



Statewide
Multimodal
Transportation Plan

Appendix E

ENVIRONMENTAL JUSTICE

ENVIRONMENTAL JUSTICE ANALYSIS

This appendix provides a systems level analysis of the potential impacts the objectives and strategies identified in **Chapter 5** of the Statewide Multimodal Transportation Plan may have on the state's environmental justice populations: racial and ethnical minorities, households without vehicles, and persons who are low-income, are age 65 or older, age 17 or younger and those who have limited English proficiency. Since this analysis occurs at the statewide systems level, the analysis is general and qualitative in nature. MnDOT will complete additional environmental justice analyses with its modal plans, as an element of other plans and studies, and for individual capital investment projects. Those individual project analyses identify specific impacts on communities and neighborhoods and work to avoid, minimize or mitigate adverse impacts through the project planning process and related project design decisions.

Environmental Justice Overview

Presidential Executive Order 12898, issued in 1994, directed each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority and low-income populations.”¹ The order builds on Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color or national origin. The order also provides protection to low-income groups.

There are three fundamental principles of environmental justice:

- To avoid, minimize or mitigate disproportionately high adverse human health and environmental effects, including social and economic effects, on minority and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The Executive Order and subsequent orders by the U.S. Department of Transportation define minority and low-income populations as:

- Black – a person having origins in any of the black racial groups of Africa.
- American Indian and Alaskan Native – a person having origins in any original people of North America and who maintains cultural identification through tribal affiliation or community recognition.

¹ Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations

- Asian – a person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent.
- Native Hawaiian or Other Pacific Islander – a person having origins in any of the original people of Hawaii, Guam, Samoa and other Pacific Islands.
- Hispanic – a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- Low-income – a person whose household income (or in the case of a community or group, whose median household income) is at or below the U.S. Department of Health and Human Services poverty guidelines.

While not specifically identified by Title VI or the Executive Order, this environmental justice analysis also includes persons age 65 and older, persons age 17 and younger, persons with limited English proficiency, and households with zero vehicles because these groups have unique transportation needs.

Environmental injustice or inequality occurs when a minority or low-income population experiences disproportionately higher risks than the population as a whole. As discussed in the [Racial Equities & Disparities trend paper](#), racial disparities exist in Minnesota. The Metropolitan Council² has reported that the number of Areas of Concentrated Poverty (census tracts where at least 40 percent of the residents live in poverty) has increased between 2000 and 2010-2014 and that residents of color are overrepresented in these areas. Similarly, these ACPs are located near major roadways. As discussed in the [Health Trends in Minnesota trend paper](#), individuals living next to major highways are more likely to be hospitalized for asthma-related reasons. These findings are supported by the US EPA and other research³.

² [Thrive 2040, 2014](#)

³ Examples: Near Roadway Air Pollution and Health: Frequently Asked Questions, US EPA, EPA-420-F-14-044, August 2014; National Patterns in Environmental Justice and Inequality: Outdoor NO₂ Air Pollution in the United States, Clark et al, PLOS ONE, April 2014.; Quantifying Traffic Exposure. Pratt et al, Journal of Exposure Science and Environmental Epidemiology, May/June 2014.

Overview of Minnesota’s Environmental Justice Populations

Based on the 2010 to 2014 American Community Survey five-year estimates, more than 5.3 million people live in Minnesota. **Table E-1** shows the population based on race, ethnicity, age, limited English proficiency, low-income and households with zero vehicles. As noted in **Table E-1**:

- 85.2 percent of Minnesota’s population is white
- Minnesota’s black population is the state’s largest minority population, closely followed by the Hispanic and Asian populations
- Persons age 65 and older account for 13.6 percent of the state’s population, while those age 17 and under account for 23.8 percent
- 11.5 percent of the state’s population is below the poverty level
- 4.3 percent of the population speak English less than “very well”
- More than seven percent of Minnesotan households do not have a vehicle

Table E-1: Minnesota’s demographics

Source: U.S. Census, 2010 to 2014 American Community Survey five-year Estimates
 Note: Total estimated households in Minnesota was 2,115,337

| POPULATION GROUP | TOTAL GROUP POPULATION | PERCENT OF TOTAL STATE POPULATION |
|---|------------------------|-----------------------------------|
| Total population | 5,383,661 | 100.0% |
| White alone | 4,585,781 | 85.2% |
| Black alone | 290,545 | 5.4% |
| American Indian or Alaskan Native alone | 56,490 | 1.0% |
| Asian alone | 230,798 | 4.3% |
| Native Hawaiian or other Pacific Islander alone | 2,166 | <0.1% |
| Some other race alone | 78,863 | 1.5% |
| Two or more races | 139,018 | 2.6% |
| Hispanic | 264,265 | 4.9% |
| Age 65 and older | 730,382 | 13.6% |
| Age 17 and under | 1,280,022 | 23.8% |
| Persons below the poverty level | 605,761 | 11.5% |
| Persons who speak English less than “very well” | 217,737 | 4.3% |
| Households with zero vehicles | 153,366 | 7.3% |

While **Table E-1** provides a statewide overview, the population is not evenly distributed across the state. **Tables E-2** through **E-7** provide a breakdown of these populations based on area transportation partnerships shown in **Figure E-1**. While not exact, the ATP boundaries closely follow MndOT district boundaries. From a population perspective, the Metro ATP has the greatest number of the different population groups compared to the other ATPs. However, from a percentage of total ATP population, it varies by group.

Figure E-1: Area transportation partnerships

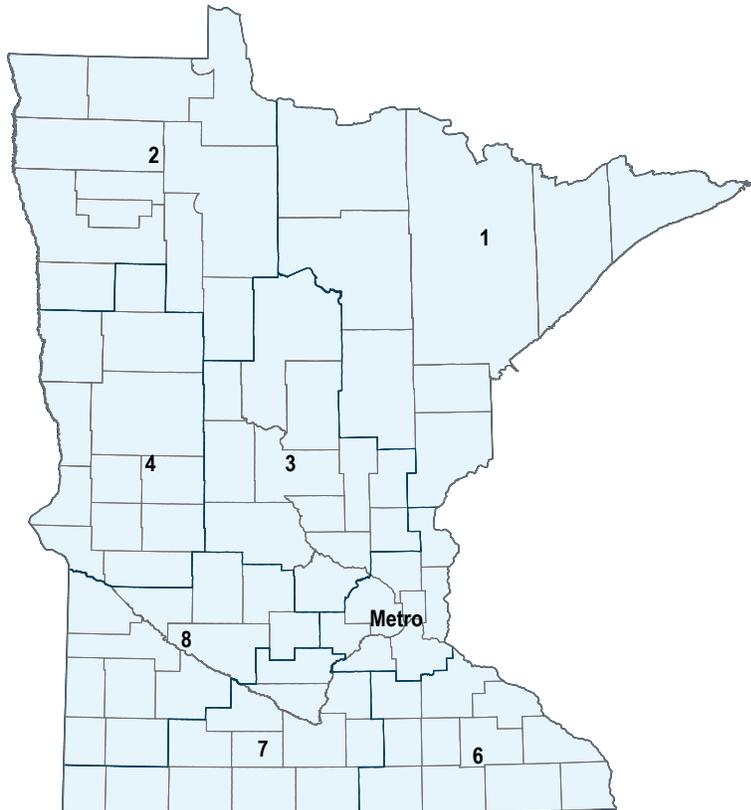


Table E-2 shows Minnesota's racial and ethnic populations by ATP. The majority of the state's minority population lives in the Metro ATP: 86 percent of the state's black population, 86.3 percent of the state's Asian population and 67.1 percent of the state's Hispanic population. While the Metro ATP has the largest American Indian / Alaskan Native population, it represents only 30.8 percent of the state's total American Indian / Alaskan Native population. ATPs 1 and 2 also have significant American Indian / Alaskan Native populations, 18.8 percent and 26.6 percent, respectively, of the state's total.

Outside of the Metro ATP:

- ATPs 3 and 6 have the largest Black populations
- ATP 6 has the largest Asian and Hispanic populations

Table E-2: Minnesota's racial and ethnic populations by area transportation partnership

Source: U.S. Census, 2010-2014 American Community Survey 5-year Estimates

| ATP | TOTAL POPULATION | WHITE ALONE | BLACK ALONE | AMERICAN INDIAN OR ALASKAN NATIVE ALONE | ASIAN ALONE | NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER ALONE | SOME OTHER RACE ALONE | TWO OR MORE RACES | HISPANIC |
|-------|------------------|-------------|-------------|---|-------------|--|-----------------------|-------------------|----------|
| 1 | 355,733 | 329,585 | 4,642 | 9609 | 2,637 | 114 | 934 | 8,212 | 4,969 |
| 2 | 164,425 | 145,319 | 1,353 | 11,133 | 1,377 | 149 | 1,012 | 4,082 | 4,613 |
| 3 | 650,824 | 610,556 | 10,837 | 7,515 | 7,021 | 126 | 4,413 | 10,356 | 15,116 |
| 4 | 244,005 | 227,616 | 2,240 | 6,234 | 1,527 | 68 | 1,295 | 5,025 | 6,342 |
| Metro | 2,974,435 | 2,351,185 | 250,417 | 17,556 | 199,077 | 1,299 | 58,594 | 96,307 | 176,448 |
| 6 | 498,131 | 456,254 | 13,514 | 1,534 | 12,754 | 154 | 5,246 | 8,675 | 25,885 |
| 7 | 284,211 | 266,733 | 4,747 | 953 | 4,124 | 86 | 3,769 | 3,799 | 18,450 |
| 8 | 211,897 | 198,533 | 2,795 | 1,956 | 2,281 | 170 | 3,600 | 2,562 | 12,442 |

Table E-3 summarizes the total low-income population in each ATP. Low-income includes all persons whose median household income is at or below the guidelines set by the U.S. Department of Health and Human Services. Statewide, 11.4 percent of persons were below the poverty level. ATP 1 and 2 had the highest percentage of their population below the poverty level, 15.4 percent and 14.0 percent respectively. ATP 6 had the lowest with 10.8 percent.

Table E-3: Minnesota's low-income population by area transportation partnership

Source: U.S. Census, 2010-2014 American Community Survey 5-year Estimates

| ATP | TOTAL POPULATION | POPULATION BELOW POVERTY LEVEL | PERCENT OF ATP POPULATION BELOW POVERTY LEVEL |
|-------|------------------|--------------------------------|---|
| 1 | 342,964 | 53,255 | 15.5% |
| 2 | 159,674 | 22,375 | 14.0% |
| 3 | 635,882 | 70,105 | 11.0% |
| 4 | 236,067 | 28,564 | 12.1% |
| Metro | 2,925,336 | 320,954 | 11.0% |
| 6 | 479,558 | 51,736 | 10.8% |
| 7 | 273,573 | 35,515 | 13.0% |
| 8 | 207,297 | 23,257 | 11.2% |

A person’s ability to speak English, at least moderately well, can be a barrier to participating in the transportation planning process. According to the American Community Survey, which estimates the number of individuals age five years and older who speak English less than “very well,” approximately four percent of Minnesotans speak English less than “very well.” **Table E-4** compares this information by ATP. The majority, 79 percent, live in the Metro ATP. ATP 2 had the fewest number of persons who spoke English less than “very well.”

Table E-4: Minnesota’s limited English speaking population by area transportation partnership

Source: U.S. Census, 2010-2014 American Community Survey 5-year Estimates

| ATP | TOTAL POPULATION | POPULATION AGE 5-YEARS AND OLDER THAT SPEAKS ENGLISH LESS THAN “VERY WELL” | PERCENT OF ATP POPULATION AGE 5-YEARS AND OLDER THAT SPEAKS ENGLISH LESS THAN “VERY WELL” |
|-------|------------------|--|---|
| 1 | 337,000 | 2,700 | 0.8% |
| 2 | 154,364 | 1,671 | 1.1% |
| 3 | 606,887 | 9,022 | 1.5% |
| 4 | 228,914 | 2,935 | 1.3% |
| Metro | 2,775,699 | 171,675 | 6.2% |
| 6 | 466,428 | 15,645 | 3.4% |
| 7 | 266,711 | 8,688 | 3.3% |
| 8 | 198,479 | 5,401 | 2.7% |

Table E-5 compares languages spoken at home. After English, Spanish is the most common language spoken at home, followed by African languages and Hmong. African languages include Swahili, Somali, Amharic, Ibo, Twi, Yoruba and Bantu, along with many others. While only 0.4 percent of the state’s population five-years and older speaks Vietnamese, 60.4 percent speak English less than “very well,” the highest percentage among those who spoke a language other than English at home.

Table E-5: Language spoken at home in Minnesota

Source: U.S. Census, 2010-2014 American Community Survey 5-year Estimates

| LANGUAGE SPOKEN AT HOME | TOTAL POPULATION | PERCENT OF POPULATION | POPULATION AGE 5-YEARS AND OLDER THAT SPEAKS ENGLISH LESS THAN "VERY WELL" | PERCENT OF POPULATION AGE 5-YEARS AND OLDER THAT SPEAK ENGLISH LESS THAN "VERY WELL" |
|------------------------------|------------------|-----------------------|--|--|
| Speak only English | 4,485,551 | 89.1% | NA | NA |
| Spanish or Spanish Creole | 193,111 | 3.8% | 83,799 | 43.4% |
| African languages | 69,415 | 1.4% | 29,487 | 42.5% |
| Hmong | 57,513 | 1.1% | 24,584 | 42.7% |
| German | 23,258 | 0.5% | 4,032 | 17.3% |
| Chinese | 22,266 | 0.4% | 9,922 | 44.6% |
| Vietnamese | 21,915 | 0.4% | 13,241 | 60.4% |
| Other Asian languages | 20,476 | 0.4% | 9,426 | 46.0% |
| French (incl. Patois, Cajun) | 15,072 | 0.3% | 3,187 | 21.1% |
| Russian | 14,106 | 0.3% | 6,463 | 45.8% |
| Arabic | 10,703 | 0.2% | 3,251 | 30.4% |
| Other languages | 100,366 | 2.0% | 30,345 | 30.2% |

Table E-6 shows the population of each ATP that is age 17 and under or age 65 and older. Those individuals age 17 and under make up 13.6 percent of Minnesota’s population, while those 65 and older make up 23.8 percent. Senior populations are estimated to increase significantly over the next 30 years. By 2035, there are projected to be more than 1.2 million seniors in Minnesota.

ATP 4 had the largest percentage (18.5 percent) of persons age 65 and older. The Metro ATP had the smallest percentage (11.5 percent) of those 65 and older. ATP 3 had the highest percentage (25.2 percent) of those 17 and younger, while ATP 1 had the smallest (20.1 percent).

Table E-6: Minnesotans age 17 and under and age 65 and older by area transportation partnership

Source: U.S. Census, 2010-2014 American Community Survey 5-year Estimates

| ATP | TOTAL POPULATION | POPULATION 17 AND UNDER | PERCENT OF POPULATION 17 AND UNDER | POPULATION 65 AND OLDER | PERCENT OF POPULATION 65 AND OLDER |
|-------|------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|
| 1 | 355,733 | 71,527 | 20.1% | 63,765 | 17.9% |
| 2 | 164,425 | 39,157 | 23.8% | 28,046 | 17.1% |
| 3 | 650,824 | 164,139 | 25.2% | 89,804 | 13.8% |
| 4 | 244,005 | 54,880 | 22.5% | 45,022 | 18.5% |
| Metro | 2,974,435 | 718,198 | 24.1% | 342,773 | 11.5% |
| 6 | 498,131 | 117,640 | 23.6% | 76,292 | 15.3% |
| 7 | 284,211 | 64,101 | 22.6% | 46,319 | 16.3% |
| 8 | 211,897 | 50,385 | 23.8% | 38,361 | 18.1% |

Households with zero vehicles may have a greater reliance on transit, bicycling, walking or car- or ride-sharing services. **Table E-7** shows the estimated number of households by ATP that had zero vehicles. The American Community Survey estimated that 7.3 percent of Minnesota households, more than 150,000 households, do not have a vehicle. More than 60 percent of these zero vehicle households are in the Metro ATP, which accounts for 8.1 percent of all Metro ATP households. In greater Minnesota, ATP 1 had the highest percentage (8.2 percent) of households without a vehicle, while ATPs 3 and 8 had the smallest percentages (5.3 percent each).

Table E-7: Minnesota households with zero vehicles by area transportation partnership

Source: U.S. Census, 2010-2014 American Community Survey 5-year Estimates

| ATP | TOTAL HOUSEHOLDS | TOTAL HOUSEHOLDS WITH NO VEHICLE | PERCENT OF HOUSEHOLDS WITH NO VEHICLE |
|-------|------------------|----------------------------------|---------------------------------------|
| 1 | 150,292 | 12,316 | 8.2% |
| 2 | 66,073 | 4,082 | 6.2% |
| 3 | 246,738 | 13,174 | 5.3% |
| 4 | 99,755 | 6,132 | 6.1% |
| Metro | 1,159,372 | 94,135 | 8.1% |
| 6 | 193,754 | 12,616 | 6.5% |
| 7 | 112,973 | 6,348 | 5.6% |
| 8 | 86,380 | 4,563 | 5.3% |

See **Chapter 4** and **Appendix D** of the SMTP for more information on public engagement.

SMTP PUBLIC ENGAGEMENT

As described in **Chapter 4** and **Appendix D**, MnDOT used an inclusive and comprehensive engagement effort to ensure that Minnesota residents had opportunities to participate in the development of the Statewide Multimodal Transportation Plan. The public engagement process offered an opportunity for people from diverse backgrounds to provide feedback on the issues facing Minnesota's transportation system.

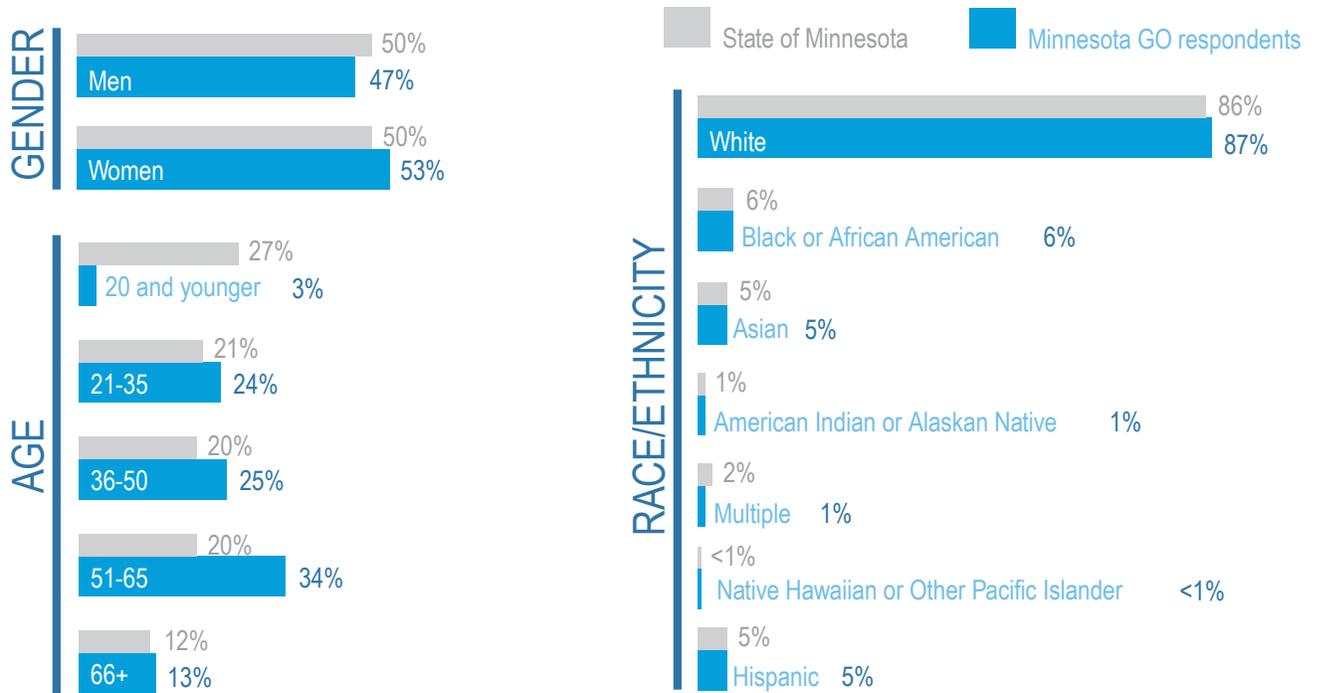
A key goal of the public outreach process was to engage traditionally underrepresented communities. To accomplish this goal, MnDOT partnered with the Twin Cities Public Television / Emergency, Community, Health, Outreach to reach traditionally underserved communities, particularly Hispanic, Hmong and Somali communities. ECHO staff translated surveys into Spanish, Hmong and Somali. ECHO staff also identified locations to conduct engagement such as ethnic markets, community centers and religious institutions. Nine events were specifically targeted to traditionally underserved communities. Examples of these activities included Hmong Village in St. Paul, Cultural Corner: Daughters of Africa in Worthington, Village Market in Minneapolis and the Divine Mercy Catholic Church in Faribault. Approximately 25 percent of the survey responses collected resulted from the partnership with TPT / ECHO.

MnDOT also used targeted Facebook ads to increase participation among traditionally underserved communities and balance the participation numbers to better reflect the demographic breakdown of Minnesota's population. These targeted ads focused on increasing participation from women, African Americans, Asian Americans and Spanish speaking individuals.

As part of the survey, participants could answer a few optional and anonymous demographic questions about their age, race / ethnicity, gender and zip code. MnDOT used this information to make sure the participation reflected the make-up of the state. When asked, about 56 percent of those who participated provided at least some demographic information. **Figure E-2** shows a demographic comparison between participants and Minnesota's population.

The survey responses received from these efforts, and the responses received from the broader general public engagement, shaped the objectives and strategies included in the Statewide Multimodal Transportation Plan by identifying which challenges and opportunities participants believed MnDOT should consider in its planning process.

Figure E-2: Demographic comparison between respondents and Minnesota's population



SMTP OBJECTIVES, STRATEGIES & WORK PLAN ACTIVITIES

The Statewide Multimodal Transportation Plan builds on the foundation provided by the Minnesota GO 50-year Vision. The plan identifies objectives and strategies to meet the vision and address the challenges and opportunities facing Minnesota during the next 20 years.

The Plan identifies five policy objectives:

- Open Decision-Making
- Transportation Safety
- Critical Connections
- System Stewardship
- Healthy Communities

Each objective includes a series of strategies to achieve the stated objective. The objectives and strategies serve as a framework for MnDOT plans and provide guidance for MnDOT's transportation partners. The plan also includes performance measures and work plan activities for MnDOT to achieve the objectives.

See **Chapter 5** of the SMTP for more information on the objectives and strategies. See **Chapter 6** for the work plan.

At a statewide system-level, the five objectives and their related strategies have a positive impact on minority, low-income, age 65 and older, age 17 and younger, limited English proficiency and zero-vehicle household populations and other Minnesotans. Each objective and how it impacts environmental justice is summarized below.

Open Decision-Making

Open decision-making relies on accountability, transparency and communication. This objective seeks to make transportation decisions through processes that:

- Are inclusive, engaging and supported by data and analysis.
- Provide for and support coordination, collaboration and innovation.
- Ensure efficient and effective use of resources.

The objective includes eight strategies such as:

- Engage with users and those otherwise affected by the system throughout all transportation processes.
- Improve early coordination in planning, project-selection and scoping to more effectively and efficiently use resources and maximize benefits.
- Use performance measurement to inform decision-making and show progress toward national, statewide, regional and local goals.
- Develop and support a diverse workforce within the transportation sector.

Several work plan activities will help MnDOT achieve the objective. These activities include:

- Develop and update new, more inclusive public engagement resources.
- Pilot tools and strategies to better incorporate equity into project-level decision-making.
- Increase the transparency of MnDOT's project selection processes.

HOW THIS IMPACTS ENVIRONMENTAL JUSTICE

Maintaining the public's trust is crucial. A key part of that trust is ensuring that everyone, regardless of income, age, race, ethnicity or ability, has the opportunity to be heard throughout the transportation decision-making process.

Public engagement must include a wide range of interests – from those who use the system to those who may be impacted by it. Engaging traditionally underserved populations in the transportation planning process can be challenging. Underserved populations may experience greater challenges than the general public in accessing jobs, schools, shopping and recreation.

They may also be unaware of their opportunities to provide comments on transportation plans and projects.

Effective public engagement uses a variety of tools to reach different communities. This objective and its related strategies and work plan activities encourages and supports MnDOT and its partners to use a range of public outreach techniques with the goal of an inclusive and accessible process for everyone. The objective also notes how a diverse workforce can aid in public engagement by allowing community members to interact with staff that shares their cultural identity, history or language. This in turn may encourage more participation from underserved populations and result in transportation decisions that more fully reflect the needs and concerns of everyone.

Transportation Safety

Safety remains a top priority for MnDOT and its transportation partners. This objective seeks to:

- Safeguard travelers and the communities they travel through.
- Apply proven strategies to reduce fatalities and serious injuries for all travel modes.
- Foster a culture of safety in Minnesota.

The transportation safety objective includes nine strategies such as:

- Explore new opportunities to improve safety for all modes of transportation.
- Plan, design, build, operate and maintain transportation infrastructure and facilities to improve the safety of all users and the communities they travel through.
- Collaborate with local, regional, state and federal planning efforts to ensure efficient and coordinated response to special, emergency and disaster events.

Work plan activities that will help MnDOT achieve the objective include:

- Develop and execute safety education campaigns.

HOW THIS IMPACTS ENVIRONMENTAL JUSTICE

Safety is a priority for everyone. It includes traveler safety and community safety. Traveler safety applies to everyone who uses the transportation system. It focuses on providing an integrated approach to safety that includes the 4Es of safety – education, enforcement, engineering and emergency medical and trauma services. Traveler safety addresses all forms of transportation such as driving, walking, biking or riding transit. Disparities exist in physical safety on the transportation system between white Minnesotans and Minnesotans of color. For example, the number of pedestrian fatalities per 100,000 people for white Minnesotans is one. For Minnesotans of color, the number of pedestrian fatalities per 100,000 people is nine.

Transportation is just one factor that can influence community safety. Community safety is a person's ability to live in a safe environment. For example, a train and truck carrying hazardous materials can have serious public safety impacts if an incident occurs. Recently, the amount of crude oil shipped by train increased. In Minnesota, trains carrying oil travel through major population centers such as the Twin Cities where many people could be impacted by an accident involving a train. The trains also travel through rural Minnesota where response times to a crash may be an issue. Communities along these rail lines have expressed concerns about the safety of crude oil shipments. The transportation safety objective directs MnDOT and its partners to work together to develop efficient and coordinated responses to special, emergency or disaster events and ensures emergency communication infrastructure is enhanced and maintained across the state.

Critical Connections

Every day people and goods are moving, whether within and between a neighborhood, community, region, state, nation and the world. The movement occurs using a variety of connections – roads, sidewalks, trails, transit, air, rail and water. Since transportation agencies have limited resources, attention needs to be focused on connections that are identified as critical to the movement of people and goods. The goal of this objective is to:

- Maintain and improve multimodal transportation connections essential for Minnesotans' prosperity and quality of life to achieve progress in meeting performance measures and targets.
- Maximize social, economic and environmental benefits.
- Strategically consider new connections.

The objective includes nine strategies such as:

- Define priority networks for all modes based on connectivity and accessibility, and integrate the networks into decision-making.
- Support and develop multimodal connections that provide equitable access to goods, services, opportunities and destinations.
- Provide transportation options that improve multimodal connections between workers and jobs.
- Develop and improve multimodal connections within and between cities and regions.

Several work plan activities will help MnDOT achieve the Critical Connections objective and strategies, including:

- Pilot tools and strategies to better incorporate equity into project-level decision-making.
- Refine the methodology used for calculating return on investment.
- Study how transportation affects equity and identify transportation strategies and approaches that will meaningfully reduce disparities.

HOW THIS IMPACTS ENVIRONMENTAL JUSTICE

Transportation is vital to keeping people connected to jobs, school, health care, family, shopping, places of worship, recreation and entertainment. Each person uses transportation differently. As a result, each person will identify different connections as critical based on their individual needs. Disparities exist in mode use and travel behavior. These disparities can be influenced by income levels, race or ethnicity. For example, individuals who live in Areas of Concentrated Poverty have a greater reliance on transit, walking and biking. While transportation can create barriers, transportation can also improve quality of life by providing connections to destinations and opportunities.

The critical connections objective, its related strategies and work plan activities encourages MnDOT and transportation partners to support and develop multimodal connections that provide equitable access and improve transportation connections within and between cities, whether for accessing jobs, health care, school, shopping, visiting family, moving goods or enjoying the state's many attractions and destinations.

System Stewardship

The transportation system is made up of many assets. Some assets are seen every day such as bridges, sidewalks, pavement markings, transit buses, crossing signals, docks and airport runways. Other assets may not be as visible such as stormwater tunnels or transportation data. For the transportation system to be effective, MnDOT and its transportation partners must not only operate and maintain these different assets, but they must also plan so the system can adapt to changing needs and risks.

The system stewardship objective seeks to:

- Strategically build, manage, maintain and operate all transportation assets.
- Rely on system data and analysis, performance measures and targets, agency and partners' needs and public expectations to inform decisions.
- Use technology and innovation to get the most out of investment and system performance.

- Increase the resiliency of the transportation system and adapt to changing needs.

The objective includes ten strategies such as:

- Maximize the useful life of transportation assets while considering system performance, costs and impacts to the state's economy, environment and quality of life.
- Proactively identify risks to the transportation system and surrounding communities to prioritize mitigation and response activities.
- Support regional approaches to mitigating identified risks to the transportation system and surrounding communities.

Work plan activities for MnDOT that support this objective include:

- Expand and improve asset management planning.
- Identify and assess risks to the transportation system.

HOW THIS IMPACTS ENVIRONMENTAL JUSTICE

As noted under the critical connections objective, transportation is a vital part of everyone's day-to-day lives. With limited resources, it is crucial that the system is operated and maintained in a way that meets public expectations and needs. A key part of system stewardship is considering and planning how the transportation system may need to change to adapt to future changes and how those decisions may impact Minnesotans' quality of life.

Another key part of system stewardship is ensuring the transportation system is able to meet essential travel needs – such as trips to medical facilities or the grocery store – during extreme weather such as floods or other unusual events. For example, system redundancy ensures that people and goods have more than one option to make a particular trip. This may occur by using different types of transportation such as transit or rail, or by providing alternate travel routes. Another way to ensure essential travel needs are met is to identify risks to the transportation system and take steps to reduce those risks. For example, ensuring a culvert under an important road is capable of handling the water from a 100-year storm event.

Healthy Communities

Transportation connects people to destinations and opportunities. As transportation decisions are made, it is important that those decisions consider the impact on the users of the transportation system and the surrounding context. The goal of this objective is to:

- Make fiscally-responsible decisions that respect and complement the natural, cultural and social context of Minnesota.

- Integrate transportation systems and surrounding land use to maximize community, economic and environmental health.

The Healthy Communities objective includes nine strategies such as:

- Coordinate land use and transportation planning within communities to ensure consistency, maximize benefits and limit long-term costs.
- Plan, design, develop and maintain transportation infrastructure and facilities in a way that reflects and is informed by the surrounding context.
- Use a complete streets approach to assess trade-offs to better serve users and those affected by the transportation system.
- Support economic vitality and create and maintain jobs through transportation infrastructure investments.
- Develop a transportation system that is respectful of cultural resources and maintains those resources for generations to come.

Work plan activities that support the strategy include:

- Pilot tools and strategies to better incorporate equity into project-level decision-making.
- Develop tools and resources to support transportation decision that reflect the surrounding context.
- Work with transportation stakeholders to identify and advance statewide strategies for reducing greenhouse gas emissions.
- Study how transportation affects equity and identify transportation strategies and approaches that will meaningfully reduce disparities.

HOW THIS IMPACTS ENVIRONMENTAL JUSTICE

While transportation can provide connections to destinations and opportunities, it can also serve as a barrier. Transportation decisions affect more than just the transportation system. They can affect natural resources, such as air and water, and cultural resources, such as historic buildings and sacred lands. They can also influence economic activity. Stated simply, transportation decisions can affect an individual's day-to-day activities.

The healthy communities objective recognizes there is no one-size-fits-all solution. MnDOT and its transportation partners must understand that transportation decisions can influence the surrounding context, much like land use decisions can influence transportation decisions. Decision-makers must consider the surrounding context when making transportation decisions. This will result in projects that are safer, sustainable and reflective of the specific place in which they occur.

POLICY DIRECTIONS

During the development of the Statewide Multimodal Transportation Plan, some broad policy directions emerged. These directions typically influenced more than one of the objective areas and resulted in some work plan activities. Two of these policy directions impact environmental justice populations:

- Context guidance
- Advancing equity

Each policy direction is briefly discussed below.

Context Guidance

The Minnesota GO Vision includes a commitment for transportation agencies to “recognize and respect the importance, significance and context of place – not just as destinations, but also where people live, work, learn, play and access services.” The context of a roadway matters. Factors such as whether the area is urban or rural, community size or the surrounding land use can all impact how a roadway is developed.

Better understanding the context of a specific roadway segment can help MnDOT and its transportation partners make better decisions on how investments on that roadway are made. There was strong support to develop context guidance, particularly related to complete streets considerations, local / state cost-sharing expectations, driveway and intersection spacing requirements, public engagement expectations and roadway design standards.

Developing context guidance establishes a framework and provides consistency in how MnDOT districts design and implement plans and projects. It establishes best practices for community engagement, recognizing that different techniques are needed for different communities.

One of the plan’s work plan activities is to develop tools and resources to support transportation decisions that reflect the surrounding context. Three of the healthy communities strategies also address context:

- Give higher priority to transportation improvements in areas with complementary existing or planned land uses.
- Coordinate land use and transportation planning within communities to ensure consistency, maximize benefits and limit long-term costs.
- Plan, design, develop and maintain transportation infrastructure in a way that reflects and is informed by the surrounding context.

Addressing context will help ensure a community's unique traits are not lost when transportation investment decisions are made. Addressing context will help ensure transportation projects reflect the characteristics and address the needs of the community served.

Advancing Equity

Environmental justice populations, particularly people of color, continue to experience economic and financial disparities. While transportation projects may serve as barriers or worsen inequality, they can also reduce negative impacts resulting from development and improve quality of life by providing access to destinations.

Historically, MnDOT viewed equity in the context of geographic distribution, i.e., funding was fairly distributed across the state. During the development of the Statewide Multimodal Transportation Plan, there was support to also address racial equity and disparities caused by past transportation investments.

Two work plan activities address this effort:

- Study how transportation affects equity and identify transportation strategies and approaches that will meaningfully reduce disparities.
- Pilot tools and strategies to better incorporate equity into project-level decision-making.

Two strategies also directly address equity:

- Develop and support a diverse workforce within the transportation sector.
- Support and develop multimodal connections that provide equitable access to goods, services, opportunities and destinations.

The goals of these strategies and work plan activities are to improve public engagement activities to ensure all voices are heard and investigate ways to better include equity concerns in the transportation decision-making process.

NEXT STEPS

The Statewide Multimodal Transportation Plan applies to all types of transportation and all transportation partners. While the plan identifies work plan activities for MnDOT, it does not identify project- or program-specific activities for MnDOT or any transportation partners. Instead, the SMTP provides the groundwork for further action by MnDOT and other transportation partners. For this reason, the objectives, strategies and work plan activities presented in the SMTP are neutral in terms of environmental justice. However, given the current disparities that exist, there is a risk of disproportionate impacts on traditionally underrepresented communities. MnDOT and other transportation partners must ensure that the actions taken to implement the plan's objectives and strategies – the individual program and project decisions – do not result in disproportionately high and adverse impacts on traditionally underrepresented populations.

For MnDOT, the objectives and strategies identified in this plan provide the groundwork for the modal and system plans. These plans identify specific policies, project-level and program recommendations and performance measures for their respective transportation systems. The SMTP includes several strategies to avoid, reduce or minimize negative impacts in its policies and programs such as:

- Develop a transportation system that is respectful of cultural resources and maintains those resources for generations to come.
- Support and implement approaches that preserve Minnesota's natural resources, avoid causing environmental harm and improve environmental quality.
- Make transportation decisions that minimize and reduce total greenhouse gas emissions.
- Coordinate land use and transportation planning within communities to ensure consistency, maximize benefits and limit long-term costs.

MnDOT will review the modal and system plan recommendations to ensure they do not result in disproportionately high and adverse human health or environmental effects on traditionally underrepresented populations.

MnDOT will also continue to ensure that its other planning efforts and project-specific decisions do not result in disproportionately high and adverse human health or environmental effects on traditionally underrepresented populations. In addition to strategies aimed to avoid, reduce or minimize negative impacts, the plan also includes several strategies to engage and communicate with the public and transportation partners about project-specific information.