louis MSA, the proportion of people with disabilities (12.5 percent) in no-vehicle households was much higher than for the general population. Seniors also were in no-vehicle households at a higher rate (8 percent, 39,000 seniors) than the general population. The general trends in the St. Louis MSA hold for the United States as a whole, with the greatest difference being between the working populations (aged 16 years and older). In the St. Louis MSA, 2.9 percent of workers lived in no-vehicle households, compared to 4.3 percent nationally.

By Race and Ethnicity

Table 34 shows no-vehicle households by race and ethnicity for the St. Louis MSA and the United States in 2021. For both St. Louis and the United States as a whole, Black households were the most likely to not have access to a vehicle. In St. Louis, 15.7 percent of Black (not Hispanic or Latino) households were without a vehicle, compared to 4.4 percent of White (not Hispanic or Latino) households, which was the lowest rate among the race and ethnicity groups. Asian (not Hispanic or Latino) households and those in the other races (not Hispanic or Latino) group also had relatively high rates of no-vehicle households, 9.2 and 15.7 percent, respectively.

Figure 53. Population in No-Vehicle Households
Proportion of people with disabilities, seniors, and workers aged 16 and older
St. Louis MSA and United States, 2019



Source: IPUMS-USA, University of Minnesota

Table 34. No-Vehicle Households

Number of households without access to a vehicle and percent of households by race and ethnicity

St. Louis MSA and United States, 2021

	St. Louis MSA	United States
Percent of households		
Asian (not Hispanic or Latino)	9.2	11.2
Black (not Hispanic or Latino)	15.7	16.0
Hispanic or Latino	7.9	9.9
Multiracial (not Hispanic or Latino)	6.0	9.3
Other Races (not Hispanic or Latino)	15.7	33.0
White (not Hispanic or Latino)	4.4	5.8
Number of households		
Asian (not Hispanic or Latino)	2,617	715,271
Black (not Hispanic or Latino)	29,364	2,399,961
Hispanic or Latino	2,144	1,811,059
Multiracial (not Hispanic or Latino)	2,933	405,383
Other Races (not Hispanic or Latino)	664	440,315
White (not Hispanic or Latino)	37,284	4,765,968

Note: St. Louis MSA data for Other Races (not Hispanic or Latino) are 2020 5-year samples from IPUMS-USA, University of Minnesota. These were used because the U.S. Census Bureau doesn't publish these estimates for the region due to the small

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (S0201); IPUMS-USA, University of Minnesota



The disparity between Black and White no-vehicle households in St. Louis in 2021 was among the highest of the peer regions. Table 35 shows that among the peer regions, St. Louis had the 12th largest gap between the two groups with Black households being 3.57 times more likely to not have access to a vehicle than White households.

Table 35.
Racial Disparity in
No-Vehicle Households, 2021

Where We Stand Peer Regions, Ranked by Ratio	Percent of households		Ratio of Black to White Residents
	Black (not Hispanic or Latino)	White (not Hispanic or Latino)	
1 Raleigh	12.8	2.6	4.92
2 Pittsburgh	31.8	6.6	4.82
3 Baltimore	19.5	4.4	4.43
4 Cincinnati	19.2	4.5	4.27
5 Milwaukee	23.1	5.7	4.05
6 Minneapolis	19.5	5	3.90
7 Kansas City	13.5	3.6	3.75
8 Philadelphia	26.4	7.2	3.67
9 Louisville	18.5	5.1	3.63
10 Nashville	9.7	2.7	3.59
11 Virginia Beach	12.5	3.5	3.57
12 St. Louis	15.7	4.4	3.57
13 Las Vegas	19.0	5.5	3.45
14 Cleveland	20.1	5.9	3.41
15 Birmingham	9.0	2.7	3.33
16 Oklahoma City	13.5	4.2	3.21
17 Detroit	15.1	4.7	3.21
18 Jacksonville	10.5	3.4	3.09
19 New Orleans	17.0	5.6	3.04
20 Hartford	18.4	6.1	3.02
21 Buffalo	25.3	8.4	3.01
22 Providence	20.9	7.0	2.99
23 San Diego	13.0	4.4	2.95
24 Indianapolis	10.3	3.5	2.94
25 Houston	10.1	3.5	2.89
26 Richmond	11.3	4.0	2.83
27 Dallas	9.3	3.3	2.82
United States	16.0	5.8	2.76
28 Chicago	23.4	8.5	2.75
29 Denver	12.0	4.4	2.73
30 Atlanta	7.3	2.7	2.70
31 Los Angeles	15.8	5.9	2.68
32 Boston	24.5	9.2	2.66
33 San Antonio	9.4	3.6	2.61
34 Charlotte	8.6	3.3	2.61
35 Memphis	9.2	3.7	2.49
36 Phoenix	9.7	4.0	2.43
37 Columbus	10.2	4.3	2.37
38 Washington, D.C.	16.5	7.0	2.36
39 Orlando	7.9	3.6	2.19
40 Seattle	14.0	6.7	2.09
41 New York	42.6	20.4	2.09
42 Austin	7.6	3.7	2.05
43 San Francisco	19.6	9.7	2.02
44 Sacramento	9.0	4.7	1.91
45 Miami	10.9	5.9	1.85
46 Tampa	9.2	5.2	1.77
47 Portland	12.5	7.1	1.76
48 Riverside	6.8	4.4	1.55

Note: Salt Lake City and San Jose are excluded due to small sample sizes.

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates (SO201)



ANALYSIS OF THE TRANSPORTATION SYSTEM WITH EQUITY LENS

This section of the assessment includes analysis of aspects of the transportation system with a focus on transportation equity populations (TEP). Some of the analysis looks at areas where there are concentrations of TEP individuals or households, but when possible, analysis is completed for the entire population groups throughout the region. A goal of this analysis is to gain a better understanding of how to approach considering these population groups in the long-range transportation plan (LRTP) and the transportation improvement program (TIP) scoring criteria.

This section includes analysis of access to opportunities (focused on jobs and grocery stores), housing and transportation costs, safety and crashes, and exposure to traffic-related pollutants.

ACCESS TO JOBS

An essential function of the transportation system is providing people access to jobs, grocery stores, health care, education, recreation, and other destinations. This analysis of access to jobs does not cover all destinations an individual may want to travel to, but it provides an indication of the access people have to a variety of destinations, such as hospitals, universities, and retail centers.

Overall, access by automobile is very good throughout the region, however access by transit is poor for much of the region and has become worse in recent years. Further, access by transit is non-existent for many residents and for many jobs. Therefore, the largest inequity identified is for no-vehicle households as well as households that may be limited to one vehicle or an unreliable vehicle. As discussed, in the previous section, Black households, seniors, and people with disabilities are more likely than the general population to lack access to a vehicle.

Job Access by Auto and Transit

The six maps on the next page show the percentage of jobs in the EWG region that can be reached by auto and by transit within 25, 45, and 60 minutes. The maps show the wide disparity in the level of access between auto and transit. See the box for data and source notes.

Figure 54 shows the percent of regional jobs that can be reached within 25 minutes by car. People who reside in the Downtown West area through the central corridor and out to western St. Louis County can reach the most jobs, 60-75 percent, in this short

Access to Jobs Data and Source Notes

Throughout this section, data are used from the EWG travel demand model. The following are a few details about the data that are important to note:

- Travel times are based on the transportation system (road network and transit schedules/routes) as of 2020, but the abnormal travel behaviors that took place in 2020 are not factored into the transportation model. Further, personal behavior changes, such as work from home, that may have occurred in larger than usual numbers due to the events of 2020 are not yet incorporated into the transportation model due to the uncertainties involved in forecasting the viability of these options.
- Peak auto and transit travel times are used.
- Transit times are based on walking to transit and do not include the time taken by trips that drive to transit. The transit times include the estimated time to walk to transit, initial wait time, transfer wait time, and walk to destination.
- Based on observed local travel behavior, if the origin or destination does not have a transit line within half of a mile, then it is inaccessible by transit.



time period. Figure 55 shows that for the vast majority of the regional population, no jobs are accessible via a 25-minute transit commute. The largest proportion of jobs that can be reached in this time frame by transit is about 7 to 8 percent. This is for less than 900 people who reside in the central portion of the downtown area.

Figures 56 and 57 show the percentage of jobs that can be reached within 45 minutes by car and by transit, respectively. In this time frame, all residents who live inside the I-270 and I-255 outer belt as well as some who reside outside of it, can reach over 75 percent of jobs in the region by auto. About 63 percent of the regional population has this amount of access via car. By comparison, the highest proportion of jobs that can be reached by transit within the same time (45 minutes) is 23.8 percent. Only 1.3 percent of the regional population (33,274 people) can reach 18 to 23.8 percent of the jobs within 45 minutes via transit, shown in light purple on the map.

Increasing the time frame to 60 minutes (Figures 58 and 59), the largest proportion of jobs that can be reached by any residents in the region via transit is 33 percent. Therefore, people who rely on transit to commute to work, can only reach about one-third of jobs in the region; no matter where they live within the region. Only about 12 percent (316,253) of residents in the region can reach 18 percent or more of the regional jobs within a 60-minute transit commute.

“I had to plan a lot of my life around the public transit options I have. That's a big part of why I chose the job I currently have, because I can walk to my job...”

- Malik L., Missouri Resident



Figures 54-59. Jobs Accessibility by Mode, East-West Gateway Region, 2020

Note: Due to large differences in the accessibility of jobs, the colors represent different percentages on the maps.

Figure 54 - Jobs Accessibility by Auto within 25 minutes, 2020

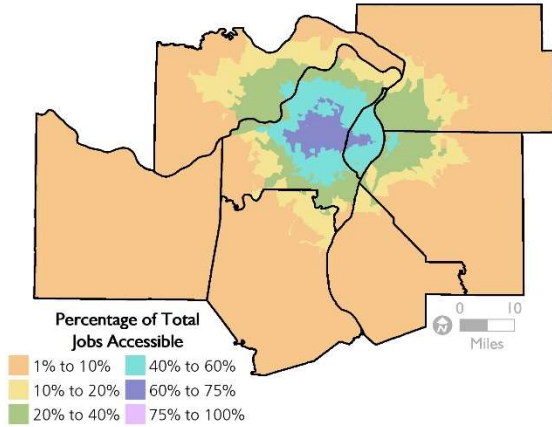


Figure 55 - Jobs Accessibility by Transit within 25 minutes, 2020

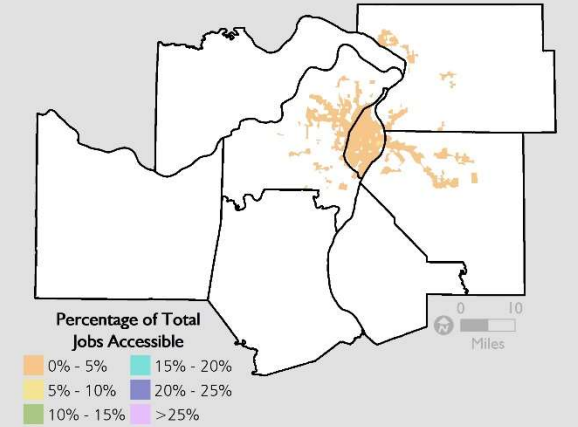


Figure 56 - Jobs Accessibility by Auto within 45 minutes, 2020

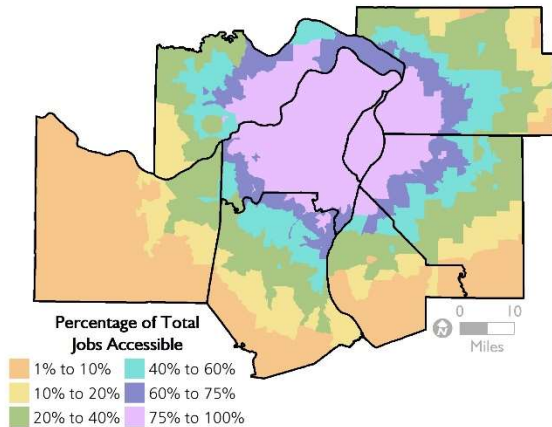


Figure 57 - Jobs Accessibility by Transit within 45 minutes, 2020

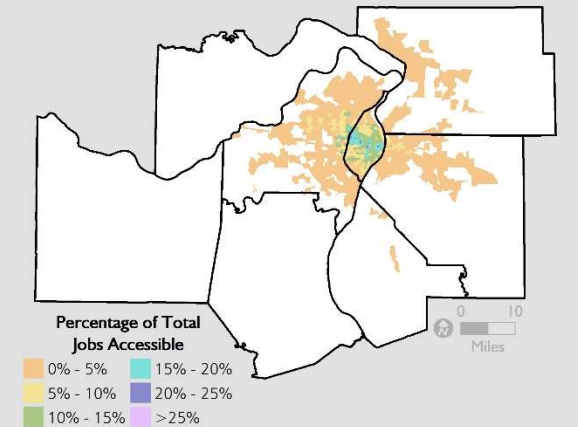


Figure 58 - Jobs Accessibility by Auto within 60 minutes, 2020

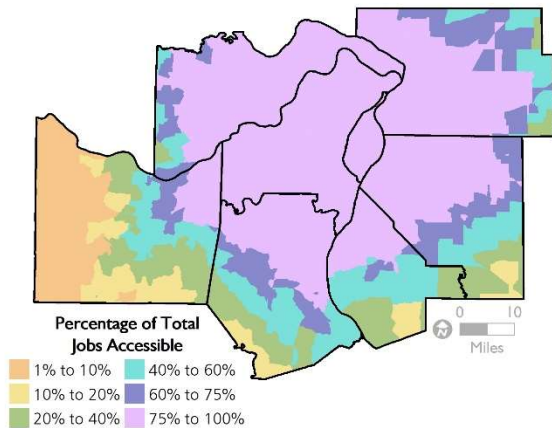
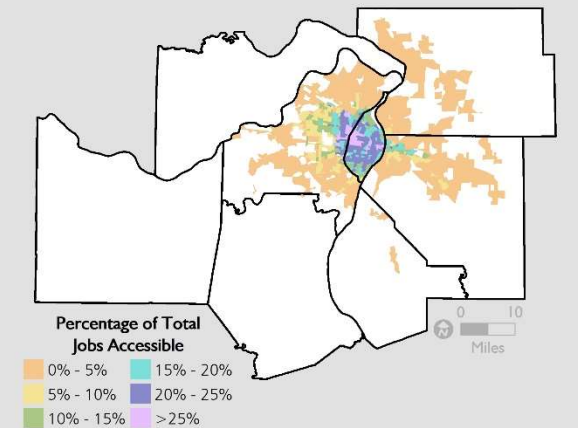


Figure 59 - Jobs Accessibility by Transit within 60 minutes, 2020



Note: These maps are based on modeled data that does not account for abnormal behavior in 2020.
Source: East-West Gateway Council of Governments.



Job Access for Transportation Equity Populations (TEP)

On average, there is not much difference in job access between the TEP groups and non-TEP groups. However, people who have a car can access much larger proportions of jobs than people who use transit.

The following analysis relies on allocation of Census demographic data to transportation analysis zones (TAZs) used in the EWG transportation travel demand model. Allocations for the TEPs were completed using U.S. Census Bureau American Community Survey 5-year estimates for the 2016-2020 time period. When possible, the percentage of jobs accessible was calculated for the non-TEP population groups as well.

Table 36 provides the average percentage of jobs that are accessible in 25-, 45-, and 60-minute transit trips and auto trips for each TEP and non-TEP. All population groups can reach at least 27 percent of jobs by auto within a 25-minute commute (the shortest time frame analyzed). By comparison, for all population groups, the percentage of regional jobs that can be reached by transit within the longest time interval (60 minutes) is minimal (6 percent or less).

Table 36. Jobs Accessible for Transportation Equity Populations (TEP) and Non-TEPs

Average percent of jobs accessible within 25, 45, and 60 minutes by transit and auto
East-West Gateway Region, 2016-2020

	By Auto			By Transit		
	25 Minutes	45 Minutes	60 Minutes	25 Minutes	45 Minutes	60 Minutes
Total Households	27.6	69.0	88.2	0.3	2.5	5.4
Total Population	27.6	69.0	88.2	0.3	2.4	5.4
Minority	27.7	69.1	88.3	0.3	2.5	5.4
Non-Minority	27.2	68.4	87.9	0.3	2.4	5.2
Poverty	27.6	68.9	88.1	0.3	2.5	5.5
Non-Poverty	27.5	68.9	88.1	0.3	2.5	5.4
Seniors	27.4	68.7	88.1	0.3	2.4	5.3
Non-Seniors	27.6	69.0	88.2	0.3	2.5	5.4
No-Vehicle Households	29.3	71.2	89.3	0.3	2.8	6.2
Households with Vehicle(s)	27.6	69.0	88.2	0.3	2.4	5.4
Disabled	27.5	68.8	88.1	0.3	2.4	5.4
LEP	30.9	73.3	90.4	0.3	2.7	6.0

Note: The non-disabled and non-lep populations are not included.

Source: East-West Gateway calculations/estimates based on travel demand model and U.S. Census Bureau, American Community Survey 5-Year, 2016-2020.



Between 2015 and 2020, average access to jobs by transit for all population groups decreased while job access by auto was about the same for all population groups. Figure 60 shows the average percentage of jobs accessible within 25-, 45-, and 60-minutes in 2015 and 2020 for the total EWG population by transit and auto.

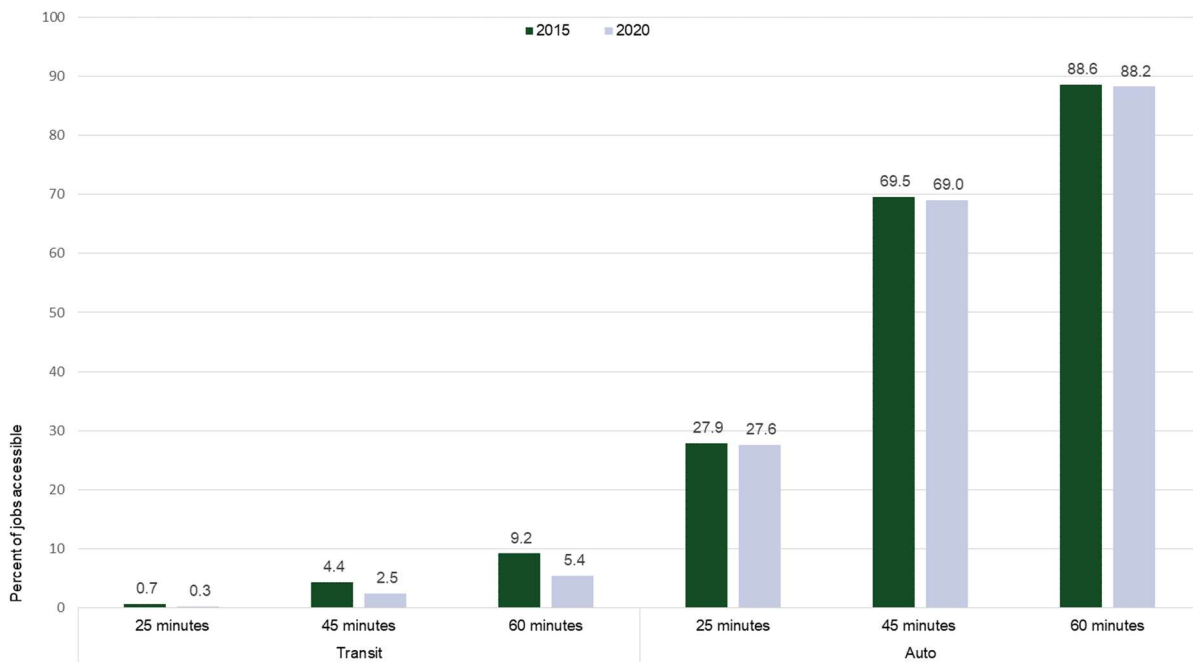
The three sets of bars on the right-hand side show that, on average, job accessibility by auto has decreased less than 1 percentage point for all three travel times. The decreases were more substantial for traveling by transit for the 45-minute travel time (-1.9 percentage points) and the 60-minute travel time (-3.8 percentage points). The percentage of jobs accessible by transit in these travel times was already low relative to the proportion of jobs accessible by auto.

The largest changes among all of the TEP and non-TEP population groups were for the LEP population and no-vehicle households. For both, the percentage of jobs accessible within 60 minutes by transit decreased from about 10 percent in 2015 to 6 percent in 2020.

“I had to be at work at 9, so I was up at 5. My ride comes at about 6, I travel then I get off at 5, then I get home sometimes about 8. I was doing twelve hours, for an eight hour job.”

- Monica W., Illinois Resident

Figure 60. Jobs Accessible for Total Population
Percent of jobs accessible by auto and transit in 25, 45, and 60 minutes
East-West Gateway Region, 2015 and 2020



Note: Population for both 2015 and 2020 are based on ACS 2016-2020 data. Employment location and transportation system data are for 2015 and 2020.
Source: East-West Gateway calculations and estimates based on travel demand model and U.S. Census Bureau, American Community Survey 5-Year, 2016-2020.



ACCESS TO GROCERY STORES

It is essential that the transportation system provides access to destinations other than employment opportunities. One of these destinations for which data are available is grocery stores. In the St. Louis MSA, an estimated 730,607 residents lived far from a grocery store in 2019. This is about 28.4 percent of the population. The USDA defines “far” from a grocery store as one mile for urban areas and 10 miles for rural areas.¹³⁰ Residents in the city of St. Louis were most likely to live in close proximity to a grocery store.

“About 7 years ago a woman in one of our grocery stores had a full cart of food. After checking out she asked if she could leave her cart there to make two trips (a 2 mile walk with groceries to her home and back was 4 miles in total). If she took the bus, it would take her 3.5 - 4 hours, so she had to choose between walking 4 miles or spending a few hours on the bus.”

Chris Krehmeyer, Beyond Housing

The USDA provides a database that estimates the accessibility of grocery stores for people throughout the country, including for specific subsets of the population. These subsets include many of the EWG TEPs, but not all.¹³¹ It also includes one additional subset, those who receive Supplemental Nutrition Assistance Program (SNAP) benefits. SNAP is a federal nutrition assistance program that provides benefits to people who meet the income thresholds.¹³²

Tables 37 and 38 provide the number and percent of the total population and of TEPs who have low access to a grocery store according to the USDA. About one-quarter to one-third of most of the TEP groups have low access. This is also true of the non-TEP populations included here, the White population and the total population. There is a disparity in the city of St. Louis where White and Black residents

Table 37. Low Access to Grocery Stores by Transportation Equity Populations

Number and percent of population that lives far (1 mile in urban areas and 10 miles in rural areas) from a grocery store

County	Low Access and...		Low Access and....									
	Low Access (Population)	Low Access (Percent)	Children (Population)	Children (Percent)	Seniors (Population)	Seniors (Percent)	No-Vehicle (Population)	No-Vehicle (Percent)	SNAP Benefits (Population)	SNAP Benefits (Percent)	Low-Income (Population)	Low-Income (Percent)
Madison	112,467	41.8	25,483	41.6	15,251	39.7	3,272	45.4	6,448	46.0	34,650	46.7
Monroe	12,336	37.4	3,109	38.5	1,554	33.4	150	30.3	226	39.1	1,629	34.4
St. Clair	99,253	36.8	26,424	38.5	11,528	34.1	4,071	42.0	7,061	43.3	35,090	41.0
Franklin	10,734	10.6	2,623	10.4	1,512	10.8	285	14.7	374	9.3	3,034	10.3
Jefferson	67,874	31.0	17,690	32.2	6,683	27.4	995	32.9	2,885	31.1	18,262	31.9
St. Charles	141,435	39.2	38,213	41.2	15,466	38.3	1,255	31.2	1,952	30.7	17,694	31.1
St. Louis	267,283	26.8	66,732	28.5	37,375	25.0	5,275	19.1	7,447	21.6	50,436	21.8
City of St. Louis	19,226	6.0	5,074	7.5	2,376	6.8	2,004	7.0	2,402	8.0	11,446	8.4
EWG Region	730,607	28.4	185,348	30.3	91,745	27.0	17,307	21.0	28,795	25.0	172,240	25.5

Note: *USDA uses population data from Census 2010 and American Community Survey (2014-2018) for some data. Data on location of grocery stores are for 2019.

Source: Food Access Research Atlas Data Download 2019, United States Department of Agriculture, last updated 4/27/2021, accessed at <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data/>

¹³⁰ For the purposes of the Food Atlas, “Urban and rural are defined in the Bureau of the Census urbanized area definitions, where rural areas are sparsely populated areas with fewer than 2,500 people, and urban areas are areas with more than 2,500 people. A census tract is urban if the geographic centroid of the tract is in an area with more than 2,500 people; all other tracts are rural.”

¹³¹ For the purposes of the Food Atlas, “Low income is defined as annual family income at or below 200 percent of the Federal poverty threshold for family size.”

¹³² For details on who is eligible to receive SNAP, visit <https://www.fns.usda.gov/snap/recipient/eligibility>



make up the same proportion of the population, but Black residents are much more likely to live far from a grocery store than White residents, 10.6 percent and 1.4 percent, respectively.

Figure 61 shows the population for the EWG region with low access to a grocery store, with the blue dots representing a subset of this population, those who have low

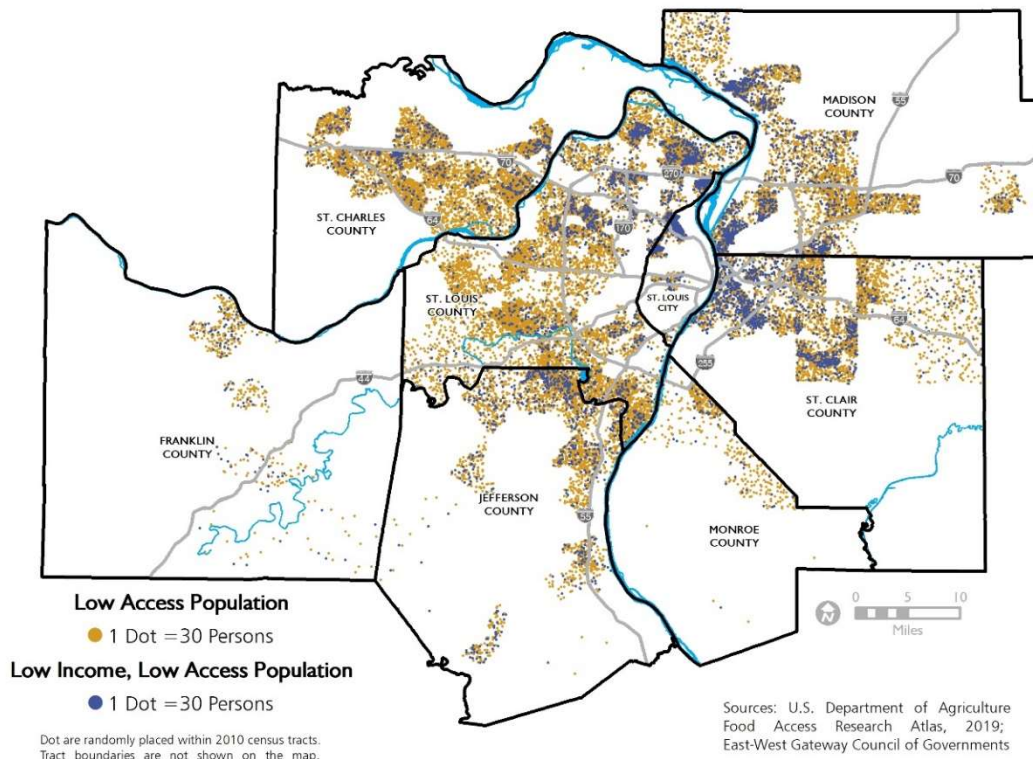
access and are low income. There are people throughout much of the region who do not have this level of access to a grocery store. The populations with low access and who are low income are mostly in the eastern portions of St. Clair and Madison counties and the northern portions of St. Louis and Franklin counties.

Table 38. Low Access to Grocery Stores by Race and Ethnicity Population Groups
Number and percent of population that lives far (1 mile in urban areas and 10 miles in rural areas) from a grocery store
East-West Gateway Region by County, 2019*

County	Low Access and....					
	White (Population)	White (Percent)	Black (Population)	Black (Percent)	Other Minority (Population)	Other Minority (Percent)
Madison	97,656	41.1	10,221	48.1	7,798	44.0
Monroe	12,102	37.5	43	61.8	334	31.8
St. Clair	61,838	35.4	32,116	39.0	9,003	40.8
Franklin	10,391	10.6	77	9.0	425	11.2
Jefferson	65,424	31.0	453	25.2	3,157	33.8
St. Charles	128,809	39.4	5,587	37.3	10,230	35.9
St. Louis	189,527	27.0	62,086	26.6	21,597	24.3
City of St. Louis	1,915	1.4	16,638	10.6	1,051	3.2
EWG Region	567,662	29.5	127,222	24.9	53,595	26.2

Note: *USDA uses population data from Census 2010 and American Community Survey (2014-2018) for some data. Data on location of grocery stores are for 2019.
Source: Food Access Research Atlas Data Download 2019, United States Department of Agriculture, last updated 4/27/2021, accessed at <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data/>

Figure 61. Access to Grocery Stores, East-West Gateway Region, 2019



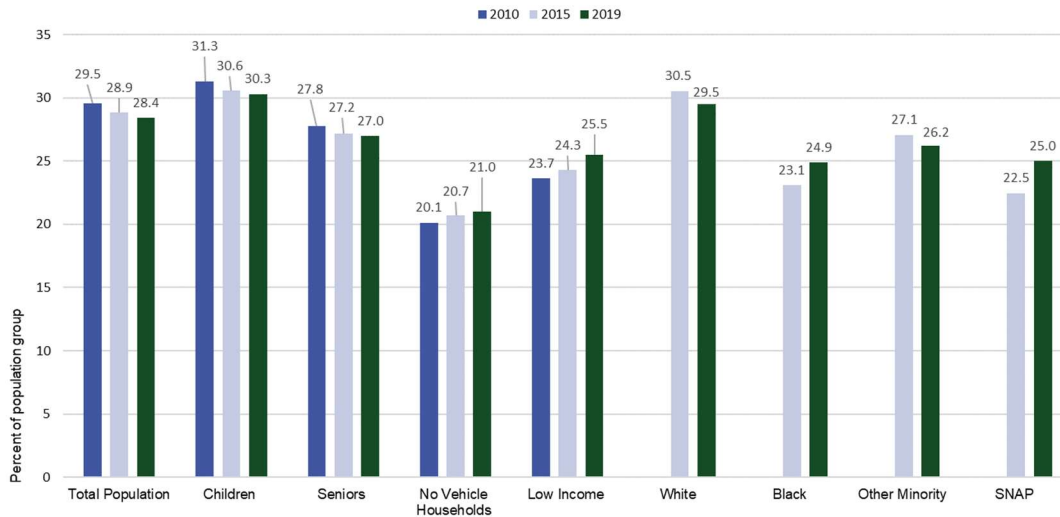


There are a few areas shown on the map as low access where people may have access to some type of grocery store that does not fit the USDA definition. USDA includes supermarkets (big box stores), supercenters, and large grocery stores. USDA selected this definition because a majority (84 percent) of SNAP benefits are used at these types of stores and most people purchase produce from these types of stores.¹³³

Over the last decade, access to grocery stores has slightly improved when looking at the percent of the total population of the region, but the proportions of Black residents, SNAP recipients, no-vehicle households, and low-income households with low access has increased, as shown on Figure 62.¹³⁴ Among the population as a whole, the percentage of the population with low access decreased from 29.5 percent in 2010 to 28.4 percent in 2019. The proportions of seniors and children with low access also decreased slightly, declining by 1 and 0.8 percentage points, respectively. From 2010 to 2019, no-vehicle households and low-income individuals experienced small increases in low access to grocery stores, increasing by about 1 percentage point and just over 2 percentage points, respectively.

Data on grocery store access are not available by race for the year 2010, but from 2015 to 2019, data indicates slightly better access among White residents and slightly worse among Black residents. For White residents, the percent with low access decreased from 30.5 to 29.5 percent. Meanwhile, the percent of Black residents with low access, increased from 23.1 in 2015 to 24.9 in 2019. Data for 2010 are also not available for SNAP recipients, but from 2015 to 2019, the percent of this population with low access increased from 22.5 to 25 percent.

Figure 62. Low-Access to Grocery Stores by Transportation Equity Populations
Percent of population that lives far (1 mile in urban areas and 10 miles in rural areas) from a grocery store
East-West Gateway Region, 2010, 2015, and 2019



Note: 2010 Data are not available for White, Black, Other Minority, and SNAP recipients. Additionally, USDA uses population data from Census 2010 and 5-Year American Community Survey for some data. The 5-Year American Community Survey data is from the 2006-2010, 2008-2012, 2011-2015, and 2014-2018 periods.

Source: Food Access Research Atlas Data, United States Department of Agriculture, last updated 4/27/2021. Accessed at <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data>

¹³³ Introduction to the Food Access Atlas, Economic Research Service, U.S. Department of Agriculture, accessed at <https://gisportal.ers.usda.gov/portal/apps/experiencebuilder/experience/?id=a53ebd7396cd4ac3a3ed09137676fd40>

¹³⁴ For 2010, total no-vehicle households and low-income population were not included by the USDA. Percentages were calculated based on 2006-2010 5-Year ACS (DP04) data. Similarly, for the low-income population 2008-2012 5-Year ACS (S1701) data was used. There is no 5-year ACS table available for population under 200% of FPL.



TRANSPORTATION COSTS

The cost of transportation is a barrier for some people in the region. Taking public transportation costs significantly less than owning a car, but transit in the St. Louis region does not provide people with the ability to travel to all destinations. The region has focused its limited transit investments to try to connect people of low-income areas to job centers. However, even those who live close to a transit stop still cannot reach some jobs and other destinations.

This section provides estimates of the cost of owning a car, taking transit and, when considering housing plus transportation costs, the areas of the region that are affordable at the regional median income as well as areas of the region where residents, on average, are cost-burdened.

Cost of Owning a Car vs. Transit

In St. Louis, on average, owning a car costs six times more than taking public transit. In 2020, the average cost of owning a car is estimated at about \$6,054.¹³⁵ Comparatively, in 2022, a regular public transit user not receiving a discounted fee spends about \$936 a year for monthly passes for Metro transit.¹³⁶

Table 39 provides the percentage of income that would be spent on auto and transit for someone earning the regional median income, a person with a full-time minimum wage job,¹³⁷ and for two poverty level thresholds. For most of these selected income thresholds, the cost of owning a car would exceed the 15 percent of income threshold that is typically considered affordable.

Average amount spent on transit and car and percent of income thresholds			
Estimated Annual Costs		Car	Transit
		\$6,054	\$936
Income Threshold (\$)		Percent of income spent on transportation	
Regional Median Income	66,439	9.1	1.4
Full-Time Minimum Wage	24,076	25.1	3.9
Poverty: Family of four with two children	26,246	23.1	3.6
Poverty: Two-person household with a head of household aged 65 years or older	15,644	38.7	6.0

Sources: AAA, *Your Driving Costs: How much are you really paying to drive?*, 2020, accessed at <https://newsroom.aaa.com/wp-content/uploads/2020/12/2020-Your-Driving-Costs-Brochure-Interactive-FINAL-12-9-20.pdf>; Metro Bi-State 2022; U.S. Census Bureau; Poverty thresholds at <http://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>

¹³⁵ AAA, *Your Driving Costs: How much are you really paying to drive?*, 2020, accessed at <https://newsroom.aaa.com/wp-content/uploads/2020/12/2020-Your-Driving-Costs-Brochure-Interactive-FINAL-12-9-20.pdf>; Estimate is the cost per year for medium sized sedan.

¹³⁶ As of this writing, a monthly metro pass in St. Louis costs \$78 a month for riders not receiving a reduced fair or aid for transportation costs.

¹³⁷ Average for Missouri (\$11.15) and Illinois (\$12).



Housing plus Transportation Costs

Housing and transportation are two large expenses for households. According to the U.S. Department of Housing and Urban Development, affordable housing “is generally defined as housing on which the occupant is paying no more than 30 percent of gross income for housing costs, including utilities.”¹³⁸ However, in 2006, the Center for Neighborhood Technology (CNT) proposed a Housing + Transportation (H+T) index, with affordability for a given household defined as no more than 45 percent of income going to the sum of housing and transportation costs. The CNT definition has been cited thousands of times, and is now a commonly accepted standard for affordability.

CNT made popular the notion that transportation costs need to be considered in combination with housing costs because both types of costs are influenced by the built environment and therefore strongly tied together. For example, a person who finds relatively low-cost housing, but who has to drive an hour to get to work, may find that the total cost of housing and transportation is overly burdensome.

EWG uses the CNT methodology as a base and adds local data to estimate areas of the region that are affordable. Two distinct questions are addressed:

- What parts of the region are affordable to the average household (earning the regional median income) in the region?
- Which parts of the region have cost-burdened households?

These questions do not yield the same answers. For example, a tract with high-housing costs and high-income levels may be unaffordable to an average household, but still be affordable to the high-income households that live there. Conversely, a tract may have low-housing costs and a preponderance of low-income households; these low-income households may still be cost-burdened despite housing costs that are low compared to other parts of the region.¹³⁹ It is worth noting, all of the prices used in these estimates fluctuate over time, particularly in recent years. For the estimates used here, most data are from 2019 and the price of gas is set at \$3.98 per gallon.

Figure 63 addresses the first question, showing areas of the region that are affordable to a household with income at the regional median. On the map, areas shaded in yellow are considered unaffordable to those who earn less than the regional median income, which was \$64,461 in 2019.¹⁴⁰ Therefore, to have a sustainable budget, households at the median income or below would need to live in green-shaded areas.

¹³⁸ U.S. Department of Housing and Urban Development, 2011. Glossary of Terms to Affordable Housing.

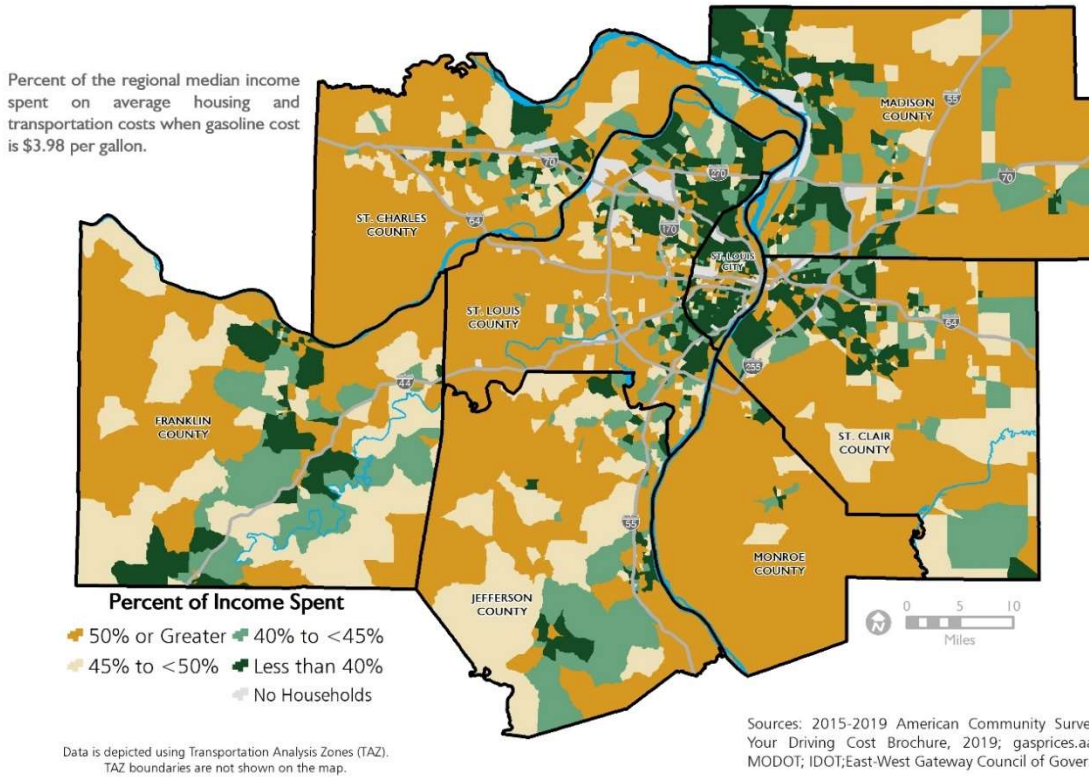
<https://archives.hud.gov/local/nv/goodstories/2006-04-06glos.cfm>

¹³⁹ The EWG H+T methodology is based on the method pioneered by CNT. The study uses the 2015-2019 American Community Survey to estimate housing costs for small areas known as transportation analysis zones (TAZ). The EWG travel demand model is used to estimate the average amount of driving by households in each TAZ. The Consumer Expenditure Survey is used to estimate other transportation costs.

¹⁴⁰ East-West Gateway calculations based on the U.S. Census Bureau, 2016-2019 American Community Survey 5-Year Estimates.



**Figure 63. Housing + Transportation Affordability Index (Regional Income)
East-West Gateway Region, 2019**



For the most part, the transportation equity populations (TEP) are less likely than the general population to live in a community that is considered unaffordable for those making the regional median income or more. Table 40 shows the proportion of each TEP that lives in areas considered affordable by this definition. An estimated 48.3 percent of the population and 44.7 percent of households live in communities that are unaffordable at the regional median income. Seniors are the only TEP group who are about as likely as the general population to live in an area that is unaffordable at the regional median income.

Table 40. Housing + Transportation Costs for TEP and non-TEP groups					
Number and percent of population group by affordability category					
Regional median income and \$3.98 gas, 2019*					
	Less than 45 Percent	45 Percent or More	Less than 45 Percent	45 Percent or More	Ratio
	Population	Population	Percent of Group	Percent of Group	45 Percent or More/ Less than 45 Percent
TEP Populations					
Minority	554,246	258,320	68.2	31.8	0.47
Seniors	210,431	201,737	51.1	48.9	0.96
No-Vehicle Households	56,165	19,802	73.9	26.1	0.35
Poverty	192,360	77,198	71.4	28.6	0.40
Disabled	182,990	115,637	61.3	38.7	0.63
Limited English Proficiency	33,042	20,939	61.2	38.8	0.63
Non-TEP Populations					
Total Population	1,341,147	1,253,616	51.7	48.3	0.93
Households	642,291	519,253	55.3	44.7	0.81
Non-Minority	786,901	995,296	44.2	55.8	1.26
Non-Seniors	1,130,716	1,051,879	51.8	48.2	0.93
Households with 1 or more vehicles	586,126	499,451	54.0	46.0	0.85
Non-Poverty	1,148,787	1,176,418	49.4	50.6	1.02

* The year of data used for the H+T costs is 2019 or 2015-2019; the TEP group data is for 2016-2020

Sources: 2015-2019 and 2019-2020 American Community Surveys; BLS Consumer Expenditure Survey (2015-2019); Money Zine Car Depreciation Calculator; Franklin, Jefferson, St. Charles, and St. Louis counties, and St. Louis City Personal Tax Rates; AAA Your Driving Cost Brochure 2019; gasprices.aaa.com; MODOT; IDOT; East-West Gateway Council of Governments

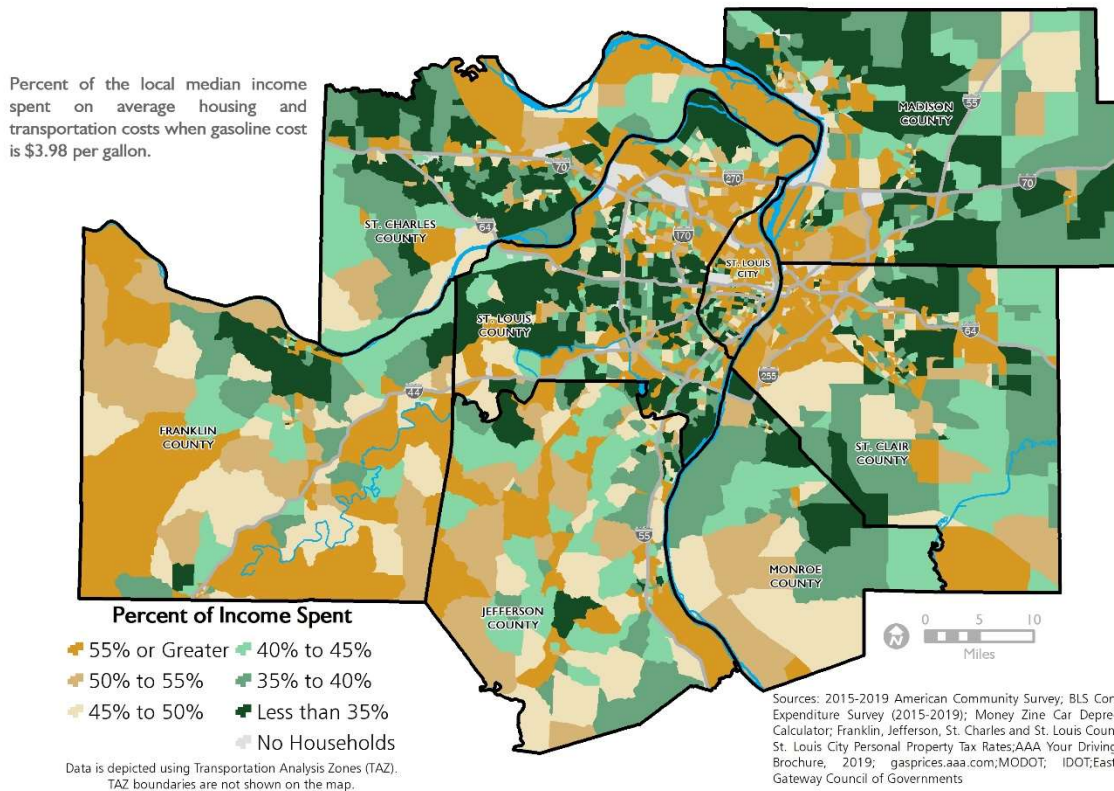


Figure 64 addresses the second question, showing communities in which average households are cost burdened. In each yellow-shaded tract, the median household income of that tract is less than the median H+T cost for that tract, indicating that households are cost-burdened. Green-shaded tracts are those in which the local median household income is greater than local median H+T costs, indicating that, on average, these costs are affordable for households in those areas.

“It costs me a ton of money to get to school...I like to make sure all of the classes I’m teaching are on one day, if possible, so I don’t have to spend a huge amount of time and money getting there.”

- Christopher W.,
Missouri Resident

**Figure 64. Housing + Transportation Affordability Index (Tract Income)
East-West Gateway Region, 2019**





By this definition, most households (59 percent) in the region have affordable H+T costs. However, TEPs are more likely to be cost-burdened. Areas where residents are most likely to spend an unsustainable amount on the two costs are in northern parts of the city of St. Louis and St. Louis County, the western parts of St. Clair and Madison counties, and some of the outer parts of the region in Franklin, Jefferson, and Monroe counties.

Most of the TEPs are more likely than the general population to live in a community where the typical household is cost-burdened. Table 41 provides the number and percent of people for each of the TEP groups who live in areas where average H+T costs are less than 45 percent of the regional income or 45 percent or more. About 38 percent of the entire population, or 40.9 percent of households, live in communities with high transportation and housing costs. Households without a vehicle (65.4 percent), those who live in poverty (62 percent), and people of racial minority groups are more likely to live in these communities. Seniors in St. Louis are slightly less likely than the general population to be cost-burdened.

Table 41. Housing + Transportation Costs for TEP and non-TEP groups					
Number and percent of population group by affordability category					
Local median income and \$3.98 gas, 2019*					
	Less than 45 Percent	45 Percent or More	Less than 45 Percent	45 Percent or More	Ratio
	Population	Population	Percent of Group	Percent of Group	45 Percent or More/ Less than 45 Percent
TEP Populations					
Minority	363,638	448,924	44.8	55.2	1.23
Seniors	259,750	152,417	63.0	37.0	0.59
No-Vehicle Households	26,322	49,645	34.6	65.4	1.89
Poverty	102,392	167,165	38.0	62.0	1.63
Disabled	159,819	138,807	53.5	46.5	0.87
Limited English Proficiency	32,739	21,242	60.6	39.4	0.65
Non-TEP Populations					
Total Population	1,609,867	984,889	62.0	38.0	0.61
Households	686,114	475,428	59.1	40.9	0.69
Non-Minority	1,246,229	535,965	69.9	30.1	0.43
Non-Seniors	1,350,117	832,472	61.9	38.1	0.62
Households with 1 or more vehicles	659,792	425,783	60.8	39.2	0.65
Non-Poverty	1,507,475	817,724	64.8	35.2	0.54

* The year of data used for the H+T costs is 2019 or 2015-2019; the TEP group data is for 2016-2020

Sources: 2015-2019 and 2019-2020 American Community Surveys; BLS Consumer Expenditure Survey (2015-2019); Money Zine Car Depreciation Calculator; Franklin, Jefferson, St. Charles, and St. Louis counties, and St. Louis City Personal Tax Rates; AAA Your Driving Cost Brochure 2019; gasprices.aaa.com; MODOT; IDOT; East-West Gateway Council of Governments



TRAFFIC FATALITIES

Nationally, car crashes are a leading cause of death. EWG is committed to creating a safer transportation system. While all road users are at risk of being involved in a severe crash, it is worth considering whether any groups of people in the St. Louis region bear a disproportionate risk. This analysis finds a strong association between the location of crash fatalities and areas (census tracts) with high proportions of Black residents, high proportions of low-income households, and high poverty rates as well as a disproportionate concentration of motorist fatalities in rural areas. Further, in the St. Louis region, Black residents account for a disproportionate number of motorist fatalities, and an even more disproportionate number of bicycle and pedestrian (bike/ped) fatalities.

Table 42 shows crash fatalities broken down by race and ethnicity, as well as by relationship to vehicles involved in crash fatalities. Overall, there were 1,522 traffic fatalities in the EWG region from 2016 to 2020. Most victims were drivers (975, or 64 percent). Some 268 passengers were killed in this time period, followed by 251 pedestrians. Seventeen cyclists were killed, as well as two individuals on personal conveyances. There were nine fatalities for which relationship to vehicle was not entered into the data set. Whites (not Hispanic or Latino) accounted for 941 of the fatalities, followed by 481 Blacks (not Hispanic or Latino).

Traffic Fatalities Data and Source Notes

This analysis uses a dataset of all crash fatalities from the National Highway Traffic Safety Administration (NHTSA). The Fatality Analysis Reporting System (FARS) dataset includes information on location of fatal crashes; whether a victim is a driver, passenger, or pedestrian; and limited demographic information on crash victims. The following analysis uses the FARS data overlaid with locational data and demographic data from the 5-Year American Community Survey (2020) to assess geographic patterns.

Table 42. Traffic Fatalities by Race and Ethnicity

East-West Gateway Region, 2016-2020

Occupant Type	Number of Fatalities						Total
	American Indian	Asian	Black	Hispanic	All Other Races and Ethnicities	White	
Bicyclist	1		5		2	9	17
Driver of a Motor Vehicle In-Transport		10	247	21	26	671	975
Passenger of Motor Vehicle In-Transport		4	109	3	9	143	268
Pedestrian	1	5	118	6	8	113	251
Person on Personal Conveyance					1	1	2
Unknown Occupant Type			2	3		4	9
Total	2	19	481	33	46	941	1,522

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System



Table 43 consolidates bicycle, pedestrian, and personal conveyance fatalities into the “bike/ped” category. Drivers and passengers are combined into the “motorist” category. Shown are totals for Whites (not Hispanic or Latino), Blacks (not Hispanic or Latino), and all other races and ethnicities. Black residents are disproportionately likely to be victims of bike/ped fatalities. Black residents constituted 19.2 percent of the population and 19.4 percent of bike/ped commuters¹⁴¹ but accounted for 45.6 percent of all bike/ped fatalities. This rate is more than double what would be expected if bike/ped fatalities were evenly distributed among the population. By contrast, Whites made up 68.7 percent of the population and 65.6 of bike/ped commuters but constituted just 45.6 percent of bike/ped fatalities. Similarly, other racial and ethnic categories comprise 12.1 percent of the population, but just 8.9 percent of bike/ped fatalities.

“I do feel a lot of fear for my safety and for other people who are trying to get around without a car... As a transit rider, I stand behind a pole because I’m so concerned at the reckless driving I see...”

- Evie H., Missouri Resident

Disparities among motorist fatalities were also apparent, though not as pronounced as those for bike/ped fatalities. Whites made up 65.5 percent of motorist fatalities, close to their population proportion of 68.7 percent. Black residents accounted for 28.6 of motorist fatalities, nearly 50 percent more than would be expected if crashes were evenly distributed.

Table 43. Comparison of Fatality Rates by Race

East-West Gateway Region, 2016-2020

Passenger Type	White	Black	All Other Races and Ethnicities
Bicyclist or Pedestrian	123	123	24
Percent of Population	68.7	19.2	12.1
Percent of Fatalities	45.6	45.6	8.9
Motorist	818	358	76
Percent of Population	68.7	19.2	12.1
Percent of Fatalities	65.5	28.6	6.1

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System

¹⁴¹ U.S. Census Bureau, 5-Year American Community Survey Estimates, 2016-2020.



Tables 44 through 46 analyze locations of fatalities. Crashes that occurred on Interstates are excluded from this analysis.

In Table 44, tracts are divided into 10 groups based on the percentage of population that is Black residents, with each group representing approximately 10 percent of the regional population. There is a strong association between high concentrations of Black residents and occurrence of bike/ped fatalities. Approximately 9.8 percent of the region’s population lives in tracts in which at least 73.9 percent of the residents are Black. These tracts accounted for 35 percent of bike/ped crashes, more than triple the percentage that would be expected if crashes were evenly distributed. Tracts that were between 33.2 percent and 73.9 percent Black residents were home to 10.1 percent of the region’s population but were the site of 14.3 percent of bike/ped fatalities, a rate more than 40 percent higher than an even distribution. All other groups of tracts, with populations that were less than 33 percent Black, had fewer bike/ped crashes than would be expected in an even distribution.

There are also disproportionate shares of motorist fatalities for tracts with the largest and smallest shares of Black residents. Tracts in which Blacks represented at least 73.9 percent of the population were the site of 20.5 percent of all motorist fatalities, more than twice the rate produced in an even distribution. Also, tracts that were less than 0.08 percent Black residents also contained about 10 percent of the region’s population, but 21.6 percent of motorist fatalities. Most of these tracts were located in rural areas.

Table 44. Crash Fatalities by Race

East-West Gateway Region, 2016-2020

Decile (Census tracts divided into 10 groups based on Percent of Black Residents)	Percent Black Residents	Population	Non-Interstate Motorist Fatalities (#)	Bike/Ped Fatalities (#)	Percent of Population in Decile	Percent of Non- Interstate Motorist Fatalities	Percent of Bike/Ped Fatalities
1 (Largest Black Percentages)	73.9 - 100	254,718	199	93	9.8	20.5	35.0
2	33.2 - 73.9	261,953	88	38	10.1	9.1	14.3
3	17.3 - 33.2	254,852	58	22	9.8	6.0	8.3
4	8.6 - 17.3	263,004	73	16	10.2	7.5	6.0
5	4.9 - 8.6	255,325	69	19	9.9	7.1	7.1
6	3.4 - 4.9	262,108	39	14	10.1	4.0	5.3
7	1.7 - 3.4	256,106	92	18	9.9	9.5	6.8
8	0.8 - 1.7	260,153	61	13	10.1	6.3	4.9
9	0.08 - 0.8	259,015	83	16	10.0	8.5	6.0
10 (Smallest Black Percentages)	0 - 0.08	260,565	210	17	10.1	21.6	6.4

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System



Both motorist and bike/ped fatalities were strongly concentrated in low-income tracts. On Table 45, tracts are divided into 10 groups based on median household income (MHI Tracts with a MHI of less than \$37,378 contained 10 percent of the region’s population but 22.3 percent of motorist fatalities and 34.6 percent of bike/ped fatalities. Tracts with MHI between \$37,424 and \$48,421 also were home to about 10 percent of the region’s residents, but were the site of 11.2 percent of motorist fatalities and 17.3 percent of bike/ped fatalities. Tracts with MHI between \$48,542 and \$55,547, also home to 10 percent of the region’s residents, were the site of 13.9 percent of bike/ped crashes. All other groups of tracts saw fewer fatal crashes than would be expected in an even distribution.

“We are less than a ½ mile from a grocery store and there’s no sidewalk for a good portion of it. Its fine when I’m by myself, I don’t mind walking it. But I don’t love pushing my kids in a stroller on not a sidewalk...”

- Julie W., Missouri Resident

Table 45. Crash Fatalities by Income Deciles

East-West Gateway Region, 2016-2020

Decile (Census tracts divided into 10 groups based on Income)	Median Household Income	Population	Non-Interstate Motorist Fatalities (#)	Bike/Ped Fatalities (#)	Percent of Population in Decile	Percent of Non-Interstate Motorist Fatalities	Percent of Bike/Ped Fatalities
1 (Lowest Income)	\$0 - 37,378	257,920	217	92	10.0	22.3	34.6
2	\$37,424 - 48,421	257,309	109	46	9.9	11.2	17.3
3	\$48,542 - 55,547	259,499	95	37	10.0	9.8	13.9
4	\$55,613 - 63,429	259,197	101	23	10.0	10.4	8.6
5	\$63,718 - 68,605	257,045	74	13	9.9	7.6	4.9
6	\$68,851 - 75,436	260,551	102	13	10.1	10.5	4.9
7	\$75,530 - 84,148	257,454	83	12	9.9	8.5	4.5
8	\$84,226 - 97,857	257,591	59	9	10.0	6.1	3.4
9	\$98,010 - 112,807	258,599	87	9	10.0	9.0	3.4
10 (Highest Income)	\$112,906 - >250,000	262,634	45	12	10.1	4.6	4.5

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System



Table 46 shows a similar association between tracts with high poverty rates and tracts in which fatal crashes occurred. Tracts with the highest poverty rates, greater than 25.6 percent, were home to 10 percent of the region’s population, but had 21.3 percent of non-Interstate motorist fatalities, and 33.5 percent of bike/ped fatalities.

Table 46. Crash Fatalities by Poverty Rate Deciles

East-West Gateway Region, 2016-2020

Decile (Census tracts divided into 10 groups based on Poverty Rate)	Poverty Rate Range	Population	Non-Interstate Motorist Fatalities (#)	Bike/Ped Fatalities (#)	Percent of Population in Decile	Percent of Non- Interstate Motorist Fatalities	Percent of Bike/Ped Fatalities
1 (Highest Poverty Rates)	25.6 - 65.9	258,465	207	89	10.0	21.3	33.5
2	16.4 - 25.6	258,450	100	39	10.0	10.3	14.7
3	11.9 - 16.2	258,924	104	36	10.0	10.7	13.5
4	9.5 - 11.9	256,452	105	24	9.9	10.8	9.0
5	7.6 - 9.5	261,217	84	9	10.1	8.6	3.4
6	6.1 - 7.6	252,906	77	18	9.8	7.9	6.8
7	4.5 - 6.0	255,559	71	16	9.9	7.3	6.0
8	3.4 - 4.5	266,833	73	15	10.3	7.5	5.6
9	2.0 - 3.4	253,412	81	10	9.8	8.3	3.8
10 (Lowest Poverty Rates)	0 - 2.0	265,581	70	10	10.3	7.2	3.8

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System



Table 47 breaks down crash fatalities by urban status. In the EWG region, 14 percent of the population lives in areas classified as rural by the U.S. Census Bureau while 86 percent live in areas classified as urban. Some 35 percent of non-Interstate motorist fatalities occurred in rural areas, more than double the number that would be expected based solely on population. It should be noted that crash victims who die in a given location are not necessarily residents of the area. In addition, people in rural households tend to drive more than people in urban households do, which may account for a portion of the difference. Even so, rural areas see a disproportionate number of traffic fatalities. With respect to bike/ped fatalities, however, rural areas have fewer than would be expected based solely on population. With 14 percent of the region’s population, rural areas account for just 9 percent of bike/ped fatalities.

Table 47. Crash Fatalities by Urban Status

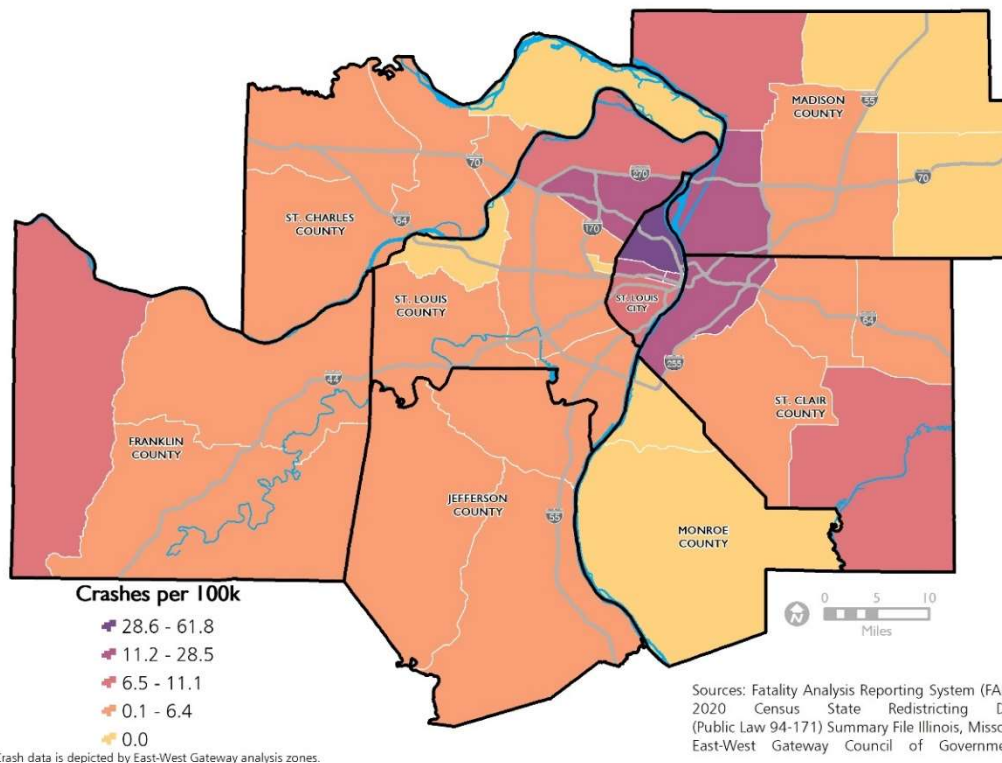
East-West Gateway Region, 2016-2020

	Rural	Urban
Percent of Population	14	86
Percent of Non-Interstate Motorist Fatalities	35	64
Percent of Bike/Ped Fatalities	9	91

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System

Figure 65 provides the bike/ped crash fatalities per 100,000 population for the 2016 to 2020 time period. It can be seen here that the crash rates are highest in the northern part of the city of St. Louis followed by the central part of the city of St. Louis, northern St. Louis County, and in the metro east portion of Illinois.

Figure 65. Bicycle and Pedestrian Crash Fatalities per 100,000 Population East-West Gateway Region, 2016-2020





TRANSPORTATION POLLUTION AND ENVIRONMENTAL HAZARDS

Many people in the St. Louis region and across the country live in close proximity to automobile traffic. While often providing convenience, living near high-traffic areas is also associated with increased noise, toxic gases, and particulate matter including diesel particulates (DPM), which is found to be related to increased risk of adverse health outcomes, such as asthma.¹⁴²

This section includes data for three metrics (traffic proximity, diesel particulate matter, and asthma rates) that are tracked as part of the Climate and Economic Justice Screening Tool (CEJST)¹⁴³ and/or the U.S. Environmental Protection Agency (EPA) EJSCREEN Environmental Justice Mapping and Screening Tool. These tools identify environmental factors that have adverse health effects. Many of these factors have also been found to have disproportionate effects on people of minority races and low income. The reasons for the larger effects are complex and can include both more a greater amount of exposure and health disparities.¹⁴⁴

The traffic proximity metric is a measure of nearness, indicating potential risk. The DPM metric is a measure of potential exposure, and the asthma measure provides data on one health outcome that in part stems from exposure to environmental hazards.

This section identifies communities in the EWG region that score high on these three metrics, relative to other communities throughout the country. Data in this section are based on national percentiles, providing information on how communities score on each metric relative to the remainder of the U.S. population. For example, if a population is at the 80th percentile, 20 percent of the U.S. population has a higher value on that variable. These are the communities where pollution from automobile traffic may be the greatest. As the EPA cautions, the screening tool is a useful first step in identifying communities. Further review and outreach are needed to provide a full assessment of risk.

The maps display the percentiles by census tract in the EWG region, and data are provided on how each of the three variables affect the transportation equity populations (TEPs). Overall, the largest disparities on all three metrics among the TEPs and their counterparts is for people of racial and ethnic minority groups compared to their peers, with the minority populations experiencing disproportionate shares of the adverse effects. There are also fairly large disparities between no-vehicle households and households with vehicles.

¹⁴² U.S. Environmental Protection Agency (EPA), 2019. EJSCREEN Technical Documentation accessed at https://www.epa.gov/sites/default/files/2021-04/documents/ejscreen_technical_document.pdf

¹⁴³ The CEJST is in beta version. The tool is being developed to identify communities that are disadvantaged for the purposes of meeting the goals of the Justice40 initiative.

¹⁴⁴ Ibid.



Traffic Proximity and Volume

The traffic proximity metric screens the region for locations where the population may be suffering from the negative aspects of living near a major roadway, finding that most TEP groups are more likely than their counterparts to live in close proximity to high-traffic roadways. The metric focuses specifically on populations that are in very close proximity (500 meters) to roadways with very high volumes of traffic. One example is people who live 50 to 100 meters from a multi-lane highway.

Traffic proximity¹⁴⁵ measures the count of vehicles at major roads within 500 meters, divided by distance in meters. The score is based on average annual daily traffic (AADT), as reported by state DOTs to the Highway Performance Monitoring System (HPMS). About half of the road segments (3.8 million of 6.8 million) in HPMS are selected for this metric. These are considered major road segments, including interstates, expressways, principal arterials, and minor arterials in urban areas. These roadways are estimated to account for about 14 percent of U.S. roadways and two-thirds of U.S. traffic (measured by vehicle miles traveled).¹⁴⁶

To calculate the traffic proximity score for a community, the AADT of a roadway is divided by the distance (meters) from the center point of 2010 census block to the nearest point of each surrounding relevant roadway. Inverse distance weighting is used to give more weight to traffic that is in closer proximity to the population. A distance of 500 meters is used in most cases in order to capture the majority of roadways that could have a significant effect on the population. If no applicable roadways are within a 500-meter radius, other roadways are included. Research indicates that 100 to 300 meters is the distance most often associated with health effects.

According to the EPA, the data are highly skewed. Populations that live in blocks in the highest five percentiles have proximity scores that are more than 10 times higher than the median and are much higher than those in the next 5 to 10 percent.

Based on all U.S. census tracts being scored on traffic proximity and then divided into percentiles, the following are some summary data:

- The U.S. median score on traffic proximity is 203.95.
- Scores at the 75th percentile are around 840.
- The range for the EWG region is 0.29 (1st percentile) to 6,031.6 (98th percentile).
- There are 10 tracts in the EWG region that are at or above the 95th percentile, four in St. Louis County and six in the city of St. Louis.
- The average score for the region is 620.36.

¹⁴⁵ Source: [Traffic data](#) from 2017 as compiled by EPA's EJScreen.

¹⁴⁶ U.S. Environmental Protection Agency (EPA), 2019. EJSCREEN Technical Documentation accessed at https://www.epa.gov/sites/default/files/2021-04/documents/ejscreen_technical_document.pdf



Figure 66 shows the percentile range of the census tracts in the region based on the traffic proximity scores. The tracts in the greater than 75th percentile range are in dark red. They are scattered throughout the city of St. Louis and St. Louis County and a few tracts in St. Charles, Jefferson, and St. Clair counties. Most of the rural parts of the region are in the lowest percentile group, although there are a number of tracts that are at the 46th percentile or greater.

Figure 66. Traffic Proximity and Volume, East-West Gateway Region, 2019

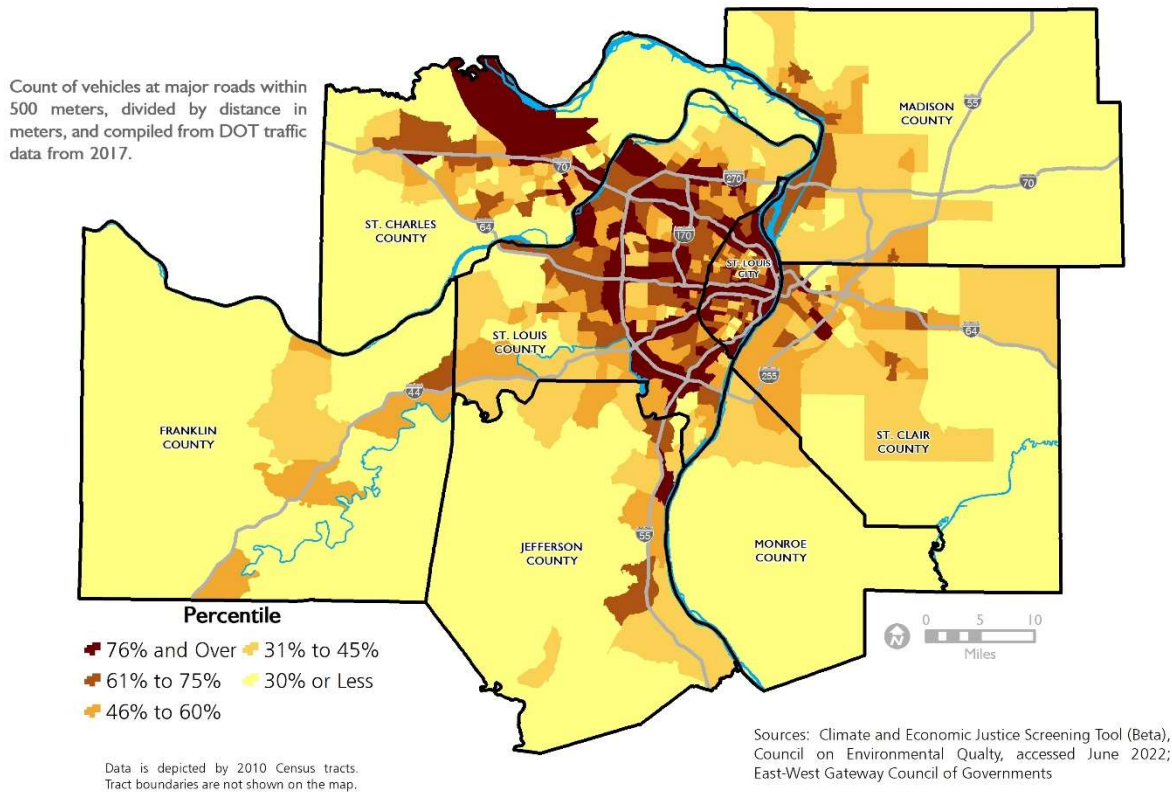


Table 48 provides the number and percent of each TEP and their peer group that fall into four ranges of percentiles. The column to the far right provides the ratio of the percent of the TEP group in the specified percentile range over the percent of the non-TEP group in that range. The ratio indicates to what degree the TEP and non-TEP groups are similar. Figure 67 provides the percent of TEPs and non-TEPs that live in high-proximity tracts.



Table 48. Transportation Equity Populations (TEP) by Traffic Proximity Percentile

Number of and percent of TEP and peer-groups by percentile group

East-West Gateway Region, 2019

Percentile Range (Census tracts divided into 100 groups based on traffic proximity)	Number of Population Group	Percent of Population Group	Number of Population Group	Percent of Population Group	Ratio (TEP/Non-TEP)
	Minority Population		Non-Minority Population		
Over 75	185,582	25.7	295,858	15.9	1.62
61-75	170,872	23.7	277,651	14.9	1.59
46-60	147,843	20.5	389,670	20.9	0.98
31-45	139,289	19.3	464,249	24.9	0.77
Less than 30	78,369	10.9	433,673	23.3	0.47
Total	721,955	100.0	1,861,101	100.0	
	Senior Population		Non-Senior Population		
Over 75	78,563	19.0	402,877	18.6	1.02
61-75	73,109	17.7	375,414	17.3	1.02
46-60	90,786	21.9	446,727	20.6	1.07
31-45	92,062	22.2	511,476	23.6	0.94
Less than 30	79,338	19.2	432,704	19.9	0.96
Total	413,858	100.0	2,169,198	100.0	
	Disabled Population		Non-Disabled Population		
Over 75	63,225	19.6	410,467	18.4	1.06
61-75	57,754	17.9	385,160	17.3	1.03
46-60	70,124	21.7	462,330	20.7	1.05
31-45	73,028	22.6	524,430	23.5	0.96
Less than 30	59,009	18.3	447,356	20.1	0.91
Total	323,140	100.0	2,229,743	100.0	
	LEP Population		Non-LEP Population		
Over 75	14,551	26.3	437,723	18.4	1.43
61-75	12,927	23.4	409,419	17.3	1.36
46-60	10,731	19.4	493,241	20.8	0.93
31-45	10,469	19.0	555,729	23.4	0.81
Less than 30	6,559	11.9	476,769	20.1	0.59
Total	55,237	100.0	2,372,881	100.0	
	No-Vehicle Households		Households with Vehicles		
Over 75	23,888	29.6	188,669	19.6	1.51
61-75	20,074	24.9	166,457	17.3	1.44
46-60	15,920	19.7	205,082	21.3	0.93
31-45	13,226	16.4	219,269	22.8	0.72
Less than 30	7,670	9.5	183,146	19.0	0.50
Total	80,778	100.0	962,623	100.0	
	Poverty Population		Non-Poverty Population		
Over 75	63,631	22.3	403,138	18.0	1.24
61-75	64,069	22.4	373,026	16.6	1.35
46-60	59,746	20.9	470,936	21.0	1.00
31-45	59,067	20.7	534,048	23.8	0.87
Less than 30	39,452	13.8	463,586	20.7	0.67
Total	285,965	100.0	2,244,734	100.0	

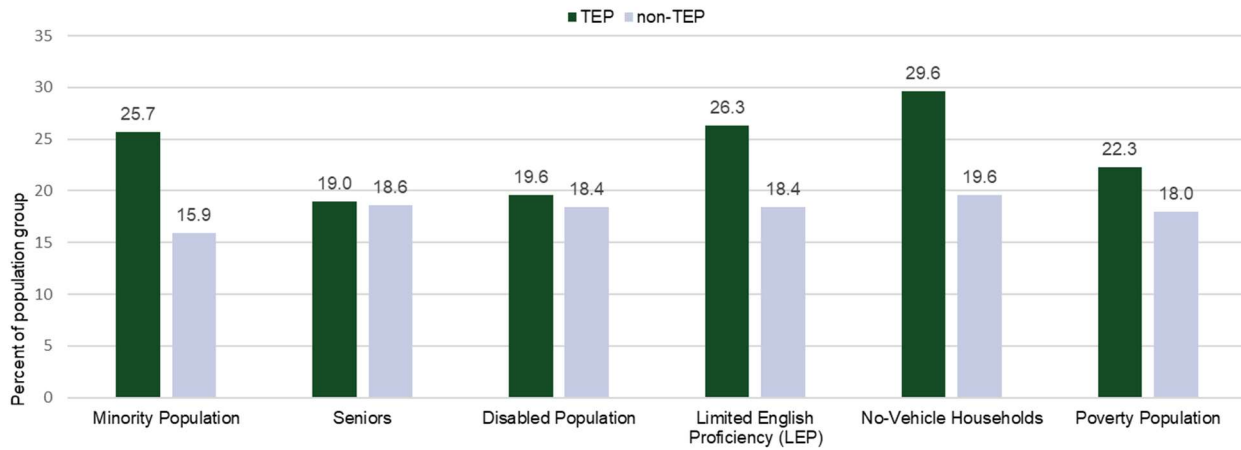
Source: Climate and Economic Justice accessed July 2022 at <https://screeningtool.geoplatform.gov/en/downloads>; U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019 (B17001, S1810, DP04, B25045)



Figure 67 and Table 48 provide the results for the TEPs in the EWG region, including:

- People of racial and ethnic minority groups are 1.62 times more likely than non-minorities to reside in a high-proximity tract (greater than the 75th U.S. percentile). They are also about half as likely to live in a low-proximity tract (30th percentile or less).
- Seniors and disabled people are just about as likely as their non-TEP counterparts to live in tracts of each percentile range.
- LEP residents are 1.43 times more likely as non-LEP residents to live in a high-proximity tract.
- No-vehicle households are 1.51 times more likely than households with a vehicle to live in a high-proximity rate tract. They are also about half as likely to live in a low-proximity tract.
- People who live in poverty are 1.24 times more likely than those with incomes above the poverty level to live in a high-proximity rate tract.

Figure 67. Transportation Equity Population (TEP) in Communities with High Traffic Proximity Scores
Percent of population group living in a census tract at >75 percentile for the U.S.
East-West Gateway Region, 2019



Source: Climate and Economic Justice accessed July 2022 at <https://screeningtool.geoplatform.gov/en/downloads>; U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019 (B17001, S1810, DP04, B25045).



Diesel Particular Matter (DPM)¹⁴⁷

The DPM analysis scores all communities in the region based on the amount of particles in the air, finding that most TEP groups in the St. Louis region are more likely to live in high-DPM tracts than their counterparts. Most heavy- and medium-duty trucks are equipped with diesel engines that emit exhaust into the air that includes particulate matter. When inhaled, the particles can enter a person's lungs and bloodstream and can cause serious health problems, including heart disease, lung disease and cancer, heart attacks, irregular heartbeat, asthma, and respiratory irritations and disease.^{148, 149}

DPM exposure/level in the air is measured by the weight of particles in micrograms per cubic meter. Based on all U.S. census tracts being scored on DPM and then divided into percentiles, the following are some summary data:

- The U.S. median score on DPM is 0.38.
- The score at the 75th percentile is about 0.63.
- The range for the EWG region is 0.17 (17th percentile) to 1.26 (95th percentile).
- The average score for the region is 0.65.

Figure 68 shows the percentile range of the census tracts in the region based on the DPM score. Tracts in the 91st or higher percentiles are in the central portion of the city of St. Louis and follows the I-64 corridor out to the interchange with I-170, then north along I-170, and one tract at the I-64 and I-70 interchange. The tracts with higher scores generally follow the interstates, and most of the rural parts of the region are in the lowest percentile range.

Table 49 provides the number and percent of each TEP and their peer group that fall into four ranges of percentiles. The column to the far right provides the ratio of the percent of the TEP group in the specified percentile range over the percent of the non-TEP group in that range. The ratio indicates to what degree the TEP and non-TEP groups are similar. Figure 69 provides the percent of TEPs and non-TEPs that live in high-DPM tracts.

Figure 69 and Table 49 provide the results for the TEPs in the EWG region, including:

- People of racial and ethnic minority groups are 1.69 times more likely than non-minorities to reside in a high-DPM tract (greater than 95th percentile). They are also about 65 percent less likely to live in a low-DPM tract (55th percentile or less).
- Seniors and disabled people are slightly less likely than their non-TEP counterparts to live in a high-DPM tract.
- LEP residents are 1.19 times more likely than non-LEP residents to live in a high-DPM tract. They are also about half as likely to live in a low-DPM tract.
- No-vehicle households are 1.86 times more likely than households with a vehicle to live in a high-DPM tract. They are also about half as likely to live in a low-DPM tract.
- People who live in poverty are 1.36 times more likely than those with incomes above the poverty level to live in a high-DPM tract.

¹⁴⁷ Used in clean transit category for CEJST, Source: National Air Toxics Assessment (NATA) from 2014 as compiled by EPA's EJScreen.

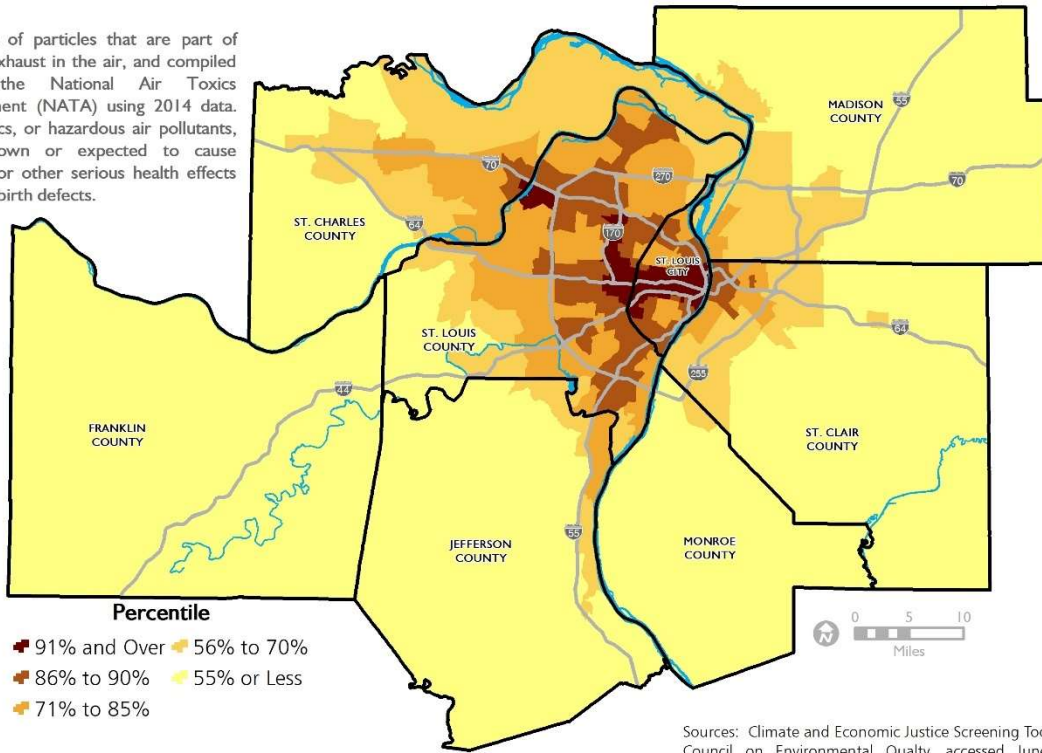
¹⁴⁸ EPA, Particulate Matter Pollution, 18 July 2022, accessed at <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM>.

¹⁴⁹ OSHA, Diesel Exhaust/Diesel Particulate Matter, January 2013, accessed at <https://www.osha.gov/sites/default/files/publications/OSHA-3590.pdf>.



Figure 68. Diesel Particulate Matter Exposure, East-West Gateway Region, 2019

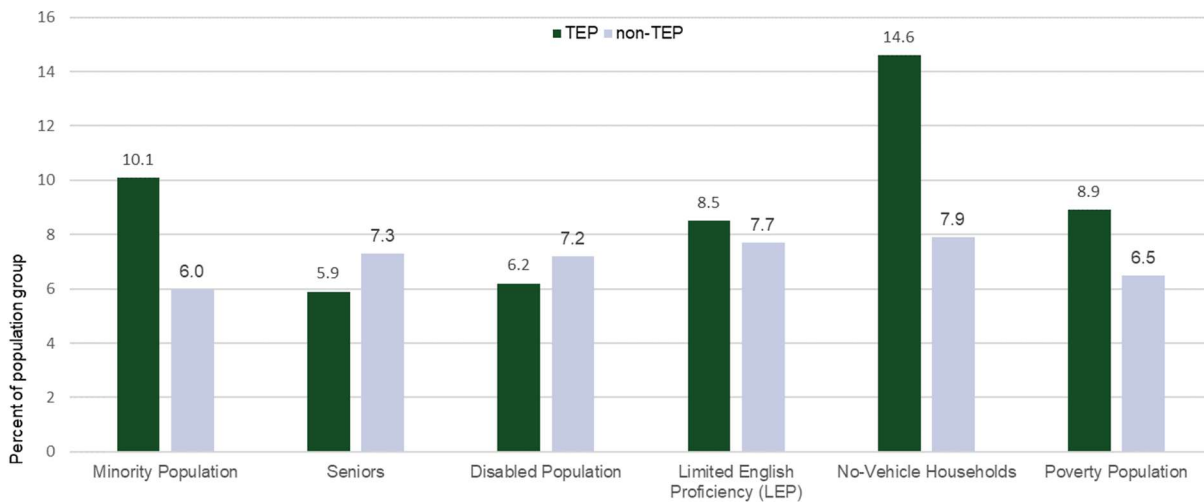
Mixture of particles that are part of diesel exhaust in the air, and compiled from the National Air Toxics Assessment (NATA) using 2014 data. Air toxics, or hazardous air pollutants, are known or expected to cause cancer or other serious health effects such as birth defects.



Data is depicted by 2010 Census tracts.
Tract boundaries are not shown on the map.

Sources: Climate and Economic Justice Screening Tool (Beta), Council on Environmental Quality, accessed June 2022; East-West Gateway Council of Governments

Figure 69. Transportation Equity Population (TEP) in Communities with High Diesel Particulate Values
Percent of population group living in a census tract in >75 percentile
East-West Gateway Region, 2019



Source: Climate and Economic Justice accessed July 2022 at <https://screeningtool.geoplatform.gov/en/downloads>; U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019 (B17001, S1810, DP04, B25045).



**Table 49. Transportation Equity Populations (TEP)
by Diesel Particulate Matter Percentile**
Number of and percent of TEP and peer-groups by percentile group

East-West Gateway Region, 2019

Percentile Range (Census tracts divided into 100 groups based on diesel particulate matter exposure)	Number of Population Group	Percent of Population Group	Number of Population Group	Percent of Population Group	Ratio (TEP/Non-TEP)
	Minority Population		Non-Minority Population		
Over 75	72,693	10.1	111,038	6.0	1.69
61-75	204,231	28.3	295,417	15.8	1.79
46-60	276,022	38.2	470,498	25.2	1.52
31-45	86,395	12.0	374,004	20.0	0.60
Less than 30	82,713	11.5	614,796	33.0	0.35
Total	722,054	100.0	1,865,753	100.0	
	Senior Population		Non-Senior Population		
Over 75	24,378	5.9	159,353	7.3	0.80
61-75	83,650	20.2	415,998	19.1	1.05
46-60	129,561	31.2	616,959	28.4	1.10
31-45	70,569	17.0	389,830	17.9	0.95
Less than 30	106,738	25.7	590,771	27.2	0.95
Total	414,896	100.0	2,172,911	100.0	
	Disabled Population		Non-Disabled Population		
Over 75	20,080	6.2	159,835	7.2	0.87
61-75	67,576	20.9	427,184	19.1	1.09
46-60	97,650	30.2	641,279	28.7	1.05
31-45	56,333	17.4	400,804	17.9	0.97
Less than 30	81,981	25.3	604,912	27.1	0.94
Total	323,620	100.0	2,234,014	100.0	
	LEP Population		Non-LEP Population		
Over 75	4,678	8.5	168,514	7.1	1.19
61-75	15,849	28.7	454,598	19.1	1.50
46-60	20,884	37.8	680,596	28.6	1.32
31-45	6,974	12.6	425,270	17.9	0.71
Less than 30	6,862	12.4	648,555	27.3	0.46
Total	55,247	100.0	2,377,533	100.0	
	No-Vehicle Households		Households with Vehicles		
Over 75	11,811	14.6	75,949	7.9	1.86
61-75	22,425	27.7	186,810	19.4	1.43
46-60	26,399	32.7	277,402	28.8	1.14
31-45	9,166	11.3	168,697	17.5	0.65
Less than 30	11,020	13.6	255,625	26.5	0.51
Total	80,821	100.0	964,483	100.0	
	Poverty Population		Non-Poverty Population		
Over 75	25,385	8.9	146,993	6.5	1.36
61-75	70,296	24.6	416,701	18.5	1.33
46-60	87,013	30.4	648,586	28.8	1.05
31-45	44,093	15.4	411,953	18.3	0.84
Less than 30	59,330	20.7	625,100	27.8	0.75
Total	286,117	100.0	2,249,333	100.0	

Source: Climate and Economic Justice accessed July 2022 at <https://screeningtool.geoplatform.gov/en/downloads>; U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019 (B17001, S1810, DP04, B25045)



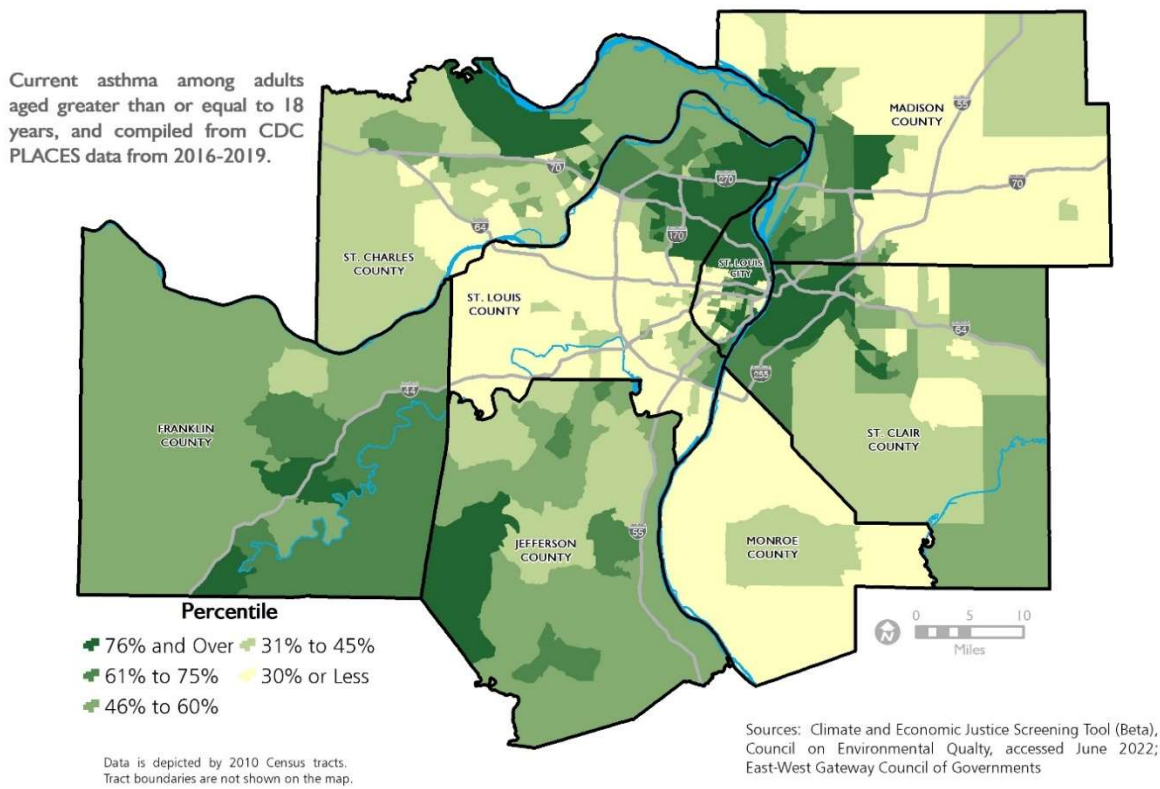
Asthma¹⁵⁰

The last metric in this section is based on the asthma prevalence among adults aged 18 years or older, finding that people of racial and ethnic minority groups, those who live in poverty, and households without a vehicle are more likely to live in communities with high asthma rates than their counterparts. The U.S. percentiles are based on a weighted percent of people who answer “yes” to both of the following questions: “Have you ever been told by a doctor, nurse, or other health professional that you have asthma?” and “Do you still have asthma?”

This metric measures one health outcome that is associated with traffic proximity and exposure to pollutants. However, there are other factors that are also associated with higher risk of asthma, including allergies, genetics, poor indoor air quality, and respiratory infections.¹⁵¹

Figure 70 shows the percentile range of the census tracts in the region based on the number of adults in the tract that have asthma. Tracts in the highest percentiles are in the northern portions of the city of St. Louis and St. Louis County, the metro east, and in portions of Franklin and Jefferson counties. The tracts in the lowest percentiles are in the central and southern portions of St. Louis County, much of Madison and Monroe counties, and a handful of tracts in each the city of St. Louis, St. Charles County, and St. Clair County. There are no tracts in Franklin or Jefferson counties that are in the 30th percentile or less range.

Figure 70. Current Asthma among Adults (Aged 18 and Older), East-West Gateway Region, 2019



¹⁵⁰ Used in: Health burdens category for CEJST; Source: [PLACES data](#) from 2016-2019.

¹⁵¹ Cleveland Clinic, Asthma, accessed at <https://my.clevelandclinic.org/health/diseases/6424-asthma>.



Table 50 provides the number and percent of each TEP and their peer group that fall into four ranges of percentiles. The column to the far right provides the ratio of the percent of the TEP group in the specified percentile range over the percent of the non-TEP group in that range. The ratio indicates to what degree the TEP and non-TEP groups are similar. Figure 71 provides the percent of TEPs and non-TEPs that live in communities with the highest asthma rates.

For the EWG region:

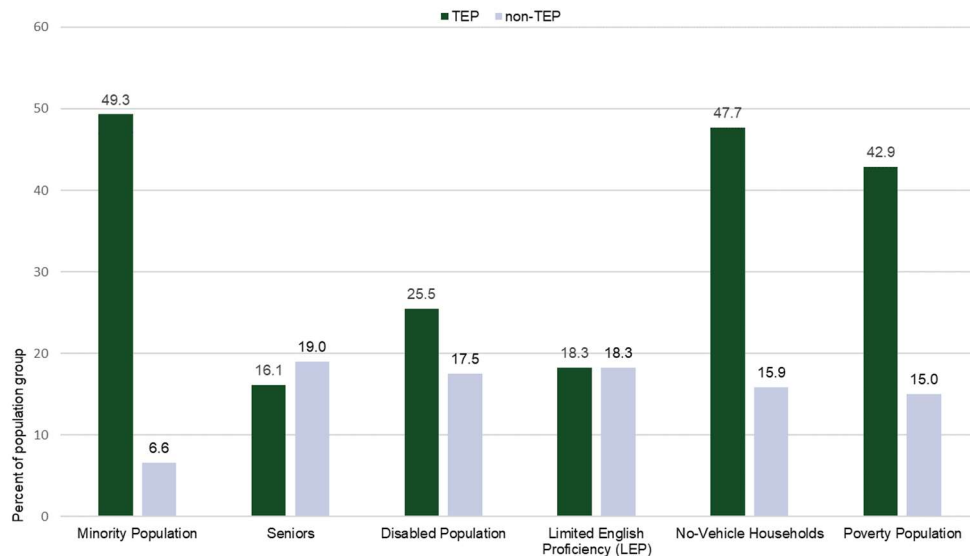
- Tracts at the 75th percentile have on average about 1,060 residents with asthma.
- The range for tracts in the region is 780 people (7th percentile) to 1,620 people (99th percentile).
- The average number of people with asthma per tract in the region is 1,004 people.

By far the largest disparity among the TEPs and the non-TEP groups is among people of racial and ethnic minorities. People of racial and ethnic minorities in the EWG region are 7.48 times more likely than non-minorities to live in a census tract that has a higher asthma prevalence than 75 percent of the U.S. population. Nearly 50 percent of the minority population in the EWG region lives in one of these tracts with a relatively high number of people with asthma. Of the nearly 500,000 residents that live in one of these tracts, about 74.3 percent are of racial and ethnic minority population groups.

As shown on Table 50 and Figure 71, results for the other TEPs include:

- People with disabilities are slightly more likely (1.46 times) than non-disabled people to live in a high-asthma tract (greater than the 75th percentile).
- Seniors are slightly less likely than non-seniors to live in a high-asthma tract.
- LEP residents are about as likely as non-LEP residents to live in a high-asthma tract.
- No-vehicle households are three times more likely than households with a vehicle to live in a high-asthma tract.
- People who live in poverty are 2.87 times more likely than those with incomes above the poverty level to live in a high-asthma tract.

Figure 71. Transportation Equity Population (TEP) in Communities with High Asthma Rates
Percent of population group living in a census tract with asthma rate >75 percent of U.S. population
East-West Gateway Region, 2019



Source: Climate and Economic Justice accessed July 2022 at <https://screeningtool.geoplatform.gov/en/downloads>; U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019 (B17001, S1810, DP04, B25045).



Table 50. Transportation Equity Populations (TEP) by Asthma Percentile

Number of and percent of TEP and peer-groups by percentile group

East-West Gateway Region, 2019

Percentile Range (Census tracts divided into 100 groups based on asthma rate percentile)	Number of Population Group	Percent of Population Group	Number of Population Group	Percent of Population Group	Ratio (TEP/Non- TEP)
	Minority Population		Non-Minority Population		
Over 75	356,142	49.3	123,080	6.6	7.48
61-75	73,802	10.2	166,553	8.9	1.14
46-60	99,011	13.7	417,057	22.4	0.61
31-45	83,853	11.6	499,423	26.8	0.43
Less than 30	109,246	15.1	659,626	35.4	0.43
Total	722,054	100.0	1,865,739	100.0	
	Senior Population		Non-Senior Population		
Over 75	66,951	16.1	412,271	19.0	0.85
61-75	34,943	8.4	205,412	9.5	0.89
46-60	78,283	18.9	437,785	20.1	0.94
31-45	90,913	21.9	492,363	22.7	0.97
Less than 30	143,806	34.7	625,066	28.8	1.20
Total	414,896	100.0	2,172,897	100.0	
	Disabled Population		Non-Disabled Population		
Over 75	82,362	25.5	390,145	17.5	1.46
61-75	36,884	11.4	200,759	9.0	1.27
46-60	67,739	20.9	444,854	19.9	1.05
31-45	63,847	19.7	512,647	22.9	0.86
Less than 30	72,788	22.5	685,595	30.7	0.73
Total	323,620	100.0	2,234,000	100.0	
	LEP Population		Non-LEP Population		
Over 75	10,097	18.3	435,788	18.3	1.00
61-75	6,031	10.9	219,545	9.2	1.18
46-60	11,105	20.1	474,958	20.0	1.01
31-45	11,504	20.8	537,163	22.6	0.92
Less than 30	16,510	29.9	710,065	29.9	1.00
Total	55,247	100.0	2,377,519	100.0	
	No-Vehicle Households		Households with Vehicles		
Over 75	38,533	47.7	152,993	15.9	3.01
61-75	7,241	9.0	90,643	9.4	0.95
46-60	12,100	15.0	195,167	20.2	0.74
31-45	9,251	11.4	220,888	22.9	0.50
Less than 30	13,696	16.9	304,787	31.6	0.54
Total	80,821	100.0	964,478	100.0	
	Poverty Population		Non-Poverty Population		
Over 75	122,850	42.9	336,859	15.0	2.87
61-75	35,556	12.4	199,857	8.9	1.40
46-60	55,823	19.5	450,727	20.0	0.97
31-45	36,271	12.7	540,434	24.0	0.53
Less than 30	35,617	12.4	721,442	32.1	0.39
Total	286,117	100.0	2,249,319	100.0	

Source: Climate and Economic Justice accessed July 2022 at <https://screeningtool.geoplatform.gov/en/downloads>; U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019 (B17001, S1810, DP04, B25045)



4. ANALYSIS OF TRANSPORTATION INVESTMENTS SINCE 2005

As the MPO for the St. Louis region, EWG allocates federal transportation spending through its annual transportation improvement program (TIP). The TIP is a schedule of transportation projects planned by multiple agencies in the St. Louis region for a four-year period. Federal law requires that EWG prepare and approve the TIP in order for federal funds to be used on these projects. Projects identified in the TIP have been given priority based on, and are consistent with, the region's long-range transportation plan (LRTP).

Several federal requirements affect the process of assembling and developing the TIP. It must be developed in increments of at least four years, indicate priority ranking of projects, and be financially attainable. All implementing agencies must demonstrate sufficient financing for each project. Projects must be selected primarily on their merits. The law also requires that the TIP include all federally-funded transportation projects, regardless of mode or implementing agency.

A database maintains a list of all projects that received funding through the TIP. Therefore, ICF and EWG used the TIP database to perform a baseline analysis of spending patterns since 2005. One lesson learned from this exercise is that the TIP database was designed to support operational processes and is not well-suited to analysis of the kinds of strategic questions raised in this assessment. This report offers recommendations for the development of the new TIP database, focusing especially on reporting capabilities that should be built into the system.

Despite limitations in data, ICF and EWG staff were able to elicit a set of basic facts about how TIP funds have been allocated since 2005. Questions addressed include the following:

- How has TIP spending been distributed among counties in the region?
- How has TIP spending been distributed among municipalities in the region?
- How much funding has been awarded for different types of projects, such as pedestrian access or roadway maintenance?
- How much money has been awarded under different federal programs?
- Funds awarded in the TIP must have local project sponsors, which typically are state departments of transportation, county governments, or municipal governments. How much money is awarded to different types of sponsors?
- Finally, a geospatial analysis was conducted to visually depict project deployment throughout the region.

COUNTY ANALYSIS

This section shows transportation investments from the TIPs since 2005, broken down by county and compared with population and employment. TIP spending is broken down into three categories: department of transportation (denoted as MODOT or IDOT) projects, locally-sponsored projects, and transit projects.

- **DOT spending** consists of projects sponsored by a state department of transportation. These projects generally entail expanding or maintaining major roadways of regional significance and represent total programmed dollar amounts, including federal and non-federal funds, as shown in the TIP.



- **Spending on locally-sponsored projects** represents programmed total dollar amounts, including federal and non-federal funds, as shown in the TIP for programs available via competitive application process through EWG, MODOT, IDOT, or USDOT. This includes funding programs, such as the Surface Transportation Block Grant Program-Suballocated (STP-S), Congestion Mitigation and Air Quality Improvement Program (CMAQ), and Transportation Alternatives Program (TAP). Local sponsors are generally county governments, municipal governments, transit agencies, or other jurisdictions of local government. However, MODOT may apply for CMAQ funding, in which case it is included under locally-sponsored projects.
- **Spending on transit projects** was provided by Metro, Madison County Transit, and St. Clair County Transit. Most transit spending is in the city of St. Louis, St. Louis County, and St. Clair County. However, Metro administers some of the Section 5310 funding program (Enhanced Mobility of Seniors & Individuals with Disabilities) in Franklin, Jefferson, and St. Charles counties. The Metro data represents actual project costs from 2005-2021. For Madison County Transit District, the funding amounts were taken from programmed amounts in the TIP. Projects include light rail extensions, light rail vehicle refurbishment, preventive maintenance, and bus replacements. Transit projects that were funded through East-West Gateway local programs (STP-S or CMAQ) are counted under locally-sponsored projects, and not under transit.

It was necessary to treat Missouri and Illinois totals separately because TIP spending is suballocated from state DOT grants. Therefore, the proportion of spending reported for a given county represents its proportion of spending among the other EWG counties in the same state.

Data for each analysis is divided into two parts. The first part involves graphs showing total dollars spent in each county, with expenditures grouped into five-year intervals (2005-2009, 2010-2014, 2015-2019, and 2020-2024). The second part involves showing the percent of spending allocated to each county. To contextualize TIP spending, county demographic and economic variables are also included on each table. Thus, each type of spending (DOT, local, transit) is depicted alongside of population and employment.

It is important to note that population, employment, and GDP do not in themselves determine the need for TIP allocations. The conditions of roads and bridges, the miles of roadway, and maintenance schedules have a greater role in determining TIP spending than do social and economic variables. The Federal Highway Administration, in fact, prohibits the allocation of TIP spending based simply on population or other socio-economic variables. In addition, almost every resident of the region travels in places other than their home counties, and therefore requires adequate transportation systems in all counties, not just their own place of residence. Thus, the socio-economic variables presented here are only for context and do not imply a proportional need for spending.

In the analysis of past project data, major regional projects that offer broad regional benefits were not included in the analysis, as the benefit from those projects extends beyond the county or counties in which it was built. Projects that were removed from the analysis include the following:

- I-255 at Mississippi River (JB) Bridge Rehab
- I-270 at Mississippi River Bridge Replacement
- New I-70 Mississippi River Bridge (Stan Span) in downtown St Louis
- I-64 EB Daniel Boone Bridge Replacement over Missouri River
- I-70 WB Blanchette Bridge Replacement over Missouri River

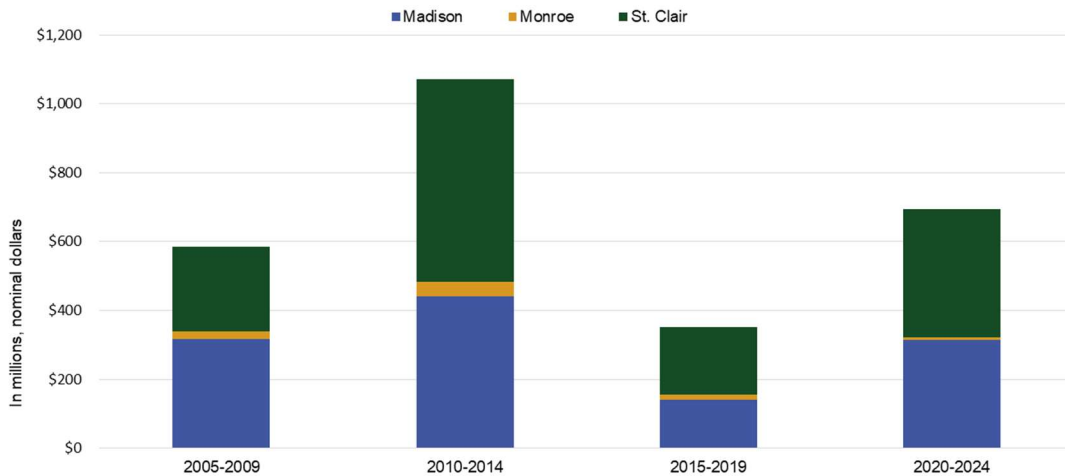


- I-44 at Meramec River Bridge Replacement
- I-55/64 Poplar Street Bridge lane addition aka slide and ramp reconfiguration
- Merchants Railroad Bridge Replacement in downtown STL
- MO 47 over Missouri River Bridge Replacement

STATE DOT SPENDING

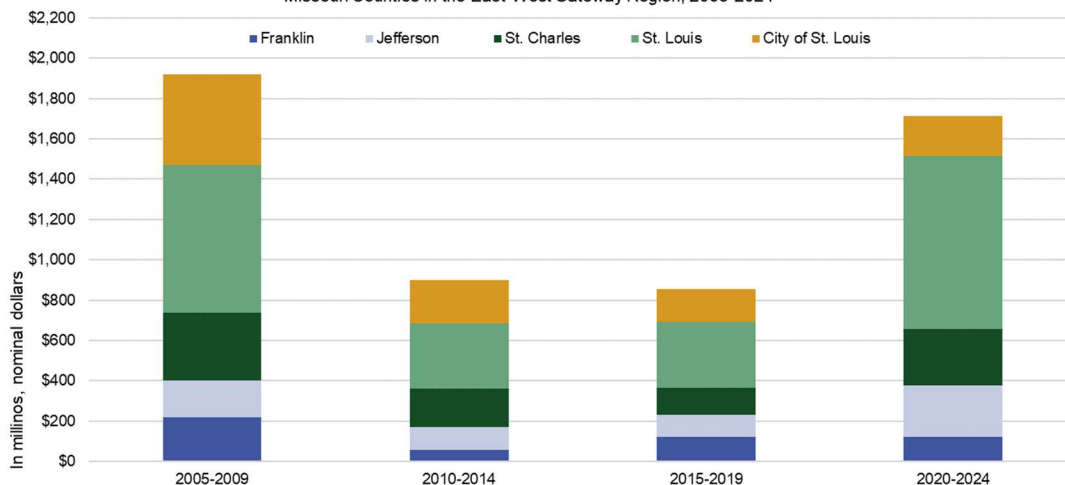
As will be discussed at greater length below, projects sponsored by Missouri and Illinois state departments of transportation (DOT) account for more than 75 percent of all TIP spending. Figures 72 and 73 show DOT spending by county for each of the five-year time intervals. From 2005 to 2009, a total of \$590 million was spent in Illinois, and just under \$2 billion in Missouri. In the current 2020-2024 period, to date \$1 billion has been allocated in Illinois, and just over \$1.75 billion in Missouri.

Figure 72. Spending on Illinois Department of Transportation-Sponsored Projects by County
Illinois Counties in the East-West Gateway Region, 2005-2024



Note: Transit expenditures are for 2020 and 2021 only.
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.

Figure 73. Spending on Missouri Department of Transportation-Sponsored Projects by County
Missouri Counties in the East-West Gateway Region, 2005-2024



Note: Transit expenditures are for 2020 and 2021 only.
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.



Tables 51 and 52 show the percentage of spending in each county. Underneath the spending percentages in each time period are rows showing each county's proportion of population and employment. For example, from 2005 to 2009, 54 percent of IDOT's spending in the three-county portion of the region went to Madison County. At the same time, Madison County had 47 percent of the population of the three-county area as well as 47 percent of the jobs.

Analysis of state DOT spending does not reveal any obvious disparities in funding. In Illinois, proportions of IDOT funding have fluctuated in the

counties of Madison and St. Clair, with a rise in spending on regional projects (i.e., projects not attributable to a single county) in the most recent time period. Among Missouri counties, St. Louis County usually receives a proportion of DOT funding that is less than its proportion of population or jobs. In the most recent funding period, however, St. Louis County's proportion of funding was approximately equal to its proportion of population. Franklin County generally receives a proportion of funding that is greater than its share of population, although this is probably due to the long expanses of Interstate highway, U.S. highway, and state highway running throughout the county. St. Charles County generally receives a lower proportion of funding than its proportion of population, although its proportion of funding is generally similar to its share of employment. The city of St. Louis initially had a

higher proportion of funding than of population, although this has reversed in the most recent funding period. The city of St. Louis, however, has a larger share of employment than of population, and continues to have the densest employment centers in the region, which requires a robust transportation network that serves the needs of workers from throughout the region. As mentioned previously, the comparisons of spending to socio-economic variables presented here are to provide context to discussion, not to imply that funds should be distributed evenly based on these factors.

Table 51. IDOT-Sponsored Projects					
Percent of Spending by County for the Illinois Counties of the St. Louis Region with Contextual Variables (Percent of Population and Employment)					
Madison, Monroe, and St. Clair, 2005-2024					
	County	2005-2009	2010-2014	2015-2019	2020-2024
Percentage of DOT Funding	Madison	54	36	39	31
	Monroe	4	4	4	1
	St. Clair	42	48	54	37
Percentage of Population	Madison	47	47	47	47
	Monroe	6	6	6	6
	St. Clair	47	47	47	46
Percentage of Employment	Madison	47	47	48	49
	Monroe	5	5	5	5
	St. Clair	48	48	47	46

Note: Transit Expenditures include 2020 and 2021 only.

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022; U.S. Census Population Estimates; Bureau of Economic Analysis

Table 52. MODOT-Sponsored Projects					
Percent of Spending by County for the Missouri Counties of the St. Louis Region with Contextual Variables (Percent of Population and Employment)					
Franklin, Jefferson, St. Charles, St. Louis, and the City of St. Louis, 2005-2024					
	County	2005-2009	2010-2014	2015-2019	2020-2024
Percentage of DOT Funding	Franklin	11	4	12	7
	Jefferson	9	8	10	14
	St. Charles	17	13	13	16
	St. Louis	37	22	32	49
	City of St. Louis	23	15	16	11
Percentage of Population	Franklin	5	5	5	5
	Jefferson	11	11	11	11
	St. Charles	17	18	19	20
	St. Louis	51	50	49	49
	City of St. Louis	16	16	15	15
Percentage of Employment	Franklin	4	4	4	4
	Jefferson	5	5	5	5
	St. Charles	13	13	14	15
	St. Louis	58	57	56	56
	City of St. Louis	21	20	20	20

Note: Transit Expenditures include 2020 and 2021 only.

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022; U.S. Census Population Estimates; Bureau of Economic Analysis



SPENDING ON LOCALLY-SPONSORED PROJECTS

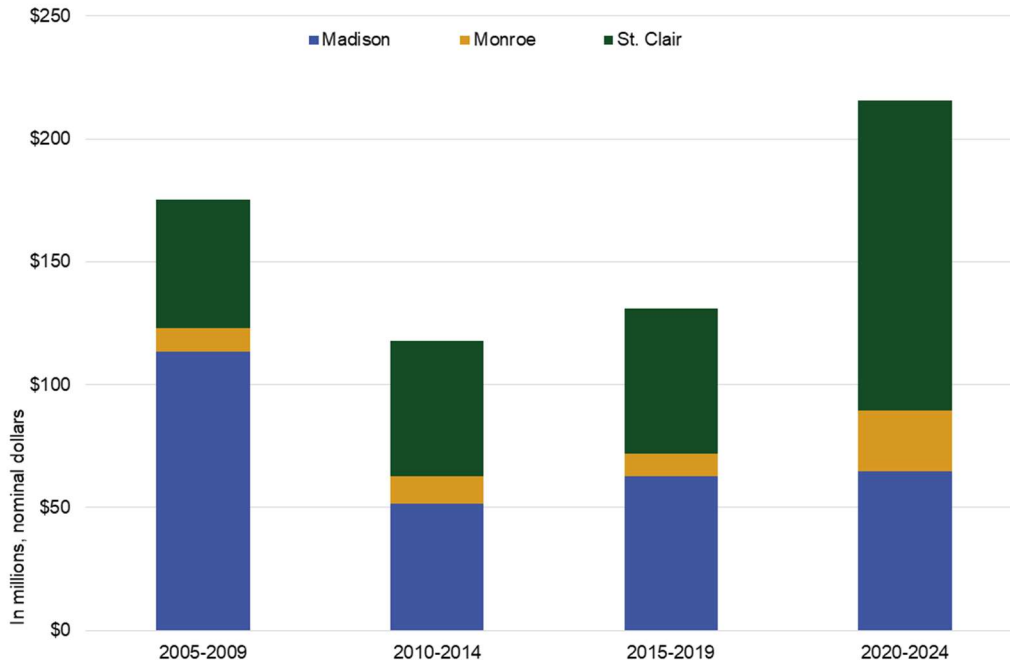
Table 53 and Figure 74 shows spending levels fluctuated for projects with local-project sponsors, such as municipal or county governments in Illinois.

Spending in Madison County went from a high of \$113 million spent in 2005 to 2009, down to \$51.6 million spent in the subsequent five-year time period. Spending in St. Clair County went from \$52 million in the first time period to more than \$126 million in the most recent period. Monroe County held even at about \$10 million per five-year period until the current funding cycle, in which Monroe has been allocated nearly \$25 million.

Table 53. Locally-Sponsored Projects in Illinois					
Percent of Funding by County for the Illinois Counties of the St. Louis Region with Contextual Variables (Percent of Population and Employment)					
Madison, Monroe, and St. Clair, 2005-2024					
	County	2005-2009	2010-2014	2015-2019	2020-2024
Percentage of Local Funding	Madison	65	44	48	30
	Monroe	6	9	7	11
	St. Clair	30	47	45	59
Percentage of Population	Madison	47	47	47	47
	Monroe	6	6	6	6
	St. Clair	47	47	47	46
Percentage of Employment	Madison	47	47	48	49
	Monroe	5	5	5	5
	St. Clair	48	48	47	46

Note: Transit Expenditures include 2020 and 2021 only.
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022; U.S. Census Population Estimates; Bureau of Economic Analysis

Figure 74. Spending on to Locally-Sponsored Projects
Illinois Counties in the East-West Gateway Region, 2005-2024





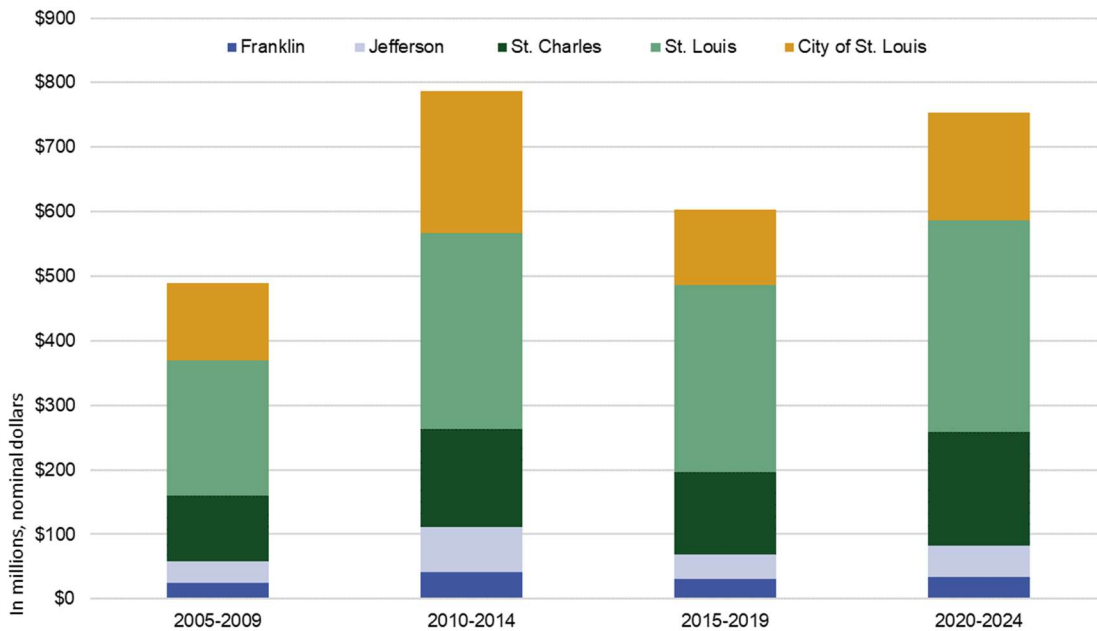
Spending patterns in Missouri counties are shown in Table 54 and Figure 75. Again, St. Louis County consistently receives a lower proportion of funding than its proportion of population or employment. From 2015 to 2019, St. Charles County received a smaller proportion of funding than its proportion of population, although the situation reversed in the current funding period. In each time period, St. Charles County received a proportion of funding that is greater than its share of employment. Franklin County generally receives a greater proportion of funding than its share of population, while Jefferson County receives a smaller proportion of funding than its share of population. The city of St. Louis received a greater proportion of funding than its share of population in most time periods, although it received less from 2015 to 2019. The city also received substantially less than its proportion of employment in the same time period.

Table 54. Locally-Sponsored Projects in Missouri
Percent of Funding by County for the Missouri Counties of the St. Louis Region with Contextual Variables (Percent of Population and Employment)
Franklin, Jefferson, St. Charles, St. Louis, and the City of St. Louis, 2005-2024

	County	2005-2009	2010-2014	2015-2019	2020-2024
Percentage of Local Funding	Franklin	5	5	4	5
	Jefferson	7	9	5	6
	St. Charles	21	19	16	24
	St. Louis	43	39	35	43
	City of St. Louis	24	28	14	22
Percentage of Population	Franklin	5	5	5	5
	Jefferson	11	11	11	11
	St. Charles	17	18	19	20
	St. Louis	51	50	49	49
	City of St. Louis	16	16	15	15
Percentage of Employment	Franklin	4	4	4	4
	Jefferson	5	5	5	5
	St. Charles	13	13	14	15
	St. Louis	58	57	56	56
	City of St. Louis	21	20	20	20

Note: Transit Expenditures include 2020 and 2021 only.
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022; U.S. Census Population Estimates; Bureau of Economic Analysis

Figure 75. Spending on Locally-Sponsored Projects
Missouri Counties in the East-West Gateway Region, 2005-2024



Note: Transit expenditures are for 2020 and 2021 only.
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.



TRANSIT SPENDING

Transit spending is overwhelmingly concentrated in jurisdictions with extensive bus or light rail systems. In Illinois, the counties of Madison and St. Clair receive nearly all of the transit funding allocated to the three counties in the Illinois portion of the region. In Missouri, most transit spending is concentrated in St. Louis County and the city of St. Louis, both of which support the transit system with dedicated sales taxes. Other counties receive a small share of transit funding, which is mainly limited to non-profit organizations that provide van services for the elderly or disabled.

In Illinois, the relative share of transit funding fluctuates between Madison and St. Clair, as shown on Figure 76 and Table 55. In Missouri, the city of St. Louis generally obtains more transit funding than does St. Louis County, as shown on Figure 77 and Table 56. However, it is difficult to determine how to attribute some expenditures geographically. For example, if funds were used to purchase a bus that runs in both the city of St. Louis and St. Louis County, then for this accounting exercise, this expenditure would be divided evenly between city and County. This formula may exaggerate the amount of spending in the city of St. Louis.

Perhaps the most striking aspect of the data on transit funding is that the per capita amount allocated to transit in Illinois is more than double that in Missouri. From 2015 to 2019, per capita transit spending in Illinois amounted to \$243, compared to \$109 for Missouri. The difference can be attributed mainly to state policy. Statutory limits in Missouri prohibit highway trust fund money from being used as a match for transit projects. This diminishes the ability of the region to match federal transit dollars, as the only match on the Missouri side is from local sources. Illinois provides state funding for use as a transit match.

Table 55. Transit Funding in Illinois
Percent of Funding by County for Illinois Counties of the St. Louis Region with Contextual Variables (Percent of Population and Employment)
Madison, Monroe, and St. Clair, 2005-2021

County		2005-2009	2010-2014	2015-2019	2020-2021
Percentage of Transit Funding	Madison	42	46	52	48
	Monroe	0	0	0	0
	St. Clair	58	54	48	52
Percentage of Population	Madison	47	47	47	47
	Monroe	6	6	6	6
	St. Clair	47	47	47	46
Percentage of Employment	Madison	47	47	48	49
	Monroe	5	5	5	5
	St. Clair	48	48	47	46

Note: Transit expenditures include 2020 and 2021 only.
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022; U.S. Census Population Estimates; Bureau of Economic Analysis

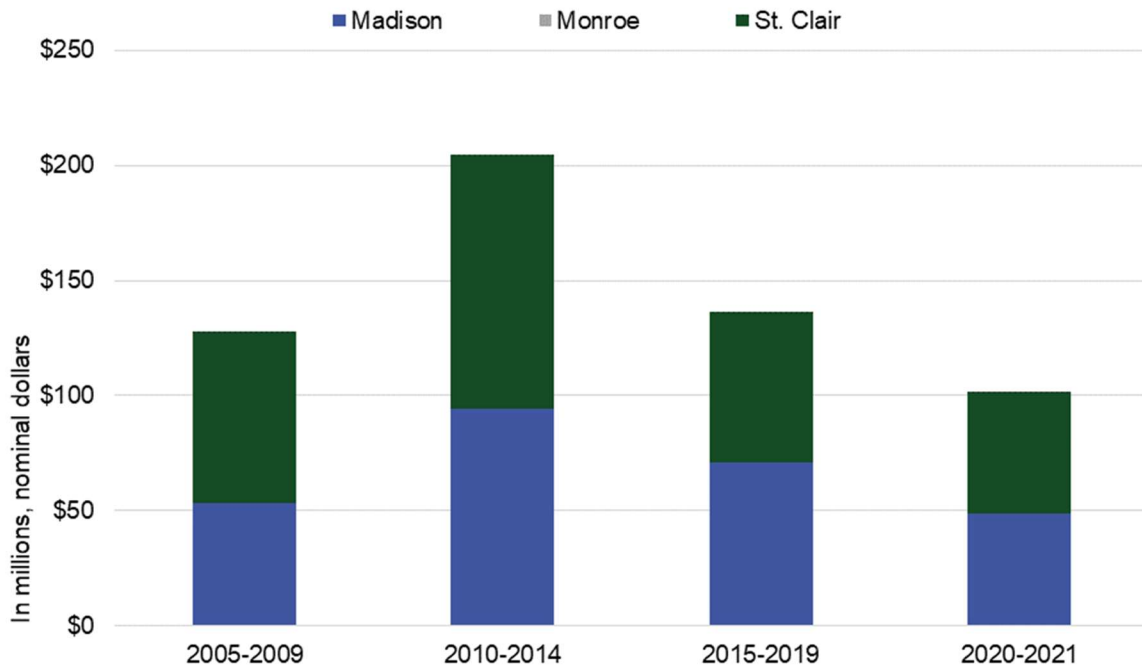
Table 56. Transit Funding in Missouri
Percent of Funding by County for Missouri Counties of the St. Louis Region with Contextual Variables (Percent of Population and Employment)
Franklin, Jefferson, St. Charles, St. Louis, and the city of St. Louis, 2005-2024

County		2005-2009	2010-2014	2015-2019	2020-2024
Percentage of Transit Funding	Franklin	0.3	1.7	0.1	0
	Jefferson	0.4	1.1	1.4	0.3
	St. Charles	0.6	1.0	1.1	0.1
	St. Louis	48.2	43.8	40.8	46.7
	St. Louis City	50.4	52.4	56.6	52.8
Percentage of Population	Franklin	5	5	5	5
	Jefferson	11	11	11	11
	St. Charles	17	18	19	20
	St. Louis County	51	50	49	49
	City of St. Louis	16	16	15	15
Percentage of Employment	Franklin	4	4	4	4
	Jefferson	5	5	5	5
	St. Charles	13	13	14	15
	St. Louis County	58	57	56	56
	City of St. Louis	21	20	20	20

Note: Transit expenditures include 2020 and 2021 only.
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022; U.S. Census Population Estimates; Bureau of Economic Analysis

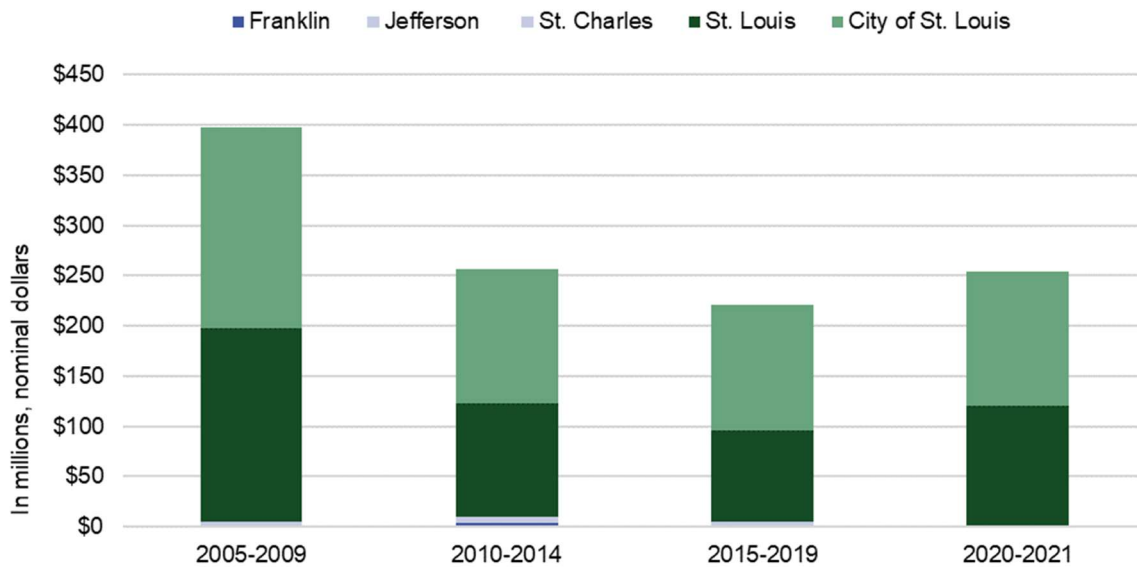


Figure 76. Transit Spending in Illinois by County
Illinois Counties in the East-West Gateway Region, 2005-2021



Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.

Figure 77. Transit Spending in Missouri by County
Missouri Counties in the East-West Gateway Region, 2005-2021



Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.



MUNICIPAL ANALYSIS

Additional analysis was conducted on the proportion of local spending consisting of projects sponsored by municipal governments. Appendix B includes four tables that list the amounts of total project spending on projects sponsored by municipalities, in nominal terms, from 2005 to the present. Table 60 shows Illinois municipalities in alphabetical order. Table 61 shows Illinois municipalities ranked according to total nominal amount received. Table 62 shows Missouri municipalities in alphabetical order, while Table 63 shows Missouri municipalities ranked on amount received.

In Illinois, Dupo received the single largest project among municipalities, with a new interchange on I-255. However, this project was specified in an earmark in the 2005 federal transportation funding act. This illustrates one limit of an analysis such as this. In this case, EWG had no discretion over whether to fund the project, as it was mandated by federal law. Additional analysis looking at competitive grants administered by EWG would be a useful supplement, but at present staff lack the capacity to discriminate between projects funded through a competitive call for applications vs. those supported by federal formula funding streams.

The second largest recipient of TIP funding in Illinois was Alton, which received over \$53 million. The single largest project during this time was the construction of the Alton Regional Multimodal Transportation Center, which was funded through the federal TIGER program. Since this project received a TIGER grant, it also was not subject to the normal competitive process for TIP funding. The total cost for this project including federal and local match was \$18.5 million.

Among Missouri municipalities, the top three recipients of TIP funding in this period were the city of St. Charles, Wentzville, and O’Fallon, all in St. Charles County.

Of special concern were municipalities that have never received TIP funding. At present, it is not possible to determine whether these non-recipients have not received funding because they never applied or because their applications were rejected. Thus, an important need in the development of a new TIP database will be to allow tracking of both successful and rejected applications from municipalities.

Table 57 shows characteristics of municipalities that have received TIP funding since 2005 and those that have not.

Municipalities that have not received TIP funding are

Table 57. Characteristics of TIP Recipients and Non-Recipients		
Municipalities in the East-West Gateway Region, 2005-2024		
	Recipients	Non-Recipients
Total Population	1,470,147	79,887
Average Population	12,784	1,011
Average Area (square miles)	7.93	1.59
African American Population	250,052	26,200
African American Percentage	17	33
Hispanic Population	57,375	4,559
Hispanic Percentage	4	6

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022, U.S. 2020 Census. Universe: Municipalities in the EWG region excluding city of St. Louis. Excludes approximately 300,000 in city of St. Louis and approximately 750,000 in unincorporated areas.



significantly smaller than recipients (1.6 square miles vs. 7.9 square miles). Non-recipients on average have significantly smaller populations (1,011 vs. 12,784). Although most Black residents reside in municipalities that have received TIP funding, municipalities that have not received funding have twice the proportion of Black residents and Hispanic residents.

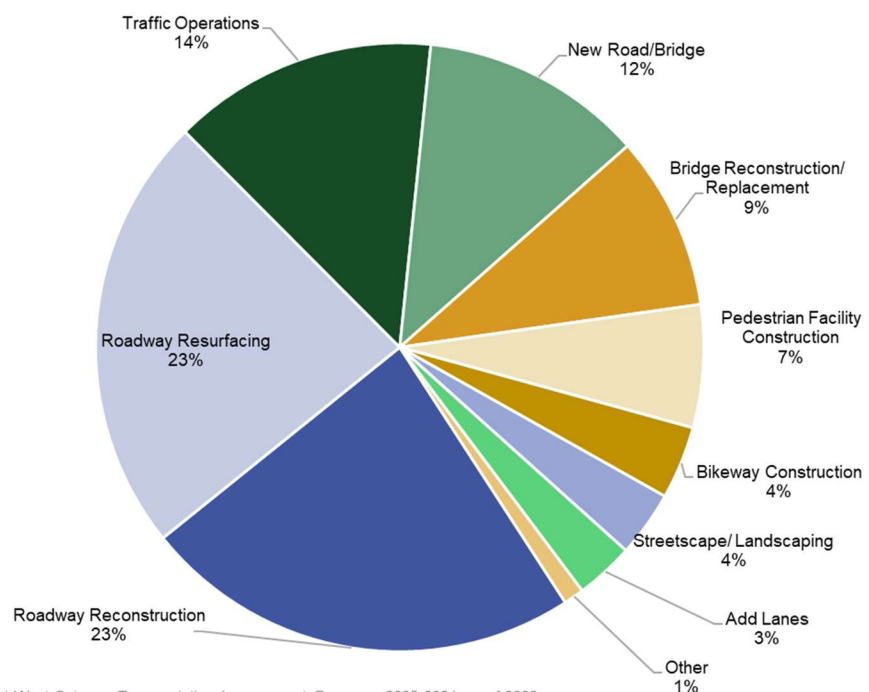
Caution is warranted in interpreting these results. The reasons that some municipalities have not received funding are not known, and may vary from place to place. Possible reasons include:

- Leaders in some municipalities may not perceive a need to pursue TIP funding.
- Some municipalities may have applied and been rejected. It is not currently possible to know how many of the non-recipients had applications rejected.
- Small municipalities with limited staff may not have the capacity to produce an application or knowledge of the process.
- Very small municipalities may not be the owners of streets within their jurisdictions; these roads may be maintained by the county. Funding eligibility for STP-S is determined by road classification. Local roads are not eligible for road work while collectors and arterials are. Bridges and sidewalks are eligible regardless of road classification. Thus, even a municipality that is not the owner of an eligible road could apply for funding to, for example, improve pedestrian crossings on an arterial owned by the state or county.
- The need to provide a 20 percent match may deter some municipalities from applying.

Despite caveats about interpreting the data, the disparity in proportion of racial and ethnic minorities among non-recipients is striking. The greatest concentration of small municipalities is in North St. Louis County, which has more than 30 municipalities that are less than a square mile in area. Many of these have limited staff and tax revenue. For historical reasons, Black residents are concentrated in many of these small communities. Thus, despite limitations of the data, a further investigation of reasons that some communities lack funding is warranted. The concluding section has recommendations to this end.

Figure 78 shows municipal spending by project type. Although most is spent on roads, bridges, and traffic operations, more than 10 percent is devoted to bicycle and pedestrian projects.

Figure 78. Spending on Municipally-Sponsored Projects by Investment Category
East-West Gateway Region, 2005-2024



Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022



FUNDING STREAM ANALYSIS

This section provides an overview of the various streams of funding provided by the federal government for transportation. MODOT provides the following, which is a useful introduction to federal transportation funding:

A significant amount of transportation funding comes from the federal government. Federal funding is generated by the federal fuel tax—18.4 cents per gallon for gasoline and 24.4 cents per gallon for diesel. Other sources include taxes on tires, heavy truck and trailer sales, heavy vehicle use taxes and general revenue. These revenues are distributed to the states based on formulas prescribed by federal law through transportation funding acts. The previous transportation funding act, Fixing America’s Surface Transportation (FAST) Act, authorized federal programs for the five-year period from 2016-2020. It expired September 30, 2020 but was extended for another year by continuing resolution. In Nov. 2021, the federal transportation bill, called the Infrastructure Investment and Jobs Act (IIJA) was reauthorized.... The majority of federal revenue is dedicated to pay for a share of eligible highway improvement costs. The federal share for the eligible costs is typically 80 percent, with the state or local government providing a 20 percent match. The amount of federal funding available is fixed, so some eligible costs may not receive reimbursement.¹⁵²

The following are funding categories administered by the Federal Highway Administration (FHWA) and included in the TIP:

- Congestion Mitigation and Air Quality (CMAQ): This program funds projects in air quality non-attainment areas and maintenance areas for ozone, carbon monoxide, and small particulate matter (PM2.5) with the goal of reducing transportation-related emissions and helping metropolitan areas comply with National Ambient Air Quality Standards (NAAQS).
- High Priority Projects (HPP) or “earmarks”: This program consists of projects specifically designated in the SAFETEA-LU transportation bill of 2005, or projects in congressional appropriation bills. Although earmarks have not been used in the last decade, previous earmarks are reflected in the TIP database.
- Highway Infrastructure Program (HIP): This funding was identified in the FY2019, FY2020, and FY2021 Department of Transportation Appropriations Act. Funds may be used on public roads and bridges. Additional HIP funds were identified in the Coronavirus Response and Relief Supplemental Appropriations Act of 2021.
- Highway Safety Improvement Program (HSIP): This program aims to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- National Highway Freight Program (NHFP): The NHFP was established in the FAST Act to improve efficient movement of freight on the National Highway Freight Network.
- Surface Transportation Block Grant Program (STBG): STBG provides flexible funding for states and localities for improvements on public roads and bridges, transit capital projects, and improvements to transit terminals and facilities. A portion of a state’s STBG must be spent in metropolitan areas with populations over 200,000. These suballocated funds (STP-S) are usually used on locally-sponsored projects.

¹⁵² Missouri Department of Transportation. 2021. *Citizen’s Guide to Transportation Funding in Missouri*. https://www.modot.org/sites/default/files/documents/2021%20Citizen%27s%20Guide%20to%20Transportation%20Funding%20in%20Missouri_0.pdf



- **Transportation Alternatives Program (TAP):** The FAST Act established a set-aside of Surface Transportation Block Grant funding for transportation alternatives. These set-aside funds encompass a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

Each federal funding stream has eligible activities. As a result, funding decisions by a metropolitan planning organization (MPO) are limited by restrictions in federal statute. For example, the single largest funding stream, the National Highway Performance Program, limits funding to “construction, reconstruction, resurfacing, restoration, rehabilitation, preservation, or operational improvements” of roadway segments, bridges or tunnels in the National Highway System. These funds cannot be reprogrammed for transit or pedestrian projects, for example.

Several Federal Transit Administration (FTA) programs are also included in the TIP, including Rides to Wellness Grants, Urbanized Area Formula Grants, Capital Assistance, Enhanced Mobility of Seniors and Individuals with Disabilities, and the New Freedom Program.

Table 58 shows total spending on TIP projects, broken down by funding streams that supported these projects. Transit spending is excluded. Some of these streams are no longer in existence, such as Interstate Maintenance, National Highway System, and ARRA. The dollar amounts specified represent the total amount spent on the project, including local or state matching funds.

**Table 58: Project Funding by Funding Stream
(Excludes Transit, State Advance Construction)**

East-West Gateway Region, 2005-2024

Funding Category	Amount (in dollars)	Percent
National Highway Performance Program	2,783,830,427	24.5
State	1,497,253,346	13.2
Surface Transportation Program Suballocated	1,391,742,607	12.2
Surface Transportation Block Grant	887,594,295	7.8
Interstate Maintenance	864,294,393	7.6
Highway Bridge Program	521,315,233	4.6
High Priority Projects/Earmarks	516,073,791	4.5
National Highway System	495,285,821	4.4
Congestion Mitigation and Air Quality	492,634,685	4.3
American Recovery and Reinvestment Act 2009	417,918,878	3.7
Highway Safety Improvement Program	348,299,273	3.1
Other	1,160,538,771	10.2

Source: East-West Gateway Transportation Improvement Program, 2005-2024 as of 2022.



ANALYSIS BY INVESTMENT TYPE

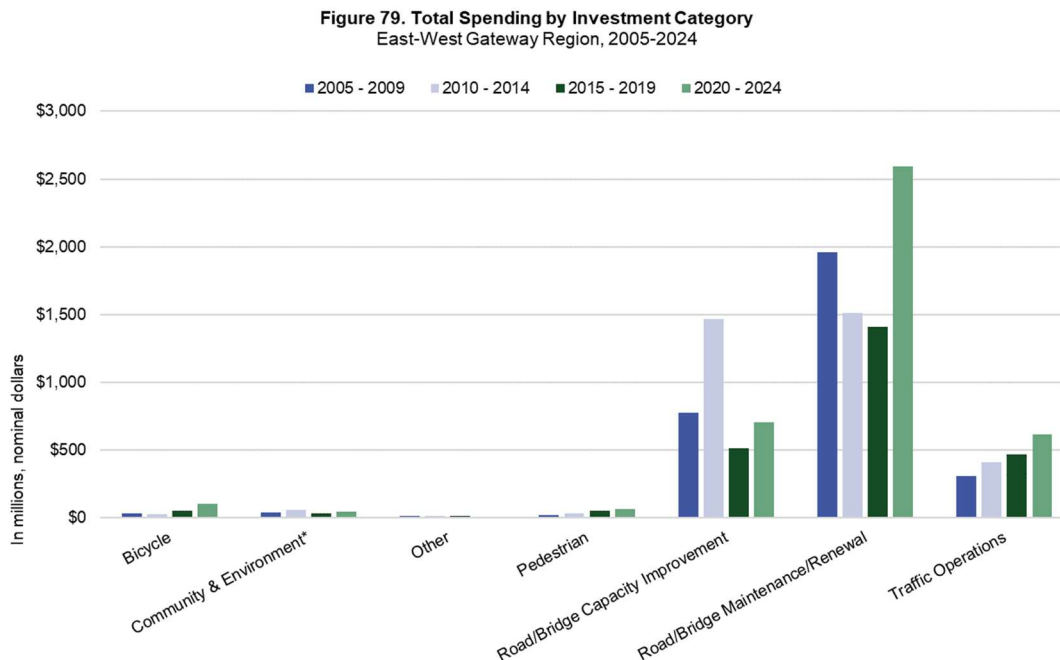
Spending in the TIP is largely determined by the eligibility of projects for federal funding streams. When total spending is analyzed for FHWA projects only (i.e., excluding transit projects), the category with the highest TIP spending is road/bridge maintenance/renewal (\$7.46 billion, or 56 percent), followed by road/bridge capacity improvement (\$3.46 billion, 26 percent). Since 2005, TIP spending on bicycle projects was \$211 million (1.6 percent), and projects coded as primarily pedestrian amounted to \$172 million (1.3 percent).

Again, due to data limitations, caution must be used in interpreting this information. The TIP database only includes a single code for investment type. Thus, a project is given an investment type code that represents its primary purpose. In some cases, major projects may have included pedestrian components that were of secondary importance, and therefore not coded as pedestrian. In a special data run conducted by MODOT for EWG, it was determined that the recent I-270 design/build project that cost \$246 million overall included approximately \$5.8 million for pedestrian improvements, mainly related to walkways on bridges that cross the highway. A useful requirement for a new TIP database would be coding that would allow pedestrian spending of this sort to be tracked.

East-West Gateway Region, 2005-2024		
Investment Type	Amount (in dollars)	Percent of Funding
Roadway Resurfacing	2,969,771,340	22.3
New Road/Bridge	2,519,646,230	18.9
Bridge Reconstruction/ Replacement	2,511,312,639	18.8
Roadway Reconstruction	1,988,399,818	14.9
Traffic Operations	1,572,841,102	11.8
Adding Lanes	941,415,807	7.1
Other	830,818,068	6.2

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.

Table 59 shows total spending by investment category from 2005 to 2024. Figure 79 shows total spending by investment category in five-year increments from 2005 to 2024.



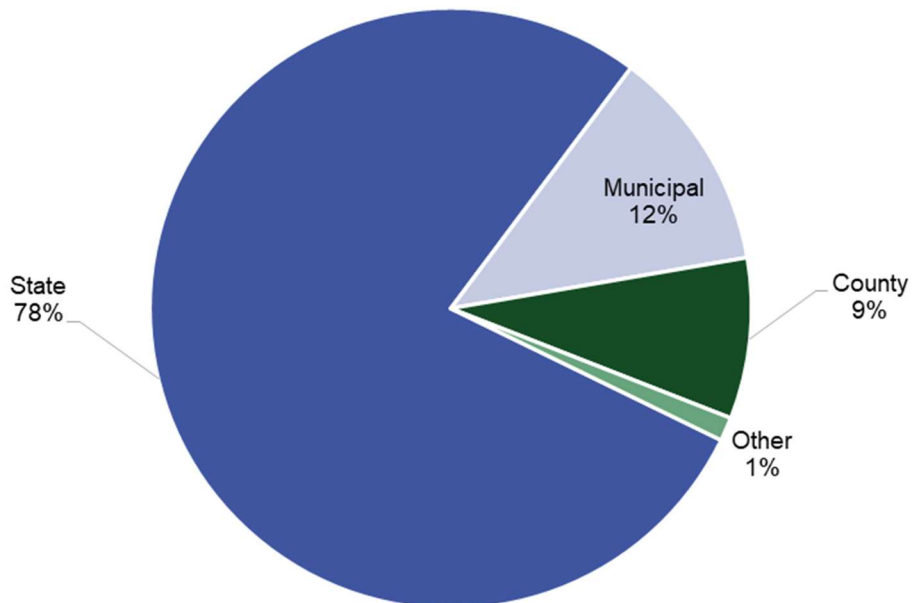
Notes: Excludes transit expenditures.
* Community & Environment = Community Enhancement and Environmental Mitigation
Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022



ANALYSIS BY SPONSOR TYPE

Figure 80 shows total spending for FHWA-funded projects by sponsor type. It shows that more than three quarters of the funding administered by EWG went to MODOT or IDOT for highway and bridge construction and maintenance. Counties received 9 percent of the funding, and municipalities 12 percent. Recognizing the dominant role of state DOTs in the region's transportation spending highlights the importance of close working relationships between DOTs and MPOs, and on guiding principles developed by the MPO for use in development of DOT projects.

Figure 80. Total Spending by Sponsor Type
East-West Gateway Region, 2005 - 2024



Note: Excludes spending on transit.

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.

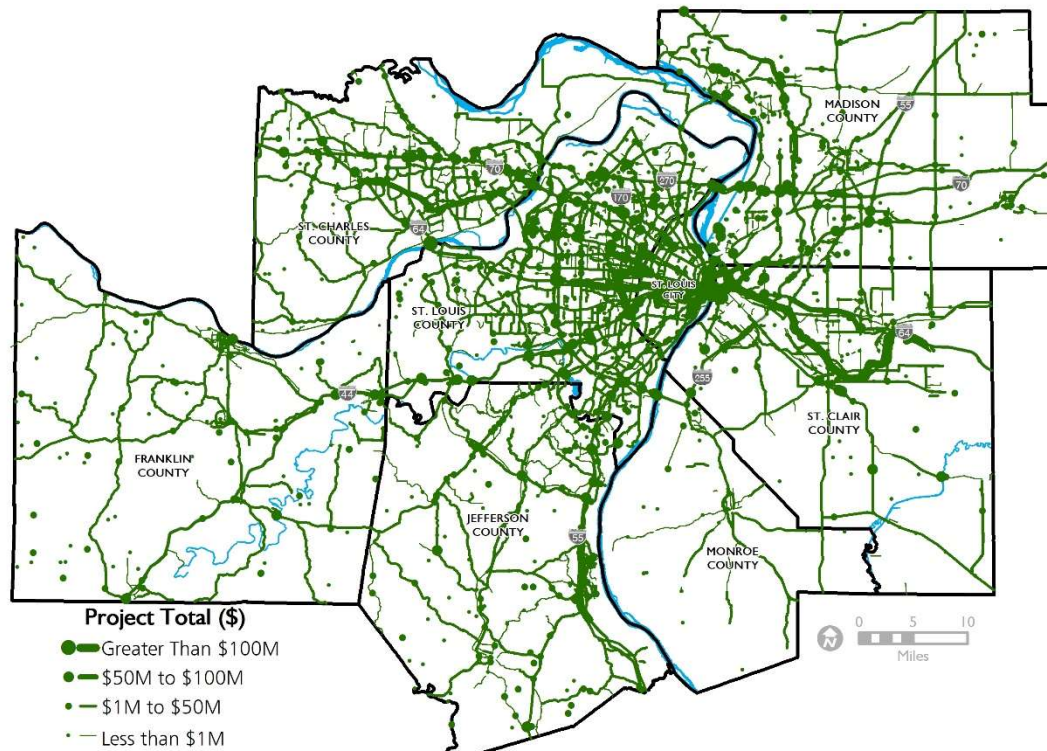


GEOSPATIAL ANALYSIS

Figure 81 shows TIP spending, with line thickness used to symbolize nominal dollar amounts. The largest projects involved work on major bridges over the Mississippi and Missouri rivers, reconstruction of I-64 in St. Louis County and the city of St. Louis, pavement and bridge work on I-270 in St. Louis County, the Page Avenue extension in St. Charles County, and addition of lanes and bridge replacement in Jefferson and St. Louis counties.

Projects that have exceeded \$100 million in TIP funding have included several major bridges, including the Stan Musial/Veterans Memorial Mississippi River Bridge, the I-270 Mississippi River Bridge, the Chain of Rocks Bridge, and the Daniel Boone Missouri River Bridge. Highway projects that exceeded \$100 million included the I-64 reconstruction which began in 2007, pavement, bridge and ADA improvements on I-270, and improvements on I-55. Major transit projects have included the Cross-County MetroLink Extension and the Mid-America MetroLink extension in St. Clair County

**Figure 81. Allocation of Transportation Improvement Project Funds
East-West Gateway Region, 2005-2024**

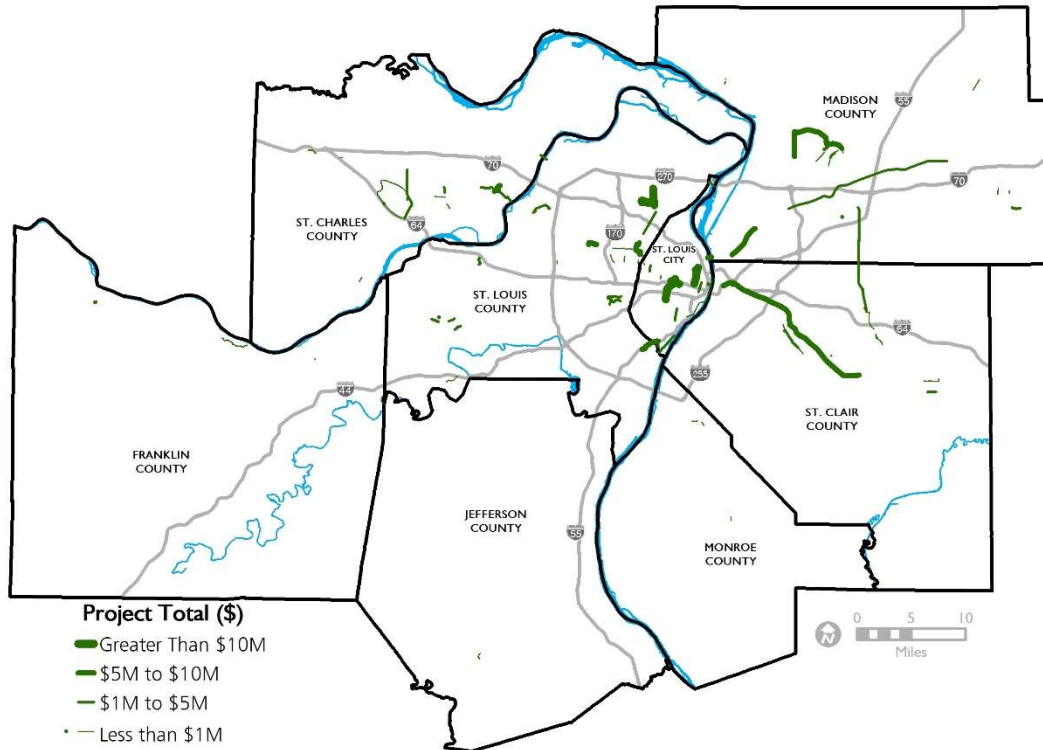


Source: East-West Gateway Council of Governments



Figure 82 shows a map of major bicycle projects since 2005. The Great Rivers Greenway has been the project sponsor for most of the largest projects, including the Brickline Greenway, the Maline Greenway, and the Grant's Trail extension. Other significant projects have been undertaken by Madison County Transit District and county governments.

**Figure 82. Allocation of Transportation Improvement Program Funds on Major Bicycle Projects
East-West Gateway Region, 2005-2024**



Source: East-West Gateway Council of Governments

The following is a list of infrastructure projects coded as primarily bicycle-related with total spending levels over \$5 million. An important caveat is that some of the spending in these projects may have been related to roadway projects. In addition, some bicycle/pedestrian components have also been included in other projects coded as roadway projects. Thus, this list represents only projects that were coded as primarily related to bicycles. The concluding section includes recommendations on structuring the database to better track bike/ped spending in complex projects.

- West Florissant Great Streets, St. Louis County
- Brickline Greenway, city of St. Louis
- 20th Street, Market to St. Louis Avenue, city of St. Louis
- CORTEX Tower Grove Connector, city of St. Louis
- Maline Greenway, St. Louis County
- Schoolhouse Northeast Extension, Madison County
- Grant's Trail Extension, St. Louis County and city of St. Louis
- McKinley Bridge Bikeway over Mississippi River
- Centennial Greenway, St. Charles County and St. Louis County
- St. Clair County MetroLink Bike Trail

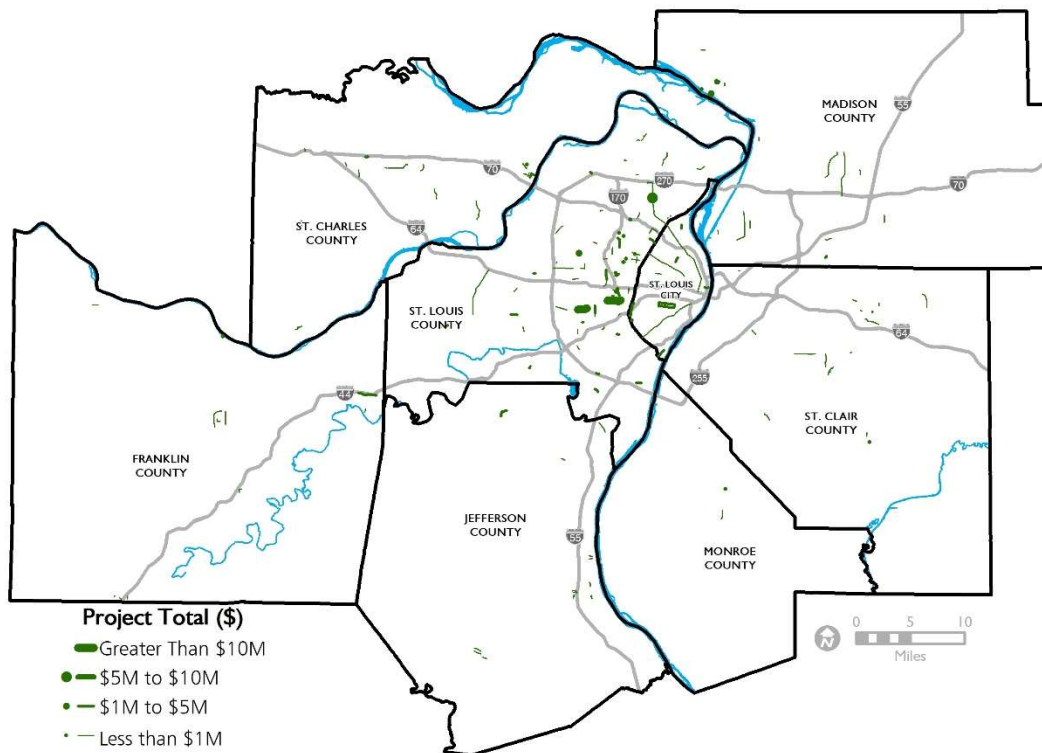


Figure 83 shows pedestrian projects since 2005, with line or point width used to symbolize funding levels. Several counties have had large pedestrian projects, including Manchester/Route 100 in St. Louis County, the River des Peres Greenway in the city of St. Louis, the Alton Landmark Crossing in Madison County, and the First Capitol/Fifth Street project in St. Charles County.

The following are projects coded primarily as pedestrian in nature with more than \$2.5 million in total project costs:

- MODOT improvements on MO-100 and US 67
- St. Louis County improvements on West Florissant Avenue
- GRG River des Peres Greenway
- North Broadway improvements in the city of St. Louis
- Separate improvements on Manchester Road in Wildwood and Kirkwood.

Figure 83. Allocation of Transportation Improvement Program Funds on Pedestrian Projects East-West Gateway Region, 2005-2024



Source: East-West Gateway Council of Governments

GEOSPATIAL ANALYSIS OF TIP FUNDING AND CURRENT CONDITIONS

In this section, funding in the TIP is overlaid on related current conditions parameters. This allows for a high-level analysis of whether transportation funding is allocated to areas of need. It is important to note that the aspects of communities captured in this analysis change over time; communities that have a high need today may not have had that same challenge 20 years ago. Therefore, it is critical these maps be considered as context to part of the ongoing understanding of the equitable distribution of funding in the region.

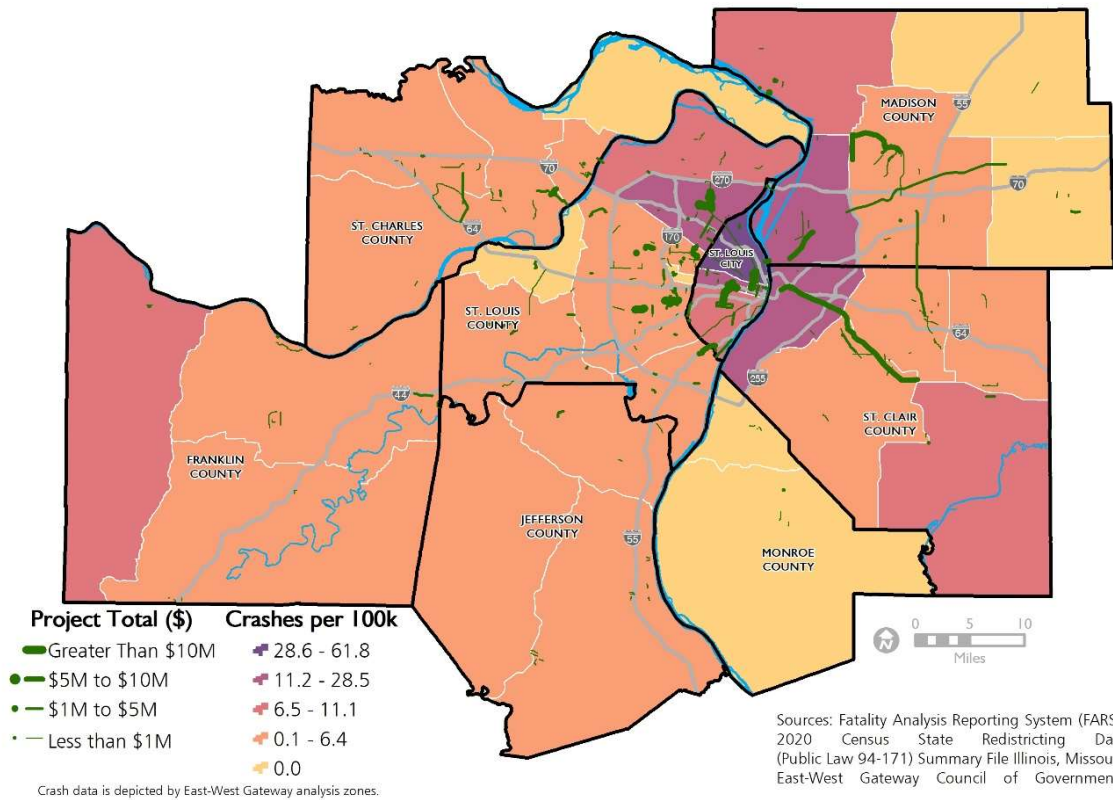


Safety

The transportation system should be safe for all road users using all modes of transportation in all communities. As the current conditions analysis shows, bicyclist and pedestrian fatalities are concentrated in certain parts of the region. In particular, the northern portions of the city of St. Louis and St. Louis County, the city of St. Louis central business district, Midtown area of the city of St. Louis, and the western parts of Madison and St. Clair counties have a disproportionate level of bike and pedestrian fatality rates. In order to more quickly reduce the fatality rates across the region, bicycle and pedestrian safety investment should be focused in these communities of concern.

Figure 84 shows bicycle and pedestrian project spending from 2005 to 2024 along with bicycle and pedestrian crash fatality rates between 2016 and 2020. As seen on the figure, many of the investments over this timeframe have been focused in areas with relatively high fatality rates. Different types of bicycle and pedestrian projects may have different effects on safety. Further analysis is needed to understand the causes of fatalities and if the bicycle and pedestrian spending is focused on addressing the highest risk corridors and intersections.

**Figure 84. Bicycle and Pedestrian Crash Fatality Rate (2016-2020) with Transportation Improvement Program Funds Allocated to Bicycle and Pedestrian Projects (2005-2024)
East-West Gateway Region**

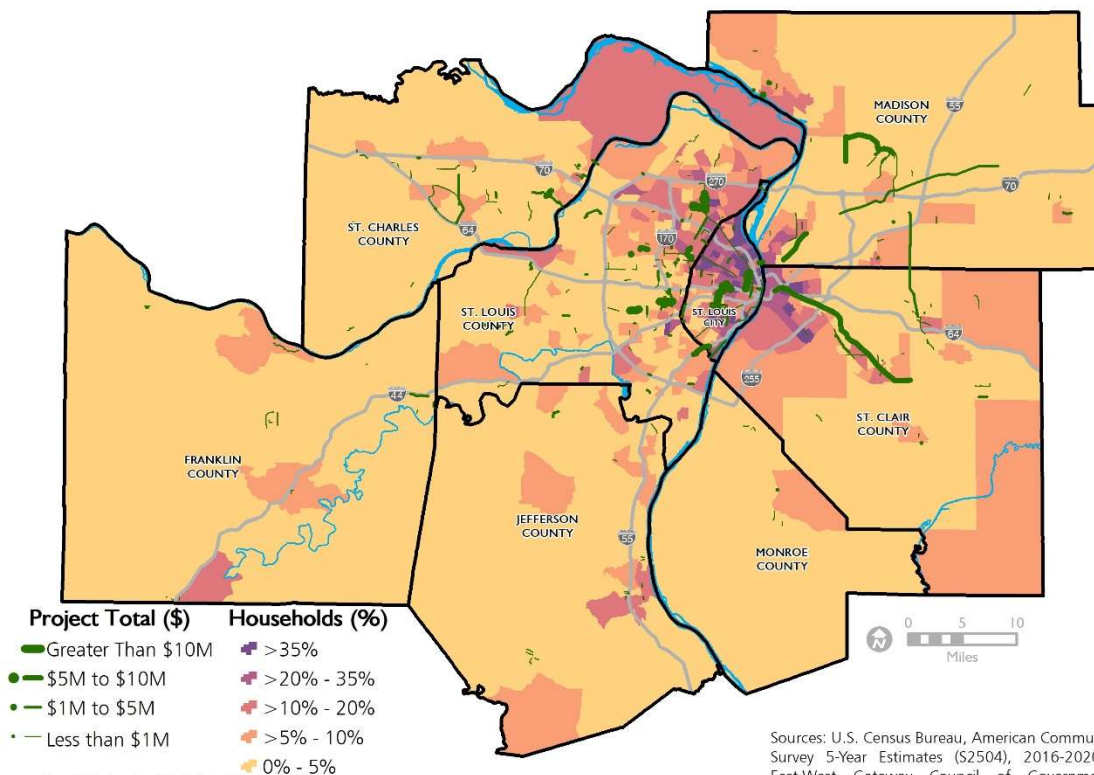




Bicycle and Pedestrian Access

Similarly, Figure 85 overlays the bicycle and pedestrian project spending with percent of no-vehicle households. This map is challenging to interpret for several reasons. It appears that much of the spending has not been in areas with the largest shares of bicycle and pedestrian commuters. However, there are many factors that go into where these type of projects are constructed. Further, as noted earlier, there are no-vehicle households located throughout the region, even in many of the areas where these households make up a small proportion of the population. Additionally, bicycle and pedestrian projects are used by a wide array of travelers, including households with vehicles. Therefore, it is difficult to use this analysis to determine whether the projects are being implemented in the locations with the most need or benefit. This map can be used to increase the understanding of available data and future analysis. Further analysis is required to analyze the benefits of bicycle and pedestrian projects and how those benefits accrue to different communities.

Figure 85. Transportation Improvement Program Funds Allocated to Bicycle and Pedestrian Projects (2005-2024) with Percent of No-Vehicle Household (2016-2020), East-West Gateway Region

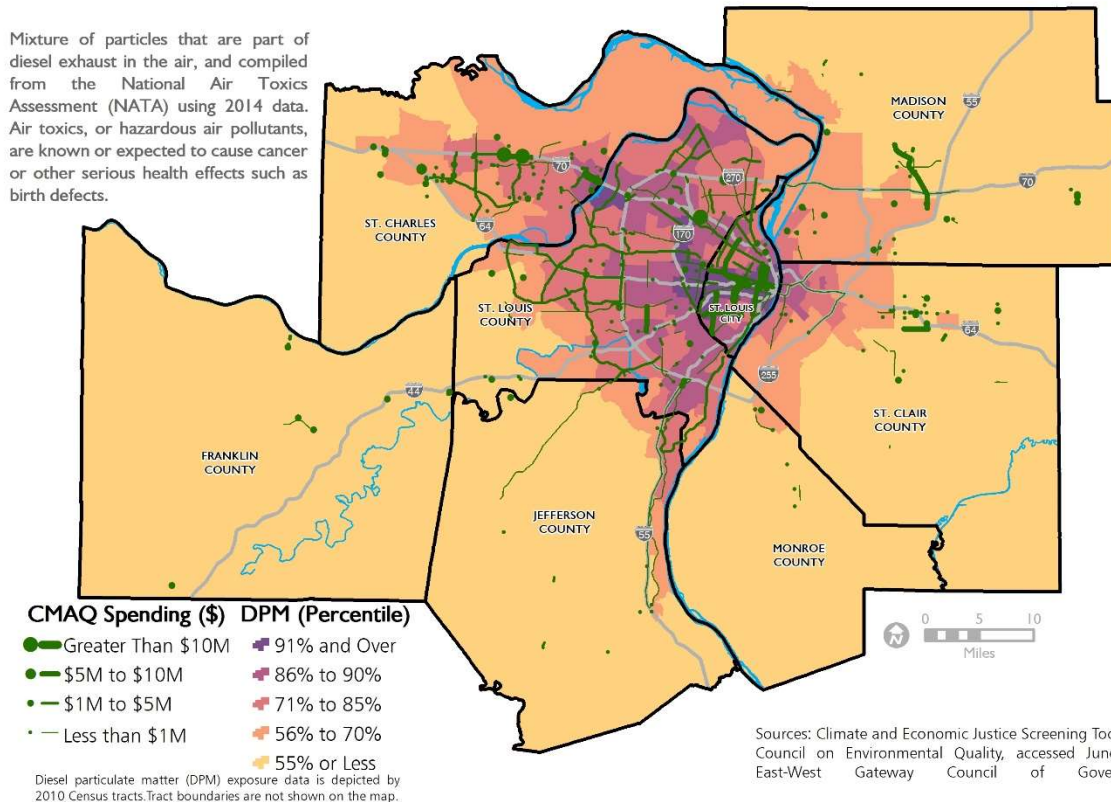




Health and Environment

The Congestion Mitigation and Air Quality Improvement (CMAQ) program provides funds for projects that reduce motor vehicle-related air pollution and/or mitigate traffic congestion in air quality non-attainment or maintenance areas for criteria pollutants, including ozone, carbon monoxide, and small particulate matter (PM2.5). The TIP projects that received CMAQ program funding in the EWG region were mapped in relation to diesel particulate matter exposure in the region, as shown in Figure 86. The analysis suggests that TIP projects are generally in the areas with higher diesel particulate matter; indicating they have been targeted toward areas with the greatest need. However, there are a wide variety of types of projects eligible for CMAQ funds, and this analysis does not explore the levels of emissions reductions or impacts on localized pollution.

**Figure 86. CMAQ Funding (2005-2024) and Diesel Particulate Matter Exposure (2019)
East-West Gateway Region**





5. RECOMMENDATIONS

The three components of this Transportation Equity Assessment – the historical analysis, the existing conditions analysis, and the recent transportation spending analysis – provide valuable information on how transportation policies and investments have shaped the St. Louis region and how the transportation system serves people in the region. This information is helpful by identifying issues and potential areas of focus in relation to equity and can support efforts to enhance equity considerations within the transportation investment decision making process moving forward. The assessment also reveals areas for further study by EWG and regional partners to ensure that the transportation system works for everyone.

The recommendations below provide EWG staff, the EWG Board of Directors, and other stakeholders with actions to consider that can help to reimagine and improve the transportation system to create a prosperous region for all populations. The recommendations are grouped into five categories:

- Inclusive Engagement
- Planning Process
- Project Identification and Planning
- Capacity Building
- Championing

INCLUSIVE ENGAGEMENT



Everyone should have the opportunity to be involved in the planning process. EWG is committed to engaging the entire regional community in the transportation planning process, as demonstrated through its Public Participate Plan and Title VI program activities.

Inclusive Engagement Recommendations

- Establish an on-going community-focused or equity advisory group to provide input from community members representing diverse abilities, ages, incomes, and from historically disadvantaged groups. This group could build on the equity advisory group that was assembled for the *Connected2050* long-range plan update and ideally would engage a broader set of interests and participants.
- To determine the best ways to engage such a group, conduct research on the community advisory group structures that are used by other metropolitan planning organizations to assess what approaches have been effective in other regions. For instance, the National Capital Region Transportation Planning Board has an “Access for All” Advisory Committee that advises the Board on issues, programs, policies, and services important to traditionally underserved communities, including low-income communities, underrepresented communities, people with limited English proficiency, people with disabilities, and older adults. The committee meets (virtually) approximately every two to three months and reports out to the Board and other committees. The Baltimore Regional Transportation Board has formed a Transportation CORE (Community Outreach and Regional Engagement) Group as a new form of engagement to expand the reach beyond existing committees and to include neighborhood residents and business owners, equity and transportation advocates, non-profit leaders, and representatives of the various interested parties from rural, suburban and urban communities and business interests. The group is anticipated to be engaged primarily through online activities at the



members' own convenience, such as by completing surveys and reviewing and commenting on draft materials.

- Conduct dialogues with organizations representing traditionally underserved groups in the St. Louis region to determine what input structure would make the most sense, and whether having an established advisory group with regular meetings or some other format would be the strongest mechanism for reaching different voices in the community.
- Continue to review and refine the Public Participation Plan to ensure focused efforts to engage all communities, particularly those that are difficult to reach, throughout all aspects of the transportation planning process. Many transportation agencies around the country are increasing their use of virtual public engagement, social media, coordination with local faith-based and community organizations, and other techniques to meet people in their own communities. EWG staff should review and identify further opportunities to strengthen the techniques that will meaningfully engage communities, particularly transportation equity populations.

PLANNING PROCESS



Missouri, Illinois, and all eight EWG jurisdictions coordinate to prioritize regional transportation improvements as part of the on-going metropolitan transportation planning process. While EWG has for many years incorporated equity considerations into the project prioritization process for the long-range transportation plan (LRTP) and transportation improvement program (TIP), there are opportunities to adjust and enhance processes to strengthen equity. The following recommendations relate to issues such as project prioritization, securing TIP funding, and funding application policies.

Planning Process Recommendations

- Directly highlight equity in regional transportation goals or guiding principles and sure equity considerations are incorporated into many of the regional goals.
- Identify ways to strengthen the consideration of equity in the scoring process used to prioritize projects for the TIP and the LRTP. Consider USDOT recommendation to MPOs to officially adopt a quantitative Equity Screening component to the TIP development processes to incorporate community vision and need in project selection and design. In the past, EWG has incorporated points into the scoring process for different project types for projects that support what had been defined as “Environmental Justice (EJ) areas,” based on high concentrations of transportation equity populations, including minorities, low-income populations, seniors, persons with disabilities, and no-vehicle households. However, EWG recognizes that this approach based on thresholds misses large portions of these populations within the region. For instance, most persons with disabilities are not located in “EJ areas” yet face many challenges and needs in terms of accessing transportation. As a result, the scoring process is recommended to be broadened to address needs of transportation equity population such as seniors, persons with disabilities, and no-vehicle households regardless of location.
- While focusing more broadly on transportation equity populations throughout the region, EWG should consider appropriate methodologies to identify “Equity Emphasis Areas” that address areas with high concentrations of transportation equity populations, those impacted by high traffic volumes and diesel particulate levels, and those communities that were historically divided or cut off due to transportation infrastructure development for additional points in



project scoring. It is recognized the communities with high concentrations of persons in poverty and that have historically been disadvantaged and underrepresented often face particularly acute challenges. Consider developing a methodology for categorizing all communities based on level of opportunity.

- Strengthen the focus in planning broadly on enhancing safe access without a vehicle, including travel choices by transit, walking, and bicycling, as well as low-cost or subsidized shared ride services. The equity investment analysis highlighted the challenges faced by no-vehicle households, the large difference in travel time and jobs access via transit compared to driving, and the challenges faced by some households in accessing groceries. Having safe choices to walk, bicycle, and use transit was highlighted as a priority by people throughout the St. Louis region within the process of developing the Connected2050 long-range plan, and “Safe and Secure” and “Choices and Access for All” were identified as two of the region’s Guiding Principles. Recognizing that providing travel choice, walkable development, and encouraging development in places accessible to transit are supportive of these regional goals and strengthen equity, EWG should ensure that these Guiding Principles play a strong role in project prioritization for the long-range transportation plan and TIP.
- Improve tracking of project spending by project type to better be able to document and assess the benefits of project investments and support further assessments of equity. Specifically, improve the way projects are entered and maintained into the TIP database by allowing the recording of multiple values for investment type, associated counties and municipalities, allowing identification of beneficiaries (population groups and geographies), and allowing TIP projects to be coded as polygon features. Additionally, consistent recording of safety and transit projects and tracking of projects that municipalities had applied for but did not get funding for would be valuable for further equity analysis.
- Conduct further equity research and reporting, including barriers faced by municipalities in applying for funding. For instance, this work might include further analysis of access to groceries, health care, education, and recreation for transportation equity populations; developing case studies focusing on chained trips for TEP households with no vehicles or one vehicle compared to two vehicles; conducting a transportation cost analysis for those TEP households with no vehicles versus those households with one or more automobiles; and determining additional methods of analyzing potential disparities among populations. Additional analysis also seems warranted to understand potential barriers that municipalities face in applying for TIP funds.
- Integrate equity-focused analysis into all planning processes, including safety, freight, and mobility planning. Beyond the long-range transportation plan and TIP, equity should be considered in planning processes addressing issues such as congestion and mobility, safety, and freight. For instance, as part of the congestion management process required to be implemented by EWG, the region could incorporate analyses addressing accessibility across different populations.
- Work with partners to identify policies and practices that would support equity, such as those related to litter removal, investments in bus shelters, and other local projects. For instance, litter along roadways was identified as a concern by the public when gathering feedback as part of development of the Connected2050 plan. While this is a concern broadly, some communities may not have the resources for their own litter removal. It would be worthwhile for EWG, the



State departments of transportation, and other partners to explore changes in levels of funding for litter removal or other strategies to ensure that all communities have clean and litter free roadways.

- Develop and track equity focused regional performance measures. Current performance measures focus on overall transportation measures such as tracking fatal and serious injury crash rates; however, these measures could be improved by also tracking disparities such as the disparity between crashes involving minorities and the overall population.

PROJECT IDENTIFICATION AND PLANNING



In addition to the planning process, EWG can work closely with partners to identify and develop concepts for projects that are designed to support equity.

Project Identification and Planning Recommendations

- Conduct studies focused on addressing the past adverse impacts of transportation decisions on communities and convening partners to collaborate to develop concepts for pilots and projects to compete for federal discretionary grant programs, such as the Reconnecting Communities Pilot Program.
- Conduct studies and collaborative planning efforts designed to identify strategies to address specific issues faced in communities, such as access to healthcare and groceries, as well as pedestrian and bicycle safety. The Infrastructure Investment and Jobs Act provides funding for planning efforts aimed at identifying dangerous sections of roadway and devising intervention strategies, and funding should be pursued to facilitate these planning efforts. There are also a wide array of discretionary projects that are designed to support persons with disabilities, older adults, and historically disadvantaged communities, including innovative mobility pilots, micro-transit, and other strategies that also support the region's Guiding Principle to be Innovative.



CAPACITY BUILDING



A key area of recommendation is to build the technical capacity of local governments and other stakeholders to support applying for and securing funding for projects that support equity needs. Capacity building could occur through EWG's efforts to provide technical assistance to local governments and partners, conduct outreach on historical decisions and inequities to raise regional awareness among partners, and supporting identification of funding for projects.

Capacity Building Recommendations

- Conduct neighborhood studies and deliver assistance to local governments and other partners focused on TEPs. A good example to review is the York Area MPO, which uses such studies to gain a better understanding of the mobility and accessibility challenges present in specific underserved communities.¹⁵³
- Conduct outreach to communities that have never received TIP funding to determine whether there are barriers that could be addressed.
- Help communities take advantage of new funding streams in the Infrastructure Investment and Jobs Act that waive match requirements for low-income communities.
- Help communities to participate in technical assistance programs, such as through the U.S. Department of Transportation and U.S. Department of Housing and Urban Development's Thriving Communities initiative.

CHAMPIONING



Finally, EWG can champion the strengths of the St. Louis region and highlight the challenges being faced. While the U.S. Department of Transportation strongly supports equity through its Equity Action Plan, at times the process to funnel federal dollars into our communities can be challenging to navigate. Moreover, the 20 percent non-federal match is a requirement for many federal programs and is potentially a serious barrier for some communities. EWG staff can work with the Association of Metropolitan Planning Organizations (AMPO) and other stakeholders to educate federal policy makers on the impacts of the match requirement on low-income communities and identify challenges associated with accessing federal grants. EWG can also encourage federal assistance with local match funds for underserved communities and identify inefficiencies in funding distribution.

¹⁵³ [Environmental Justice Unified Process and Methodology Guide, 4-25-2022](#)



APPENDIX A: HISTORICAL TIMELINE

Figure 87 Timeline Federal transportation Developments (yellow), Demographic Shifts (blue), and Local Policies and Planning Decisions (green) influencing the St. Louis Region's Transportation Landscape, 1840s to 1960

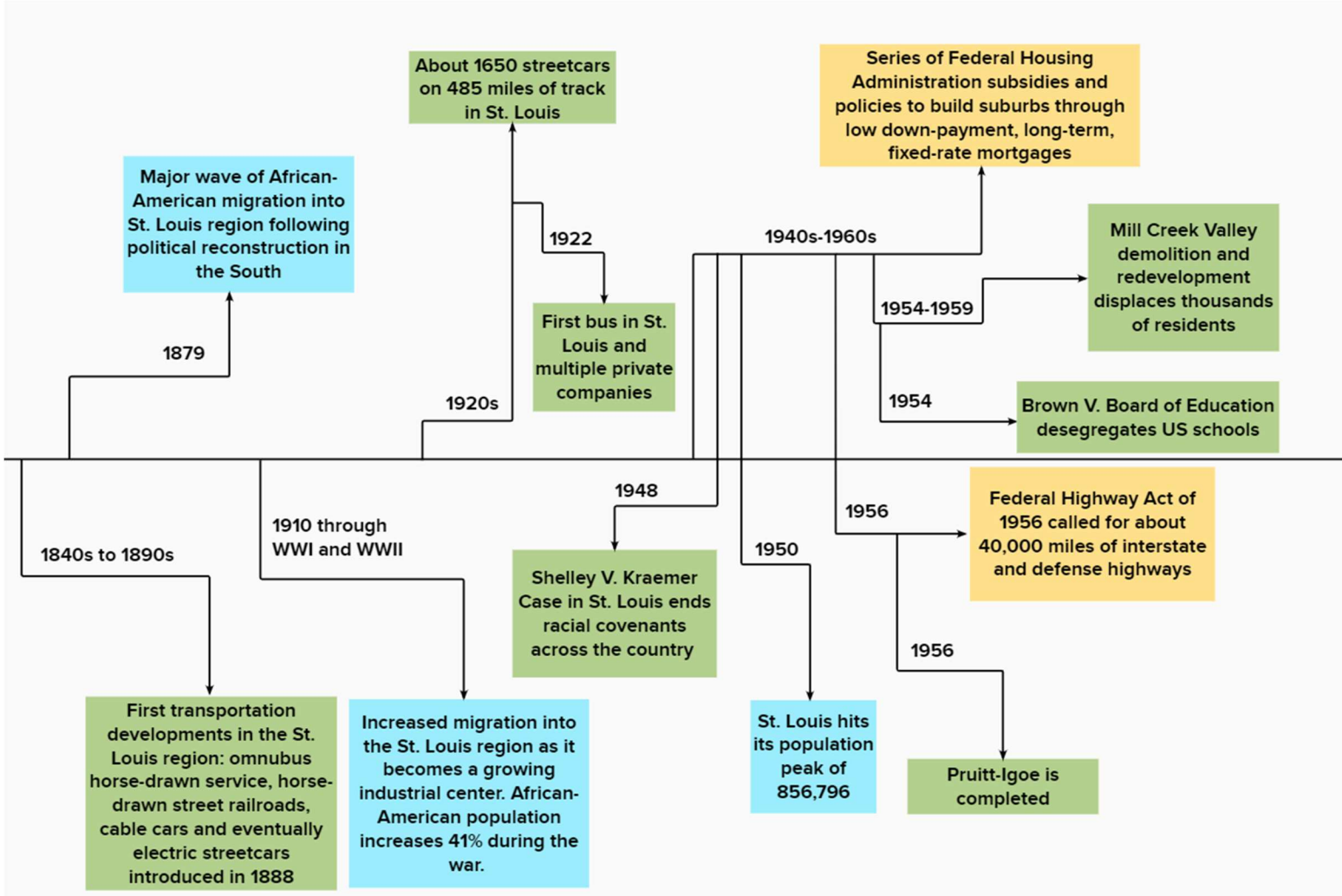
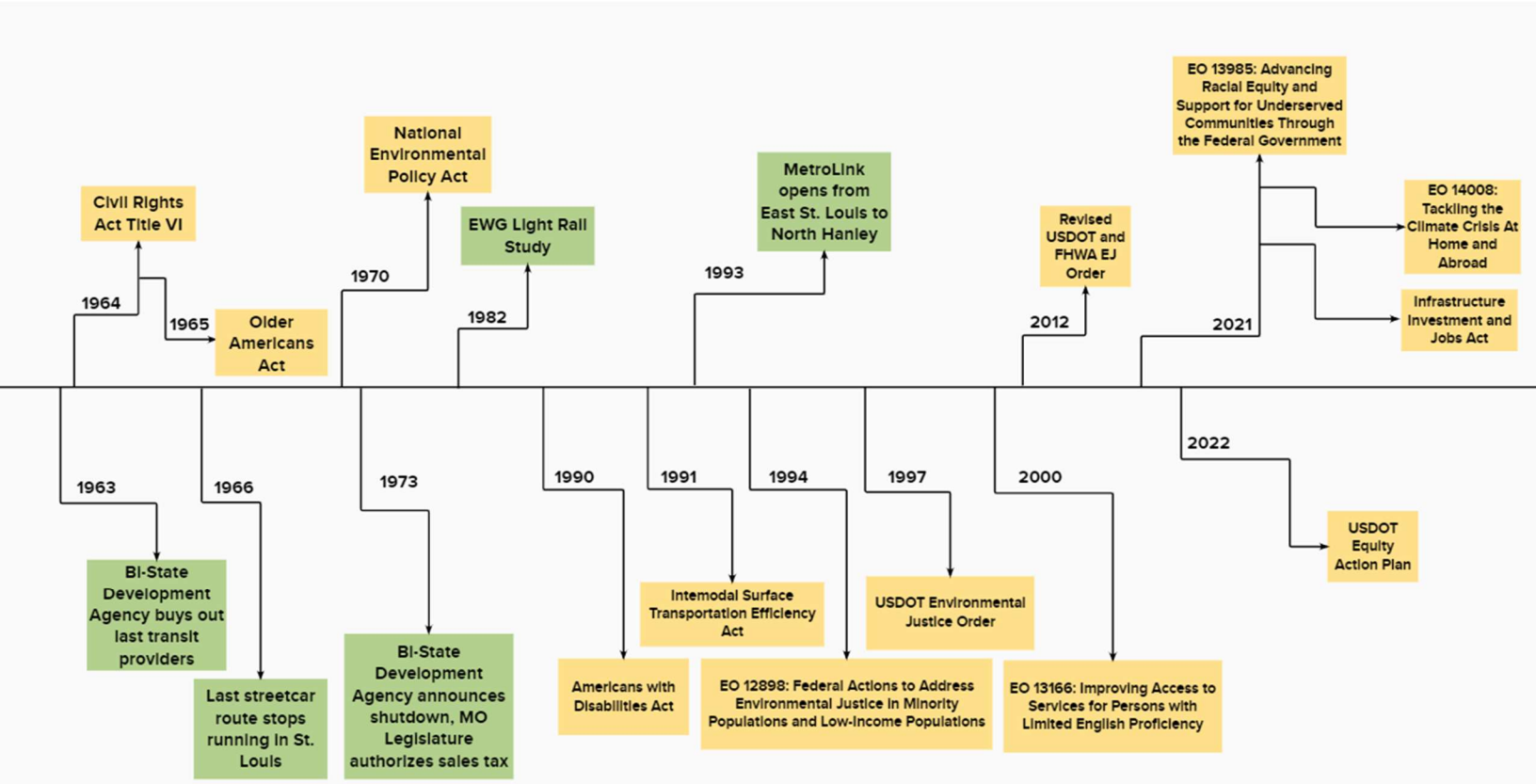




Figure 88. Timeline of Transportation Developments (green) and Federal Policies (yellow) influencing the St. Louis Region’s Transportation Landscape, 1960s to 2022





APPENDIX B: ANALYSIS OF MUNICIPAL-SPONSORED PROJECTS

Table 60. Funding Received in Municipal-Sponsored Projects

Illinois Municipalities (Alphabetical) in the East-West Gateway Region, 2005-2024

Municipality	County	Total Funds (in dollars)	Municipality	County	Total Funds (in dollars)
Alhambra	Madison	0	Livingston	Madison	0
Alorton	St. Clair	1,125,000	Madison	Madison	8,062,285
Alton	Madison	53,645,113	Maeystown	Monroe	0
Belleville	St. Clair	34,471,643	Marine	Madison	3,650
Bethalto	Madison	13,470,936	Marissa	St. Clair	0
Brooklyn	St. Clair	305,792	Maryville	Madison	7,704,769
Cahokia	St. Clair	7,637,836	Mascoutah	St. Clair	5,187,367
Caseyville	St. Clair	1,354,000	Millstadt	St. Clair	521,470
Centreville	St. Clair	3,003,697	New Athens	St. Clair	88,000
Collinsville	Madison/St. Clair	20,938,883	New Baden	St. Clair	0
Columbia	Monroe	15,269,800	New Douglas	Madison	0
Dupo	St. Clair	58,875,000	O'Fallon	St. Clair	26,049,554
East Alton	Madison	6,142,400	Pierron	Madison	0
East Carondelet	St. Clair	0	Pontoon Beach	Madison	0
East St. Louis	St. Clair	12,047,510	Roxana	Madison	0
Edwardsville	Madison	15,649,826	Sauget	St. Clair	15,512,907
Fairmont City	Madison/St. Clair	0	Shiloh	St. Clair	10,297,325
Fairview Heights	St. Clair	6,503,866	Smithton	St. Clair	906,100
Fayetteville	St. Clair	0	South Roxana	Madison	231,345
Freeburg	St. Clair	470,000	St. Jacob	Madison	0
Fults	Monroe	0	St. Libory	St. Clair	0
Glen Carbon	Madison	4,722,390	Summerfield	St. Clair	0
Godfrey	Madison	9,277,063	Swansea	St. Clair	8,203,813
Granite City	Madison	46,503,482	Troy	Madison	12,228,284
Grantfork	Madison	0	Valmeyer	Monroe	0
Hamel	Madison	0	Venice	Madison	746,500
Hartford	Madison	4,440,549	Washington Park	St. Clair	420,500
Hecker	Monroe	0	Waterloo	Monroe	11,470,749
Highland	Madison	13,562,661	Williamson	Madison	0
Lebanon	St. Clair	7,244,406	Wood River	Madison	7,419,190
Lenzburg	St. Clair	0	Worden	Madison	0

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.



Table 61. Funding Received in Municipal-Sponsored Projects

Illinois Municipalities (In order of nominal amount received) in the East-West Gateway Region, 2005-2024

Municipality	County	Total Funds (in dollars)	Municipality	County	Total Funds (in dollars)
Dupo	St. Clair	58,875,000	Venice	Madison	746,500
Alton	Madison	53,645,113	Millstadt	St. Clair	521,470
Granite City	Madison	46,503,482	Freeburg	St. Clair	470,000
Belleville	St. Clair	34,471,643	Washington Park	St. Clair	420,500
O'Fallon	St. Clair	26,049,554	Brooklyn	St. Clair	305,792
Collinsville	Madison	20,938,883	South Roxana	Madison	231,345
Edwardsville	Madison	15,649,826	New Athens	St. Clair	88,000
Sauget	St. Clair	15,512,907	Marine	Madison	3,650
Columbia	Monroe	15,269,800	Alhambra	Madison	0
Highland	Madison	13,562,661	East Carondelet	St. Clair	0
Bethalto	Madison	13,470,936	Fairmont City	St. Clair/Madison	0
Troy	Madison	12,228,284	Fayetteville	St. Clair	0
East St. Louis	St. Clair	12,047,510	Fults	Monroe	0
Waterloo	Monroe	11,470,749	Grantfork	Madison	0
Shiloh	St. Clair	10,297,325	Hamel	Madison	0
Godfrey	Madison	9,277,063	Hecker	Monroe	0
Swansea	St. Clair	8,203,813	Lenzburg	St. Clair	0
Madison	Madison	8,062,285	Livingston	Madison	0
Maryville	Madison	7,704,769	Maeystown	Monroe	0
Cahokia	St. Clair	7,637,836	Marissa	St. Clair	0
Wood River	Madison	7,419,190	New Baden	St. Clair	0
Lebanon	St. Clair	7,244,406	New Douglas	Madison	0
Fairview Heights	St. Clair	6,503,866	Pierron	Madison	0
East Alton	Madison	6,142,400	Pontoon Beach	Madison	0
Mascoutah	St. Clair	5,187,367	Roxana	Madison	0
Glen Carbon	Madison	4,722,390	St. Jacob	Madison	0
Hartford	Madison	4,440,549	St. Libory	St. Clair	0
Centreville	St. Clair	3,003,697	Summerfield	St. Clair	0
Caseyville	St. Clair	1,354,000	Valmeyer	Monroe	0
Alorton	St. Clair	1,125,000	Williamson	Madison	0
Smithton	St. Clair	906,100	Worden	Madison	0

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.



Table 62. Funding Received in Municipal-Sponsored Projects

Missouri Municipalities (Alphabetical) in the East-West Gateway Region, 2005-2024

Municipality	County	Total Funds (in dollars)	Municipality	County	Total Funds (in dollars)	Municipality	County	Total Funds (in dollars)
Arnold	Jefferson	6,659,510	Florissant	St. Louis	7,718,141	Parkdale	Jefferson	0
Augusta	St. Charles	1,088,101	Foristell	St. Charles	0	Parkway	Franklin	0
Ballwin	St. Louis	10,844,645	Frontenac	St. Louis	7,137,476	Pasadena Hills	St. Louis	0
Bella Villa	St. Louis	0	Gerald	Franklin	0	Pasadena Park	St. Louis	0
Bellefontaine Neighbors	St. Louis	3,488,481	Glen Echo Park	St. Louis	0	Peaceful Village	Jefferson	0
Bellerive Acres	St. Louis	0	Glendale	St. Louis	5,717,782	Pevely	Jefferson	3,384,392
Bel-Nor	St. Louis	1,100,000	Grantwood Village	St. Louis	1,344,140	Pine Lawn	St. Louis	1,357,205
Bel-Ridge	St. Louis	0	Green Park	St. Louis	6,258,804	Portage Des Sioux	St. Charles	0
Berger	Franklin	0	Greendale	Missouri	0	Richmond Heights	St. Louis	8,985,846
Berkeley	St. Louis	981,095	Hanley Hills	St. Louis	0	Riverview	St. Louis	0
Beverly Hills	St. Louis	0	Hazelwood	St. Louis	10,833,086	Rock Hill	St. Louis	3,695,506
Black Jack	St. Louis	0	Herculaneum	Jefferson	15,791,596	Scotsdale	Jefferson	0
Breckenridge Hills	St. Louis	1,048,655	Hillsboro	Jefferson	6,420,443	Shrewsbury	St. Louis	1,569,145
Brentwood	St. Louis	7,594,493	Hillsdale	St. Louis	0	St. Ann	St. Louis	6,489,992
Bridgeton	St. Louis	6,522,471	Huntleigh	St. Louis	0	St. Charles	St. Charles	80,817,744
Byrnes Mill	Jefferson	0	Jennings	St. Louis	97,050	St. Clair	Franklin	4,942,485
Calverton Park	St. Louis	0	Josephville	St. Charles	0	St. John	St. Louis	2,363,214
Cedar Hill Lakes	Jefferson	0	Kimmswick	Jefferson	0	St. Paul	St. Charles	0
Champ	St. Louis	0	Kinloch	St. Louis	0	St. Peters	St. Charles	29,542,030
Charlack	St. Louis	0	Kirkwood	St. Louis	22,789,368	Sullivan	Franklin	5,406,042
Charmwood	Franklin	0	Ladue	St. Louis	14,952,385	Sunset Hills	St. Louis	7,241,926
Chesterfield	St. Louis	21,785,959	Lake Saint Louis	St. Charles	20,212,585	Sycamore Hills	St. Louis	0
Clarkson Valley	St. Louis	0	Lake Tekakwitha	Jefferson	0	Town And Country	St. Louis	6,573,120
Clayton	St. Louis	18,205,974	Lakeshire	St. Louis	0	Twin Oaks	St. Louis	672,625
Cool Valley	St. Louis	653,725	Leslie	Franklin	0	Union	Franklin	26,063,746
Cottleville	St. Charles	2,895,616	Manchester	St. Louis	8,830,900	University City	St. Louis	16,516,157
Country Club Hills	St. Louis	0	Maplewood	St. Louis	6,563,343	Uplands Park	St. Louis	0
Country Life Acres	St. Louis	0	Marlborough	St. Louis	0	Valley Park	St. Louis	11,954,727
Crestwood	St. Louis	8,508,515	Maryland Heights	St. Louis	39,845,594	Velda City	St. Louis	0
Creve Coeur	St. Louis	11,200,189	Miramigoua Park	Franklin	0	Velda Village Hills	St. Louis	0
Crystal City	Jefferson	8,033,857	Moline Acres	St. Louis	1,717,756	Vinita Park	St. Louis	1,628,845
Crystal Lake Park	St. Louis	0	New Haven	Franklin	8,665,502	Warson Woods	St. Louis	0
Dardenne Prairie	St. Charles	14,449,943	New Melle	St. Charles	475,806	Washington	Franklin	16,715,049
De Soto	Jefferson	17,699,250	Normandy	St. Charles	0	Webster Groves	St. Louis	7,024,407
Dellwood	St. Louis	2,515,258	Northwoods	St. Louis	3,562,289	Weldon Spring	St. Charles	7,706,500
Des Peres	St. Louis	7,336,741	Norwood Court	St. Louis	0	Weldon Spring Heights	St. Charles	0
Edmundson	St. Louis	2,298,475	Oak Grove Village	Franklin	1,327,230	Wellston	St. Louis	0
Ellisville	St. Louis	621,754	Oakland	St. Louis	1,100,600	Wentzville	St. Chare	68,205,824
Eureka	St. Louis	9,183,898	O'Fallon	St. Charles	53,639,226	West Alton	St. Charles	0
Fenton	St. Louis	16,772,292	Olivette	St. Louis	9,103,388	Westwood	St. Louis	0
Ferguson	St. Louis	11,886,163	Olympian Village	Jefferson	0	Wilbur Park	St. Louis	0
Festus	Jefferson	13,174,077	Overland	St. Louis	632,720	Wildwood	St. Louis	32,480,204
Flint Hill	St. Charles	0	Pacific	Franklin	13,600,252	Winchester	St. Louis	0
Flordell Hills	St. Louis	0	Pagedale	St. Louis	2,441,738	Woodson Terrace	St. Louis	0

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.



Table 63. Funding Received in Municipal-Sponsored Projects

Missouri Municipalities (In order of nominal amount received) in the East-West Gateway Region, 2005-2024

Municipality	County	Total Funds (in dollars)	Municipality	County	Total Funds (in dollars)	Municipality	County	Total Funds (in dollars)
St. Charles	St. Charles	80,817,744	Hillsboro	Jefferson	6,420,443	Country Club Hills	St. Louis	0
Wentzville	St. Charles	68,205,824	Green Park	St. Louis	6,258,804	Country Life Acres	St. Louis	0
O'Fallon	St. Charles	53,639,226	Glendale	St. Louis	5,717,782	Crystal Lake Park	St. Louis	0
Maryland Heights	St. Louis	39,845,594	Sullivan	Franklin	5,406,042	Flint Hill	St. Charles	0
Wildwood	St. Louis	32,480,204	St. Clair	Franklin	4,942,485	Flordell Hills	St. Louis	0
St. Peters	St. Peters	29,542,030	Rock Hill	St. Louis	3,695,506	Foristell	St. Charles	0
Union	Franklin	26,063,746	Northwoods	St. Louis	3,562,289	Gerald	Franklin	0
Kirkwood	St. Louis	22,789,368	Bellefontaine Neighbors	St. Louis	3,488,481	Glen Echo Park	St. Louis	0
Chesterfield	St. Louis	21,785,959	Pevely	Jefferson	3,384,392	Greendale	St. Louis	0
Lake Saint Louis	St. Charles	20,212,585	Cottleville	St. Charles	2,895,616	Hanley Hills	St. Louis	0
Clayton	St. Louis	18,205,974	Dellwood	St. Louis	2,515,258	Hillsdale	St. Louis	0
De Soto	Jefferson	17,699,250	Pagedale	St. Louis	2,441,738	Huntleigh	St. Louis	0
Fenton	St. Louis	16,772,292	St. John	St. Louis	2,363,214	Josephville	St. Charles	0
Washington	Franklin	16,715,049	Edmundson	St. Louis	2,298,475	Kimmswick	Jefferson	0
University City	St. Louis	16,516,157	Moline Acres	St. Louis	1,717,756	Kinloch	St. Louis	0
Herculaneum	Jefferson	15,791,596	Vinita Park	St. Louis	1,628,845	Lake Tekakwitha	Jefferson	0
Ladue	St. Louis	14,952,385	Shrewsbury	St. Louis	1,569,145	Lakeshire	St. Louis	0
Dardenne Prairie	St. Charles	14,449,943	Pine Lawn	St. Louis	1,357,205	Leslie	Franklin	0
Pacific	Franklin	13,600,252	Grantwood Village	St. Louis	1,344,140	Marlborough	St. Louis	0
Festus	Jefferson	13,174,077	Oak Grove Village	Franklin	1,327,230	Miramigoua Park	Franklin	0
Valley Park	St. Louis	11,954,727	Oakland	St. Louis	1,100,600	Normandy	St. Louis	0
Ferguson	St. Louis	11,886,163	Bel-Nor	St. Louis	1,100,000	Norwood Court	St. Louis	0
Creve Coeur	St. Louis	11,200,189	Augusta	St. Charles	1,088,101	Olympian Village	Jefferson	0
Ballwin	St. Louis	10,844,645	Breckenridge Hills	St. Louis	1,048,655	Parkdale	Jefferson	0
Hazelwood	St. Louis	10,833,086	Berkeley	St. Louis	981,095	Parkway	Franklin	0
Eureka	St. Louis	9,183,898	Twin Oaks	St. Louis	672,625	Pasadena Hills	St. Louis	0
Olivette	St. Louis	9,103,388	Cool Valley	St. Louis	653,725	Pasadena Park	St. Louis	0
Richmond Heights	St. Louis	8,985,846	Overland	St. Louis	632,720	Peaceful Village	Jefferson	0
Manchester	St. Louis	8,830,900	Ellisville	St. Louis	621,754	Portage Des Sioux	St. Charles	0
New Haven	Franklin	8,665,502	New Melle	St. Charles	475,806	Riverview	St. Louis	0
Crestwood	St. Louis	8,508,515	Jennings	St. Louis	97,050	Scotsdale	Jefferson	0
Crystal City	Jefferson	8,033,857	Bella Villa	St. Louis	0	St. Paul	St. Charles	0
Florissant	St. Louis	7,718,141	Bellerive Acres	St. Louis	0	Sycamore Hills	St. Louis	0
Weldon Spring	St. Charles	7,706,500	Bel-Ridge	St. Louis	0	Uplands Park	St. Louis	0
Brentwood	St. Louis	7,594,493	Berger	Franklin	0	Velda City	St. Louis	0
Des Peres	St. Louis	7,336,741	Beverly Hills	St. Louis	0	Velda Village Hills	St. Louis	0
Sunset Hills	St. Louis	7,241,926	Black Jack	St. Louis	0	Warson Woods	St. Louis	0
Frontenac	St. Louis	7,137,476	Byrnes Mill	Jefferson	0	Weldon Spring Heights	St. Charles	0
Webster Groves	St. Louis	7,024,407	Calverton Park	St. Louis	0	Wellston	St. Louis	0
Arnold	Jefferson	6,659,510	Cedar Hill Lakes	Jefferson	0	West Alton	St. Charles	0
Town And Country	St. Louis	6,573,120	Champ	St. Louis	0	Westwood	St. Louis	0
Maplewood	St. Louis	6,563,343	Charlack	St. Louis	0	Wilbur Park	St. Louis	0
Bridgeton	St. Louis	6,522,471	Charmwood	St. Louis	0	Winchester	St. Louis	0
St. Ann	St. Louis	6,489,992	Clarkson Valley	St. Louis	0	Woodson Terrace	St. Louis	0

Source: East-West Gateway Transportation Improvement Programs 2005-2024, as of 2022.

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Saint Louis from the Archway