



Transportation Equity

Assessment Report for the St. Louis Region

Executive Summary

December 2022







This report was prepared by ICF and East-West Gateway staff, with support from Added Dimension.

This publication was supported, in part, by a grant provided from the U.S. Department of Transportation through the Missouri Department of Transportation and the Illinois Department of Transportation. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Missouri Highways and Transportation Commission, the Illinois Department of Transportation, the Federal Highway Administration, or the Federal Transit Administration.

East-West Gateway Council of Governments (EWG) hereby gives public notice that it is the policy of the agency to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America, on the grounds of race, color, or national origin, shall be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which EWG receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with EWG. Any such complaint must be in writing and filed with EWG's Title VI Coordinator within one hundred eighty (180) calendar days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Nondiscrimination Complaint Form, please see EWG's website at www.ewgateway.org/titlevi or call (314) 421-4220 or (618) 274-2750.

As the metropolitan planning organization (MPO) responsible for long-range transportation planning in the St. Louis region, the East-West Gateway Council of Governments (EWG) seeks to ensure that the transportation system meets the needs of all residents. This Transportation Equity Assessment was conducted to help understand how past transportation investments have affected different population groups in the region and how the transportation system works for people in the region today.

WHY THIS TRANSPORTATION EQUITY ASSESSMENT WAS CONDUCTED

The concept of equity focuses on **fairness** and **providing all people with access to opportunities**, so that no one is overly limited or burdened due to characteristics such as their race, ethnicity, income, age, or

disability. Equity recognizes that there often are different needs, barriers, or challenges facing different populations, and equity in transportation means developing solutions to help meet the needs of all people, particularly those who face mobility challenges (see Figure ES-1). It also recognizes that there should be a fair distribution of the benefits and burdens of transportation and that transportation policies and investments in the past disadvantaged some populations, particularly low-income and minority populations.

Figure ES-1. Graphic on the Meaning of Equity from the Robert Woods Johnson Foundation

Equality



This Transportation Equity Assessment is designed to help ensure that the transportation system in the St. Louis region works for everyone. It is designed to help:

- Understand how past transportation investments and decisions have affected different population groups;
- Support compliance with federal requirements that prohibit discrimination based on race, ethnicity, income, age, disability, and limited English proficiency;
- Help the region compete for new federal funding to support safety, mobility, and community connections;
- Contribute to ongoing stakeholder efforts to address disparities in the region; and
- Ultimately provide benefits to the entire region by improving access to jobs and opportunities for all people, which will strengthen the region's economic vitality and quality of life.

Traveling a Mile in Your Neighbor's Shoes

Many of us take for granted that if we need groceries, we can simply get in the car and be at a grocery store in a matter of minutes.

But for some people, such as those without a car, a trip to the grocery store could involve a multi-hour journey, with a long walk to catch a bus, waiting outside (in the heat, cold, or rain), a bus ride with multiple transfers, and sometimes the need to cross high-speed roadways and parking lots — and then the long journey back.

Equitable transportation means providing everyone fair opportunities to access life needs, such as food, health care, jobs, and education – so that no one is severely limited or burdened based on characteristics like their access to a vehicle.

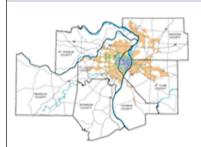
This Transportation Equity Assessment includes three key components:

1. Historical Analysis



A historical analysis of investments and policies going back over a hundred years to help understand past decisions affecting the region and communities.

2. Existing Conditions Analysis



An assessment of current mobility, transportation safety, environmental conditions in the region in relation to different population groups.

3. Recent Transportation Spending Analysis



An analysis of regional and local transportation investments, based on an assessment of projects in the Transportation Improvement Program (TIP) since 2005.

In addition, developing this Transportation Equity Assessment involved engagement with stakeholders and residents throughout the St. Louis region through interviews, focus groups, in-person and virtual open houses, and an Equity Advisory Group to hear about the transportation challenges being faced by residents, employers, human service providers, and others.

THE IMPACTS OF PAST TRANSPORTATION INVESTMENTS AND POLICIES

Part 1: Historical Analysis

Advancing transportation equity today benefits from understanding how transportation investments in the past impacted communities and shaped opportunities for people throughout the region.

1800s TO EARLY 1900s

Looking back to the 1800s, the St. Louis region grew significantly in trade and industry, first because of river commerce and then rail-based trade. By the early 1900s, the St. Louis region was one of the leading manufacturing centers in the country. The region experienced significant waves of immigration from European countries. There was also a significant migration of African Americans from the South, who came seeking employment opportunities in manufacturing. The city grew an extensive streetcar network, and by 1900, there were over 1,400 streetcars running on 450 miles of track along almost every major street. Throughout this period of growth, many recent arrivals lived in ethnic Irish, German, Polish, and Italian neighborhoods. Black residents also largely lived in segregated neighborhoods, however this was enforced through deed covenants that restricted who could live in certain neighborhoods.

1930s to 1960s: Transportation and Housing Policies

Federal housing policies following the Great Depression and into the post-World War II era reinforced segregation and adversely affected the ability of Black residents to build wealth through homeownership. The Federal Housing Administration's (FHA's) subsidies helped support homeownership through low down payment and long-term, fixed-rate mortgages, but most who were eligible were White households. Nationally, only 2 percent of FHA loans went to minority households.

The FHA's appraisal standards tied property value and loan eligibility to race, with maps that graded neighborhoods into categories of risk. Neighborhoods with significant Black populations received low ratings and were denied loans, a practice that came to be known as "redlining." These standards contributed to declining property values in Black communities, and incentivized White communities to exclude Black residents. As a result, in large part, Black residents were excluded from opportunities for homeownership and wealth creation that were afforded to White residents.

Over this same period, substantial federal transportation investments created the Interstate Highway System. Together with urban renewal policies, the construction of new highways displaced and divided communities. Federal funds for urban renewal and highway development were used to support clearance of land for new roads to serve the growing population moving to new communities out of the city.

Many highways were planned to support what was considered "slum clearance" and demolished and divided working-class and lower-income communities, particularly Black communities. The largest of these "slum clearance" projects was in the Mill Creek Valley, the

Figure ES-2. Map of 2015 satellite imagery showing current I-64, overlaid with 1950 Sanborn parcel maps in yellow showing part of the former Mill Creek Valley neighborhood



primary Black commercial district and a residential neighborhood in the city of St. Louis. This project razed 5,600 residential units over 465 acres and displaced approximately 20,000 residents. Urban renewal planning encouraged replacement of mixed-use, dense urban development with development that was viewed as more modern, auto-oriented uses. In St. Louis, the Land Clearance for Redevelopment Authority (LCRA) noted that mixed residential and business use was a problem and described plans to redesign and rebuild areas of the city with new development featuring highway access and ample off-street parking.

The combination of housing, transportation, and urban renewal policies together supported the growth of suburban areas and contributed to a large-scale departure from the city of St. Louis. Between 1950 and 1960, the city of St. Louis lost 100,000 residents while St. Louis County gained 300,000. Since discriminatory housing policies largely prevented Black residents from taking advantage of new suburban developments, most of the city's population loss was caused by White out-migration.

New suburban development was designed for the automobile, did not have the density or street network to support public transit, and therefore could not be reached by those without a car. In addition, urban redevelopment and zoning supported more auto-oriented design. Over time, the transit network saw disinvestment, as the dense streetcar network was pulled out and replaced by bus services that were meant to be more flexible. However, the rise of auto travel and shifts in development turned transit from a mode that served everyone to one perceived primarily as serving those with no other choices. Transit ridership declined significantly, with transit use falling from around 340 million passenger trips in 1946 to 87 million by 1963. Communities in the city, many with large numbers of Black residents, were left in persistent poverty with limited connections to many of the economic opportunities in areas only accessible by auto.

FROM THE 1960S ON: AN EVOLUTION OF TRANSPORTATION POLICIES

Since the 1960s, new policies were implemented to support Civil Rights and more inclusive decision-making, and to account for community and environmental concerns. Key federal policies, such as the Civil Rights Act (1964), the Older Americans Act (1965), and the National Environmental Policy Act (NEPA) (1970), were passed to help ensure non-discrimination and consideration of environmental and community impacts prior to making decisions. Later, additional laws were passed and policies implemented, including the Americans with Disabilities Act (1990), the Intermodal Surface Transportation Efficiency Act (1991), and Executive Order (EO) 12898 on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994).

During the 1970s and 1980s, St. Louis transportation made major progress increasing accessible transportation options for the disabled population. At the time, the Bi-State Development Agency became one of the first transit agencies in the country to operate wheelchair-lift equipped buses in their regular service. New investments were made in transit, such as the development of MetroLink light rail, which opened in 1993. Transportation planners and others increasingly recognized the importance of multimodal travel options, such as bicycle and pedestrian investments.

Transportation agencies today must ensure that people do not experience discrimination in the transportation planning process and that the process supports the needs of all residents. Recent executive orders signed in 2021 focus on using federal investments to support underserved communities. Further, the Infrastructure Investment and Jobs Act (IIJA) of 2021 provides unprecedented levels of funding for transportation infrastructure modernization, safety, and reconnecting communities that have been adversely impacted by transportation infrastructure.

IMPLICATIONS OF PAST TRANSPORTATION DECISIONS

The historical analysis shows that transportation policies and investments contributed to racial and economic inequity. The clearance of areas for highways contributed to the loss of affordable housing, and new highways disrupted and divided communities, particularly Black communities. Together with discriminatory housing policies, which prevented homeownership by Black residents in many growing suburban communities, the investments in highways contributed to segregated housing patterns and consequent racial disparities in wealth. Transportation investments and planning decisions supported the growth of suburbs and decline in central city population, with auto-oriented development that often was inaccessible to low-income residents. Moreover, transportation funding focused on highways and roadways, and left a shrinking transit network that did not connect to locations with areas seeing growth in employment. As a result, it is important to recognize that past policies and investment

decisions benefited some residents who were able to take advantage of new housing and mobility options, while the result for other communities was disinvestment and lack of job access.

These impacts are still being felt today. While the St. Louis region has become more integrated over the past few decades, it remains one of the most segregated regions for White and Black residents among peer regions, defined as the 50 most populous regions in the country. The region also has one of the highest racial disparities in poverty, with Black (not Hispanic or Latino) residents 3.17 times as likely as

White (not Hispanic or Latino) residents to be below the poverty line. Areas of concentrated poverty (defined as areas with a poverty rate of 40 percent or more) are associated with less access to jobs, higher crime, reduced opportunities to build wealth, and poorer health outcomes. Black residents are 9.25 time more likely than White residents to live in these communities, the 5th largest disparity among the peer regions. As of 2021, Black

Figure ES-3. St. Louis MSA Ranking Among the 50 Most
Populous U.S. Regions

Measure	Ranking
Racial Segregation	6th
Racial Disparity in Poverty Rate	8th
Racial Disparity in Concentrated Poverty	5th
Racial Disparity in Unemployment Rate	8th
Racial Disparity in Higher Education	21st

Note: Data are from the U.S. Census Bureau for 2016-2020 or 2021. See source for more detail.

Source: East-West Gateway, Where We Stand, accessed at w w w.ew gateway.org/w w s.

residents in the St. Louis region were nearly three times (2.61) more likely to be unemployed than White residents, ranking 8th among peer regions, with the unemployment rate for White workers at 3.8 percent compared to 10.5 percent for Black workers. The gap in educational attainment is one that has been closing, but as of 2021, White adults in St. Louis were 1.76 times more likely to have a Bachelor's degree than Black adults.

CURRENT CONDITIONS IN THE ST. LOUIS REGION: DEMOGRAPHICS AND MOBILITY

Part 2: Existing Conditions
Analysis

The second component of this analysis focuses on current

conditions in the St. Louis region. It involves a review of population characteristics within the St. Louis region, including identifying where different populations live across the region. This analysis explores six population groups: 1) minority populations, 2) low-income populations, 3) persons with disabilities, 4) older adults (those age 65 or older, also referred to as "seniors"), 5) limited-English proficiency (LEP) populations, and 6) no-vehicle households. These groups – considered "transportation equity populations" – often face mobility challenges or have historically been disadvantaged.

The analysis shows that members of each of these population groups live in areas throughout the region. However, minority residents (particularly Black residents), those living below the poverty level, LEP households, and no-vehicle households are more highly concentrated in the central portion of the region. The senior and disabled populations are more spread throughout the region.

No-Vehicle Households

Access by transit is very limited in the region, which can be particularly problematic for people without a car or households with limited access to reliable automobiles. As a result, no-vehicle households often face challenges accessing jobs, education, health care, and other opportunities and resources. According

to recent data from the U.S. Census Bureau, about 15.7 percent of Black households do not own a vehicle, compared to 4.4 percent of White households and 6.5 percent of all households. Seniors and people with disabilities also are more likely to reside in no-vehicle households compared to the general population.

The city of St. Louis has the largest percentage of no-vehicle households with 18.7 percent. However, each county of the region has some households that do not have regular access to a vehicle and people who may face mobility challenges. These challenges may be particularly acute in suburban and rural areas where there are limited public transportation services.

Figure ES-4. No-Vehicle Households
Percent of population group with no access to a vehicle
St. Louis MSA, 2019 or 2021

Race and Ethnicity	Percent of households without a vehicle		
All Households	6.5		
White	4.4		
Black	15.7		
Asian	9.2		
Hispanic or Latino	7.9		
Population Group	Percent of population group without a vehicle		
Total Population	4.8		
Seniors (age 65+)	8.0		
Persons with Disabilities	12.5		
Source: U.S. Census bureau, American Community Survey 1-year			

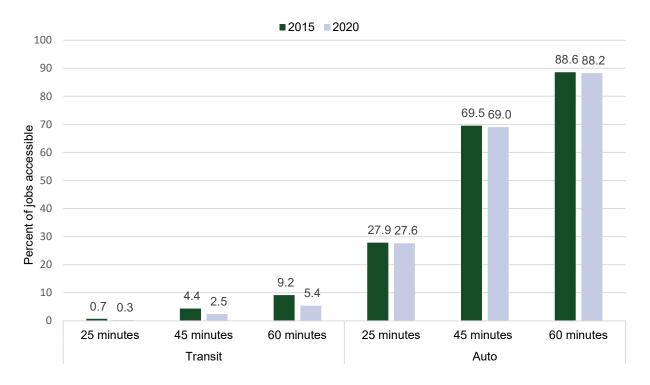
Estimates (SO201); IPUMS-USA, University of Minnesota, 2019.

JOB ACCESSIBILITY

A stark difference exists between access to jobs using transit and personal vehicles. A significant portion of the region's jobs are accessible within a reasonable commute by car. On average, residents in the region can reach nearly 70 percent of jobs within a 45-minute drive and 88 percent of jobs within a 60-minute drive. In contrast, access by transit is very limited in the region, which can be particularly problematic for people without a car or households with limited access to reliable automobiles. On average, only about 5 percent of jobs in the region are accessible within a 60-minute transit trip. Even in the most transit-accessible parts of the region, only about 33 percent of jobs are accessible within a 60-minute transit commute. Therefore, people who rely on transit at best can only reach about one-third of jobs in the region within a reasonable commute time, and in many parts of the region can reach much fewer jobs (or have no access to jobs by transit). Moreover, the share of jobs accessible by transit has declined between 2015 and 2020.

Figure ES-5. 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.

Since a larger share of Black households do not own a vehicle compared to White households, the limited number of jobs accessible by transit suggests that a larger share of Black residents have restricted employment options within a reasonable commute time. Average travel time to work in the region is relatively similar for people of different races and ethnicities, about 26 minutes. However, commute times for residents in rural areas, such as Monroe, Franklin, and Jefferson counties, are longer on average (29-31 minutes) than the regional average, reflecting longer average travel distances. While a relatively small share of rural residents do not own a vehicle compared to urban residents, those without access to a reliable vehicle or with a disability or other issue that prevents driving may face severe limitations in terms of access to jobs.

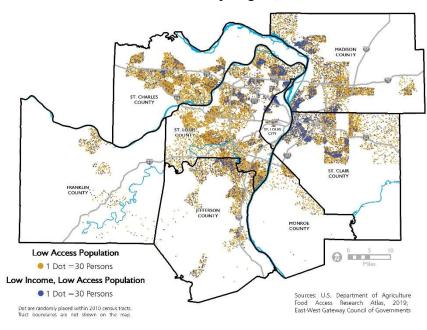
GROCERY ACCESS

Some locations throughout the region – in urban, suburban, and rural areas – have low access to grocery stores. In the St. Louis metropolitan area, about 28.4 percent of the population is estimated to live far

from a grocery store (defined as more than 1 mile in urban areas and more than 10 miles in rural areas by the U.S. Department of Agriculture).

The analysis did not identify a disparity in access across demographic groups considering race, age, or income groups regionwide. However, low-income and novehicle households in areas that are far from grocery stores may face challenges in meeting basic needs, particularly in areas with limited transit. Further research would be valuable to assess mobility options for no-

Figure ES-6. Access to Grocery Store East-West Gateway Region, 2019



vehicle households in these locations.

ROADWAY FATALITIES AND BICYCLE AND PEDESTRIAN CRASH FATALITIES

Black residents account for a disproportionate amount of motorist fatalities and an even larger disproportionate share of bicycle and pedestrian fatalities. While the Black population makes up about 19 percent of the region's population, Black residents accounted for about 29 percent of motorist fatalities and 46 percent of bicycle and pedestrian fatalities. Data indicate that both motorist and bike/pedestrian fatalities are disproportionately concentrated in low-income Census tracts. Further research is needed to understand the causes and contributing factors leading to these fatalities. However, these findings suggest that low-income populations, that are already burdened with

transportation challenges in terms of access to jobs and other opportunities, also face a greater threat of death from crashes on the transportation network, compared to higher income populations. An additional finding is that a disproportionate number of non-Interstate motorist fatalities occur in rural areas.

Figure ES-7. Comparison of Fatality Rates by Race

East-West Gateway Region, 2016-2020

Passenger Type	White	Black	All Other Races and Ethnicities
Percent of Population	68.7	19.2	12.1
Percent of Bike/Ped Fatalities	45.6	45.6	8.9
Percent of Motorist Fatalities	65.5	28.6	6.1

Note: Excludes fatalities on interstates.

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

EXPOSURE TO TRAFFIC AND POLLUTION

Many of the region's transportation equity populations are more likely than their counterparts to live close to high volume roadways, be exposed to potentially harmful diesel particulate matter, and have asthma, which in part steps from exposure to environmental hazards. Specifically, minority populations are 1.62 times more likely than non-minorities to live near high-volume roadways, 1.69 times more likely to live in a community with high diesel particulate matter levels, and 7.48 times more likely to live in a community with a high asthma rate. People with incomes below the poverty level are 1.24 times more likely than those with incomes above the poverty level to live near high-volume roadways, and 1.36 times more likely to live in a census tract with high diesel particulate matter, and 2.87 times more likely to live in a high-asthma tract.

ANALYSIS OF REGIONAL TRANSPORTATION SPENDING SINCE 2005

Part 3: Recent Transportation Spending Analysis

The third component of this Transportation Equity Assessment

focuses on analyzing transportation spending in the region's Transportation Improvement Program (TIP) since the year 2005. The TIP is a schedule of transportation projects planned by agencies in the St. Louis region over a four-year period. Federal law requires that East-West Gateway prepare and approve the TIP for federal funds to be used on these projects. A significant amount of transportation funding in the region comes from the federal government programs, including the Surface Transportation Program, Congestion Mitigation and Air Quality Improvement (CMAQ) Program, High Priority Projects (HPP), Highway Infrastructure Program (HIP), and Highway Safety Improvement Program (HSIP).

The TIP database used for this analysis has limitations that make it challenging to analyze equity. Examples of these limitations include limited descriptions of individual projects (such as whether a roadway project incorporates bicycle/pedestrian infrastructure) and difficulty in assessing how projects benefit or burden different populations.

Recognizing these limitations, some of the major findings of the TIP investment analysis are as follows:

- Projects sponsored by state departments of transportation account for more than 75 percent of all TIP spending. The majority of TIP funding goes to roadway resurfacing, new road/bridge construction, and reconstruction projects.
- Per capita spending on transit in Illinois is more than double that in Missouri. State policy in Missouri
 prohibits the use of Highway Trust Fund money for transit projects, which diminishes the options
 available to the state to match federal funding for transit projects.
- Municipalities that have not received TIP funding are significantly smaller than recipients in land area (average 1.6 mi² vs. 7.9 mi²) and in population (average 1,011 vs. 12,784 people). 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 communities have limited staff and tax revenue and have largely minority populations. Municipalities that have not had projects in the TIP have twice the proportion of Black and Hispanic residents compared to municipalities that have had TIP-funded projects. The 20 percent local match required for projects may constitute a barrier, especially for smaller municipalities with a limited tax base.

RECOMMENDATIONS

The Transportation Equity Assessment reveals some areas for further work and study by East-West Gateway and regional partners to ensure that the transportation system works for everyone. This study identifies five categories of recommendations: inclusive engagement, planning process, project identification and planning, capacity building, and championing.

INCLUSIVE ENGAGEMENT



Everyone should have the opportunity to be involved in the planning process. Recommendations to increase engagement in the planning process include establishing an on-going community-focused or equity advisory group and strengthening the Public Participation Plan to ensure focused efforts to engage all communities, including those who are difficult to reach.

PLANNING PROCESS



Missouri, Illinois, and all eight EWG county-level jurisdictions coordinate to prioritize regional transportation improvements as part of the regional transportation planning process. Recommendations for ways in which EWG can integrate equity into the regional planning process include:

- Strengthen consideration of transportation equity in project prioritization processes;
- Improve tracking of project spending by project type;
- Conduct further equity research and reporting;
- Integrate equity-focused analysis into all planning processes, including safety planning, freight planning, and mobility planning; and
- Work with partners to identify policies/practices to address equity, such as those related to litter removal, investments in bus shelters, and other local projects.

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. EWG should work with partners to conduct studies focused on addressing the past adverse impacts of transportation decisions on communities. EWG can also play a constructive role by

convening partners to collaborate to develop concepts for pilots and projects to compete for federal discretionary grant programs.

CAPACITY BUILDING



A key recommendation is to build the technical capacity of local governments and other stakeholders to apply for and secure funding for projects that support equity needs. Capacity building could occur through EWG's efforts to provide technical assistance to local governments and partners. In addition, EWG can build stakeholder capacity through

outreach on historical decisions and inequities to raise regional awareness among partners. Finally, EWG can strengthen local government capacity by identifying funding sources for projects, particularly with respect to funding streams authorized by the Infrastructure Investment and Jobs Act.

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. EWG can help educate federal policy makers

on how non-federal match requirements can create barriers for low-income communities to access federal funds and encourage federal programs to be structured in ways to address these barriers.