



DRAFT 2050 LONG RANGE PLAN

Washtenaw Area Transportation Study



WASHTENAW
AREA
TRANSPORTATION
STUDY

2024

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Introduction

Introduction

INTRODUCTION

The WATS Long Range Plan is all about working together to create the best transportation system for everyone. This plan is our roadmap for the future, guiding us to improve how we travel around our region. It's important that we focus on making transportation not just about cars and roads, but about people.

We believe in a system that puts people first – one that's safe, creates predictable travel times, and connects everyone to where they need to go, including to affordable homes. Good transportation makes life better, whether it's getting to work, school, or anywhere else.

However, making our transportation system better isn't straightforward. We face challenges like balancing the need for safe roads for all users with keeping traffic moving predictably. In Michigan, different groups are in charge of different parts of transportation and land use. The Michigan Department of Transportation manages our main roads, but they don't decide how land around these roads is used. That's up to the cities and townships, which can make things complicated. And while the Washtenaw County Road Commission takes care of township roads, they don't control land use either, the townships do

Our economy depends heavily on our transportation system. It helps businesses run smoothly, creates jobs, and keeps our community connected. That's why the 2050 Plan focuses on ensuring our transportation network supports economic growth.

Safety is our top priority. No matter how the transportation system grows or changes, making sure everyone who uses it - drivers, cyclists, pedestrians - is safe, always takes precedence

We're committed to working together with all these different groups to build a transportation system that works for everyone. Our plan is about collaboration, tackling challenges head-on, and keeping our community's needs at the heart of everything we do. Together, we're paving the way for a better, more connected future.

The Long Range Transportation Plan sets a vision of the future transportation system by identifying goals, performance measures, a list of projects, and providing policy guidance.

The Transportation Improvement Plan (TIP) is the conduit for projects in the Long Range Plan to receive funding. The TIP should advance the vision and goals of the Long Range Plan. The projects in the TIP are included in the Long Range Plan, however, they are not listed.

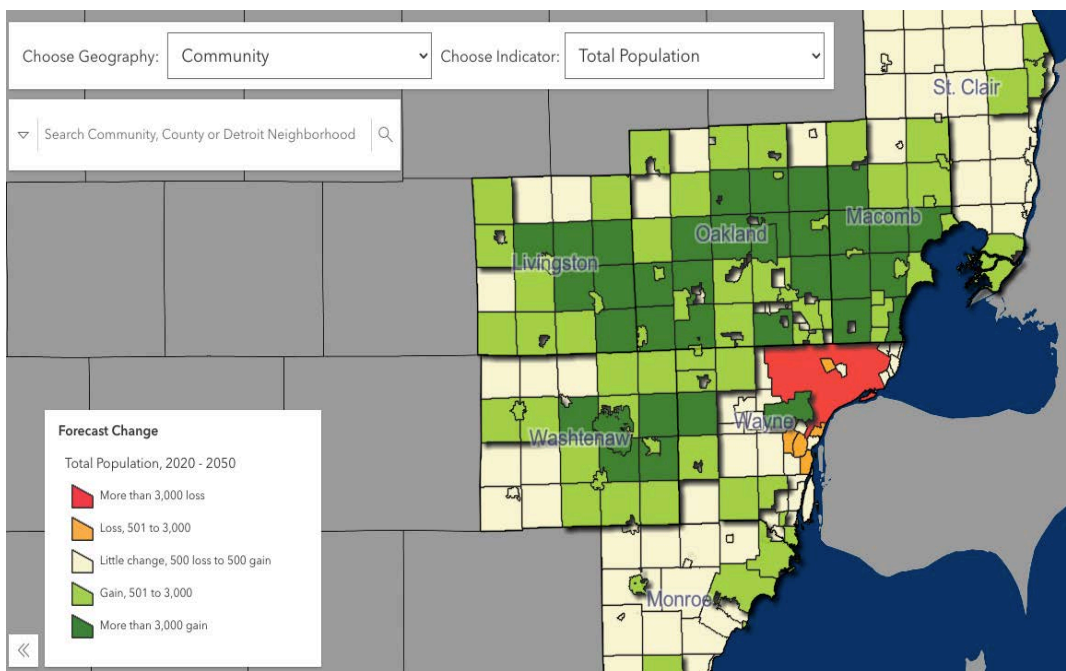
The current TIP can be found at miwats.org/tip

Washtenaw County remains a growing economic engine in southeast Michigan. Population and employment growth are both expected to significantly outpace the rest of the region and state. That growth means more trips. Those trips are shaped by policy and technology. This plan addresses policy issues surrounding transportation and provides guidance on how to plan for rapidly changing transportation technology and trip making behavior. Additionally, WATS worked with local communities and the public to develop a fiscally constrained list of projects through 2050. While funding has not been allocated to specific projects beyond the year 2026, revenue forecasts cover all of the proposed investments listed in this plan.

Background

POPULATION

Demographic forecasts predict 13% population growth (49,154 increase) in Washtenaw County by 2050, with the most significant increases in the City of Ann Arbor and urban Townships. As the County's population continues to grow, local land use decisions will affect the way travel impacts the built and natural environment. Dense, mixed-use development, along with responsible rural preservation is encouraged as it allows for efficient use of the existing transportation network. This, in turn, allows a greater share of resources to be spent on enhancing and connecting the current system rather than unnecessary highway expansions and road widenings. To this end, the impact that transportation projects have on people, communities and tourism should be considered and prioritized over simply increasing car throughput.



Washtenaw County - 2050 Forecast Summary Report



Background

JOBS AND THE ECONOMY

Peak period commute trips are the primary source of congestion in Washtenaw County. With the total jobs in the county expected to increase 14% by 2050, these trips will only continue to contribute to that congestion if they are primarily taken in single occupancy vehicles. Reducing the number of and duration of peak period commute trips is a policy priority that extends the value of previous investments and creates a more enjoyable travel experience for system users.

Projects that simply expand capacity fail to address the underlying factors driving traffic growth and prioritize a short term reduction of peak-period congestion with long term maintenance liabilities and expectations of future expansions. Policy makers should encourage implementing agencies to consider a broad range of infrastructure and policy solutions. Some of those solutions include:

- Expanding the scope and frequency of transit services
- Encouraging employer based trip reduction strategies
- User fees that discourage both peak period parking and travel on congested facilities
- High occupancy vehicle lanes or other solutions that prioritize travel for shared ride trips

TRANSPORTATION AS A SERVICE

While the basic needs for access and mobility have not changed, the solutions available for travelers continue to expand, as technology enables new and innovative travel modes. Some of these services include:

- Ride-sharing
- Delivery services
- Bike and scooter sharing
- Mobility devices (e-bikes/e-scooters)

Washtenaw County should encourage both public and private providers to pilot and deploy these types of services locally. However, these services must respect the policy goals of local jurisdictions and be deployed in partnership with local agencies. Most importantly, priority should be given to services accessible to as many Washtenaw County residents as possible, regardless of socioeconomic status, geographic location, or physical or cognitive ability.

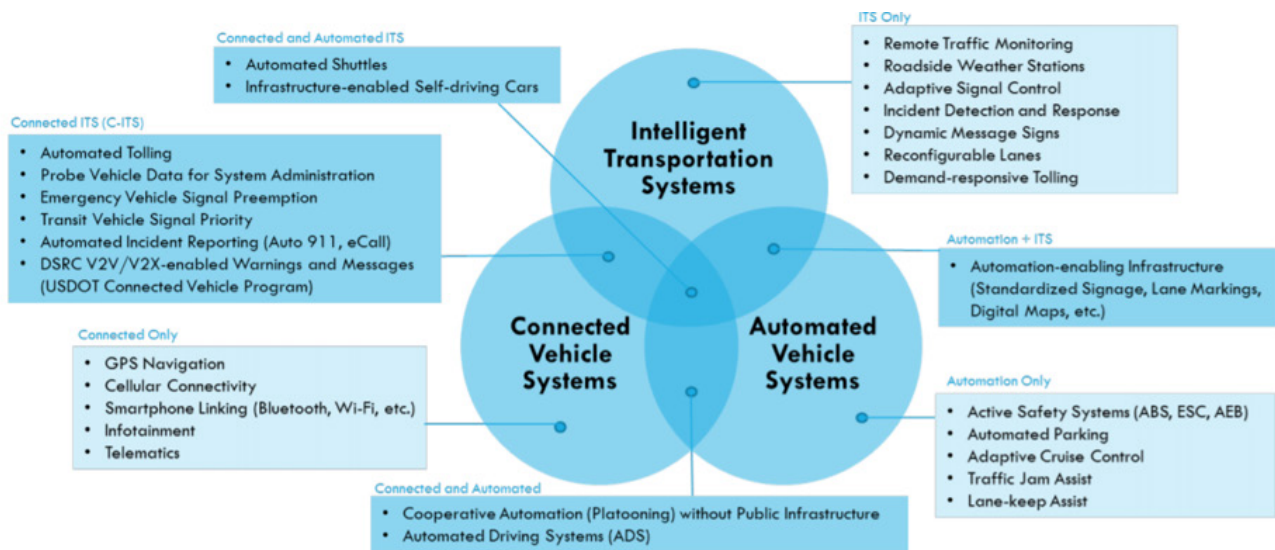
Background

AUTONOMOUS VEHICLES

Autonomous vehicles have the potential to significantly improve the lives of Washtenaw County residents. However, their actual impacts remain speculative, and outcomes range from immensely positive to environmentally catastrophic. The actual outcome is likely near the middle of this range, but decision-makers have the ability to encourage positive outcomes through policies that encourage vehicle sharing, promote transit use, protect the safety of pedestrians and cyclists, and changing land use patterns to encourage positive behavior.

The term *Autonomous* is regularly used for a host of technologies that are better understood separately, that, in combination, could lead to what most people think of as self-driving cars and buses. Those include:

- **Intelligent Transportation Systems (ITS):** ITS Systems are systems that use sensors, communication devices, and other electronics to improve the safety and efficiency of the transportation system.
- **Connected Vehicle Systems:** Connected vehicle systems provide a platform for exchanging information between vehicles, and between vehicles and the infrastructure around it.
- **Automated Vehicle Systems:** Automated Vehicle Systems are those that allow automated systems in a vehicle to act independently from driver control based on input from the world around them.



(source: Center for Automotive Research)

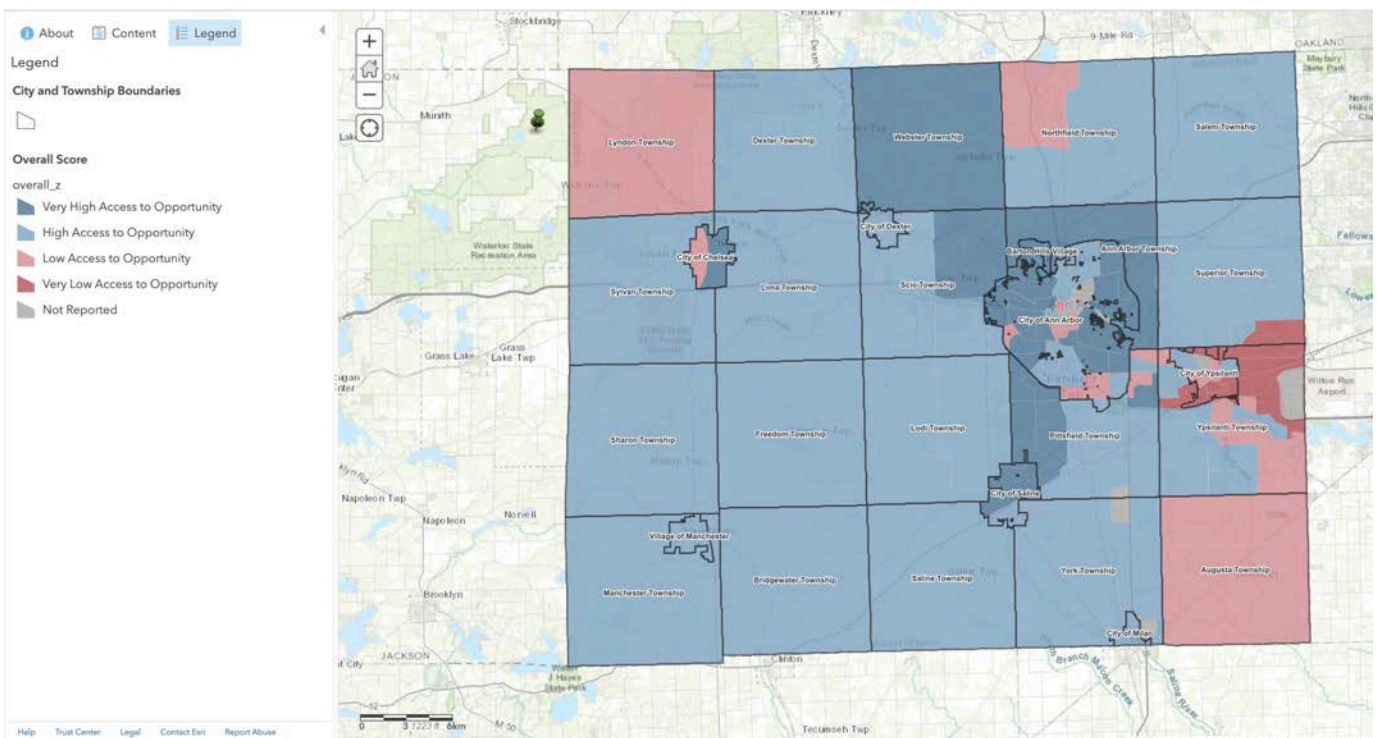
As policy-makers think about the long-term impact of these technologies, it is critical that they consider policies that encourage positive outcomes; reduced congestion, transit ridership growth, increased vehicle occupancy, and more equitable access to shared transportation options. Otherwise, these technologies could significantly contribute to congestion with Zero Occupant trips, undermine public transportation providers, and make communities less friendly to pedestrians and bicyclists.

Background

EQUITY

While significant portions of the county are thriving, other parts are struggling - specifically communities of color. All public investment presents an opportunity to begin to rectify the historic injustices that led to these disparate outcomes. As WATS considers transportation investments across all categories, equity should be a determining factor in the selection of projects. While the impact of transportation investment is significant, it is important to understand that achieving equity will depend on changes to the way all investments impacting the human and built environment are prioritized and implemented.

As local agencies prepare to accommodate the forecast growth in population and jobs, WATS will continue to focus on equity objectives, including reversing the effects of institutional racism. The Washtenaw County Opportunity Index identifies areas where the resident's social determinants (health, college, life expectancy) indicate low opportunities for upward mobility.



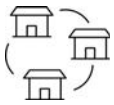
By geographically representing data about residents, place-based and racial differences in opportunity become clear. This helps identify where and for whom to prioritize our resources. WATS Technical Committee, working with an equity special interest representative on the Committee, will explore proposed projects and policies noting the impact on racial and socioeconomic equity. WATS initial participation in the County's effort to impact opportunity through equity includes a geographic review of improvements to understand what level of investment is occurring in areas of low or very low opportunity as defined by the Washtenaw County Opportunity Index, and in environmental justice areas.

Fast Facts:

- Non-white individuals account for 43.6 percent of the national population but make up 59.9% of pedestrian deaths in 2020.
- Older audits are similarly at higher risk: individuals 65 years or older are 50% more likely than younger individuals to be struck and killed by a car while walking.

Background

INTEGRATING HOUSING SOLUTIONS INTO TRANSPORTATION PLANNING FOR WASHTENAW COUNTY



Embracing a Holistic Approach to Housing and Transportation

In the pursuit of a sustainable and inclusive future, the long-range transportation plan for Washtenaw County seeks to intertwine with strategic housing initiatives, addressing both affordable housing challenges and the nuances of market-rate household affordability. Recognizing the interdependence of transportation infrastructure and housing dynamics is crucial for fostering communities that are equitable, environmentally conscious, and economically vibrant.



Diverse Housing Stock: A Keystone for Inclusive Growth

A diverse housing stock is paramount in accommodating the varied needs of Washtenaw County's residents, spanning different income levels, family sizes, and demographic backgrounds. This diversity in housing options—including affordable units, middle-income homes, and market-rate residences—ensures that all community members have access to suitable living spaces that align with their financial capabilities and lifestyle preferences. Such variety also underpins racial and socio-economic equity, providing foundational support for a more integrated and cohesive community fabric.



Strategic Desensitization: Balancing Growth and Preservation

Advocating for densification, especially along transit corridors, stands as a strategic imperative. This approach not only optimizes the use of available land but also amplifies the efficiency of our transportation network. Concentrating development around transit hubs encourages the use of public transport, thereby reducing traffic congestion, lowering greenhouse gas emissions, and promoting a healthier environment. Moreover, this densification strategy aligns with the goals of preserving our surrounding rural areas, maintaining the ecological and aesthetic value these spaces offer, and preventing urban sprawl.



The Ripple Effects on Racial Equity and Environmental Health

Integrating affordable housing within the transportation framework directly influences racial equity by ensuring that all community members, regardless of race or income, have access to essential services, employment opportunities, and quality living environments. Such integration fosters communities where diversity is not just welcomed but is seen as an asset, promoting social cohesion and mutual understanding.

Furthermore, a well-considered housing and transportation plan contributes to a healthier environment by encouraging sustainable living practices. Reduced car dependency, increased green spaces, and enhanced air quality are just a few environmental benefits that arise from a holistic approach to urban planning. These elements are crucial for creating vibrant, livable communities that prioritize the well-being of their inhabitants and the planet.



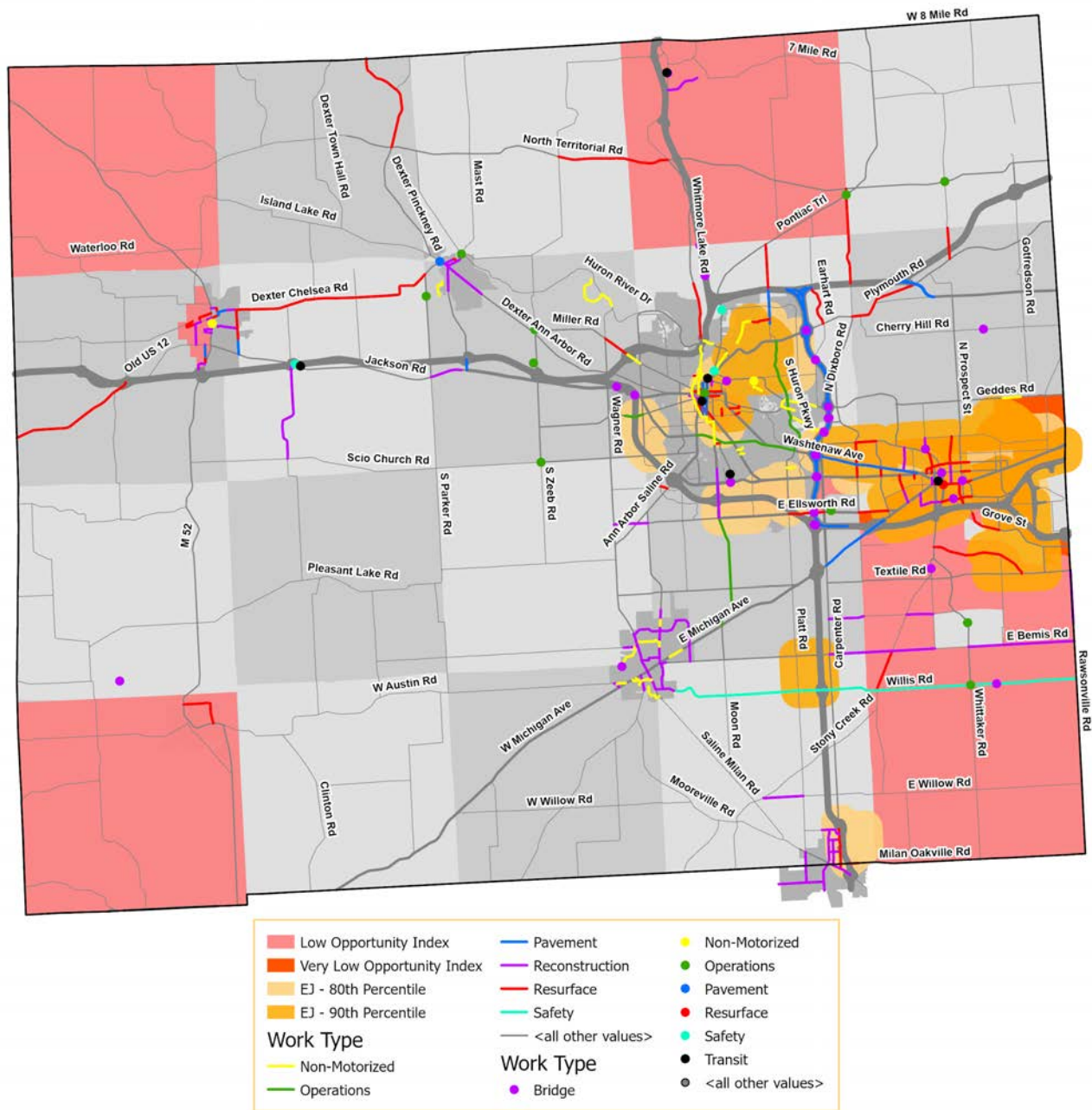
Envisioning Vibrant Communities in Washtenaw County

The long-range transportation plan is a key instrument in molding the future of Washtenaw County, not just in terms of mobility but also in crafting resilient, inclusive, and vibrant communities. By addressing housing within the transportation framework, we lay the groundwork for a county that values diversity, champions equity, and prioritizes the health of its environment and its people. Through collaborative efforts, strategic planning, and a commitment to our shared values, we can ensure that Washtenaw County remains a beacon of sustainable and equitable growth in the region.

Background

WASHTENAW COUNTY OPPORTUNITY INDEX

MAP 1 - WASHTENAW COUNTY OPPORTUNITY INDEX



The Washtenaw County Opportunity Index illustrates the geographically and racially disparate distribution of opportunity by mapping socioeconomic data. This helps identify where and for whom to prioritize resources.

Working with an equity special interest representative the WATS Technical Committee will explore proposed projects and policies noting the impact on racial and socioeconomic equity. WATS initial participation in the County's effort to impact opportunity through equity includes a geographic review to note if low-opportunity areas are receiving adequate investment and if improvements address needs for households with minimal access to a vehicle.

EXPECTATIONS FOR A TRANSPORTATION SYSTEM

Land Use decisions place demands on the transportation network that necessitate diverse mode-share to connect people and jobs. As Washtenaw County continues to grow and create new jobs, the goals and policies of this Long Range Transportation Plan help define expectations all Washtenaw County residents can have for the transportation network.

These include:

- A safe place to travel, regardless of mode
- Preservation of the community's assets over additional capacity
- A commitment to consider the needs of all users

Recognizing that the perception of safety varies among individuals is crucial. While one person might feel secure biking on the street, another may prefer a dedicated facility for reassurance. Embracing a safe-systems approach to transportation infrastructure involves planning, designing, and operating it with an understanding that people make mistakes. The goal is to create a forgiving environment that prevents fatal and serious crashes, accommodating the diverse safety needs and preferences of all road users.

Background

NAVIGATING THE TRANSPORTATION SYSTEM FOR PEOPLE WITH COGNITIVE DISABILITIES AND AUTISM

Transportation systems for persons with cognitive disabilities and autism are designed to enhance accessibility, safety, and independence while considering the unique challenges these individuals may face. The goal is to provide a supportive travel environment that accommodates the diverse needs of all passengers, including those with cognitive impairments and autism such as memory, problem-solving, attention, over stimulation, or language challenges. Here are several aspects of such transportation systems:

SPECIALIZED TRAINING FOR STAFF

- **Awareness and Training:** Operators and staff receive specialized training to recognize and assist passengers with cognitive disabilities and autism. This training often includes strategies to communicate effectively, provide clear instructions, utilize adaptive communication systems, offer reassurance to travelers who may feel anxious or confused, and recognize individuals who need emergency assistance.

USER-FRIENDLY DESIGN

- **Clear Signage and Information:** Transportation hubs and vehicles incorporate clear, easy-to-read signage with simple icons and visual cues to help guide passengers. Information is often presented in multiple formats, such as visual, auditory, and tactile, to accommodate different needs.
- **Wayfinding Assistance:** Features like interactive kiosks, GPS tracking, and mobile apps can offer real-time assistance and directions, helping to reduce anxiety and increase autonomy for passengers with cognitive challenges and autism.

TECHNOLOGICAL INNOVATIONS

- **Real-Time Communication Tools:** Technologies such as apps or wearable devices can provide real-time updates, reminders, and navigation help, allowing individuals with cognitive disabilities and autism to travel more independently.

SUPPORTIVE POLICIES AND SERVICES

- **Personalized Travel Training:** Some transit authorities offer personalized travel training to teach navigation skills, familiarize individuals with routes, and practice using transportation services in a controlled setting.
- **Specialized Services:** Paratransit services or dedicated transportation options are available in some areas, offering door-to-door service for individuals who may not be able to use standard public transportation effectively.

Background

INCLUSIVE PLANNING

- **Community Involvement:** Involving individuals with cognitive disabilities and autism in the planning and feedback process ensures that services are tailored to meet their actual needs and preferences.
- **Continuous Improvement:** Ongoing assessment and adaptation of services to incorporate feedback from users with cognitive disabilities and autism regarding advancements in technology.

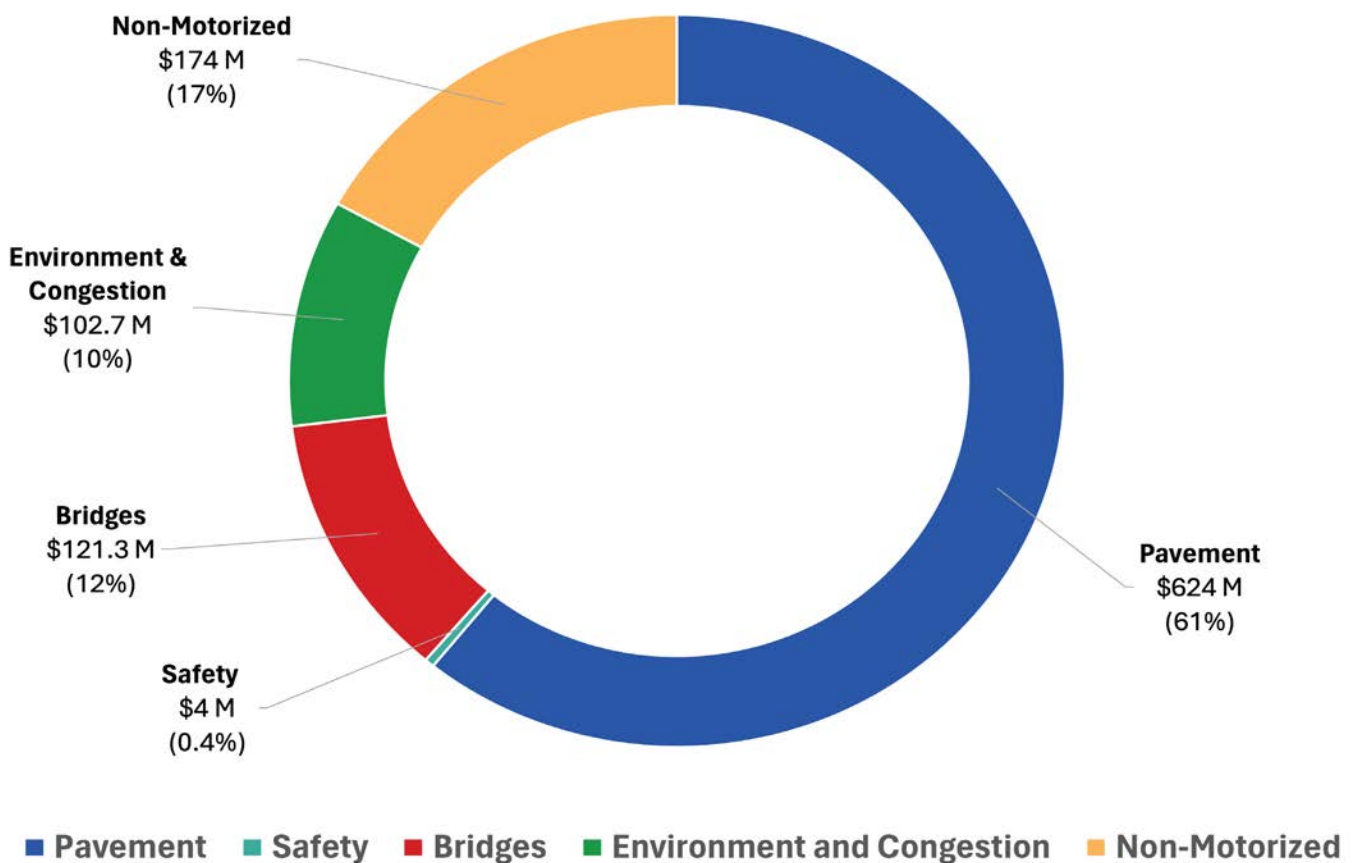
Creating an inclusive transportation system involves a holistic approach that addresses the physical infrastructure, staff training, technological support, and policy frameworks to cater to the nuanced needs of all users, particularly those with cognitive challenges and autism. The aim is to foster independence, enhance safety, and ensure a positive travel experience for individuals with cognitive disabilities and autism. This aim will make traveling simpler and more enjoyable for all travelers.

The 2050 Long Range Plan's Investment Strategy sections explore the utility of the transportation network's components and the investment over time that should be considered for each, as they contribute to the expectations listed above.



2050 PROJECT TYPE TOTALS

Funding By Investment Strategy



Goals

INTRODUCTION

WATS Long Range Plan Goals serve as the foundation for the \$2.4 billion investment in this plan and a starting point to guide policy decisions. Where possible, WATS has developed measures for each goal to gauge progress on achieving local targets and federal requirements.

The following section contains background on the plan goals, a baseline measure and 2030 target. Targets are set at 5-year increments so WATS can monitor near-term progress and provide guidance to the WATS Policy Committee if the targets are not achieved. WATS believes these goals provide a framework that supports state performance measures.

NOTE: some targets are directional rather than specific values. While the performance measures themselves remain consistent with the 2045 LRTP, the pandemic and subsequent changes to the economy and work environment have caused a significant disruption in the overall trends for many of the measures. To understand progress towards the LRTP Goals, each performance measure has been attributed a target represented by either a numeric value or a qualitative statement, specifically the term "continuously monitor". Additionally, Targets are generally attainable rather than solely aspirational. Many targets are affected by factors beyond the control of road and transit agencies. However, in some cases, such as safety targets, WATS and SEMCOG have set a goal of vision zero by 2050.

EQUITY

Neither your race nor your zip code should determine your chances in life

SAFETY

Reduce rates of serious crashes across all modes, with a vision of zero deaths by 2050

ENVIRONMENT

Reduce emissions and promote active transportation to attain carbon neutrality

LINK TRANSPORTATION + LAND USE

Increase accessibility of core services throughout the region

ACCESS + MOBILITY

Increase the ease and predictability of travel for all users

INVEST STRATEGICALLY

Improve pavement quality and invest in non-motorized options and efficient transit service

ENGAGE

Engage in meaningful interaction with the public

EQUITY

Investment in Environmental Justice Areas
 Investment in Low Opportunity Areas
 Investment in Very Low Opportunity Areas

WATS evaluates equity using Environmental Justice and Opportunity measures. The Environmental Justice process is a requirement that provides participation by potentially affected communities in the transportation decision making process. The Washtenaw County Opportunity Index identifies populations whose options for upward mobility are limited. By monitoring investment in each focus area, WATS Committees can evaluate if enough investment is being made to balance environmental benefits and burdens and to disrupt the effects of historic injustice.

DOLLARS IN THE 2023-2026 TIP IN EJ AREAS

\$115,350,629



BASELINE (2023)

PERCENTAGE OF TIP TOTAL

12.7
PERCENT

80th percentile
Environmental Justice

14.8
PERCENT

90th percentile
Environmental Justice

7.2
PERCENT

Low and Very Low
Opportunity

TARGET (2030)

PERCENTAGE OF TIP TOTAL

**CONTINUOUSLY
MONITOR**

Environmental Justice

**CONTINUOUSLY
MONITOR**

Low Opportunity

**CONTINUOUSLY
MONITOR**

Very Low Opportunity

WATS measures the total investment of TIP and LRP projects in Environmental Justice population census tracts and Low and Very Low Opportunity areas. This review provides an opportunity to make adjustments in the case of disproportionate investment and

to make targeted impacts to benefit vulnerable populations. WATS forwards feedback from county residents to implementing agencies to inform the projects selected for funding.

SAFETY

Number of Serious Car Crashes
Severe Car Crash Rate
Number of Serious Non-motorized Crashes

Roadway safety is a top priority locally and across all tiers of infrastructure development. Crash data informs the location and nature of countermeasures that improve the transportation system. Crashes are measured by frequency, rate (crashes normalized to traffic volume), and severity. Crash severities include Fatal, Incapacitating, Non-incapacitating, Possible Injury, and Property Damage Only. Crash data is evaluated annually and reviewed at local, state and federal levels, and by law enforcement.

SAFETY PROJECTS IN THE 2050 LRTP

\$3,205,000



For the 2050 Plan, WATS worked with SEMCOG to develop regional safety targets to achieve zero deaths and serious injury crashes by 2050. The targets presented below (2030) reflect the anticipated progress toward the goal of vision zero.

More information: semcog.org/safety

BASELINE (2021)

5-YEAR AVERAGE (2017 - 2021)

158

PER YEAR

Serious Car Crashes

4.3

PER YEAR

Severe Car Crashes
per 100 million VMT

25.4

PER YEAR

Serious Non-Motorized
Crashes

TARGET (2030)

5-YEAR AVERAGE (2026 - 2030)

134.7

PER YEAR

Serious Car Crashes

3.6

PER YEAR

Severe Car Crashes
per 100 million VMT

21.7

PER YEAR

Serious Non-Motorized
Crashes

Tracking the number and rate of serious (fatal and incapacitating) crashes in Washtenaw County provides a basic measure of the transportation network's safety. Crash rates are determined by comparing the five-year rolling average of crashes per 100 million vehicle miles traveled. Crash data can

vary with seasonal factors such as weather conditions or increases/decreases in vehicle miles traveled. WATS uses the five-year average of crash data to normalize for these variations. A reduction in the 5-year average indicates an overall improvement in system safety.

ENVIRONMENT

Per Capita Non-Commercial VMT

Greenhouse gases from human activity trap heat and warm the planet. According to the EPA, Greenhouse gas (GHG) emissions from transportation account for about 29 percent of total U.S. greenhouse gas emissions, making it the largest contributor of U.S. GHG emissions. Emissions can be derived from vehicle-miles-traveled (VMT), which provides a benchmark across jurisdictions. With VMT once again rising following the COVID-19 Pandemic, providing travel alternatives (non-motorized, transit, and carpool) can help reduce the pace at which VMT is increasing.

CMAQ AND CRP AWARDS FOR FY2024-2026

\$17,275,687



BASELINE (2021)

8,755
PER CAPITA

VMT Per Year

TARGET (2030)

7,000
PER CAPITA

VMT per year

Vehicle Miles Traveled (VMT) helps to assess the relationship between transportation and land use, and subsequent availability and usage of transportation alternatives. WATS has a goal of investing 10% of urban Surface Transportation Block

Grant funds in non-motorized and 10% in transit focused activities. However, Washtenaw County has limited affordable housing near employment centers which dilutes the effectiveness of these investments.

Transit provides clean, efficient, and reliable transportation for thousands of Washtenaw County residents and visitors. More transit trips means fewer single occupant vehicles contributing to congested roadways and full parking lots and structures. Per Capita transit ridership provides insight to the amount of trips utilizing transit which helps WATS monitor its impact on the goal of protecting and enhancing the environment.



BASELINE (2021)

5-YEAR AVERAGE (2017 - 2021)

30.5
PER CAPITA

Trips Per Year

TARGET (2030)

5-YEAR AVERAGE (2026 - 2030)

38.9
PER CAPITA

Trips per year

The 2050 Long Range Plan has identified more than \$1.9 billion in transit funding for both capital purchases and operation. The Plan also recognizes a concentrated growth model as the preferred

growth strategy. Developed communities should focus on infill development, while emerging and urbanizing areas should focus development near existing resources.

Alternative transportation mode share includes any trip completed outside of a single occupant vehicle. Measuring the use of alternative modes assesses their effectiveness within the transportation network. Many trips within the urban portion of Washtenaw can be completed as a pedestrian or on a bike, while longer trips often combine transit and walking/biking. Commuters coming in from rural areas or outside of the county are encouraged to carpool if alternative modes cannot be used.



BASELINE (2021)

3-YEAR AVERAGE (2019 - 2021)

31.1%

Of Mode Split

TARGET (2030)

3-YEAR AVERAGE (2028 - 2030)

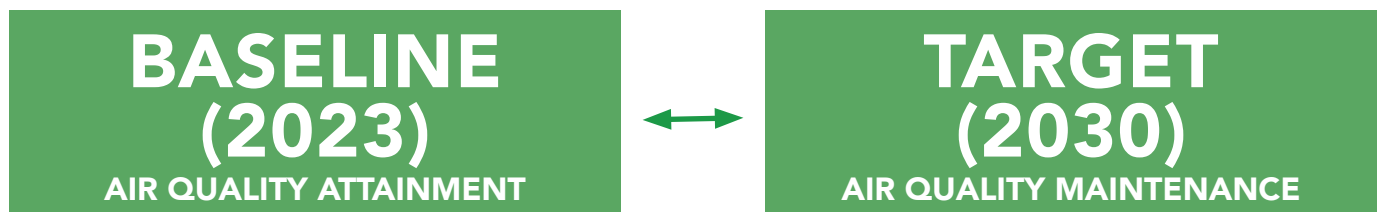
34%

Of Mode Split

The Washtenaw County Non-motorized Plan establishes a vision of a non-motorized transportation system that supports and encourages safe, comfortable and convenient ways for people to travel throughout Washtenaw County. Plan implementation seeks context appropriate solutions to

continue connecting and building out the county's non-motorized network. The current network features; 151 miles of bike lanes, 273 miles of sidewalks, and 105 miles of shared use pathways along the federal aid network.

The EPA provides guidance and standards aimed at preserving and improving the nation's air quality. Pollutants have varying effects on health, agriculture, and infrastructure and are subject to different quality standards. Transportation's impacts on air quality are often focused on reducing congestion, and increasing non-motorized and transit trips. Land-use decisions that add density and foster these alternative modes of travel should be supported and pursued.



OZONE
CARBON MONOXIDE
SULFUR DIOXIDE
FINE PARTICULATE MATTER

WATS and SEMCOG work together toward Air Quality Attainment. The process measures and models various pollutants and the impact the region's TIP and LRP projects will have on them. Projects that change air quality (intersection/signal projects, road-diets, transit and operations

improvements) are often funded by Congestion Mitigation and Air Quality (CMAQ) funds. The SEMCOG region prioritizes \$16M of funding annually towards projects that improve air quality. Projects are encouraged to facilitate environmental and traffic operations benefits.

LINK TRANSPORTATION AND LAND USE

Percent of Work Trips Accessible within 30 Minutes

The relationship between transportation and land use is crucial in defining a region's structure and how its communities develop. By aligning land use with transportation planning, we ensure a more efficient transportation network offering various travel options suited to different trip types. Assessing travel times for different modes offers insights into this relationship and tracks evolving trends. Travel time data stems from two sources: the Census Bureau's American Community Survey and regional models by entities like WATS and SEMCOG, providing estimates by transportation mode. Notably, shifting from single-occupancy vehicles can extend commute times, underscoring the need for ongoing evaluation of transportation metrics instead of setting fixed targets.



BASELINE (2020)

5-YEAR AVERAGE (2016 - 2020)

66.1
PERCENT

Percent Of Work Trips Accessible Within 30 Minutes, by Vehicle

TARGET (2030)

5-YEAR AVERAGE (2026 - 2030)

CONTINUOUSLY MONITOR

Percent Of Work Trips Accessible Within 30 Minutes, by Vehicle

A more in depth review of travel times reveals that only 49% of transit work trips are shorter than 30 minutes, substantially less than the 66% accessible in the same time by personal automobile. Biking and Walking trips have the highest share of trips occurring within 30 minutes, 83% and 90% respectively, which reflect the shorter trip lengths of these modes. WATS anticipates that the share of

Work Trips Accessible within 30 minutes will decrease slightly as the economy improves. Policy makers should track these changes over time to identify and implement appropriate countermeasures.

ACCESS + MOBILITY

Average Commute Time
Daily Per Vehicle Travel Delay

Accessibility and mobility goals blend the interests of moving efficiently with travelers' ability to reach destinations. A variety of factors such as density, land use, and mode share impact the functionality of the transportation system. The commute time measure is an average of all trips between home and work and represents a combination of proximity between work and home and system efficiency. Daily per vehicle travel delay represents the amount of time vehicles are delayed due to congestion. Increasing the ease of travel and predictability of travel time improves access and mobility for all users.



BASELINE	
24 MINUTES	Average Commute Time [5-Year Average (2017-2021)]
7.6 MINUTES	Daily Per Vehicle Delay (2015, Derived from Model)

TARGET (2030)	
24 MINUTES	Average Commute Time [5-Year Average (2026-2030)]
▼	Daily Per Vehicle Delay (2030)

Congestion Mitigation and Air Quality (CMAQ) funds are targeted to help reduce congestion in Washtenaw County. Projects include signal operations, intersection improvements and transit capital purchases that aid in the overall efficiency of

the system. Access and mobility are also linked to the design of an area. Increased system connectivity and alternative modes provide for a more efficient transportation system.

ACCESS + MOBILITY

Proximity of People and Jobs to Transit

Transit connects people with places by offering a safe method of travel. The transportation system works better when transit is a viable option for as many people as possible. As fewer young people choose to drive and cities are flooded with young professionals, transit needs will increase.

Paratransit provides service to individuals in need of transportation outside of traditional fixed route service. Paratransit is a critical component of services for vulnerable citizens.

TRANSIT PROJECTS IN THE 2050 LRTP

\$1.3 Billion

*transit funding includes capital, operations, and other local funding.



BASELINE (2020)

63.3
PERCENT

Residential Proximity
To Transit

70
PERCENT

Job Proximity To Transit

93.5
PERCENT

Paratransit Coverage

TARGET (2020)

65
PERCENT

Residential Proximity
To Transit

71
PERCENT

Job Proximity To Transit

100
PERCENT

Paratransit Coverage

Paratransit services are largely funded by federal formula funds under a program called 5311. Investment in these services provides critical service to those who rely on transit but are not able to utilize fixed route services. In addition to spending

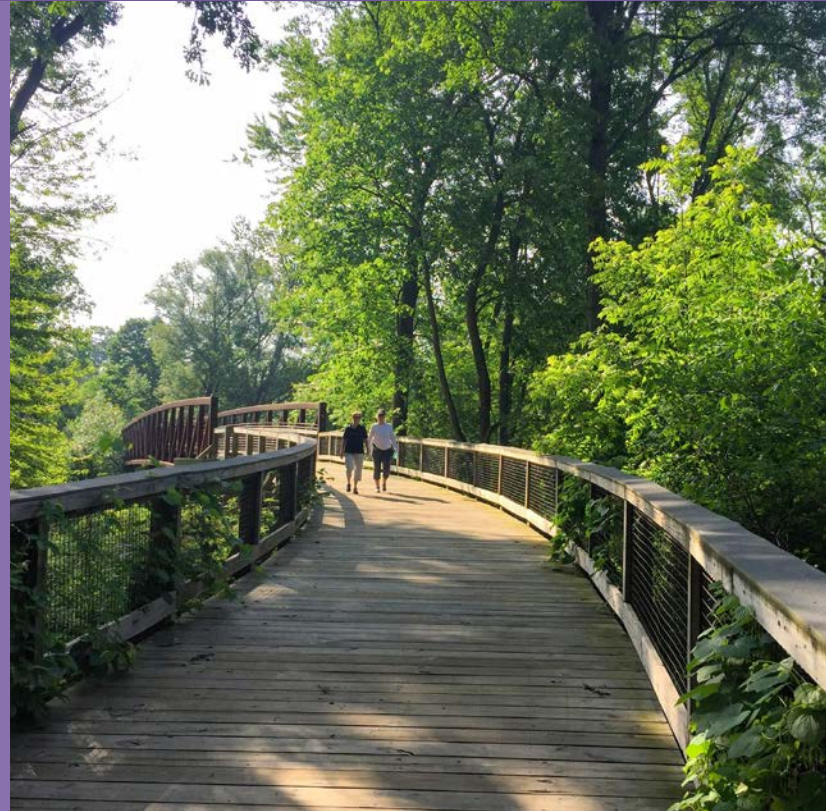
capital and operating services on transit service, dense and mixed use development helps increase the percentage of residences and jobs accessible by transit.

Complete bicycle and pedestrian networks are paramount to a connected, equitable transportation system. Sidewalks and other pedestrian facilities provide access for users all over the county. Availability of a safe facility reduces conflicts between vehicles and people.

While the appropriate type of non-motorized facility differs based on the surrounding land use, overall coverage of the network is a good way to measure progress.

NON-MOTORIZED PROJECTS IN THE 2050 LRTP

\$95,464,000



BASELINE (2015)

40.8
PERCENT

Pedestrian Coverage

29.9
PERCENT

Bicycle Coverage

TARGET (2030)



Pedestrian Coverage



Bicycle Coverage

WATS has a policy target to spend 10% of Urban Surface Transportation Program funds on non-motorized improvements. Corridors should be constructed or reconstructed as complete streets. The Transportation Alternatives Program provides funding for non-motorized transportation and enhancement. In addition to WATS' 10% funding policy, this plan adopts a Vision Zero philosophy

which aims to eliminate all transportation-related fatalities by designing systems that protects all users. All system users are fallible, so we must work together to design a system that protects everyone. The availability of safe facilities for non-motorized system users is an important component of a vision zero transportation system.

INVEST STRATEGICALLY

Roads in Good Repair
Closed Bridges/Culverts

Residents identify the surface condition of the roadways as a key priority. Given increasing costs and rising inflation, transportation agencies have made system preservation a priority. Data collection of the transportation network condition drives the timing and location of preservation projects. Pavement Surface Evaluation Rating (PASER) is the standard that all Act 51 agencies in MI use to assess the surface condition of roadways. The PASER data as part of an asset management strategy informs the best treatment per road type and condition.

ROAD REHABILITATION PROJECTS IN THE 2050 LRTP

\$172,319,188

*does not include reconstruction



BASELINE	
51.7 PERCENT	State of Good Repair (2021)
0 CLOSED	Closed Bridges
21 WEIGHT LIMIT	Weight Limit Bridges

TARGET (2030)	
50 PERCENT	State of Good Repair
0 CLOSED	Closed Bridges
∨	Weight Limit Bridges

Tracking the percentage of roads in good condition provides a basic measure of surface conditions of federal aid roadways throughout Washtenaw County.

Likewise, the number of closed bridges along with bridges that are under weight restrictions provides

baseline data on the need for investment in this infrastructure area. No target is provided for bridges due to the way that bridges are funded in MI, through a competitive grant program across the state.

INVEST STRATEGICALLY

Invest in Active Transportation
Fixed Route Operating Expense

Active transportation investment, including transit and non-motorized facilities, allow for transportation choices and enhance communities' livability and sustainability. Tracking the investment in active transportation along with the cost of providing transit service provides an indication of whether the investment made matches the priority being placed upon multi-modalism.

ACTIVE TRANSPORTATION PROJECTS IN THE 2050 L RTP

\$799,483,130

*includes non-motorized and transit capital



BASELINE (2021)

3-YEAR AVERAGE (2019-2021)

16
PERCENT

Non-Motorized And
Transit Investment

\$9.67
(AAATA)

Fixed Route Operating
Expense Per Unlinked
Passenger Trip

60.89
(WAVE)

Fixed Route Operating
Expense Per Unlinked
Passenger Trip

TARGET (2030)

3-YEAR AVERAGE (2028-2030)

20
PERCENT

Non-Motorized And
Transit Investment

**CONTINUOUSLY
MONITOR**

Fixed Route Operating
Expense Per Unlinked
Passenger Trip

**CONTINUOUSLY
MONITOR**

Fixed Route Operating
Expense Per Unlinked
Passenger Trip

TheRide and the Western-Washtenaw Area Value Express (WAVE) uses the per trip passenger expense to compare their service costs to peers across the country. This measure highlights this expense at one point in time. The WATS Policy Committee approved an investment target policy for transit and non-motorized transportation in 2006 where

the investments in each would be no less than 10%. The WATS Policy Committee approved an investment target policy for transit and non-motorized transportation in 2006 where the investments in each would be no less than 10%.

ENGAGE

Online Engagement
Offline Engagement

WATS tracks online engagement through social media interactions and website traffic, distinguishing between active engagement (likes, shares, comments) and passive engagement (views and followers). Offline engagement involves direct public contact, primarily through WATS meetings and special events like Green Fairs, with attendance serving as the main metric. Ensuring an equitable transportation system requires continuous, inclusive dialogue with the public, responsive to changes in policy and technology. WATS commits to effective communication and creating significant opportunities for community input, aiming to integrate diverse voices into transportation decisions.



BASELINE (2022)

381 INTERACTIONS	Active Online Engagement
5,780 INTERACTIONS	Passive Online Engagement
115 ATTENDEES	Offline Engagement Standing Meetings
75 ATTENDEES	Offline Engagement Special Meetings

These measures track the engagement efforts that WATS undertakes throughout the year. Tracking the engagement efforts over time will allow WATS to evaluate the effectiveness of different strategies implemented and their impacts, both online and

TARGET

CONTINUOUSLY MONITOR	Active Online Engagement
CONTINUOUSLY MONITOR	Passive Online Engagement
CONTINUOUSLY MONITOR	Offline Engagement Standing Meetings
CONTINUOUSLY MONITOR	Offline Engagement Special Meetings

offline. Measurement of engagement will be continuously monitored as it is still important to keep track of the number of people reached through social media, special events, and public meetings.

Investment Strategy

Investment Strategy

INTRODUCTION

The 2050 Long Range Plan prioritizes the allocation of Washtenaw County's federal transportation funds in an investment strategy made up of several policy priorities. These bins are meant to guide investments throughout the life of the Long Range Plan. Investments in year-to-year categories may not match the percentages identified here. Each policy priority provides background on the issue, describes deficiencies, showcases an example project, and lists projects by primary work type. WATS believes these investment targets strongly support both state and locally identified performance measures.

While the WATS process and federal funding are intended to advance safety, equity, and environmental goals, it alone is not sufficient to address these crises. Implementing a safe systems approach, ensuring access to housing and transportation, and adopting trip reduction and demand management strategies are essential to achieving these objectives. Success will require action beyond federal funded projects

Note, many, if not most projects pursue goals that exist in more than one policy priority. For the purpose of this plan, projects are grouped by their primary work type, and not split by their various components.

Investment Strategy



EQUITY + JUSTICE

While significant portions of the county are thriving, other parts are struggling—specifically communities of color. All public investment presents an opportunity to rectify the historic injustices that led to these disparate outcomes. As WATS considers transportation investments across all categories, equity should be a determining factor in the selection of projects.

45%



PAVEMENT

Active transportation, freight and auto trips rely on a high-quality road system. Chronic underinvestment in the transportation system has resulted in poor ride quality and higher maintenance costs. WATS will invest the greatest share of federal funds in the preservation of the road network.

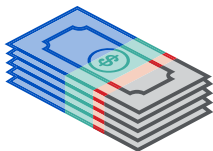
20%



SAFETY

Each year more than 30,000 people die on the nation's roadways. Policies adopted by the state and region, including Toward Zero Deaths and Vision Zero, promote safe travel for all users. WATS is committed to improving safety through spending 20% of federal funds on safety improvements.

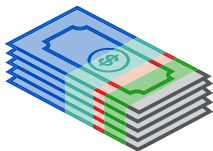
10%



BRIDGES

Bridges connect communities, reduce trip lengths and provide alternate routes. Many of Washtenaw's 400+ bridges are approaching the end of their service life, representing the largest long-term asset risk in the transportation system. Investing 10% of federal funds in bridges promotes safety and security throughout the county.

15%



ENVIRONMENT AND CONGESTION

Land-use patterns that require lengthy automobile trips lead to traffic congestion and adverse impacts on the environment. Projects that reduce emissions promote healthy and resilient communities and mitigate travel's contribution to climate change. WATS is committed to improving communities through spending 15% of federal funds on environment and congestion improvements.

10%



NON-MOTORIZED

Not all roads in Washtenaw County provide safe access to all users. Expanding mode choice through additions to the non-motorized system will improve the quality of life of all Washtenaw County residents and visitors. Investing 10% of federal funds in livability improvements will help achieve this goal.



TRANSIT

While transit agencies are eligible for Federal Highway funds, Federal Transit funds are their primary funding source. In Washtenaw County, the majority of FTA funds go to TheRide. WATS works with TheRide to prioritize investments in capital and operations as they consider the transit needs of county residents. This plan proposes spending 85% of FTA funds on transit capital and 15% on operations.

Equity + Justice

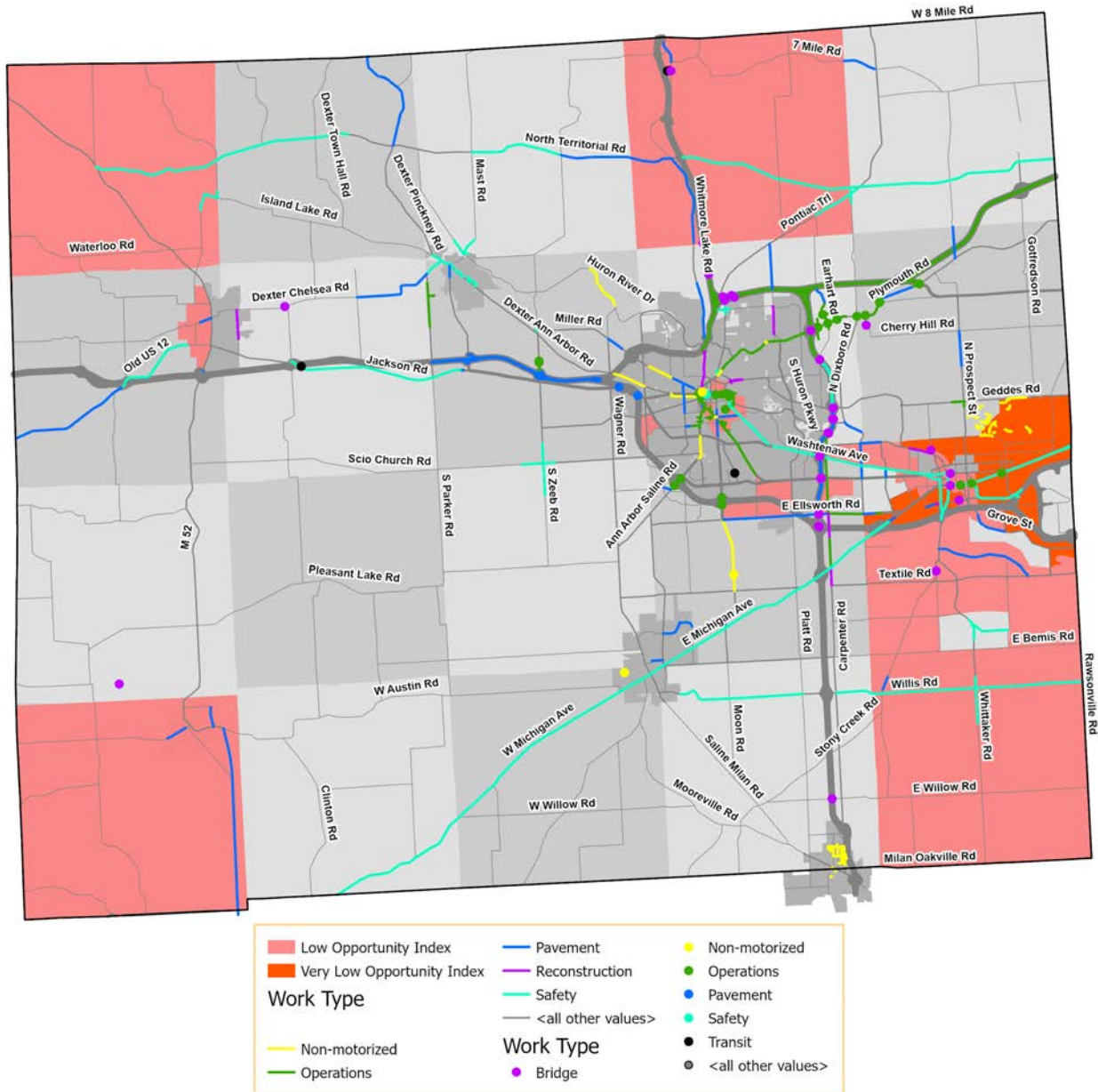
BACKGROUND

Agencies across Washtenaw County have begun to explore the roots and consequences of structural racism and institutional bias. The effects of these practices are wide-ranging and require a major shift in the way government evaluates its investments and their effects on areas of low opportunity.

Historically, transportation funding has focused on moving automobiles further and faster as opposed to a people-first approach that prioritizes equal access and the values of a community. While transportation investment alone can not fix the equity issues facing Washtenaw County, it can effect positive change in those areas. WATS uses two different methods of evaluating investment in equity and justice areas; Opportunity Index Analysis and Environmental Justice Analysis.

Deficiency Criteria

MAP 2 - WASHTENAW COUNTY TIP AND OPPORTUNITY INDEX



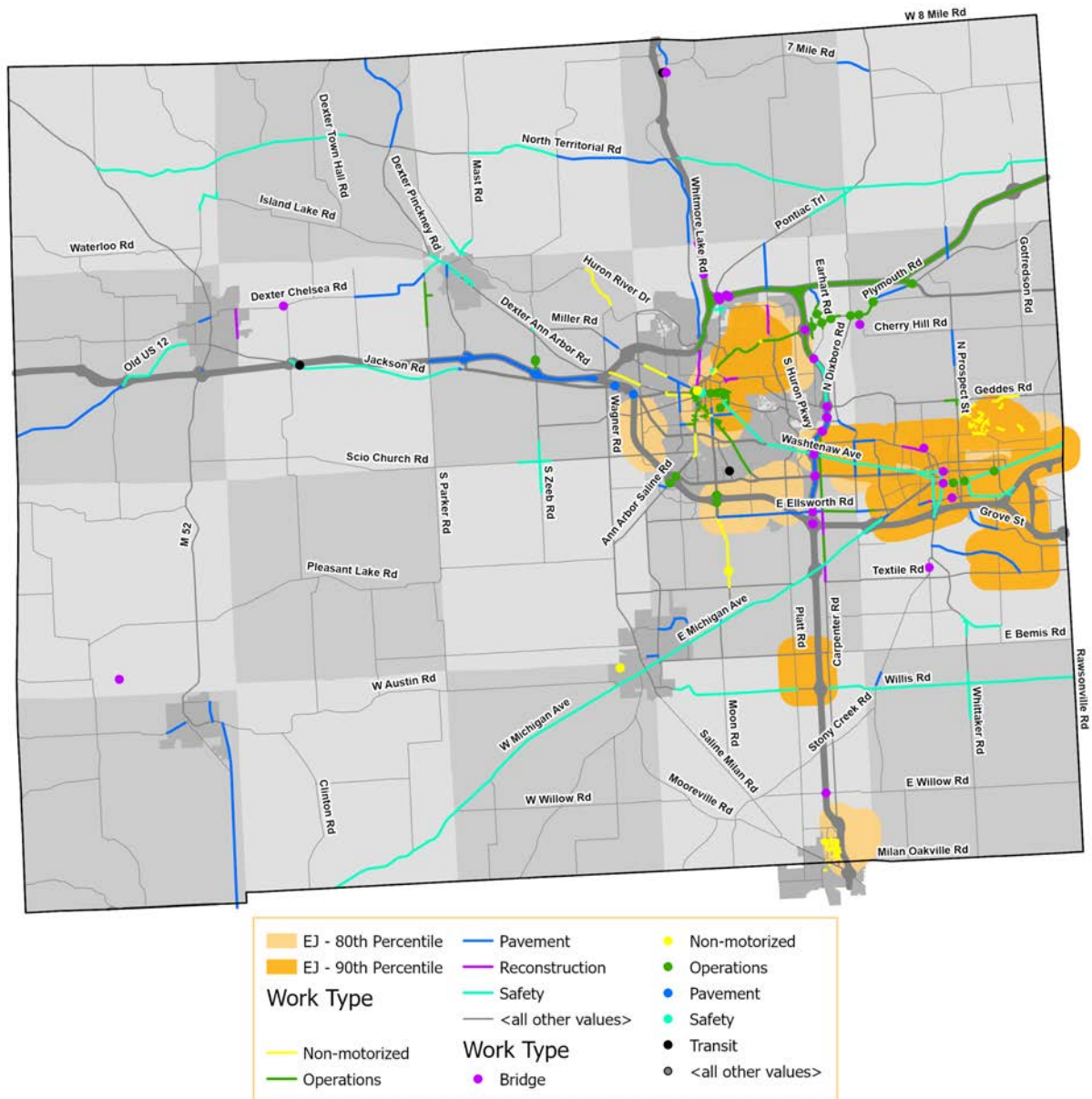
OPPORTUNITY INDEX ANALYSIS

The Opportunity Index uses a broad spectrum of indicators such as health, education, job access, economic vitality, and neighborhood safety and stability to identify local areas of inequity. WATS tracks the investment in areas identified as “low” or “very low” opportunity.

The first four years of this plan contains \$45,567,977 that benefit low opportunity areas.

Deficiency Criteria

MAP 3 - MAP OF TIP AND ENVIRONMENTAL JUSTICE



ENVIRONMENTAL JUSTICE ANALYSIS

Environmental Justice (EJ) review evaluates fair distribution of benefits and burdens in EJ and Non-EJ areas. In addition, the EJ review evaluates projects for adverse social, economic, and environmental effects.

The first four years of this plan contains \$115,350,629 that benefit Environmental Justice areas.

To examine the impacts of projects in this plan on EJ communities, WATS ranks census tracts by their combined percentage of minority and low income residents, using the 20th percentile as the EJ area threshold. Projects within ½ mile of an EJ area are considered to affect that area. WATS does not anticipate the cumulative impacts of projects in this plan to have major adverse effects on environmental justice populations although some projects may have temporary adverse effects.

PAVEMENT ENVIRONMENTAL JUSTICE ANALYSIS

In 2024, WATS conducted an analysis which compared the quality of pavement within EJ areas to the quality of pavement outside of EJ areas. In the analysis, WATS calculated the cumulative Pavement Surface Evaluation and Ratings (PASER) score of the paved federal-aid eligible roads both inside and outside of EJ areas. To ensure an accurate comparison, segments were assigned a weighted PASER score, based on the length of each individual segment. A PASER score of 1 indicates a road in extremely poor quality, whereas a score of 10 indicates a road that has been resurfaced or reconstructed within the past year.

The results show that the weighted-average PASER score was 5.93 within EJ areas and 6.56 outside of EJ areas. This information is displayed in the table below.

PAVEMENT EJ ANALYSIS	EJ AREAS	NON EJ AREAS
Centerline Miles of Paved Federal-Aid Eligible Roads	202 Miles (22.4%)	700 miles (77.6%)
Weighted Average PASER Score	5.93	6.56

The pavement quality review analyzes the impacts to EJ areas that can be directly affected by the pavement portion of this Plan's investment strategy. The discrepancy between EJ and non-EJ areas is greater than a half a point on the PASER rating scale. While this is only provided as information this type of analysis could be duplicated to analyze other performance measures as they relate to EJ areas..

Feature Project



HURON BRIDGE OVER I-94

After decades of planning a multi-disciplinary team was able to secure funding to construct a safe pedestrian and bicycle crossing over I-94 at Huron St. The paved, shared-use, non-motorized pathway including physical barriers to separate modes now safely carries multi-modal traffic between the City of Ypsilanti and Ypsilanti Township. This project significantly increased connectivity and safety in the area.

Achieving: Equity and Justice



Integrated Regional Planning

Cohesive planning across municipalities is integral to extending the reach of projects designed to enhance connectivity for all communities, especially underserved ones. WATS can act as a conduit for increased discussion.



Data-Driven Equity Analysis

WATS staff and Committees should continue to discuss new and innovative ways of analyzing the impact of projects on environmental justice areas. WATS funding cannot fix equity issues alone but can act as a catalyst for more discussion and further action. The potential benefits of Artificial Intelligence (AI) and big data should be explored.



Cross-Sector Partnerships

Explore new collaborations with non-traditional stakeholders such as technology, environmental, and economic development groups. These partnerships will enhance understanding and mitigation of equity issues across sectors.



Adaptive Project Implementation

Local agencies should implement flexible design and rapid pilot testing for demonstration projects such as pop-up bike lanes particularly in disadvantaged communities based on robust neighborhood engagement.



Sustainable and Accessible Design

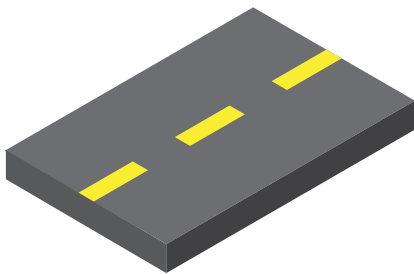
Project development should always consider potential health and environmental impacts and designed for all users regardless of physical or cognitive disability.

Pavement

Pavement

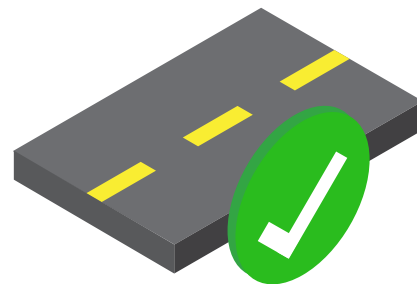
BACKGROUND

Roads are the backbone of the transportation system. Whether driving, riding the bus, or biking, a comfortable commute depends on a high quality road system. However, a poor quality road network causes more than just an uncomfortable commute, it increases car maintenance costs, decreases safety, and can contribute to congestion.



WATS rates **903 miles** of paved federal aid roadway as part of asset management data collection

40.8% of paved federal aid roads in Washtenaw County's are in Good Condition



ROAD CONDITION

Michigan is a leader in using data driven analysis to monitor and prioritize roadways for improvement. WATS participates in collecting this data, called PASER (Pavement Surface Evaluation and Rating), alongside MDOT, SEMCOG, and local agencies.

The PASER system evaluates, on a rating scale from 1 to 10, the surface distresses pavement develops over time. These ratings support the pavement asset management system which encourages municipalities to think strategically to reduce the life-cycle cost of roadways. The pavement asset management system promotes preserving the existing roadway through lower cost interventions before more intensive and costly improvements are required. Based on the ratings, pavement segments are grouped into subgroups of Good, Fair and Poor pavement condition, each requiring a different intensity of improvement.

Deficiency Criteria

RECONSTRUCTION

A full scale pavement reconstruction is recommended when the pavement is so deteriorated that all of the asphalt and some of the sub-base must be removed and replaced.

A complete pavement reconstruction may be necessary if:

- There is clear damage to the sub-base
- Alligator or block cracking is prevalent
- The pavement is not able to support current traffic loads
- There are water or drainage problems

PREVENTIVE MAINTENANCE

Preventive maintenance is required as part of a planned strategy of cost-effective treatments to an existing roadway system to extend the life of the pavement, prevent future deterioration, and maintain or improve the functional condition of the system (without increasing the structural capacity).

Preventive maintenance may be required to:

- Improve structurally sound pavement
- Joints and cracks are beginning to deteriorate
- Address surface roughness

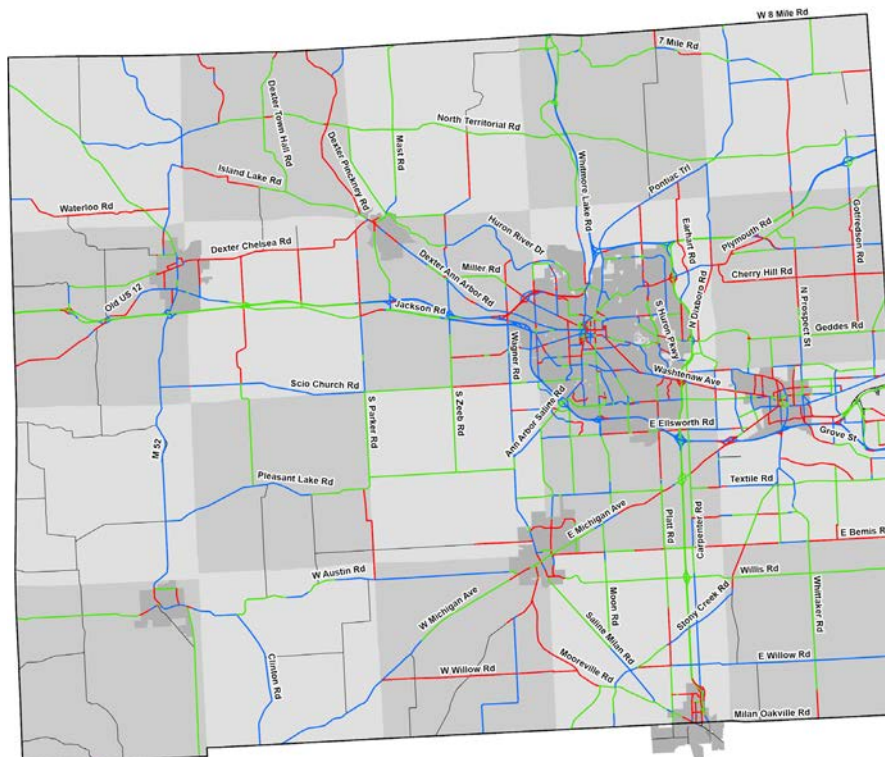
ROUTINE MAINTENANCE

Routine maintenance is used to keep pavement in the Good subgroup as long as possible at minimal cost. Routine maintenance often involves spot specific application of preventive maintenance techniques.

Routine maintenance may be required to:

- Address minor pavement issues
- Fill small cracks in pavement

MAP 4 - TREATMENT REQUIRED TO BRING ROAD TO GOOD CONDITION



Feature Project



SALINE ASSET MANAGEMENT

The City of Saline manages 35 miles of roads, categorized into major and local roads, with major roads receiving more state and federal funds. Since 2010, Saline’s road conditions have worsened, particularly for local roads, as highlighted by the PASER ratings shown.

In response, Saline passed its first road millage in 2018 and focused initial investments on reconstructing the worst local roads from 2020 to 2022. Despite increased funding, local road conditions continued to decline.

Historically, limited data hindered prioritization of capital projects. In April 2023, Saline initiated a Transportation Asset Management Plan (TAMP) to transition from reactive to proactive road management, which was adopted by the City Council in March 2024. The TAMP includes a detailed analysis of the road network and recommends shifting focus towards preventive maintenance. Over the first five years, 80% of lane miles will receive preventive maintenance, accounting for only 12% of costs, while the rest will go towards more intensive rehabilitation, comprising 20% of lane miles and 88% of the expenditure. This strategic approach is expected to improve Saline’s overall PASER ratings over the next five years.

YEAR	LOCAL	MAJOR
2010	6.28	7.09
2020	4.99	6.51
2023	4.72	6.22

Achieving Better Pavement: Asset Management

An asset management approach to pavement condition is a systematic and data-driven strategy involving the comprehensive management of road infrastructure assets. Asset management encompasses the entire life cycle of pavements, from construction to maintenance and rehabilitation, aiming to optimize performance and minimize life cycle costs.

By integrating data collection, analysis, and decision-making processes, transportation agencies can effectively prioritize and allocate resources based on the condition and criticality of pavement assets.

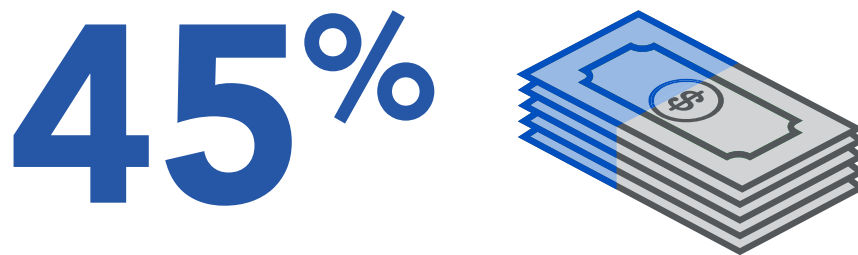
This proactive methodology not only ensures a thorough understanding of the current state of the road network but also facilitates long-term planning and strategic interventions. In the context of pavement quality, an asset management approach allows for targeted maintenance efforts, leading to improved overall conditions and extended durability of road surfaces.

Local agencies should all develop Transportation Asset Management Plans to ensure the most efficient use of funds and mix of fixes.



Project List

This plan sets a policy target of spending **45%** of available federal funds on pavement.



PROJECT LIST

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Wilkinson St.	W Middle to US-12	Reconstruction	2026-2027	\$ 418,000	Chelsea
Ann	Division to Glen	Resurface	2027 - 2030	\$769,000	Ann Arbor
Ann	First St to Division	Resurface	2027 - 2030	\$742,000	Ann Arbor
Capital Preventative Maintenance Program	Areawide	Pavement	2027 - 2030	\$3,750,000	Ann Arbor
E University	Hill to S University	Resurface	2027 - 2030	\$338,000	Ann Arbor
Fifth and Division Implementation	Fifth and Division	Pavement	2027 - 2030	\$1,500,000	Ann Arbor
Fourth Ave	Huron to Catherine and William to Madison	Resurface	2027 - 2030	\$926,000	Ann Arbor
Madison	Main to Division	Resurface	2027 - 2030	\$781,000	Ann Arbor
Nixon Phase 2	Bluett to Dhu Varren	Pavement	2027 - 2030	\$2,333,000	Ann Arbor
Packard	Main to State	Resurface	2027 - 2030	\$1,084,000	Ann Arbor
State St	Ellsworth to Oakbrook	Reconstruction	2027 - 2030	\$32,000,000	Ann Arbor
Summit	Daniel to Main	Resurface	2027 - 2030	\$538,000	Ann Arbor

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Traver Rd	Barton to Moore	Resurface	2027 - 2030	\$1,797,000	Ann Arbor
Washington	First to Third	Reconstruction	2027 - 2030	\$2,217,000	Ann Arbor
Wilkinson St.	W Middle to US 12	Reconstruction	2027-2030	\$418,000	Chelsea
Old Manchester Rd.	Old US 12 to Pamida Driveway	Reconstruction	2027 - 2030	\$ 65,000	Chelsea
Broad St	Main St to 3rd St	Reconstruction	2027 - 2030	\$835,492	Dexter
Arkona	City Limits to Dexter	Resurface	2027 - 2030	\$525,594	Milan
Dexter	E Michigan to City Limits	Resurface	2027 - 2030	\$720,867	Milan
Gump Lake & Dexter	Norfolk Southern to E Michigan	Resurface	2027 - 2030	\$434,345	Milan
Bemis	Henry/Old Crekk to Keveling	Reconstruction	2027 - 2030	\$300,974	Saline
Industrial	Campus Parkway to Woodland	Resurface	2027 - 2030	\$824,955	Saline
S Ann Arbor Rd	Willis to Michigan	Reconstruction	2027 - 2030	\$1,082,749	Saline
Cornell	Kingwood-Huron River Dr	Reconstruction	2027 - 2030	\$1,360,000	Ypsilanti
Cornell	Washtenaw-Kingwood	Reconstruction	2027 - 2030	\$1,144,000	Ypsilanti
N Huron St	Huron-Cross	Reconstruction	2027 - 2030	\$1,369,000	Ypsilanti
Various	Various	Resurface	2027 - 2030	\$689,000	Ypsilanti
W Michigan Ave	City Limit-Hamilton	Resurface	2027 - 2030	\$1,711,000	Ypsilanti
US-23 N	from M-14 to I-94	Reconstruction	2027 - 2030	\$229,369,618	MDOT
US-23 N	over Oak Park and Washtenaw Heights Company Drive	Culvert Replacement	2027 - 2030		MDOT
Pavement Preservation	County wide	Resurface	2027 - 2030	\$22,094,000	WCRC
Liberty	First to Main	Reconstruction	2031 - 2040	\$2,934,000	Ann Arbor
Nixon Phase 3	Dhu Varren to S of M-14	Pavement	2031 - 2040	\$2,000,000	Ann Arbor
South University, Oxford, Hill Area	South University, Oxford, Hill	Resurface	2031 - 2040	\$1,235,000	Ann Arbor
State St	Ellsworth to I-94 EB Ramp	Pavement	2031 - 2040	\$6,200,000	Ann Arbor
State St	I-94 WB Ramps to Oakbrook	Pavement	2031 - 2040	\$16,350,000	Ann Arbor

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
State St	Interchange at I-94 Bridge and Ramp	Reconstruction	2031 - 2040	\$9,450,000	Ann Arbor
State St	Kingsley to Fuller/Depot	Reconstruction	2031 - 2040	\$1,970,000	Ann Arbor
Stimson	State to S Industrial	Resurface	2031 - 2040	\$425,000	Ann Arbor
Traver	Tuebingen to Nixon	Resurface	2031 - 2040	\$1,420,000	Ann Arbor
Washington	Fourth Ave to Fletcher	Resurface	2031 - 2040	\$1,346,000	Ann Arbor
Dewey	M-52 to McKinley	Resurface	2031 - 2040	\$ 181,500	Chelsea
Dexter-Chelsea Road	449 Railroad to Freer Rd.	Reconstruction	2031 - 2040	\$ 780,000	Chelsea
Hayes St.	North (W) to Monroe	Resurface	2031 - 2040	\$ 165,000	Chelsea
McKinley St.	North (E) to Railroad St.	Resurface	2031 - 2040	\$ 36,000	Chelsea
Middle St. (W)	M-52 to Fire Station	Reconstruction	2031 - 2040	\$ 896,00	Chelsea
Middle St. (W)	Hayes to Wilkinson St.	Reconstruction	2031 - 2040	\$ 324,800	Chelsea
North St. (W)	M-52 to Hayes	Resurface	2031 - 2040	\$ 312,000	Chelsea
Railroad St.	McKinley St. to 449 Railroad	Pavement	2031 - 2040	\$ 19,800	Chelsea
3rd St	Central to Broad	Reconstruction	2031 - 2040	\$133,632	Dexter
Central St	Main St to City Limits	Resurface	2031 - 2040	\$489,932	Dexter
Dexter-Ann Arbor	Lexington to City Limits	Reconstruction	2031 - 2040	\$5,307,360	Dexter
Hibbard St.	Dutch Dr. to City Rd.	Resurface	2031 - 2040	\$1,000,000	Manchester
Main St	Ann Arbor Railroad to Main St.	Resurface	2031 - 2040	\$401,495	Milan
Marvin	County St to E Lewis	Reconstruction	2031 - 2040	\$2,122,969	Milan
Milan Oakville	City Limits to US-23	Reconstruction	2031 - 2040	\$272,239	Milan
North St	Arkona to Michigan Ave	Reconstruction	2031 - 2040	\$639,388	Milan
Plank	Gay St to US-23	Reconstruction	2031 - 2040	\$1,825,753	Milan
Austin	City Limits to Michigan	Reconstruction	2031 - 2040	\$874,074	Saline

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Bennet	Ann Arbor to Harris	Reconstruction	2031 - 2040	\$523,099	Saline
Harris	Bennet to Clark	Reconstruction	2031 - 2040	\$159,421	Saline
Monroe St	City Limits to Michigan	Reconstruction	2031 - 2040	\$1,327,178	Saline
N Ann Arbor Rd	City Limits to Michigan	Reconstruction	2031 - 2040	\$3,855,991	Saline
N Maple	Library to City Limits	Reconstruction	2031 - 2040	\$2,747,020	Saline
Old Creek Blvd	Willis to Michigan	Reconstruction	2031 - 2040	\$2,315,168	Saline
Saline Waterworks	Ann Arbor Rd to Heritage	Reconstruction	2031 - 2040	\$837,115	Saline
Willis Rd	Ann Arbor Rd to City Limits	Reconstruction	2031 - 2040	\$1,981,468	Saline
1st Ave	Harriet-Michigan	Reconstruction	2031 - 2040	\$1,071,000	Ypsilanti
Ballard St	Michigan-Washtenaw	Reconstruction	2031-2040	\$650,000	Ypsilanti
Ballard St	Washtenaw-Forest	Resurface	2031-2040	\$300,000	Ypsilanti
E Cross	Prospect - City Limits	Resurface	2031-2040	\$1,159,000	Ypsilanti
E Forest Ave	Rice-City Limits	Resurface	2031 - 2040	\$1,039,000	Ypsilanti
Grove St	Michigan-Prospect	Resurface	2031 - 2040	\$727,000	Ypsilanti
LeForge	Huron-Clark	Reconstruction	2031 - 2040	\$1,499,000	Ypsilanti
N River St	Michigan-Forest	Reconstruction	2031 - 2040	\$2,580,000	Ypsilanti
Various	Various	Resurface	2031 - 2040	\$1,378,000	Ypsilanti
Bemis Road	Carpenter Rd to Stony Creek Rd	Reconstruction	2031 - 2040	\$4,000,000	WCRC
Bemis Road	Whittaker Rd to Rawsonville Rd	Reconstruction	2031 - 2040	\$4,000,000	WCRC
Ellsworth Road	Wagner Rd to Maple Rd	Reconstruction	2031 - 2040	\$750,000	WCRC
Fletcher Road	Scio Church Rd to I-94	Reconstruction	2031 - 2040	\$3,600,000	WCRC
Jackson Phase 4	Parker Rd to Dino Dr	Reconstruction	2031 - 2040	\$12,000,000	WCRC
Mansfield St	Michigan Ave to Congress St	Reconstruction	2031 - 2040	\$1,500,000	WCRC
Merritt Road	Stony Creek Rd to Hitchingham Rd	Reconstruction	2031 - 2040	\$1,000,000	WCRC
Pavement Preservation	County wide	Resurface	2031 - 2040	\$44,188,000	WCRC

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Cleveland St.	Middle (W) to end	Resurface	2041 - 2050	\$ 66,000.00	Chelsea
Freer Rd.	Old US-12 to Trinkle Rd (south side)	Pavement	2041 - 2050	\$ 33,000.00	Chelsea
Freer Rd. (N)	Trinkle to Dexter Chelsea	Resurface	2041 - 2050	\$ 870,000.00	Chelsea
McKinley St.	Dewey to North (E)	Resurface	2041 - 2050	\$ 62,400.00	Chelsea
McKinley St.	Railroad to Jackson St.	Pavement	2041 - 2050	\$ 8,800.00	Chelsea
McKinley St.	Jackson St. to Middle St. (E)	Pavement	2041 - 2050	\$ 16,500.00	Chelsea
Middle St. (E)	M-52 to McKinley	Resurface	2041 - 2050	\$ 192,000.00	Chelsea
Middle St. (W)	Wilkinson to Cleveland St.	Resurface	2041 - 2050	\$ 210,000.00	Chelsea
Old Manchester Rd.	Pamida to Coliseum Drive	Pavement	2041 - 2050	\$ 30,800.00	Chelsea
Old Manchester Rd.	Coliseum Drive to M52	Resurface	2041 - 2050	\$ 120,000.00	Chelsea
Baker Rd	City Limits to Main St	Reconstruction	2041 - 2050	\$3,657,540	Dexter
Central St	Main St to City Limits	Reconstruction	2041 - 2050	\$2,924,600	Dexter
Dexter-Ann Arbor	Baker Rd to Lexington	Reconstruction	2041 - 2050	\$2,547,027	Dexter
Dexter-Ann Arbor	Island Lake Rd to Baker Rd	Reconstruction	2041 - 2050	\$1,422,762	Dexter
Dutch Dr.	Hibbard St. to M-52	Resurface	2041 - 2050	\$1,000,000	Manchester
Arkona	City Limits to Dexter	Reconstruction	2041 - 2050	\$3,137,484	Milan
Dexter	E Michigan to City Limits	Reconstruction	2041 - 2050	\$4,303,147	Milan
E Lewis	W Lewis to Dexter	Reconstruction	2041 - 2050	\$1,449,518	Milan
E Michigan	Dexter to North St	Reconstruction	2041 - 2050	\$1,154,769	Milan
Gump Lake&Dexter	Norfolk Southern to E Michigan	Reconstruction	2041 - 2050	\$2,592,782	Milan
Main St	City Limits to Ann Arbor Railroad	Reconstruction	2041 - 2050	\$2,854,239	Milan
Milan Oakville	Dexter to US 23		2041 - 2050	\$943,424	Milan

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Milan Oakville	Main St to Dexter St	Reconstruction	2041 - 2050	\$1,372,649	Milan
North St & Tolan	Arkona to 1st St	Reconstruction	2041 - 2050	\$3,849,955	Milan
Platt Rd	Redman to City Limits	Reconstruction	2041 - 2050	\$3,987,220	Milan
Redman	City Limits to Wabash	Reconstruction	2041 - 2050	\$3,769,339	Milan
Wabash	City Limits to Main St	Reconstruction	2041 - 2050	\$3,791,127	Milan
Clark	Harris to Maple	Reconstruction	2041 - 2050	\$1,160,253	Saline
Industrial	Michigan to Bemis	Reconstruction	2041 - 2050	\$1,990,978	Saline
Industrial	Michigan to Woodland	Reconstruction	2041 - 2050	\$4,735,091	Saline
N Maple	Bemis to Library	Reconstruction	2041 - 2050	\$2,400,141	Saline
Woodland Dr	Ann Arbor Saline Rd to Industrial	Reconstruction	2041 - 2050	\$5,225,422	Saline
College Pl	Cross-Forest	Resurface	2041 - 2050	\$149,000	Ypsilanti
Lowell St	Forest-Huron	Resurface	2041 - 2050	\$510,000	Ypsilanti
Mansfield	Congress -Washtenaw	Resurface	2041 - 2050	\$566,000	Ypsilanti
Maus St	Prospect-Emerick	Resurface	2041 - 2050	\$1,143,000	Ypsilanti
N River St	City Limit-Forest	Resurface	2041 - 2050	\$782,000	Ypsilanti
Oakwood St	Cross-Sherman	Resurface	2041 - 2050	\$109,000	Ypsilanti
Spring St	Huron-Prospect	Resurface	2041 - 2050	\$1,496,000	Ypsilanti
Various	Various	Resurface	2041 - 2050	\$1,378,000	Ypsilanti
W Forest Ave	College Pl-Rice	Resurface	2041 - 2050	\$782,000	Ypsilanti
Baker Road	Jackson Rd to I-94	Pavement	2041 - 2050	\$1,000,000	WCRC
Merritt Road	Carpenter Rd to Munger Rd	Reconstruction	2041 - 2050	\$12,000,000	WCRC
Pavement Preservation	County wide	Resurface	2041 - 2050	\$44,188,000	WCRC
Rawsonville Road	Martz Rd to Textile Rd	Reconstruction	2041 - 2050	\$12,000,000	WCRC
Seven Mile Road	Main St to Seven Mile Rd	Reconstruction	2041 - 2050	\$1,600,000	WCRC
Willow Road	Stony Creek Rd to Platt Rd	Reconstruction	2041 - 2050	\$2,400,000	WCRC

Safety

BACKGROUND

This plan adopts the Vision Zero philosophy. Knowing that humans make mistakes, vision zero places the onus of responsibility on the system rather than system users.

This plan guides investment decisions to reduce fatalities and serious injuries for all users of the transportation system, especially those that are most vulnerable, including pedestrians and bicyclists. Using adopted policies by the state and region Toward Zero Deaths and Vision Zero, the aim is to provide safe travel for all modes.

In 2023, WATS and agencies across southeast Michigan worked with SEMCOG to update the 2015 Regional Safety Plan. The 2023 Plan established eight high priority emphasis areas across three categories: Infrastructure, Behavior, and Road User. The high priority emphasis areas are:

- Infrastructure - Intersection and Lane Departure
- Behavior - Speeding, Impairment, and Unbelted Occupant
- Road User - Pedestrian, Bicyclist, and Motorcyclist

Equity and Safety

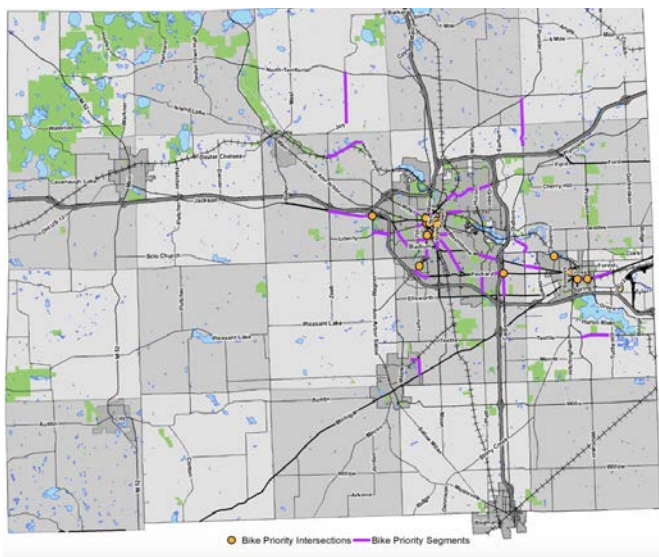
Non-white individuals account for 34.9% of the national population but make up 46.1% percent of pedestrian deaths

Older adults are similarly at higher risk: individuals 65 years or older are 50% more likely than younger individuals to be struck and killed by a care while walking

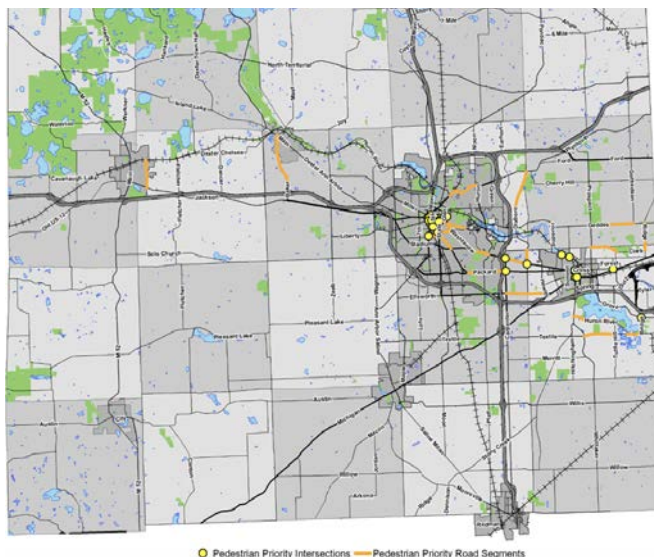
Deficiency Criteria

The maps below show locations identified as priority crash intersections and segments based on five years of crash data. The maps use a SEMCOG analysis which groups facilities by type, ranks them by crash frequency, and selects the top 5%. WATS removed locations where only one crash occurred in the five year period. This analysis is a high level data-based review, and is only meant to inform projects as they are developed, rather than dictate needs. Each road segment is different, and there may be many confounding factors that lead to a higher crash rate on specific segments.

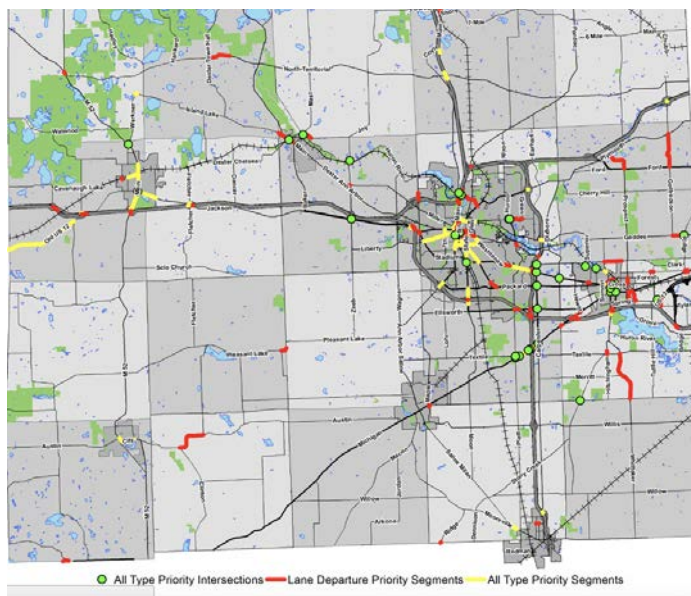
MAP 5 - BIKE SAFETY PRIORITY LOCATIONS



MAP 6 - PEDESTRIAN SAFETY PRIORITY LOCATIONS



MAP 7 - CRASH SAFETY PRIORITY LOCATIONS (ALL TYPES)



Feature Project



RECTANGULAR RAPID FLASHING BEACONS

Local agencies continue to strive for a connected network, however lack of consistent safe and accessible pedestrian crossings throughout the county force pedestrians and bicyclists to make decisions that endanger the safety of all users of the transportation system. To provide safe crossings, transportation agencies have been installing Rectangular Rapid Flash Beacons, better known as RRFBs.

RRFBs provide a lower cost alternative to traffic signals and hybrid signals that are shown to increase driver yielding behavior at crosswalks. A FHWA-sponsored experimental implementation and evaluation conducted in St. Petersburg, Florida found that RRFBs at pedestrian crosswalks are dramatically more effective at increasing driver yielding rates to pedestrians than traditional overhead beacons.

These solutions continue to be effectively deployed throughout Washtenaw County improving overall network safety.

DEFINING SAFETY PROJECTS

All transportation projects should consider ways to incorporate safety elements to the fullest extent practicable. To accelerate progress towards vision zero, investment in safety projects should delineate between a true safety project and a project that includes safety elements. However, it is understood that local agency's Transportation Asset Management (TAM) Plans asset management approach will include projects that do not include major safety elements.



True Safety Projects

A true safety project is characterized by its focused intention to address site-specific safety concerns or to implement systemic countermeasures against recognized crash patterns. These systemic countermeasures are proactive in nature, aiming to mitigate risks before accidents occur. The scope can be narrow, targeting a specific location with a tailored solution, or broad, applying systemic countermeasures across various locations sharing similar risk factors. The success of these projects is measured by their impact on safety, such as the reduction in potential or actual crashes, injuries, and fatalities.

Examples:

- Installing RRFBs (Rectangular Rapid Flashing Beacons) on Multi-lane Streets at Uncontrolled Crosswalks Without Crash History: This is an example of a targeted intervention that addresses a specific site's potential risk to pedestrians. The absence of a crash history does not diminish the project's safety value; rather, it exemplifies a proactive approach to preventing pedestrian accidents by increasing visibility at high-risk crosswalks.
- Installing Lane Line Rumble Strips on Rural Highways: This systemic countermeasure is applied to address a known crash pattern—run-off-the-road (ROR) crashes on rural highways. By installing rumble strips, the project aims to alert inattentive or fatigued drivers that they are veering off their lane, thereby preventing potential crashes. This measure is applied based on an identified pattern rather than a response to a specific incident, showcasing a proactive and broad approach to enhancing road safety

Transportation Project with Safety Elements

Conversely, a transportation project incorporating safety elements serves a dual purpose. While its primary aim might be to enhance transportation efficiency, capacity, or connectivity, it concurrently integrates safety improvements as a significant, though secondary, component of its overall design and objectives. These projects leverage safety enhancements not just as add-ons but as integral elements that contribute to the project's comprehensive goals, ensuring a holistic approach to both transportation efficiency and user safety.

Examples:

- **Intelligent Transportation Systems (ITS) Enhancements:** In efforts to streamline traffic flow and improve roadway efficiency, projects may incorporate advanced ITS technologies. These systems can optimize traffic signals for smoother flow and include safety enhancements like dynamic speed limit signs and real-time traffic condition alerts. These features collectively contribute to reducing congestion while simultaneously lowering the risk of speed-related collisions and enabling quicker responses to emergent road conditions.
- **Urban Street Redesigns for Enhanced Multimodal Use:** Projects aimed at refurbishing urban streets may primarily seek to improve traffic circulation and accommodate a broader range of transportation modes. Incorporating widened sidewalks, protected bike lanes, and traffic calming measures like raised crosswalks not only facilitates the primary goal of enhanced multimodal access but inherently boosts safety for pedestrians and cyclists, integrating safety seamlessly into the urban transport ecosystem.

The delineation between these project types lies in their objectives and criteria for success. True safety projects are singularly focused on preemptive and reactive safety interventions, with success directly measured by reductions in accidents and enhancements in user safety. Transportation projects with safety elements, meanwhile, pursue broader infrastructural or operational improvements, with safety considerations embedded to enrich these primary objectives, thereby fostering a comprehensive improvement in both efficiency and safety for the transportation network.

WATS has developed this Plan to prioritize safety and equity as deciding factors in project selection while understanding the challenges of balancing the needs of an under-funded, aging transportation network.

FIVE ELEMENTS OF A SAFE SYSTEMS APPROACH TO TRANSPORTATION SAFETY



Safe Road Users

Encouraging safe road use requires a cultural shift towards responsible behavior by all road users, including drivers, cyclists, and pedestrians. Education campaigns, strict enforcement of traffic laws, and community engagement initiatives are crucial in promoting a shared sense of responsibility for road safety.



Safe Speeds

Setting and enforcing safe speeds are fundamental to preventing accidents and reducing the severity of injuries when collisions occur. Implementing speed management strategies, such as variable speed limits and traffic calming measures in high-risk areas, can significantly improve safety for all users.



Safe Vehicles

Safe vehicles play a critical role in minimizing the risk of injury during a crash. Advancements in vehicle safety technologies, coupled with rigorous safety standards and regular vehicle inspections, ensure that vehicles are equipped to protect occupants and reduce harm to other road users.



Safe Roads

Designing safe roads involves creating infrastructure that accommodates all users safely, with a focus on vulnerable road users such as pedestrians and cyclists. This includes implementing features like protected bike lanes, pedestrian crossings, and barriers that separate different modes of transportation.



Post-Crash Care

Efficient post-crash care systems are essential for minimizing the consequences of road traffic injuries. This entails not only rapid emergency response and medical care for the injured but also psychological support and rehabilitation services to assist in the recovery process.

Achieving Safety: Vision Zero

While selecting projects for funding to implement the vision of this plan, in order to reach our safety goals we must use a safe systems approach. The project selection process alone will not solve the safety epidemic. The following strategies help achieve our safety goals:



Infrastructure Design And Safety Measures

Prioritize designing roads and intersections with safety in mind. Implement traffic-calming measures, such as roundabouts, pedestrian islands, and protected bike lanes. Enhance visibility and install appropriate signage to reduce the risk of collisions.



Integrated Transportation Systems

Develop integrated and well-connected transportation systems that accommodate all modes of transportation, including pedestrians, cyclists, and public transit. Seamless connectivity can reduce conflicts



Data-Driven Decision Making

Utilize data analytics and technology to identify high-risk areas and trends in traffic incidents. Implement evidence-based interventions and allocate resources strategically to address safety concerns effectively.



Public Awareness And Education

Launch public awareness campaigns to educate all road users about safe behaviors, the importance of following traffic rules, and the potential consequences of risky actions. Educated and aware road users contribute significantly to safer road environments.



Enforcement Strategies

Collaborate with law enforcement agencies to enforce traffic laws rigorously. Implement automated enforcement systems where applicable and ensure consistent monitoring to deter unsafe behaviors and ensure compliance.

Project List

This plan sets a policy target of spending **20%** of available federal funds on safety.

20%



PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Dhu Varren and Pontiac Trail Roundabout	Dhu Varren and Pontiac Trail	Safety	2027 - 2030	\$600,000	Ann Arbor
Moore/Pontiac Trail/Longshore Roundabout	Moore/Pontiac Trail/Longshore	Safety	2027 - 2030	\$1,600,000	Ann Arbor
Streetlights: Liberty Corridor (Scio Ridge to Maple)	Liberty Corridor (Scio Ridge to Maple)	Safety	2027 - 2030	\$195,000	Ann Arbor
Streetlight Capital Maintenance	Areawide	Safety	2027 - 2030	\$1,725,000	Ann Arbor
Uncontrolled Crosswalk Lighting	Areawide	Safety	2027 - 2030	\$405,000	Ann Arbor

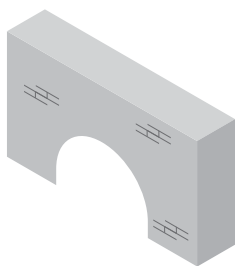
Bridges

Bridges

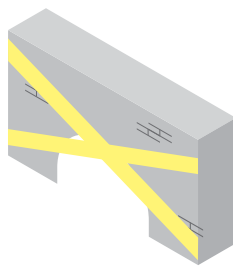
BACKGROUND

Bridges are an essential component of our transportation infrastructure. They provide connections between roadways, allow them to traverse natural features of the landscape, and provide security and emergency response connections. When a bridge no longer serves its purpose, homes and businesses can become isolated and the flow of people, goods, and services can be interrupted.

As Washtenaw County’s bridges age, the issue of funding for repair and replacement of bridges becomes more urgent, as does monitoring their condition. MDOT oversees the collection and monitoring of bridge conditions in the state in its Michigan Structure Inventory and Appraisal (MSIA) database. The MSIA database is updated in the spring and summer months as bridge inspections are completed. This database describes in detail the bridge ownership, usage, condition, and age of the state’s bridges.



260
bridges in
Washtenaw



0
closed bridges
(2022)



21
weight restricted
bridges
(2022)

BRIDGE AGE

Bridges are a major, long term investment in the transportation system with an expected lifespan of at least 50 years. However, many of Washtenaw County’s bridges are operating well beyond their anticipated lifespan. While this is a testament to the county’s dedication to maximizing the lifespan of its past investments, many of these bridges require replacement. On the right is a chart of the age of bridges in Washtenaw County. Note that 28 of the county’s bridges were built before 1951 and that the majority of the county’s bridges have past or are approaching their 50 year service life, and may require replacement or substantial improvement to extend their life.

CONSTRUCTION YEAR	NUMBER OF BRIDGES
Before 1927	11 (4.2%)
1927-1950	17 (6.5%)
1951-1975	123 (47.3%)
1976-2000	62 (23.8%)
2001-2024	47 (18.1%)
TOTAL	260

TABLE 1

Deficiency Criteria

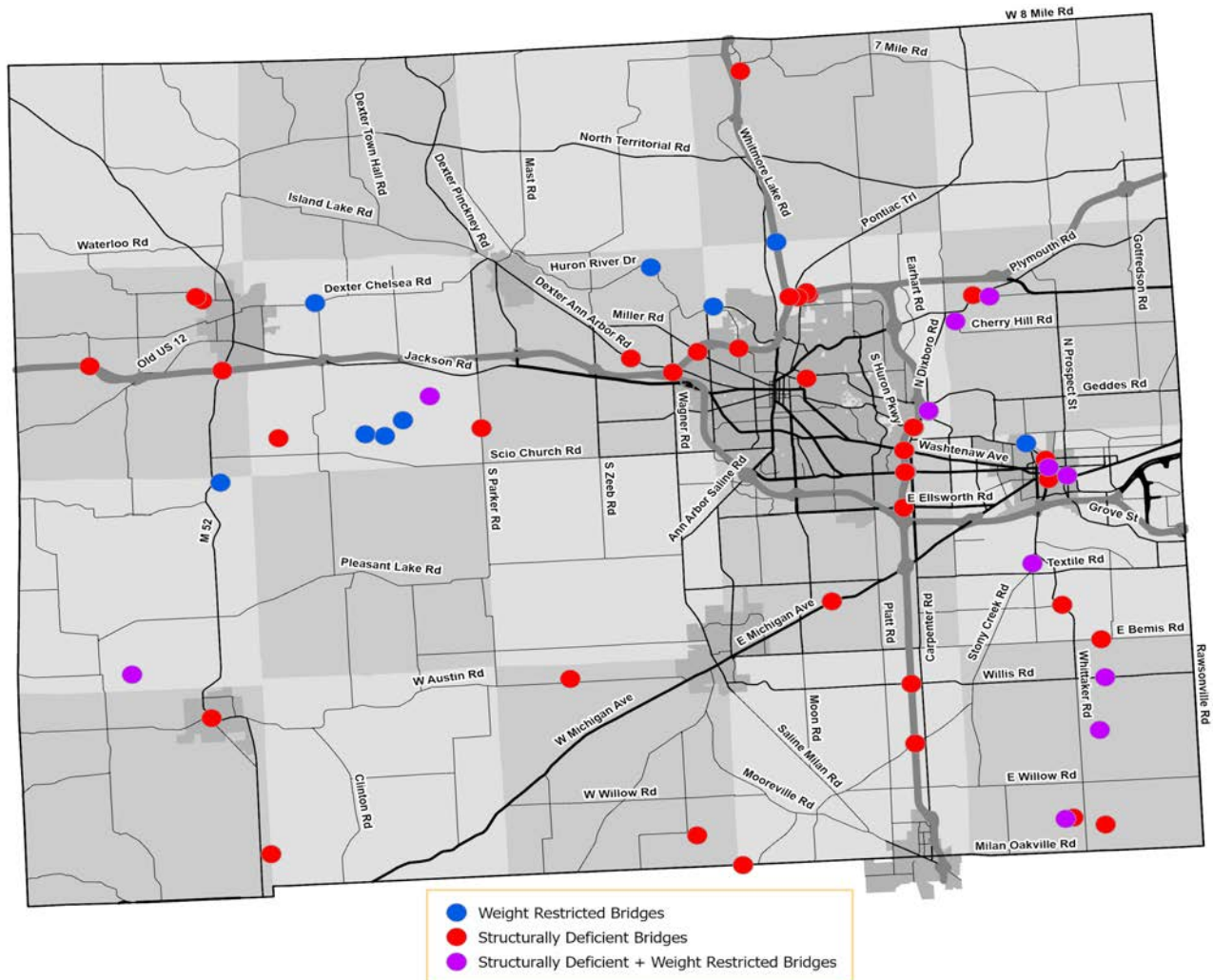
BRIDGE CONDITION

STRUCTURALLY DEFICIENT (SD):

A bridge is classified as structurally deficient if the deck, superstructure, substructure, or culvert is rated in "poor" condition (0 to 4 on the National Bridge Inventory (NBI) rating scale). Also, a bridge can be classified as structurally deficient if its load carrying capacity is significantly below current design standards or if a waterway below frequently over-tops the bridge during floods.

Below is a map of structurally deficient bridges throughout Washtenaw County.

MAP 8 - WASHTENAW COUNTY STRUCTURALLY DEFICIENT BRIDGES



Feature Project



MICHIGAN AVE OVER US-23 BRIDGE

Since 2020, Pittsfield Township had worked with MDOT and WCRC on a \$30 million upgrade to Michigan Avenue, from Platt to Carpenter Road, a project discussed since the 1980s. The first phase started in March 2023, focusing on reconstructing the Michigan Avenue bridge at the US-23 interchange, including new lanes, a multimodal pathway, and interchange ramps. Set to finish in November 2023, the work prioritized maintaining traffic flow, with closures limited to off-peak hours and short durations. Some night work was necessary to lessen traffic disruption, and despite a noise ordinance waiver, noise reduction practices were mandated.

Achieving Bridge Sufficiency: Remaining Connected

Public agencies should prioritize bridge infrastructure for safety, economic vitality, and resilience. Bridges are critical for efficient transportation, supporting economic activities and providing essential connections. Timely investment in maintenance prevents costly reconstruction and extends bridge lifespan, reducing long-term financial burdens. Resilient bridge design aids disaster preparedness, ensuring continued access during emergencies. Compliance with regulations and a commitment to innovation build public trust. Prioritizing bridge infrastructure aligns with asset management strategies, optimizing resource allocation for maximum impact on safety and functionality.

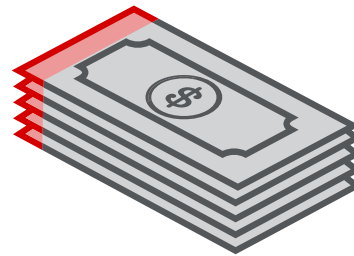
The reduction in the count of closed bridges in Washtenaw County reflects a dedicated commitment to enhancing bridge infrastructure. Sustaining this positive trend through ongoing investments in bridges is crucial for community connectivity, promoting economic growth, and resilience. Although a state program is in place to fund bridges, exploring additional federal funding sources eligible for bridge projects should be considered to further support these vital facilities. Rural areas, where the road network is not as dense can be particularly susceptible to long detours and economic loss caused by closed bridges or inadequate infrastructure.



Project List

This plan sets a policy target of spending **15%** of available federal funds on bridges.

15%



PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Eisenhower Bridge Capital Maintenance	Eisenhower Bridge	Bridge	2027 - 2030	\$1,050,000	Ann Arbor
Fuller Rd/Maiden Lane Bridge Painting	Fuller Rd/Maiden Lane Bridge	Bridge	2027 - 2030	\$1,100,000	Ann Arbor
Cross	Huron River	Bridge	2027 - 2030	\$6,488,000	Ypsilanti
Prospect	MDOT Railway	Bridge	2027 - 2030	\$258,000	Ypsilanti
US-23	NB over I-94	Overlay - Epoxy	2027 - 2030	5,924,448	MDOT
US-23	SB over I-94	Overlay - Epoxy	2027 - 2030	5,924,448	MDOT
US-23	NB over Conrail and Huron River	Bridge Replacement	2027 - 2030	5,924,448	MDOT
US-23	SB over Conrail and Huron River	Bridge Replacement	2027 - 2030	5,924,448	MDOT
US-23	US-23 NB, I-94 Business Loop over Packard Road	Overlay - Epoxy	2027 - 2030	5,924,448	MDOT
US-23	US-23 SB, I-94 Business Loop over Packard Road	Overlay - Epoxy	2027 - 2030	5,924,448	MDOT
US-23	NB over US-23 Business Route	Bridge Replacement	2027 - 2030	5,924,448	MDOT
US-23	SB over US-23 Business Route	Bridge Replacement	2027 - 2030	5,924,448	MDOT
US-23	NB over Huron River Drive	Overlay - Epoxy	2027 - 2030	5,924,448	MDOT
US-23	SB over Huron River Drive	Overlay - Epoxy	2027 - 2030	5,924,448	MDOT
US-23	Geddes Road over US-23	Overlay - Deep	2027 - 2030	5,924,448	MDOT

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
US-23	Earhart Road over US-23	Overlay - Shallow	2027 - 2030	5,924,448	MDOT
US-23	Plymouth-Ann Arbor Road over US-23	Overlay - Deep	2027 - 2030	5,924,448	MDOT
US-23	Ellsworth Road over US-23	Overlay - Epoxy	2027 - 2030	5,924,448	MDOT
I-94 E	over I-94 Business Loop	Superstructure Repair - Steel	2027 - 2030	1,901,599.5	MDOT
I-94 E	Jackson Avenue WB, I-94 Business Route over I-94 Ramp	Overlay - Epoxy	2027 - 2030	1,901,599.5	MDOT
Willis Road	Over Paint Creek	Bridge	2027 - 2030	\$1,200,000	WCRC

BRIDGES AND NON-MOTORIZED INFRASTRUCTURE

Bridges provide critical access and connections for automobile traffic, freight, emergency services, and non-motorized travel. The nature of bridge investments, with a lifetime of at least 50 years, requires long term thinking and planning for the types of uses that may occur on that bridge in the future, as well as recognizing the limitations of those expectations. WATS' Non-motorized plan identifies bridges as a critical priority for non-motorized infrastructure, and with the understanding that if investments are made today without those non-motorized facilities, unanticipated future growth could make those structures functionally obsolete for non-motorized use. Therefore bridges using federal funding are required to have appropriate non-motorized infrastructure, even if they are outside of the urban area. WATS also has a non-motorized retrofit study that provides short, medium and long-term recommendations for non-motorized accommodations on all area freeway crossings.

Environment + Congestion

Environment + Congestion

BACKGROUND

The transportation system's relationship to the environment is multifaceted. Many transportation options impact the environment and variability in the climate impacts the condition of infrastructure. Personal and commercial vehicles create air pollution and impervious roads impact storm-water infiltration pollutant loading and create heat islands. Similarly local travel relies on a transportation network in good repair. Warmer winters with more freeze/thaw cycles and increasing vehicle-miles-traveled will have increasingly severe impacts on roads. Storm events are also becoming more extreme causing engineers to design infrastructure for the 100-year storm rather than the previous 20-50-year designs.

Climate change is an increasingly demanding planning factor. Communities should be aware of the potential challenges to be faced, and incorporate environmental sustainability and resiliency into transportation planning.

This resiliency planning should recognize the potential for communities to be separated from each other and cut off from resources by impassable roads due to deteriorated road conditions, flooding and other climate influenced impacts. To help fortify the transportation network against these effects, a multidisciplinary approach to project planning and implementation should be considered that aids in environmental sustainability. To this end, project planning should include coordination between transportation, land-use, water management and forestry departments, resulting in strategic projects.

Both the City of Ann Arbor and Washtenaw County have established aggressive carbon neutrality plans. Additionally, a new federal performance measure on greenhouse gas (GHG) emissions is currently being developed. To help effect this change all transportation improvements must consider the impact on the environment and on how people travel. Incorporating green modes of transportation such as transit, walking, and biking into project scoping and design, along with consideration of impacts to the environment should occur with every transportation improvement.



Deficiency Criteria

SEMCOG completes an environmental sensitivity analysis for the seven county region. This analyzes potential effects to natural and cultural resources. This analysis is shown below. Local transportation agencies work with the Washtenaw Water Resources Commissioner to deploy onsite stormwater management treatment into transportation construction projects when possible.

Project Type	Water Resources	Wetlands	Flood Prone Areas	Groundwater Resources	Woodlands	Parks and Rec Areas	Historic Sites	Cemeteries	Heritage Routes	Historic Bridges	Non-Motorized Facilities
Bridge	29	20	23	1	46	10	2	3	2	3	10
Congestion-Capacity	1	1	1	0	1	0	0	0	0	0	0
Congestion - Non-Capacity	0	0	0	0	0	0	0	0	0	0	0
Non Motorized	4	3	4	1	5	3	2	0	0	0	2
Pavement	134	123	73	20	175	46	23	17	9	4	39

TABLE 2



Deficiency Criteria

CONGESTION DEFICIENCIES

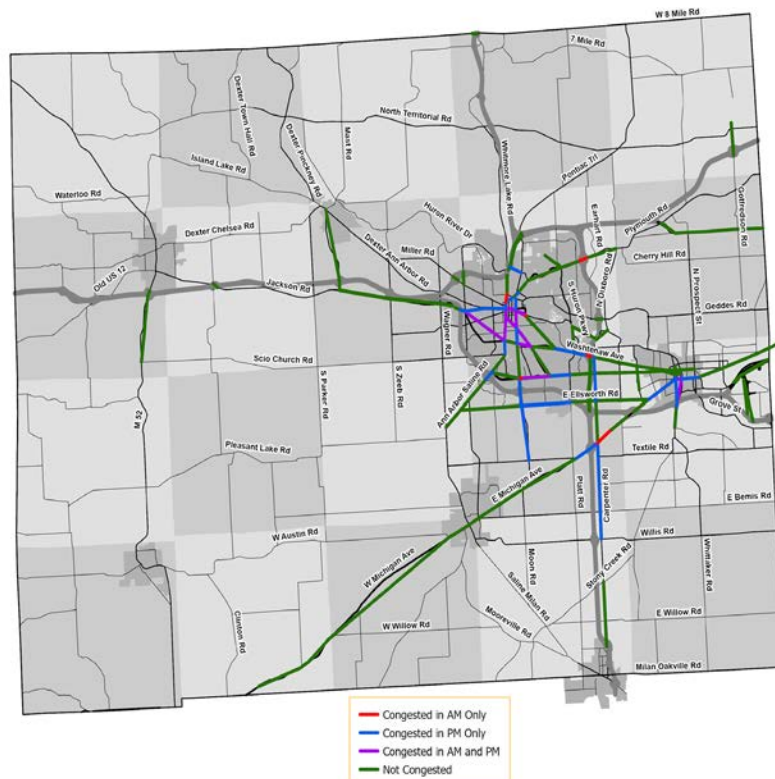
BACKGROUND: Congestion can limit the efficiency of previous roadway investments, delaying travelers, increasing the risk of vehicular crashes, and degrading regional air quality. As vehicle volume on a corridor increases, the number of people passing through a corridor grows, until a point where the road becomes saturated and reaches its highest capacity. Any additional vehicle volume decreases the person throughput of the roadway, referred to as the capacity cliff. However, with lower speeds, the risk of injury to vulnerable road users is reduced.

ARTERIAL CONGESTION: Arterial segments are considered congested when the average speed falls below 18 MPH for at least 15 minutes during the AM peak period (6:30AM - 9:30AM) or the PM peak period (3:30PM - 7:30PM) on at least 65 of 260 weekdays per year (25%).

PLANNING TIME INDEX: The planning time index represents how much total time a traveler should allow to ensure on-time arrival 95% of the time (Adequate 19 out of 20 Days). The planning time index compares near-worst case travel time to a travel time in light or free-flow traffic. For example, a planning time index of 1.60 means that, for a 15-minute trip in light traffic, the total time that should be planned for the trip is 24 minutes (15 minutes x 1.60 = 24 minutes).

TRAVEL TIME PREDICTABILITY: In addition to congestion, the predictability of travel times plays an important role in our transportation system. A trip that almost always takes 20 minutes would be considered reliable, whereas a similar trip that takes 20 minutes on certain days and 40 minutes on other days would be considered unreliable, regardless of the level of congestion.

MAP 7 - ARTERIAL ROAD CONGESTION MAP



Feature Projects



ALLEN CREEK BERM OPENING

Project Overview:

The Allen Creek Berm Project represents a significant advancement in Ann Arbor and the region's environmental and infrastructure strategy. With a budget of \$9.4 million, this project addresses crucial needs in stormwater management and flood protection.

Project Features:

Stormwater and Flood Mitigation: This initiative plays a pivotal role in enhancing the communities resilience against extreme weather events by improving stormwater handling and reducing flood risks.

Promotion of Non-Motorized Transportation: The project includes a newly constructed tunnel pedestrian pathway beneath the Amtrak railroad tracks, significantly improving safe passage for pedestrians and cyclists and promoting non-motorized transportation within the city.

Community Impact:

The Allen Creek Berm Project not only addresses environmental and safety concerns but also contributes to ongoing efforts to enhance urban mobility and accessibility. The addition of safe, non-motorized routes facilitates easier and safer travel for city residents, supporting the city's goals of increasing sustainable transportation options.

Achieving: Structurally Sufficient and Functionally Contemporary



Integrating Sustainable Modes of Transportation



Advancing Electric and Alternative Fuel Vehicles



Implementing Smart Urban Planning



Enhancing Infrastructure Resilience



Fostering Behavioral Change and Awareness

Whenever practicable projects should integrate sustainable transportation, like enhanced public transit, bike, and pedestrian paths, alongside resilient infrastructure capable of withstanding extreme weather, is essential. This approach reduces single-occupancy vehicle reliance and strengthens system resilience, supporting our climate and resilience goals.

Promoting electric and alternative fuel vehicles through expanded charging infrastructure can help reduce emissions. To address the climate crisis, public agencies should transition public fleets to electric options to further decrease our environmental footprint.

Land use and transportation planning need to be coordinated to promote transit-oriented development, mixed use development near transit hubs, promote trip-time predictability, and cut emissions. WATS will continue to work with local agencies to help coordinate land use and transportation discussion.

Technology and innovation, like real-time transit data and smart traffic systems, enhance transportation efficiency and sustainability, playing a key role in meeting our climate and resilience targets.

Educational campaigns that highlight the environmental impact of travel choices can spur shifts towards sustainable transportation habits, aligning with our climate ambitions.

Project List

This plan sets a policy target of spending **15%** of available federal funds on the environment.

15%



PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Huron Parkway	Plymouth to Washtenaw	Lane Conversion	2027 - 2030	\$2,000,000	Ann Arbor
W. Stadium Blvd	Huron to Main	Lane Conversion	2027 - 2030	\$4,000,000	Ann Arbor
Streetlight Capital Maintenance	Areawide	Operations	2027 - 2030	\$1,725,000	Ann Arbor
Streetlights: Liberty Corridor (Scio Ridge to Maple)	Liberty Corridor (Scio Ridge to Maple)	Operations	2027 - 2030	\$195,000	Ann Arbor
M-153 E	at Plymouth Road	Proposed Widening	2027 - 2030	\$1,561,940	MDOT
I-94	Ann Arbor/Saline Road to US-23; US-23/I-94 interchange	Proposed Widening	2027 - 2030	\$36,985,304	MDOT
N. Territorial Rd.	at Curtis Rd.	Operations	2027 - 2030	\$1,000,000	WCRC
State Road	Morgan Rd to Ellsworth Rd	Operations	2031 - 2040	\$15,000,000	WCRC
State Road	Textile Rd to Morgan Rd	Operations	2031 - 2040	\$16,000,000	WCRC
State Road	US-12 to Textile Rd	Operations	2041 - 2050	\$12,000,000	WCRC

NOTES

Protecting the environment requires action from governmental agencies, private companies and consumers/citizens. As new technologies emerge, the economy rebounds, development pressures mount, and an aged infrastructure demands reconstruction, we have the opportunity for better integration between transportation and land use. Complete-Streets, Green-Streets, Intelligent Transportation Systems (ITS), and transit service (including the emergence of autonomous vehicles and ride-share programs) all have potential to reduce the impacts of travel on the environment, but must be integrated system-wide and in concert with land use planning.

CMAQ and CRP funding remains the only specifically environmentally targeted funding opportunity. However, holistic environmental stewardship must be at the center of all infrastructure investment decisions to offer a compelling alternative to unsustainable practices.

Non-Motorized

Non-Motorized

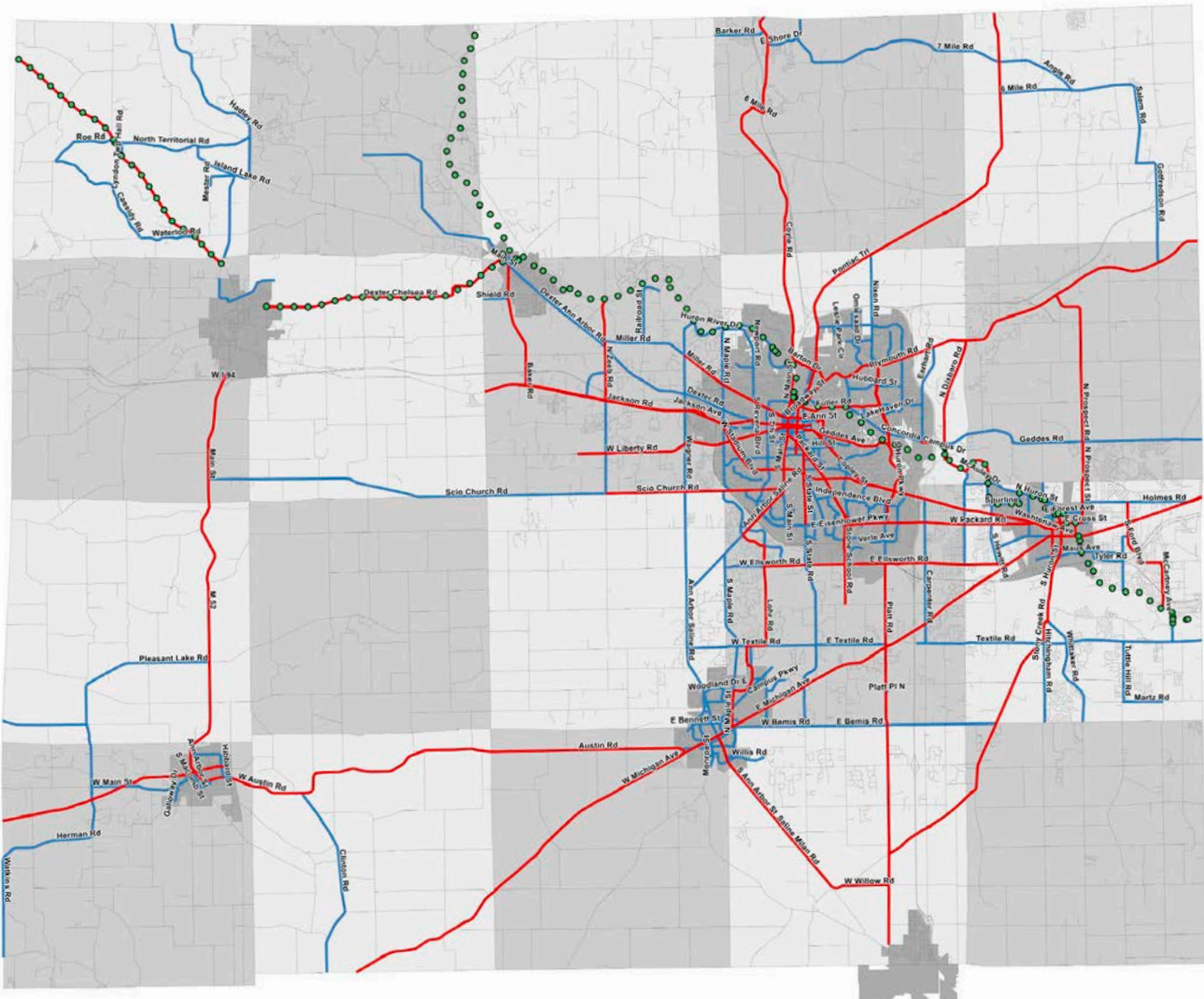
BACKGROUND

All trips, whether by car, foot, bike, bus, or mobility device begin and end as non-motorized trips, and depend on quality, connected non-motorized infrastructure to reach destinations. WATS believes that expanding mode choice options through a context sensitive expansion of the non-motorized system will improve the quality of life of all Washtenaw County residents.

By unifying planning efforts around the county, identifying priority corridors and establishing timely implementation strategies, WATS seeks to facilitate the creation of a safe and equitable, universally accessible regional active transportation system. MAP 8 depicts these unified

Deficiency Criteria

MAP 9 - PRIMARY AND LOCALLY IDENTIFIED ROUTES



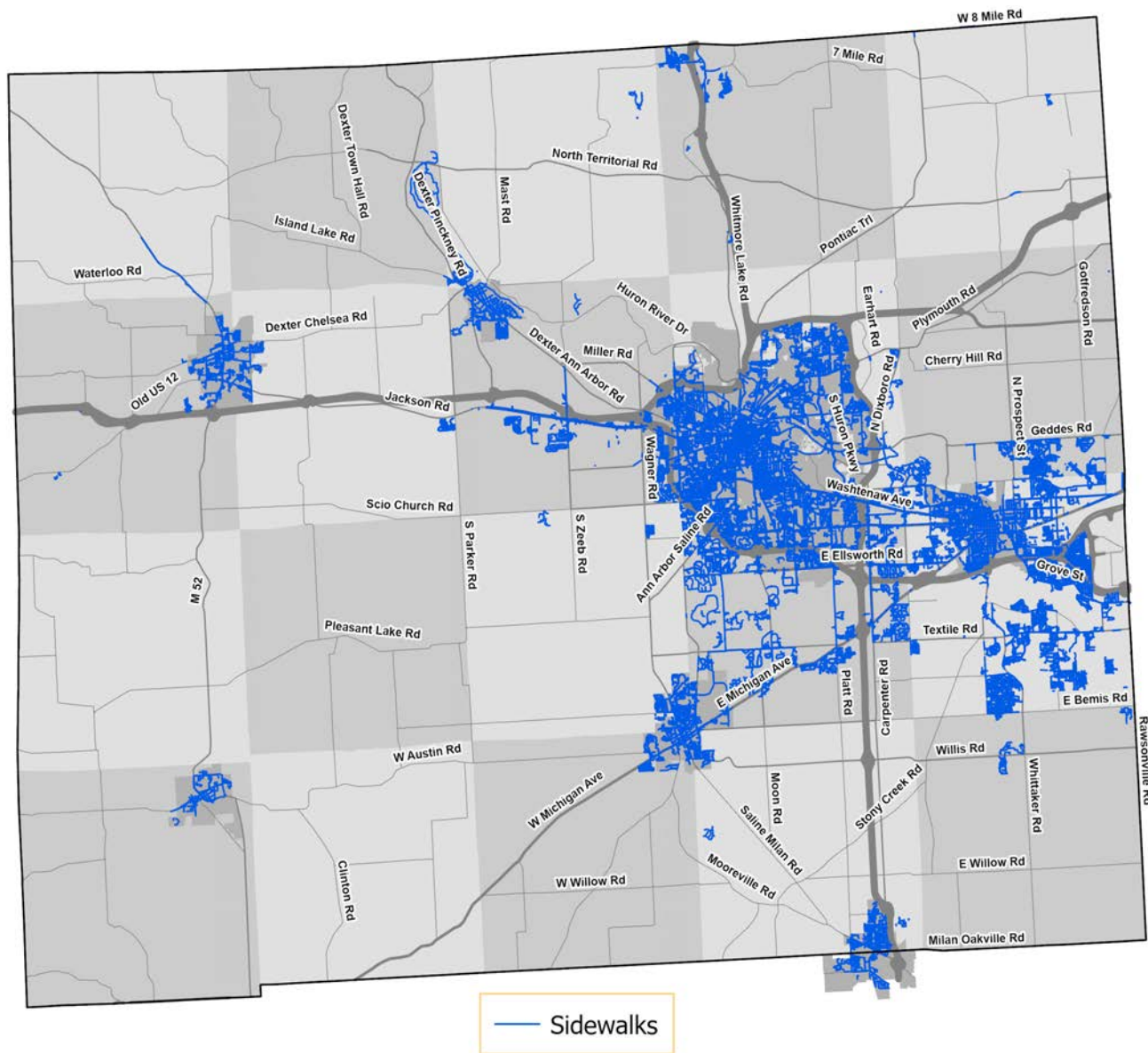
The map above shows primary and local identified routes for non-motorized transportation.

As society and infrastructure developed towards a more automobile-focused transportation system, people and businesses were able to reach further away from the central downtown areas. The ability to walk and bike to destinations became more challenging as the transportation system was increasingly designed to move more cars quickly.

Creating a connected system, including potential connections in rural communities, where desired can help increase accessibility areas for all users.

Deficiency Criteria

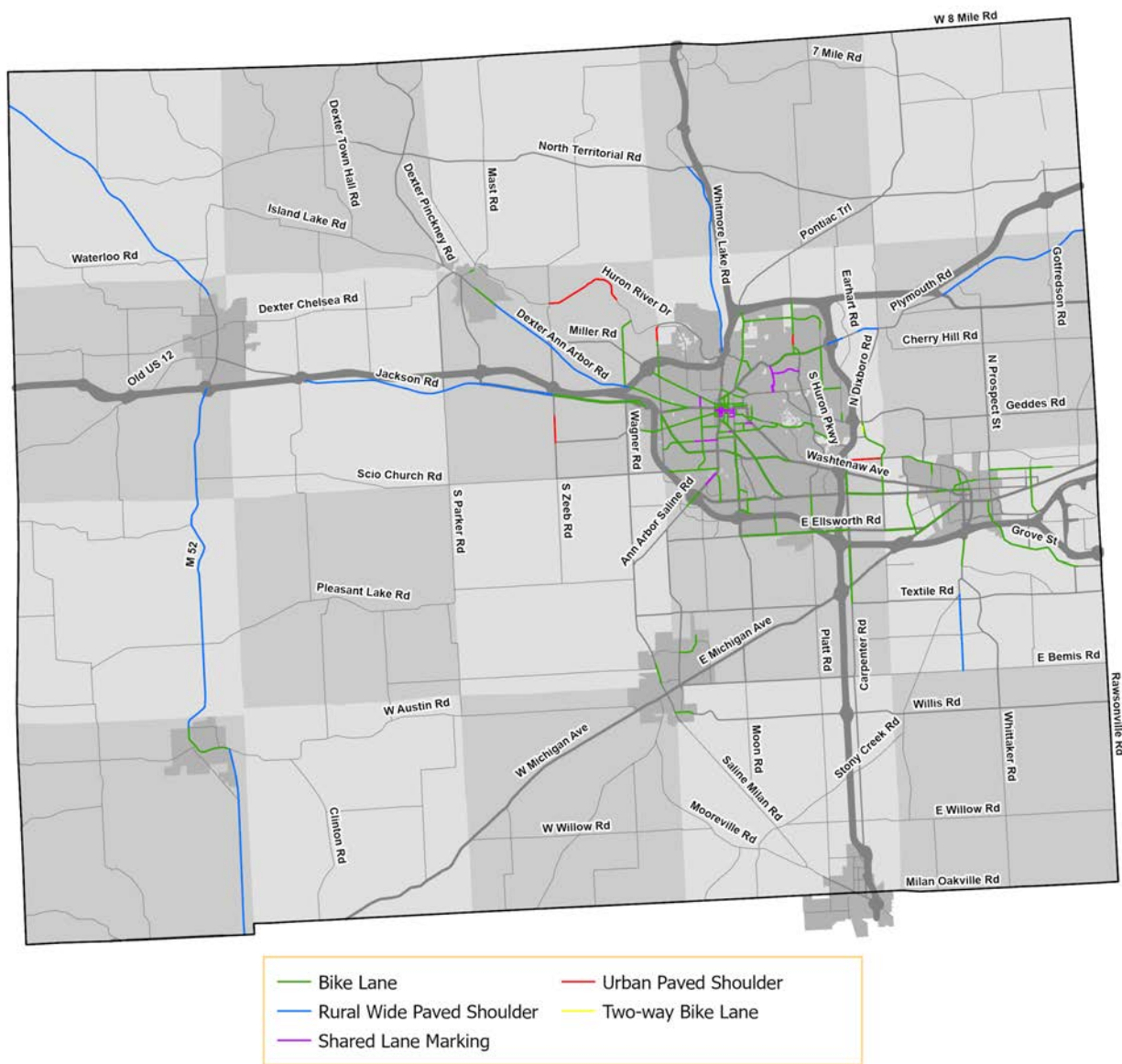
MAP 10 - URBAN PEDESTRIAN FACILITY



MAP 10 shows the presence of pedestrian facilities in Washtenaw County (including local roads). Federal Aid road segments are considered deficient where there is no sidewalk or shared use path in the urban area. This map is meant as a high-level review of the presence of pedestrian facilities, and does not account for the context of each road segment. For example, road segments with pedestrian facilities on only one side may, in practice, be contextually appropriate for the level and pattern of pedestrian activity in those areas. Physically separating bicycles from automobiles improves safety for pedestrians.

Deficiency Criteria

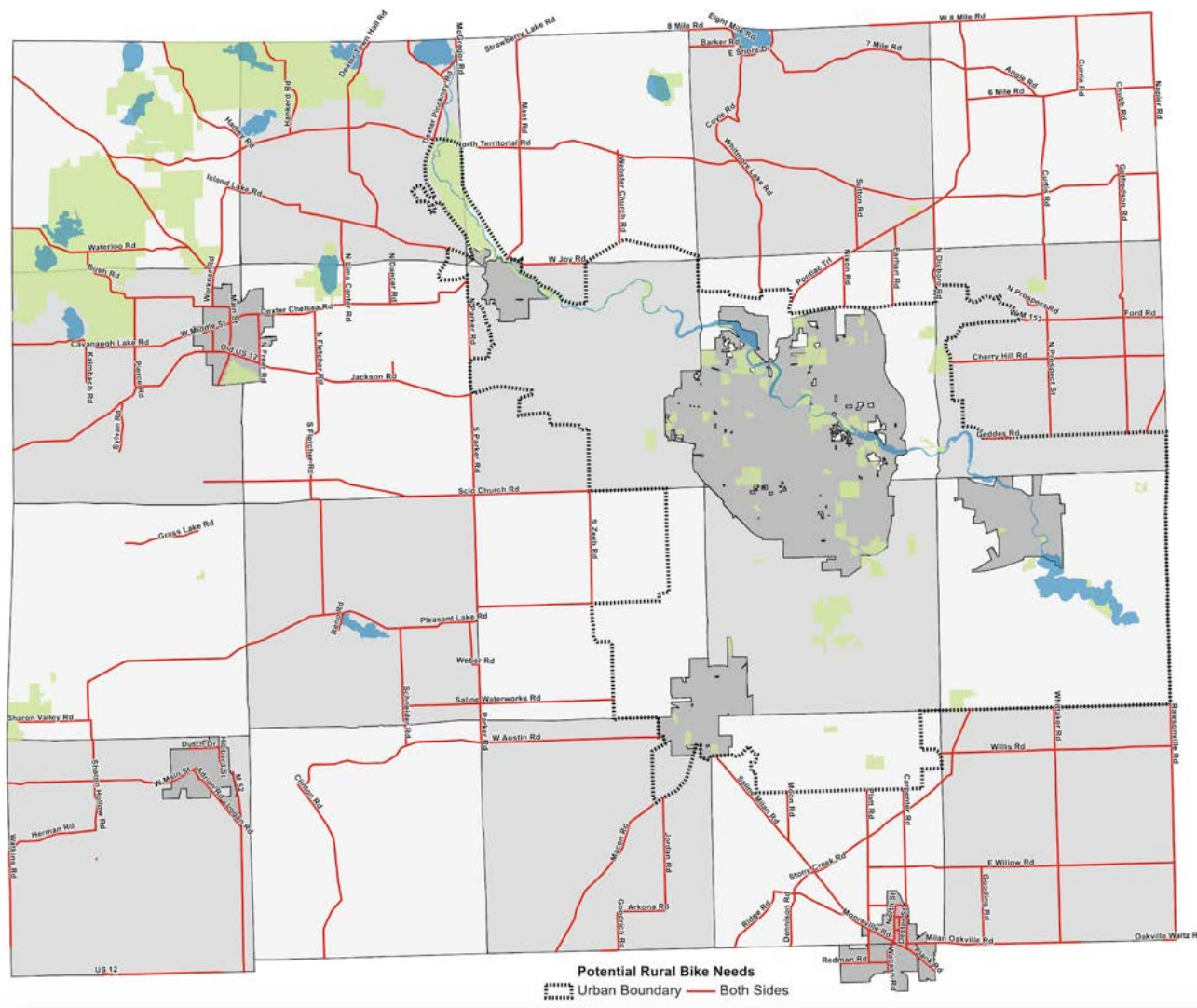
MAP 11 - URBAN BIKE FACILITY



MAP 11 highlights bicycle facilities in Washtenaw County. Federal aid road segments are considered deficient where there is no bike lane, shared use path, sharrow, or wide shoulder. This map is meant as a high level review of the presence of bike facilities and does account for the context of each road segment. When projects are engineered, evaluating the amount of vehicle traffic, bike traffic, and land use of the adjoining areas should be noted. Physically separating bicycles from automobiles improves safety for bicyclist.

Deficiency Criteria

MAP 12 - POTENTIAL RURAL BIKE FACILITY NEEDS



MAP 12 highlights road segments without bike facilities in rural Washtenaw County. Rural Federal Aid road segments could be deficient where there is no shared use path, or wide shoulders available. In the rural area, the various types of users for the facilities should be considered when evaluating improvements. Many touring and competitive cyclists use the County's rural roads and have different expectations for facilities compared to commuters or casual bikers. These touring cyclists may only expect a well-maintained surface on roads with low vehicle traffic, while casual cyclists prefer trails. WATS includes prioritization for facilities in the rural area on **MAP 9, PRIMARY AND LOCALLY IDENTIFIED ROUTES**.

Feature Project



FIRST & ASHLEY STREET TWO-WAY BIKE WAY

Completed in the Fall of 2021, the First & Ashley Street project included the restoration of two-way traffic on both streets, a two-way protected bikeway on the east side of First Street, streetscape and sidewalk improvements, a pedestrian plaza (pictured below), water main upsizing and consolidations, stormwater improvements, and street resurfacing. The project limits extended from Kingsley to Madison. The protected bikeway on First Street connects with the William Street bikeway on the south and the Miller/Catherine bikeway on the north. An advisory bike lane serves cyclists on First Street north of William Street.

Achieving: A Complete, Connected, and Safe System for All Users

Communities can maximize their impact by focusing on strategic projects that promote non-motorized connectivity. Prioritizing projects that serve multiple purposes and connect high-use areas like schools, parks, and business districts can create a network that encourages more people to walk or bike. By using existing infrastructure, like repurposing old railways or converting wide road shoulders into bike lanes, communities can reduce costs while enhancing safety and accessibility. Collaboration with local businesses and community organizations can also provide additional resources and support, ensuring the projects align with residents' needs and priorities. Ensuring physical separation between modes is the best way to achieve a safe system for all users.

Communities can also leverage low-cost solutions to create immediate improvements. Initiatives such as "pop-up" bike lanes, temporary pedestrian zones, and improved crosswalk visibility can increase non-motorized connectivity with minimal expense. These projects can serve as pilot tests for longer-term investments, allowing communities to gauge interest and collect feedback. By focusing on cost-effective, quick-win solutions, communities can build momentum and demonstrate the benefits of non-motorized connectivity, which can then help secure additional funding for larger projects and more comprehensive infrastructure development.



Project List

This plan sets a policy target of spending **10%** of available federal funds on non-motorized activities.

10%



PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Accessible Pedestrian Signals	Areawide	Non-Motorized	2027 - 2030	\$150,000	Ann Arbor
All Ages and Abilities Bike Network Signage	City-Wide	Non-Motorized	2027 - 2030	\$400,000	Ann Arbor
All Ages and Abilities Bike Network Routes	City-Wide	Non-Motorized	2027 - 2030	\$1,623,000	Ann Arbor
Annual Sidewalk Gap Filling Calendar 2027-2030	City-Wide	Non-Motorized	2027 - 2030	\$1,100,000	Ann Arbor
Annual Sidewalk Repair and Curb Ramp Program Calendar 2026-2030	City-Wide	Non-Motorized	2027 - 2030	\$4,064,000	Ann Arbor
Arboretum/Gallup Underpass	Arboretum/ Gallup Underpass	Non-Motorized	2027 - 2030	\$4,400,000	Ann Arbor
Asphalt Sidewalk Repairs Calendar 2026-2030	City-Wide	Non-Motorized	2027 - 2030	\$1,200,000	Ann Arbor
Barton Drive (M-14 to Brede) Sidewalk Gap	Barton Drive (M-14 to Brede) Sidewalk	Non-Motorized	2027 - 2030	\$213,000	Ann Arbor
Bicycle Parking Program	City Wide	Non-Motorized	2027 - 2030	\$357,000	Ann Arbor
Border to Border Trail: Fuller/Maiden Ln	Border to Border Trail: Fuller/Maiden Ln	Non-Motorized	2027 - 2030	\$1,220,000	Ann Arbor

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Brockman & Crestland (Packard to Ferdon) Sidewalk Gaps	Brockman & Crestland (Packard to Ferdon) Sidewalk	Non-Motorized	2027 - 2030	\$225,000	Ann Arbor
Crosswalk Improvements	City Wide	Non-Motorized	2027 - 2030	\$750,000	Ann Arbor
Fuller Ct Sidewalk	2100 Fuller Ct	Non-Motorized	2027 - 2030	\$250,000	Ann Arbor
Main St (Huron to M-14) Active Transportation Improvements	Main St (Huron to M-14)	Non-Motorized	2027 - 2030	\$4,000,000	Ann Arbor
Miller-Catherine Bikeway Extension (Division to U-M Campus)	Miller-Catherine Bikeway (Division to U-M Campus)	Non-Motorized	2027 - 2030	\$320,000	Ann Arbor
Miller-Catherine Bikeway Extension (Maple to M-14 park and ride)	Miller-Catherine Bikeway (Maple to M-14 park and ride)	Non-Motorized	2027 - 2030	\$300,000	Ann Arbor
Non-Motorized Connection under E Medical Center Dr Along S Side of Fuller	E Medical Center Dr Along S Side of Fuller	Non-Motorized	2027 - 2030	\$403,000	Ann Arbor
Oakwood Sidewalks	Oakwood Sidewalks	Non-Motorized	2027 - 2030	\$670,000	Ann Arbor
Sunset/Wildt Sidewalk Gap	Sunset/Wildt Sidewalk	Non-Motorized	2027 - 2030	\$326,000	Ann Arbor
Traver Road (Barton to John A Woods) Sidewalk	Traver Road (Barton to John A Woods)	Non-Motorized	2027 - 2030	\$520,000	Ann Arbor
Gallup Park Road, Border-to-Border Trail and Parking Improvements	Gallup Park Road	Non-Motorized	2027 - 2030	\$7,000,000	Ann Arbor
Sidewalk Gap filling	City Wide	Non-Motorized	2027-2030	-	Chelsea
Freer Road Path	Chelsea Senior Center to Peirce Lake Elementry	Non-Motorized	2027-2030	-	Chelsea
Mill Creek Path Phase III	Baker to Shield	Non-Motorized	2027 - 2030	\$1,000,000	Dexter
Maple Road Sidewalk	Railroad to Thibault	Non-Motorized	2027 - 2030	\$185,000	Saline
West US-12 Sidewalk Project	Mill Pond Park to Austin Rd	Non-Motorized	2027 - 2030	\$607,000	Saline
Mill Pond Park Non-Motorized Path	Mill Pond Park to Rail Road Crossing	Non-Motorized	2027 - 2030	\$326,000	Saline

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Saline Waterworks Non-Motorized Path	Rail Road Crossing to Woodland Drive	Non-Motorized	2027 - 2030	\$1,519,000	Saline
N Maple Road Sidewalk	N Maplewood Drive To S Maplewood Drive	Non-Motorized	2027 - 2030	\$252,000	Saline
All Ages and Abilities Bike Network Signage	City-Wide	Non-Motorized	2031 - 2040	\$1,000,000	Ann Arbor
Annual Sidewalk Gap Filling Calendar 2030-2040	City-Wide	Non-Motorized	2031 - 2040	\$4,000,000	Ann Arbor
Annual Sidewalk Repair and Curb Ramp Program Calendar 2030 - 2040	City-Wide	Non-Motorized	2031 - 2040	\$10,151,000	Ann Arbor
Asphalt Sidewalk Repairs Calendar 2030 - 2040	City-Wide	Non-Motorized	2031 - 2040	\$3,000,000	Ann Arbor
Border to Border Trail: Fuller/Maiden Ln	Border to Border Trail: Fuller/Maiden Ln	Non-Motorized	2031 - 2040	\$530,000	Ann Arbor
Geddes Road Sidewalk	Huron Pkwy to Earhart	Non-Motorized	2031 - 2040	\$5,800,000	Ann Arbor
Huron River Drive (East) Sidewalk	Huron River Drive (East) Sidewalk	Non-Motorized	2031 - 2040	\$3,400,000	Ann Arbor
Traver Rd (John A Woods to Moore) Sidewalks	Traver Rd (John A Woods to Moore) Sidewalks	Non-Motorized	2031 - 2040	\$1,500,000	Ann Arbor
Traver Road (Placid Way to Hideaway Lane) Sidewalk	Traver Road (Placid Way to Hideaway Lane)	Non-Motorized	2031 - 2040	\$1,700,000	Ann Arbor
Treeline Urban Trail		Trail	2031 - 2040	\$75,000,000	Ann Arbor
Woodland Drive Non-Motorized Path	Thibault Lane to N Maple Road	Non-Motorized	2031 - 2040	\$3,089,000	Saline
People's Park Non-Motorized Path	Monroe Street To S Ann Arbor Street	Non-Motorized	2031 - 2040	\$817,000	Saline
East Curtis Park Non-Motorized Path	W Michigan Avenue To Monroe Street	Non-Motorized	2031 - 2040	\$1,021,000	Saline
West Curtis Park Non-Motorized Path	W Michigan Avenue To Curtis Park	Non-Motorized	2031 - 2040	\$697,000	Saline
Salt Springs	Saline Sewage Plant To Saline Milan Road	Non-Motorized	2031 - 2040	\$1,969,000	Saline

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
E Michigan Avenue Sidewalk	W Faurecia Plant Drive To E Faurecia Plant Drive	Non-Motorized	2031 - 2040	\$710,000	Saline
Stonecliff Park Sidewalk	Saline River Drive To Saline River	Non-Motorized	2031 - 2040	\$1,165,000	Saline
All Ages and Abilities Bike Network Signage	City-Wide	Non-Motorized	2041 - 2050	\$1,000,000	Ann Arbor
Annual Sidewalk Gap Filling Calendar 2040 - 2050	City-Wide	Non-Motorized	2041 - 2050	\$4,000,000	Ann Arbor
Annual Sidewalk Repair and Curb Ramp Program Calendar 2040 - 2050	City-Wide	Non-Motorized Non-Motorized	2041 - 2050	\$10,151,000	Ann Arbor
Asphalt Sidewalk Repairs Calendar 2040 - 2050	City-Wide	Non-Motorized	2041 - 2050	\$3,000,000	Ann Arbor
Thibault Lane Non-Motorized Path	Ann Arbor-Saline Road To Maple Road	Non-Motorized	2041 - 2050	\$1,972,000	Saline
Thibault Lane Non-Motorized Path	Woodland Drive To Thibault Lane	Non-Motorized	2041 - 2050	\$1,412,000	Saline

Transit



BACKGROUND

Washtenaw County is served by a combination of transit service providers, with various levels of service and service areas. The urban core is served by the Ann Arbor Area Transportation Authority, while rural parts of the county are served by a mix of small public and private transit services. Public support for AAATA's plan, [TheRide 2045](#), has been made evident by the recent passage of the mileage resulting in new and increased services: Ann Arbor-Ypsilanti express route, increased frequency of service, longer hours of services, and expanded overnight service. Rural providers are finding new ways to serve their communities (door-to-door service, electric vehicle transition and food pantry).

TheRide 2045: www.theride.org/about/projects/theride-2045

Transit Coordination

REGIONAL COORDINATED HURON SERVICES PUBLIC TRANSIT PLAN

The demand for public transportation and services for riders with special needs has risen in Washtenaw County and much of Michigan, and is likely to keep increasing. This trend is due to factors like longer, more independent lives, the Americans with Disabilities Act (ADA) empowering those with disabilities, and stricter work requirements for welfare recipients. Yet, accessing reliable and affordable transportation remains a challenge for many, especially in rural Washtenaw County, impacting employment, health care, and other vital services. To address this, the Regional Transportation Authority (RTA) developed OnHand, a plan for better transportation coordination in Southeast Michigan. The initiative aims to improve access for seniors, people with disabilities, and low-income individuals. Through technical analysis, stakeholder engagement, and surveys, the plan suggests regionalizing the management of the Section 5310 program, enhancing cooperation among transportation providers, and standardizing ADA programs and policies across the region to ensure consistent services and training.

STRATEGIES IDENTIFIED IN THE COORDINATED PLAN

Based on review of public and stakeholder input, the plan strategies seek to frame activities that will improve the mobility of seniors, people with disabilities, and those with low income.

The identified strategies equally important and of equal priority.

- Increase local and regional mobility
- Improve coordination among providers
- Increase awareness of existing services
- Streamline funding and reporting
- Develop partnerships for supportive physical infrastructure

Transit Deficiencies

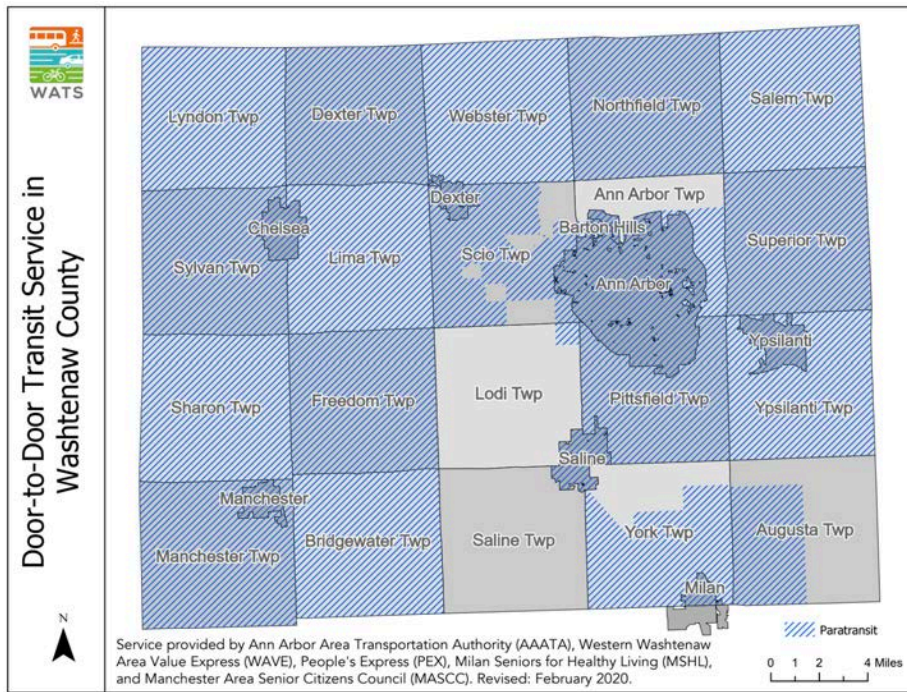
TRANSIT DEFICIENCIES

Transit is a significant factor in Washtenaw County's continual efforts to become a more livable and sustainable community. In the Urban Area, fixed route transit is a critical component of the transportation system, with tens of thousands of trips taken daily. These trips provide options for choice riders, those unable to drive, and help bridge gaps between affordable housing and employment. County-wide, Door-to-Door transit service addresses the needs of those unable to drive or use traditional fixed route transit. These services connect people to medical appointments, jobs, family, and daily errands. In rural areas, these services are even more important, with distance potentially isolating those unable to drive.

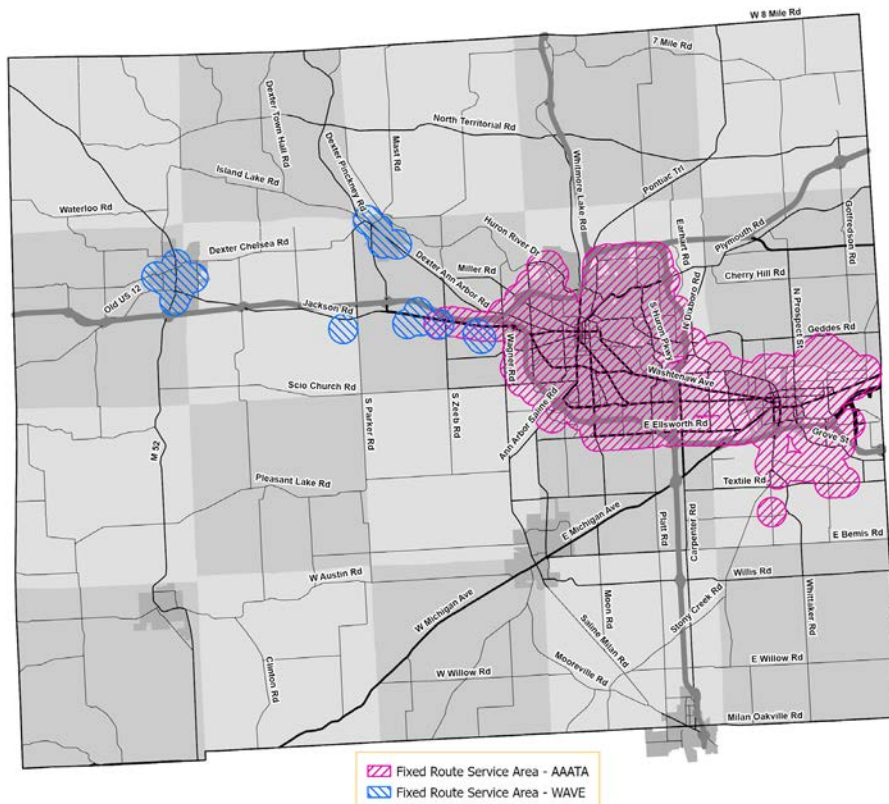
The following maps show areas that are covered by transit service. In the urban area, any area not covered by fixed route service or door-to-door service is considered deficient. In the rural areas, only areas not covered by door-to-door service are considered deficient.

Transit Services Areas

MAP 13 - DOOR-TO-DOOR TRANSIT SERVICE



MAP 14 - URBAN FIXED ROUTE TRANSIT SERVICE



Feature Project



SMALL AND RURAL TRANSIT PROVIDERS

Rural transit plays a pivotal role in enhancing the quality of life in less densely populated areas by providing critical connectivity and accessibility. For many rural residents, particularly the elderly, those with disabilities, and lower-income families, public transportation services are vital for accessing healthcare, education, employment, and other essential services. Without reliable rural transit options, these populations can become isolated, increasing the risk of poverty and limiting personal independence.

- People's Express was awarded funding (\$336,786) to replace five lift equipped transit vehicles.
- The Western Washtenaw Area Value Express was awarded funding (\$186,841) for one 32-foot bus.

Transit Funding

NOTES

WATS continues to focus on diversifying mode-share, and enhancing the transportation network in low opportunity and environmental justice areas. While transit agencies are eligible for CMAQ funding, Surface Transportation Block Grant (STBG) funding, and Transportation Alternatives Program funding, the primary federal source of transit funds is the Federal Transit Administration (FTA). In Washtenaw County, the majority of those funds are given to the direct recipient, TheRide. TheRide undergoes its own long range planning process with oversight and approval by its Board. Transit specific funds are included and approved as part of the Transportation Improvement Program. Given the differences in how those funds are administered, WATS is providing the total Long Range Plan funding for those projects as information, but not as a target.

Capital - 52% (\$704,019,130)

Operations - 48% (\$649,185,281)

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Blake Transit Center Expansion	Ann Arbor	Transit	2027 - 2030	\$4,230,678	AAATA
Bus Maintenance and Storage Facility	AAATA Service Area	Transit	2027 - 2030	\$62,217,462	AAATA
Bus Rapid Transit	AAATA Service Area	Transit	2027 - 2030	\$37,492,529	AAATA
Bus Stops	AAATA Service Area	Transit	2027 - 2030	\$1,240,000	AAATA
Fleet Expansion	AAATA Service Area	Transit	2027 - 2030	\$9,204,620	AAATA
State of Good Repair (Facilities and Technologies)	AAATA Service Area	Transit	2027 - 2030	\$10,760,000	AAATA
State of Good Repair (Fleet Replacement)	AAATA Service Area	Transit	2027 - 2030	\$35,406,750	AAATA
Transit Hubs	AAATA Service Area	Transit	2027 - 2030	\$2,369,000	AAATA
Transit Priorities	AAATA Service Area	Transit	2027 - 2030	\$6,030,000	AAATA
Transit Service Expansion and Enhancement	AAATA Service Area	Transit	2027 - 2030	\$49,831,908	AAATA
Transit Technologies	AAATA Service Area	Transit	2027 - 2030	\$6,396,300	AAATA
Ypsilanti Transit Center Reconstruction	Ypsilanti	Transit	2027 - 2030	\$13,926,806	AAATA
Accounting Software upgrades	PEX Service Area	Transit	2027 - 2030	\$375,000	PEX
EV Grant for Vehicles and Charging Stations	PEX Service Area	Transit	2027 - 2030	\$600,000	PEX

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Maintenance software upgrades	AAATA Service Area	Transit	2027 - 2030	\$275,000	PEX
Multimodal Rural Transportation Hub for SE MI	PEX Service Area	Transit	2027 - 2030	\$13,201,644	PEX
Scheduling and Dispatching Software upgrades	PEX Service Area	Transit	2027 - 2030	\$465,000	PEX
Transit Operations	WAVE Service Area	Transit	2027 - 2030		WAVE
Replacement Vehicles	WAVE Service Area	Transit	2027 - 2030		WAVE
Chelsea-Ann Arbor Express Expansion	WAVE Service Area	Transit	2027 - 2030		WAVE
Office Equipment and Software	WAVE Service Area	Transit	2027 - 2030		WAVE
New building, bus stop Shelters, Benches, and Signage	WAVE Service Area	Transit	2027 - 2030		WAVE
Bus Maintenance and Storage Facility	AAATA Service Area	Transit	2031 - 2040	\$12,060,000	AAATA
Bus Rapid Transit	AAATA Service Area	Transit	2031 - 2040	\$99,975,005	AAATA
Bus Stops	AAATA Service Area	Transit	2031 - 2040	\$2,215,714	AAATA
Fleet Expansion	AAATA Service Area	Transit	2031 - 2040	\$25,317,571	AAATA
State of Good Repair (Facilities and Technologies)	AAATA Service Area	Transit	2031 - 2040	\$58,470,000	AAATA
State of Good Repair (Fleet Replacement)	AAATA Service Area	Transit	2031 - 2040	\$76,045,547	AAATA
Transit Hubs	AAATA Service Area	Transit	2031 - 2040	\$6,081,142	AAATA
Transit Priorities	AAATA Service Area	Transit	2031 - 2040	\$9,202,858	AAATA
Transit Service Expansion and Enhancement	AAATA Service Area	Transit	2031 - 2040	\$253,231,619	AAATA
Transit Technologies	AAATA Service Area	Transit	2031 - 2040	\$7,861,572	AAATA
Ann Arbor Train Station	Ann Arbor	Rail	2031 - 2040	\$100,000,000	Ann Arbor
Expansion Bus requirements in the next seven years (7)	PEX Service Area	Transit	2031 - 2040	\$720,000	PEX

Project List

PROJECT	LOCATION	PROPOSED WORK	YEAR	TOTAL COST	AGENCY
Expansion Mini Van requirements in the next ten years (10)	PEX Service Area	Transit	2031 - 2040	\$900,000	PEX
Expansion Transit requirements in the next ten years (10)	PEX Service Area	Transit	2031 - 2040	\$1,150,000	PEX
Property grant - sharing with the WAVE	PEX Service Area	Transit	2031 - 2040	\$37,500	PEX
Transit Operations	WAVE Service Area	Transit	2031 - 2040		WAVE
Replacement Vehicles	WAVE Service Area	Transit	2031 - 2040		WAVE
Maintenance Garage Upgrade	WAVE Service Area	Transit	2031 - 2040		WAVE
Bus Rapid Transit	AAATA Service Area	Transit	2041 - 2050	\$28,571,429	AAATA
Bus Stops	AAATA Service Area	Transit	2041 - 2050	714,286	AAATA
Fleet Expansion	AAATA Service Area	Transit	2041 - 2050	11,061,429	AAATA
State of Good Repair (Facilities and Technologies)	AAATA Service Area	Transit	2041 - 2050	72,000,000	AAATA
State of Good Repair (Fleet Replacement)	AAATA Service Area	Transit	2041 - 2050	78,872,859	AAATA
Transit Hubs	AAATA Service Area	Transit	2041 - 2050	1,642,857	AAATA
Transit Priorities	AAATA Service Area	Transit	2041 - 2050	2,857,143	AAATA
Transit Service Expansion and Enhancement	AAATA Service Area	Transit	2041 - 2050	346,121,754	AAATA
Transit Technologies	AAATA Service Area	Transit	2041 - 2050	4,071,429	AAATA
Transit Operations	WAVE Service Area	Transit	2041 - 2050		WAVE
Replacement Vehicles	WAVE Service Area	Transit	2041 - 2050		WAVE

Regional Priorities

Regional Priorities

EQUITY

Washtenaw County provides a high quality of life to its residents with a healthy, thriving populace. Key prosperity markers are on the rise, including: wealth, median incomes, housing prices, educational attainment, and job growth. However, looking more closely, opportunity indicators are not equitably distributed. While significant portions of the county are thriving, other parts are struggling - specifically communities of color.

WATS can help correct the transportation decisions that have separated, underserved or otherwise negatively altered communities. WATS evaluates investments in low opportunity areas and reports these findings with TIP amendments. Low opportunity area investments, to be effective, must include the needs identified by local communities and their residents. The Policy Committee may wish to designate a portion of WATS federal funds be spent in low opportunity areas to encourage projects identified by these communities.



Regional Priorities



BORDER TO BORDER (B2B) TRAIL

The Border to Border trail (B2B Trail) forms the backbone of the regional non-motorized system in Washtenaw County. The B2B Trail is also part of the State of Michigan's Iron Belle Trail connecting Detroit and Ironwood (in the Upper Peninsula) expanding the trail's significance and reach regionally. When completed regionally, there will be more than 100 mile connected trail spanning from Lake Erie Metropark to the City of Jackson. Within Washtenaw County, the total planned trail spans 52 miles (39 miles are complete/under construction) and connects 13 communities numerous parks, universities and colleges, hospitals, job centers, and downtown areas. The project will also link to the planned Treeline in Ann Arbor, a separated trail that will provide a needed recreational link between Ann Arbor's Downtown and neighborhoods.

Goals of the Border to Border Trail include

- Completion of 35 miles of the Huron River Greenway - a paved shared-use pathway connecting Ypsilanti, Ann Arbor, and Dexter along the Huron River
- Completion of 27 miles of the Huron Waterloo Pathway - a paved shared use path connecting Dexter, Chelsea, Stockbridge, the Lakelands Trail, and Pinckney in a "Loop"
- Provide opportunities for transportation, recreation, river access, and links to neighboring counties
- To the maximum extent possible, route the trail away from roads to create a safe a fun experience for a wide range of users
- Improve local connectivity to the B2B Trail by supporting local projects of various types of non-motorized infrastructure such as: The Treeline, Mill Creek Park Pathway, Matthaei Botanical Gardens Trail, and the Zeeb Road Pathway

WATS has supported the project through participation in multiple committees that identify and prioritize trail improvements and expansions. WATS funded portions of the trail through STBG funds and has signed several letters of support for federal TAP funds.

Regional Priorities



CITY OF YPSILANTI BRIDGES

The Cross Street Bridge over the Huron River is the entry point to the historic Depot Town commercial district, Ypsilanti's primary dining and nightlife destination. It becomes the centerpoint of street fairs such as Cruise Nights, providing excellent views of and access to the Frog Island and Riverside Parks both upstream and downstream, and overlooks the Tridge, an important connector of the Border to Border/ Iron Belle Trail. The bridge serves (around 10,000) vehicles per day, including local freight traffic, as well as significant amounts of local pedestrian and both local and regional bike traffic. It has poor condition and is tentatively planned for a deck replacement and pier rehabilitation in 2026. The City has secured slightly more than \$3.2 million for this work of an anticipated \$6m total cost.

The Prospect Street bridge over MDOT's railway is a critical north-south connector in Ypsilanti. Prospect provides a "straight shot" connection to M-14 from Michigan Avenue (US12), critical to logistics businesses/ employers in the area such as R&L Carriers and users of Willow Run Airport. This bridge has a condition of Poor and the City is exploring extensive rehabilitation, expected to cost north of \$6 million. No funding has yet been secured.

Regional Priorities



YPSILANTI TRANSIT CENTER

The new Ypsilanti Transit Center (YTC), which is a part of TheRide's Long-Range Plan, focuses on serving a growing greater Ann Arbor-Ypsilanti area. The proposed new transit center in Ypsilanti would address needs for the growing community including a larger building, more efficient internal and external layout, additional amenities, security enhancements and a greater number of bus bay spaces.

Issues facing the existing transit center:

- The increased number of routes delivering more riders than ever before has increased the pressure on the YTC facility
- The YTC appears to have reached its limits in terms of the physical space needed to support operations and customer needs

TheRide has received funding for implementation of the new YTC and is currently seeking public feedback.

Regional Priorities



NON-MOTORIZED SYSTEM GAPS

Despite improvements in non-motorized infrastructure, highway interchanges, bridges, and major corridors often remain challenging and uncrossable barriers. Many facilities were initially designed with minimal expected pedestrian traffic, but as the surrounding community developed, the need for non-motorized travel increased.

Some of the challenges that impede filling these non-motorized system gaps:

- Limited funding
- Limited right of way
- Areas with the most extensive needs are often the least able to afford new infrastructure
- Existing bridges without non-motorized infrastructure may have decades of remaining service life, and there are few options to expand the bridge to accommodate non-motorized travel

Regional Priorities



NORTH MAIN AND TRUNKLINE TRANSFER DISCUSSION

North Main Street between Huron and M-14 in the City of Ann Arbor is a state-owned trunkline road which, over the course of its 1.25 mile length transitions from a highway on/off ramp to a downtown cross-section. MDOT currently plans to improve this corridor in 2021, however, the project budget does not provide for any improvements outside the existing roadway.

Issues affecting the corridor:

- Limited right of way
- Directional peak periods of congestion
- A barrier to Border to Border and Treeline connectivity
- Potential growth around Ann Arbor City owned 721 N. Main property
- Lack of adequate non-motorized crossings
- Gaps in both bicycle and pedestrian facilities

In December 2023, a feasibility study was conducted to analyze the potential impacts of transferring the ownership of this road, as well as Jackson, Huron, and Washtenaw from MDOT to the City of Ann Arbor. A transfer of ownership would allow the City of Ann Arbor greater flexibility for road design and user experience. Other communities with state owned roads can also research this possibility.

Regional Priorities



REIMAGINE WASHTENAW

The ReImagine Washtenaw initiative is a multi-jurisdictional program to transform a nearly five-mile stretch of Washtenaw Avenue (M-17) between Stadium Blvd in Ann Arbor and Summit Street in Ypsilanti. This is the primary arterial that connects the Ypsilanti and Ann Arbor communities, and traverses Ypsilanti and Pittsfield Townships, as well. The Michigan Department of Transportation owns Washtenaw Avenue (M-17), and is intersected with roads owned by the City of Ann Arbor, City of Ypsilanti and Washtenaw County Road Commission. Carrying tens of thousands of people per day from the US-23 corridor and between the four communities, this corridor presents both planning and engineering challenges.

Issues affecting the corridor:

- 20,000 to 50,000 vehicles per day
- 5,000 transit boardings per day
- Significant sidewalk gaps
- lack of adequate non-motorized crossings
- Access Management issues
- Non uniform rights of way
- Lack of non-motorized infrastructure
- No sense of place

In 2009, four communities, MDOT, Washtenaw County OCED, TheRide and WATS partnered to commence the ReImagine Washtenaw effort, a collaborative, regional planning effort with clear goals to transform the Washtenaw Avenue corridor from a sprawling, auto-oriented corridor, into a multimodal, vibrant, mixed-use corridor. The coalition completed and adopted the 2014 Corridor Improvement Study, providing a detailed vision for how the corridor can be transformed. In 2023, MDOT commenced a Planning and Environmental Linkages (PEL) Study, expected to be completed in 2024, which will update the 2014 corridor Plan, and set the stage for anticipated major corridor reconstruction. WATS supports the implementation of this vision through continued collaboration between project partners.

Regional Priorities



RURAL PRESERVATION

Rural preservation is crucial in protecting the livelihoods of rural communities, preserving cultural heritage, and maintaining biodiversity. However, with development pressure it is essential to strike a balance that allows for sustainable development while ensuring that rural environments remain intact.

Issues affecting rural areas:

- Aging in place requires adequate transportation services
- Preservation of agriculture lands and rural character
- Long term maintenance of roadways
- Lack of high speed internet for businesses and residents
- Lack of transportation options such as non-motorized and transit
- Continued aging demographic
- Balance of the preservation of natural space and dedication to growth

Regional Priorities



WESTERN WASHTENAW REGIONAL ADVISORY GROUP (WWRAG)

Growth in the Chelsea and Dexter area is largely focused in the townships but impacts the transportation system for everyone. Partnerships that promote connectivity for non-motorized transportation needs should be pursued. Additionally, the lack of north-south connections constrict the flow of travel. Many committee members have cited operational issues at Old-12 and Freer as a leading concern. WATS developed a tool to help prioritize projects in the area based on the following factors: Accessibility and Mobility, Link Transportation Planning with Land Use and Economic Development, Safety, Environmental Quality, and Fostering Regional Participation and Cooperation

Additional challenges affecting the area:

- The WWRAG area population is anticipated to grow to nearly 60,000 by 2050
- Increased traffic
- Lack of high-frequency fixed-route transit
- Dexter viaduct

Model

Model

PURPOSE OF THE MODEL

To address federal requirements, WATS works with SEMCOG to maintain a Regional Transportation Demand Model, a tool that forecasts future travel behavior. This model can be used to forecast congestion, estimate the growth in both traffic and transit ridership, and study the impact of changing demographics on regional infrastructure. Critically, the model also allows WATS to study the types of infrastructure that might meet the travel needs of the county, and how those changes will affect regional travel behavior. For the first time, WATS partnered directly with SEMCOG to utilize their travel demand model rather than separately calibrating a model based off of the same data. This allows WATS the ability to run the SEMCOG model and analyze changes locally.

The model is developed with several key inputs:

- Current and Estimated Future Demographic Data
- Current and Estimated Future Employment Data
- Traffic Counts
- Transit Ridership data
- Household Travel Survey data - a detailed sampling of travel behavior throughout the region

This plan compares the 2020 base year with a 2050 build and 2050 no-build scenario. The 2050 build scenario includes capacity changes and new transit routes provided by local agencies.

ESTIMATING THE IMPACTS OF CHANGING DEMOGRAPHICS

Once staff have a model that provides a reasonable estimate of future traffic demand based on current and anticipated population and employment data, that data can be modified to evaluate alternative scenarios. However, due to the nature of project development and limited budgets relatively few projects are scoped to change capacity of the transportation network and network based alternatives generally have minor impacts to overall travel demand. Through advancements in modeling techniques WATS has begun working with SEMCOG to better understand the changes that result from cultural shifts and moving to a safety systems approach. A people-focused approach on the demand portion of the supply and demand of regional travel is increasingly useful.

ANALYZING THE EFFECTS OF NETWORK (ROAD AND TRANSIT) CHANGES

Similar to estimating the impacts of changing demographics and employment, staff can instead modify the network to monitor the impacts on traffic flow and transit ridership. Example modifications include adding lanes to a roadway or increasing the frequency of transit service. WATS regularly works with local road and transit agencies to evaluate the effectiveness of transportation improvements. Proposed capacity changes provided by local agencies were included in the build scenario which saw relatively little change in delay and overall traffic flow compared to the 2050 no-build scenario.

DEMOGRAPHICS

Despite relatively stagnant growth region-wide, Washtenaw County continues to grow and emerge as a thriving economic hub. The universities and the talented workforce they attract helped the county weather the recession and propel its continued economic growth.

POPULATION FORECAST

Washtenaw County is expected to add nearly 50,000 new residents by 2050. These new residents, attracted by the county's relatively healthy job market, will put additional strain on already burdened transportation infrastructure. Household and population growth are relatively well distributed throughout the county, however, the majority of growth occurs within the existing urban area of Washtenaw County.

	CHANGE 2020-2050					
	2020	2030	2040	2050	NUMBER	PERCENT
Total Population	372,258	384,851	409,072	421,412	49,154	13.7
Population Age 0-4	17,458	17,313	18,868	18,175	717	4.10%
Population Age 5-17	50,867	47,029	50,147	50,906	39	0.10%
Population Age 18-24	61,717	63,796	62,236	64,183	2,466	4.00%
Population Age 25-64	187,022	183,780	194,879	198,413	11,391	6.10%
Population Age 65-84	49,211	63,522	66,503	68,996	19,785	40.20%
Population Age 85+	5,983	9,411	16,439	20,739	14,756	246.60

TABLE 3

TABLE 3 shows the breakdown of population growth over time and by age. Note the rapid growth of the population of Seniors by 2050. In 2020, individuals over 65 comprise 14.8% of the county's population, by 2050 that number grows to 20.2%. These seniors are less likely to drive themselves or use fixed route transit, as many will depend on costly door-to-door style services to address their transportation needs.

Model

EMPLOYMENT FORECAST

Washtenaw County is expected to add nearly 40,000 jobs by 2050, a 13.7% increase. Most of the county's job growth occurs in the sectors that already comprise the largest share of jobs in the county: Education Services, Healthcare Services, and Professional and Technical Services. The forecast for manufacturing jobs continues to decline, currently representing 5.7% of total employment, but forecasted to decrease to 4.4% of total employment by 2050.

The service sectors that the Washtenaw County job market specializes in continue to be well paid and highly in demand. This could increase the number of out-of-county commuters, who are likely to drive if regional transit alternatives are not available.

TABLE 4 below shows the 2050 employment forecast by economic sector. Note that the top three sectors, Education Services, Healthcare Services, and Professional and Technical Services, comprise 53.1% of total employment by 2050.

	CHANGE 2019-2050					
	2019	2030	2040	2050	NUMBER	PERCENT
Total Jobs	278,176	293,770	304,716	316,303	38,127	13.7%
Education Services	4,151	55,954	58,418	59,972	6,214	11.6%
Healthcare Services	54,277	58,739	63,507	68,628	14,351	26.4%
Prof. and Tech. Services & Corp. HQ	28,680	34,231	36,495	39,337	9,005	29.7%
Information & Financial Activities	25,811	27,332	28,440	29,762	3,951	15.3%
Leisure & Hospitality	24,339	25,235	26,230	26,821	2,482	10.2%
Retail Trade	19,275	17,402	16,004	15,189	4,086	21.2%
Manufacturing	23,592	15,632	14,519	14,010	1,822	11.5%
Admin., Support, & Waste Serv.	13,120	13,523	14,040	14,656	1,536	11.7%
Other Services	11,311	11,316	11,695	11,968	657	5.8%
Nat. Resources, Mining, & Const.	1,872	11,443	11,709	11,824	2,192	22.8%
Public Administration	5,996	6,189	6,417	6,568	572	9.5%
Wholesale Trade	7,006	7,406	7,529	7,518	512	7.3%
Trans., Warehousing, & Utilities	7,048	9,378	9,713	10,050	2,563	34.2%

TABLE 4

LIMITATIONS OF THE MODEL AND OF THE CAPACITY FIRST TRANSPORTATION SYSTEM

While Transportation Demand models are useful tools for analyzing how changes to the transportation network might impact travel behavior, there are limitations that should be considered before its application. Additionally, the model should be understood as a technical tool in a decision space that integrates both policy and technical factors. This section explores some of the limitations of models that WATS considers before applying its own.

MODELS ARE DESIGNED TO UNDERSTAND CAPACITY

The primary task of the transportation model is to explain the relationship between observed travel behavior, the capacity of the roadway and transit network, population, and employment. If the user considers observed behavior, population, and employment as fixed values, then capacity and congestion are the only tools available to produce travel behavior change. However, there are numerous factors that determine travel behavior, most of which are difficult to model. Specifically, the model lacks real tools to analyze the relationship between land use and transportation. While it is possible to reallocate growth in future years for exploratory purposes, that type of analysis doesn't look at how transportation network changes, like highway widenings, might produce large scale land use changes in the future. The best tools for these types of discussions are still policy tools and policy discussions, and the limitations of models in these types of discussions must be well understood by policy makers. WATS continues to work with SEMCOG as they develop an Activity Based Model.

MODELS ARE BASED ON TODAY'S ASSUMPTIONS AND TECHNOLOGIES

Consider the process for developing a transportation model:

- Survey the travel behavior of individuals in a region
- Observe traffic counts and transit ridership throughout the region
- Relate these numbers to current employment and household data
- Create future year forecasts of employment and household data
- Use the current relationship of travel behavior and population/employment to derive a future estimation of travel behavior using the forecasted datasets

The forecast of travel behavior in the future is completely dependent on the decisions and factors that explain the current transportation system. New technologies, policy changes, and many of the other issues that are discussed when considering the future of transportation at a policy level are not considered in the model. While this is largely due to a lack of tools to accurately forecast the impacts of policy decisions, it should introduce skepticism when considering model results for long term investments.

As large-scale freeway widening projects are considered, WATS' Policy Committee should require agencies to complete robust consideration of reasonable alternatives consistent with local land use policies. Alternative analysis should be scoped to include suites of policy alternatives, transit investments, HOV lanes, HOT lanes, employer based trip reduction programs, among others. Additionally, such projects should also be considered alongside the emergence of self-driving vehicles, which may temper the need for additional travel lanes. Priority should be given to human focused improvements that account for the complex relationship between land use, local culture, and the transportation network.

Additional vehicular capacity should only be considered as a last resort, as it provides short term travel speed improvement at the expense of long term financial stability and induced demand. For a large-scale widening project to move forward, the project must have technical and policy merits. The implementing agency should work with local leaders to define both the problem and its solution.

CONGESTION IS NOT INHERENTLY BAD

Transportation models were initially developed and required for the broad purpose of identifying and addressing congestion, assuming all congestion is bad. However, the transportation planning and engineering fields have developed more nuanced views regarding congestion, recognizing that congestion can be an indication of economic health and greater urbanization. Travel in general is a derived demand, it is a means to an end, rather than an end in itself.

CONGESTED SEGMENTS

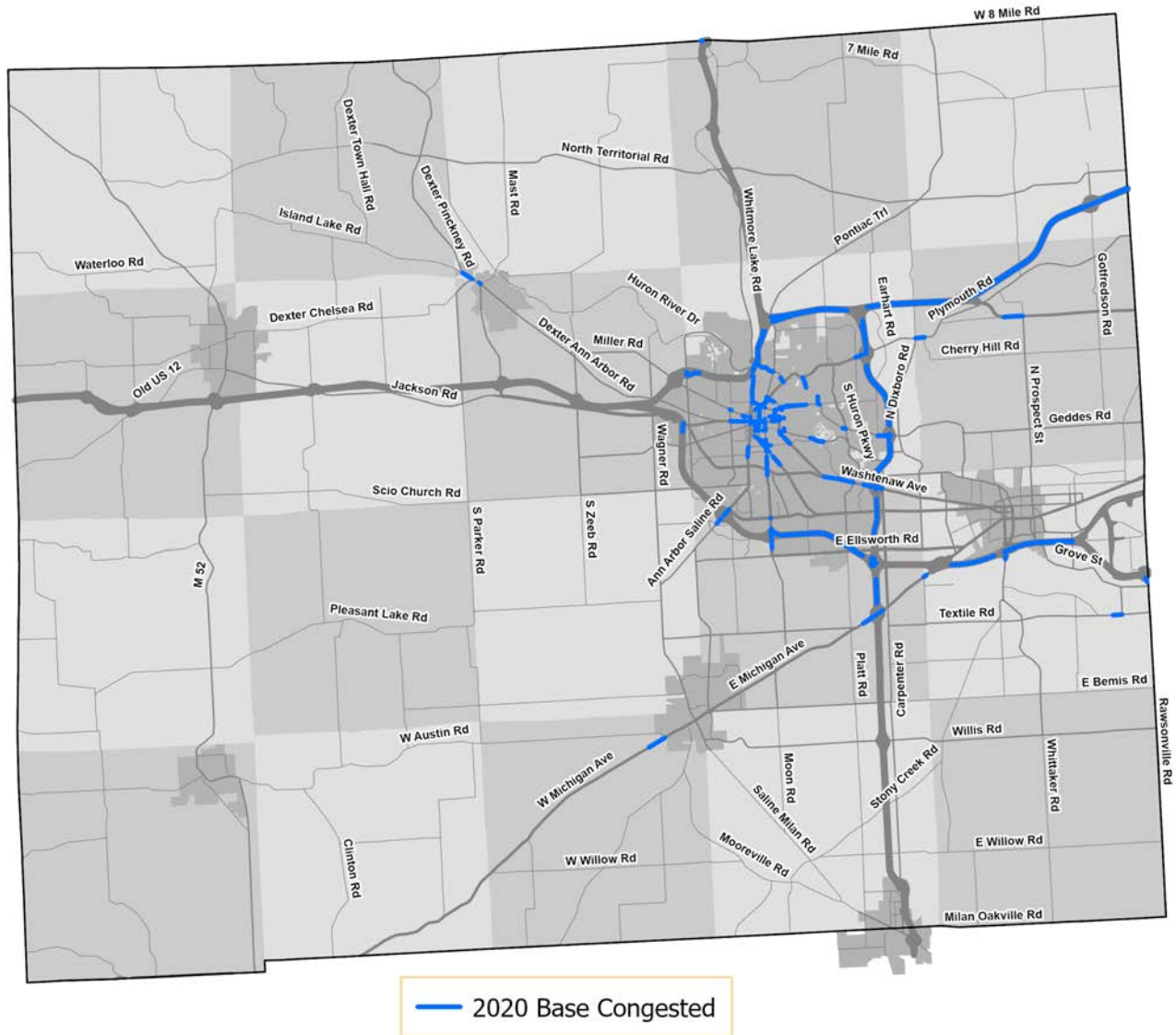
The core forecast of the model, which estimates the growth of traffic demand between the base year (2020) and horizon year (2050) of the model is the primary dataset used by WATS staff to provide growth rates. This compares congestion between 2020 and 2050 (build and no build scenarios). While congestion is forecast to increase between 2020 and 2050, it is important to understand there is not a universal definition for congestion.

CONGESTION FORECAST

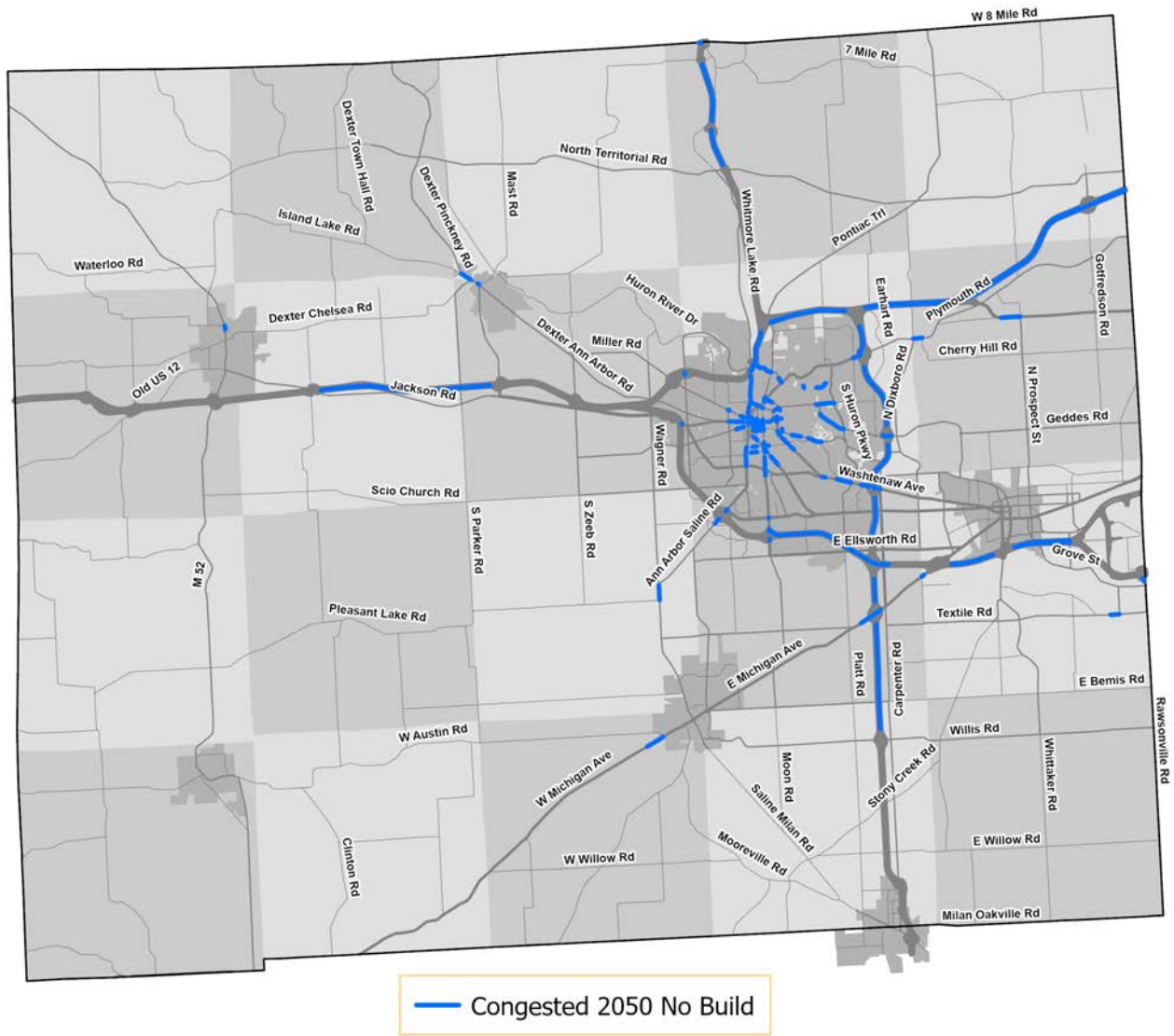
Congestion is expected to grow over time as new residents and employment come to the county. While the demands on the system will increase, infrastructure and capacity are not anticipated to expand significantly. This may encourage some travelers to use transit, walk, or bike, but vehicle travel remains the primary mode in the future year forecasts. The following maps show the modeled congestion throughout the county in 2020 and 2050.

Model

MAP 15 - 2020 AM & PM COMBINED CONGESTED SEGMENTS

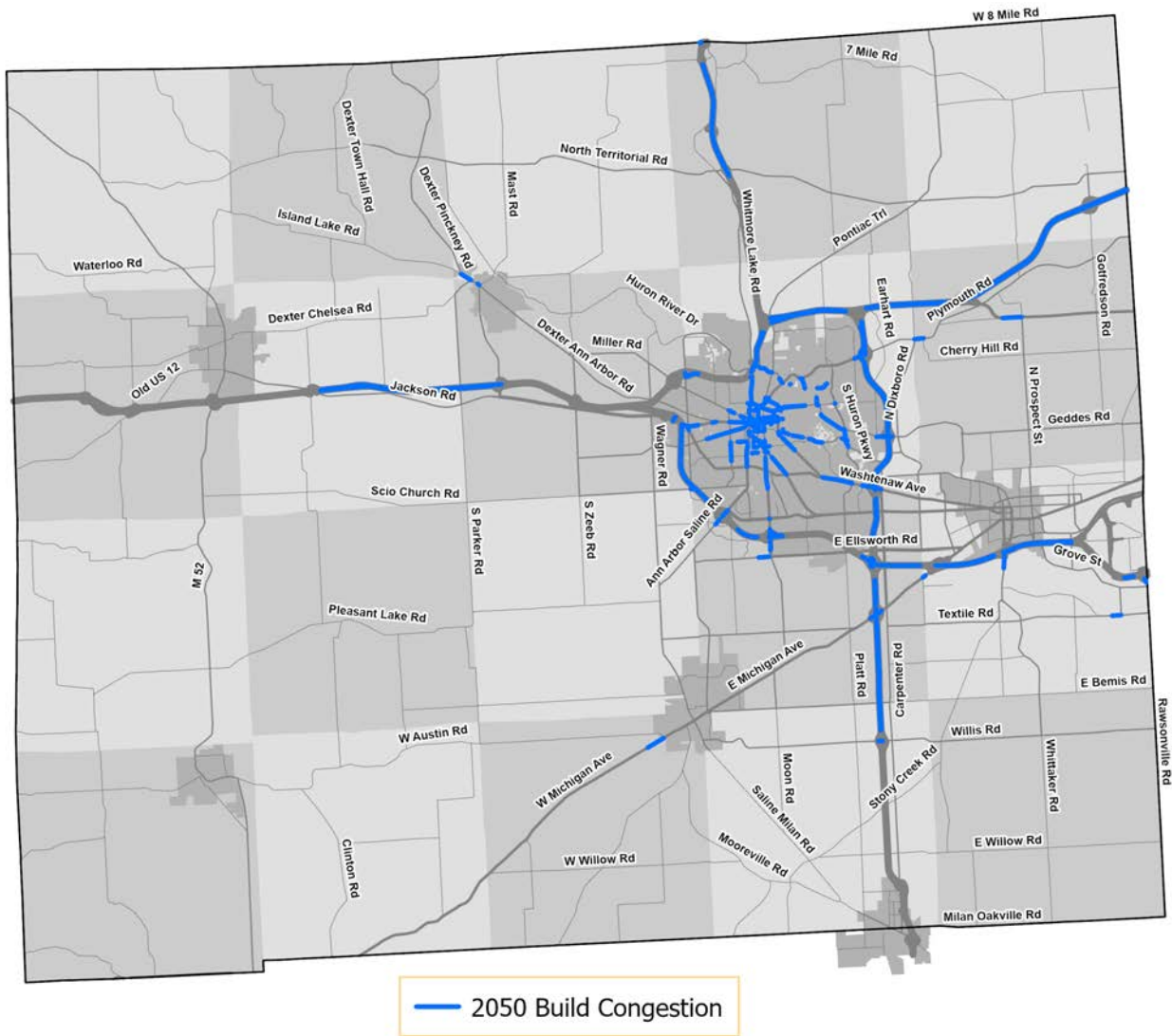


MAP 16 - 2050 NO BUILD AM & PM COMBINED CONGESTED SEGMENTS



The congested No Build scenario has no added transportation network enhancements.

MAP 17 - 2050 BUILD AM & PM COMBINED CONGESTED SEGMENTS



The 2050 Build Scenario includes transportation enhancements submitted by local agencies.

TRAVEL DELAY AND VEHICLES MILES/HOURS TRAVELED

	2020	2050 (Build)	2050 (No Build)	% Change (Build)	% Change (No Build)
AM Peak VMT	1,978,747	2,192,613	2,218,229	11%	12%
AM Peak VHT	64,366	79,758	80,329	24%	25%
PM Peak VMT	3,550,318	3,925,780	3,968,161	11%	12%
PM Peak VHT	130,026	164,355	165,145	26%	27%
Total Daily Delay (Hours)	53,320	84,981	83,210	59%	56%
Per Capita Daily Delay (Minutes)	8.72	12	11.84	37%	38%

TABLE 5

Congestion growth is expected during morning and evening peak travel periods. Growth is anticipated both in absolute numbers, as well as per capita delay. This is expected given that many of the roads forecasted to be congested currently experience congestion, so new trips are degrading travel times on the same roadways, rather than expanding the scope of congestion.

WATS recognizes the safety benefits of slower speeds and that projects specifically designed to increase capacity can be detrimental to the vision of this plan.

RECOMMENDATIONS

Washtenaw County has been and is expected to continue growing over the next 25 years. New residents and employment will require some adjustment in the transportation system, either travelers will have to grow accustomed to greater levels of congestion or policymakers will need to choose to invest in a more effective system. Given the desire to provide a high quality of life in the county, WATS recommends the latter, but encourages the Policy Committee to consider a broad range of alternatives that could improve both quality of life and the operations of the transportation system. Managing traffic demand, investments that improve the operations without widening, encouraging transit use, and encouraging non-motorized travel are viable alternatives to the costly last resort of capacity expansion. Additionally, the COVID-19 global pandemic showed that major changes in travel behavior can be the result of both unexpected challenges and rapid changes in transportation and technology.

Financial

FINANCIAL BACKGROUND

The current transportation bill, the Bipartisan Infrastructure Law (BIL) authorizes \$567 billion over fiscal years 2022 through 2026 for highway, highway and motor vehicle safety, public transportation, rail, and a variety of other programs. Congress must approve funding through its budget and appropriations process. SEMCOG provides a full financial chapter for the entire region that highlights the financial future of the region and how it impacts transportation. WATS manages the federal urban and rural funds that come directly to Washtenaw County. These federal funds are received from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). To receive funds from FHWA, local agencies must generally provide a 20% match. Local match comes from the Michigan Transportation Fund (MTF), local millages, or general funds. FTA funds also require a local match; that match comes from transit millages, farebox revenue, and from the state of Michigan’s Comprehensive Transit Fund (CTF).

FHWA AND FTA DIRECT FUNDS

FUNDING SOURCE	2027-2030	2031-2040	2041-2050
FHWA Funding to WATS Planning Area	\$29,043,062	\$79,605,900	\$87,934,439
Total Transit Investment	\$254,022,697	\$553,268,528	\$545,913,186
Local	-	-	-
Total Funds	\$283,065,759	\$632,874,428	\$633,847,625

TABLE 6

SMALL URBAN FUNDS

The Small Urban Program provides federal Surface Transportation Program (STP) funding to areas with an urbanized population of 5,000 to 49,999. Road and transit capital projects are eligible for STP funds. Washtenaw County has three small urban areas; Dexter, Milan, and Chelsea. Washtenaw County small urban areas receive at most \$385,000 every odd year. Washtenaw County can anticipate the following funds throughout the 2050 LRP.

FUNDING SOURCE	2027-2030	2031-2040	2041-2050
Small Urban	\$2,310,000	\$5,775,000	\$5,775,000
Local	\$577,500	\$1,443,750	\$1,443,750
Total Funds	\$2,887,500	\$7,218,750	\$7,218,750

TABLE 7

AWARDED FUNDS

WATS’ local agencies have been successful in receiving grant funding. These funds are not directly allocated to local agencies in Washtenaw County and therefore cannot be directly counted as funds that can be expected. However, if local agencies submitted projects that have traditionally been funded by one of these programs, the project has been listed to reflect the project’s need and in anticipation of applying in an upcoming call for projects.

Public Engagement

Public Engagement

PUBLIC ENGAGEMENT PHILOSOPHY

WATS believes implementing an effective and equitable vision for Washtenaw County's transportation system depends on a well-informed, ongoing discussion with the public.

WATS outlines its strategy for public engagement in the Public Participation Plan. When complete, this section will outline various methods on how WATS engaged with the public, including active and passive engagement, and online and in-person interactions.

The full plan can be found: <https://www.miwats.org/plans-and-publications/public-participation-plan>

CONSULTATION

The goal of the consultation agency outreach process is to provide specific public and private agencies expanded involvement opportunities in the planning process. The consultation process included early involvement, direct outreach, information and data sharing, plan comparison, and evaluations that meet federal regulations in the Bipartisan Infrastructure Law. Although there is overlap between the consultation agency and public engagement processes, the two efforts are separate. The primary difference is the target audience for consultation agencies is formal groups and organizations, while public outreach is directed towards individuals.

Agencies involved in the consultation outreach are planning partners across the region in various capacities including natural resources, education, conservation, environmental justice, community and economic development, tribal interests, freight, transit, border crossings, aviation, and more outlined in the Appendix.

Consultation between these various agencies and planning partners is an opportunity to confer on needs of the larger community, to compare and coordinate planning approaches, and to generally communicate about the vision for the overall transportation system that crosses multiple jurisdictions.

Performance Measures

Performance Measures

TRANSPORTATION PERFORMANCE MEASURE LEGISLATION

Transportation legislation in recent years has moved to create performance and outcome-based programs for the investment of resources in projects that collectively make progress toward the achievement of nationally set goals. This emphasis was continued in the Bipartisan Infrastructure Law (BIL). As part of the bill, national performance goals were created for roads and highways along with public transportation. WATS' funding application provides a scoring matrix supportive of WATS goals and State and Federal performance measures. The regional Congestion Management Process administered by SEMCOG provides additional opportunities to evaluate and support system performance and prioritization to achieve performance based outcomes.

ROADS AND HIGHWAYS NATIONAL PERFORMANCE GOALS

23 CFR 150 outlines the national goals for the federal aid highway program around which the federally required performance measures were created. Below is a listing of those seven areas followed by a brief description of each goal.

GOAL AREA	DESCRIPTION
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
Infrastructure Condition	To maintain the highway infrastructure asset system in a state of good repair
Congestion Reduction	To achieve a significant reduction in congestion on the National Highway System
System Reliability	To improve the efficiency of the surface transportation system
Freight Movement	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
Environmental Sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment
Reduced project delivery delay	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies/work practices.

TABLE 8

MAP-21 also mandated the Federal Transit Administration (FTA) to develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle.

GOAL AREA	DESCRIPTION
Rolling Stock	A revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services
Equipment	An article of non-expendable, tangible property has a useful life of at least one year
Facilities	A building or structure that is used in providing public transportation
Infrastructure	The underlying framework or structures that support a public transportation system

TABLE 9

Performance Measures

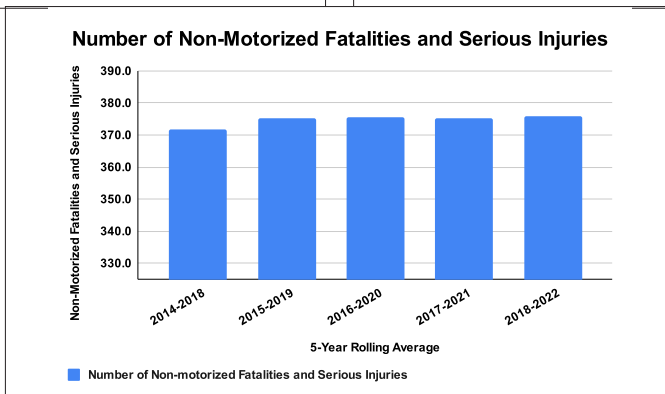
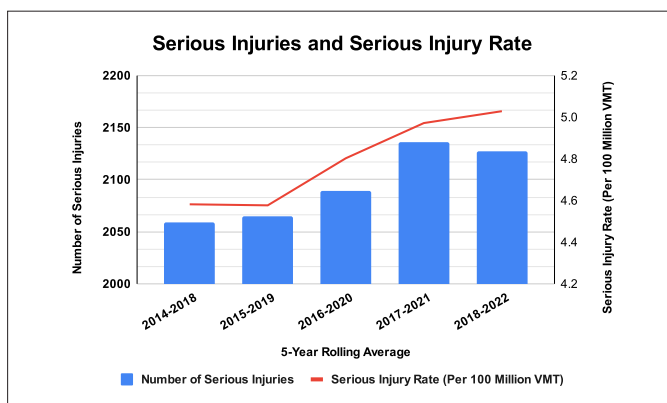
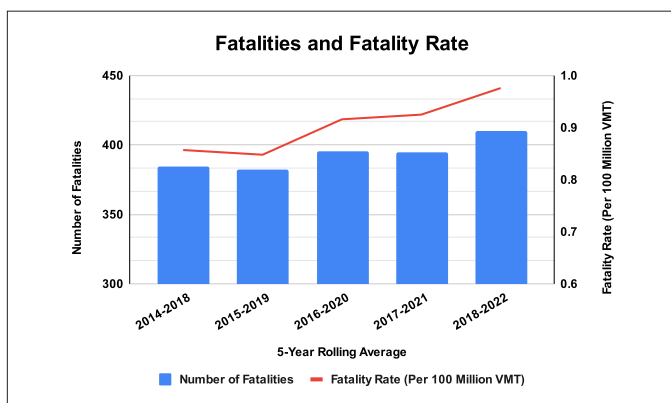
Safety (Target due annually by MDOT by August 31 of each year for the next calendar year)

From 2018, when State DOTs and MPOs were required to begin setting annual safety performance measures, through 2022, SEMCOG and WATS adopted the safety targets previously set by MDOT. However, after extensive collaboration with WATS committees and other stakeholders from across the region, SEMCOG developed its own safety targets for the first time in 2023. SEMCOG developed its own safety targets to more closely reflect the shared desire to eliminate fatalities and serious injuries on the regional transportation network.

- Number of fatalities
- Fatality rate
- Number of serious injuries
- Serious injury rate
- Number of non-motorized fatalities and serious injuries

SAFETY PERFORMANCE	BASELINE THROUGH CALENDAR YEAR 2018-2022	CALENDAR YEAR 224 STATE SAFETY TARGET
Fatalities	410.4	406.4
Fatality Rate	.976	.956
Serious Injuries	2,126.8	2,108.8
Serious Injury Rate	5.029	5.009
Non-motorized fatalities & Serious Injuries	376.00	366.00

TABLE 10



Performance Measures

1. Interstate and NHS pavements—23 CFR 490.307

Current coordination efforts include evaluation of the pavement condition on the interstate and non-interstate NHS system. The evaluation of the pavement will be evaluated by four metrics:

- International Roughness Index (IRI)
- Cracking Percent
- Rutting/Faulting (depending on road construction material)

This rule designates that MDOT is required to establish two and four year targets for pavement condition on the National Highway System (NHS). There are two sets of targets, one for the Interstate System, and the other for the Non-Interstate NHS. The current performance period takes place from January 1, 2022 to December 31, 2025, with MDOT targets established on October 1st, 2022. MDOT is required to submit biennial progress reports to FHWA. There are four performance measures for assessing pavement condition based on composite analysis of the metrics:

- % of Interstate pavement of Good Condition
- % of Interstate pavement in Poor Condition
- % of Non-Interstate NHS pavement in Good Condition
- % of Non-Interstate NHS pavement in Poor Condition

One requirement within this rule is that no more than 5% of the Interstate System be in poor condition.

PAVEMENT MEASURES	MEASURE	BASELINE CONDITION (2022-2025)	2-YEAR TARGETS	4-YEAR TARGETS
Pavement	Percent of Interstate Pavement in Good Condition	70.4%	59.2%	56.7%
Pavement	Percent of Interstate Pavement in Poor Condition	1.8%	5.0%	5.0%
Pavement	Percent of Non-Interstate NHS percent in Good Condition	41.6%	33.1%	33.1%
Pavement	Percent of Non-Interstate NHS percent in Poor Condition	8.9%	10.0%	10.0%

TABLE 11

Performance Measures

2. NHS bridges—23 CFR 490.407

Current coordination efforts include evaluation of the condition of the substructure, superstructure, deck, and culverts for all bridges on the NHS system. The evaluation of the bridges will use the National Bridge Inspection Standards (NBIS). Each substructure, superstructure, deck, and culvert are rated on a 0-9 scale and recorded in the National Bridge Inventory (NBI) database. The NBI Condition ratings are broken up into three categories below:

- **Good Condition:** Rating of 7–9
- **Fair Condition:** Rating of 5–6
- **Poor Condition:** Rating of 0–4
- **Serious or Critical Condition:** Rating of 2–3
- **Imminent Failure or Failed Condition:** Rating of 0–1

This rule designates that MDOT is required to establish two and four year targets for bridge condition on the NHS. MDOT targets due on May 20, 2018. MDOT is required to submit three performance reports to FHWA within the four year performance period. There are two performance measures for assessing bridge condition:

- % of NHS bridges in Good Condition
- % of NHS bridges in Poor Condition

The minimum penalty threshold requires that no more than 10% of NHS bridges measured by deck area be classified as structurally deficient.

BRIDGE MEASURES	BASELINE CONDITION (2022-2025)	2-YEAR TARGETS	4-YEAR TARGETS
Percent National Highway System (NHS) Deck Area in Good Condition	22.1%	15.2%	12.8%
Percent NHS Deck Area in Poor Condition	7.0%	6.8%	5.8%

TABLE 12

3. Interstate and NHS reliability—23 CFR 490.507 (Target Due May 20, 2018)

The performance measures under this rule are:

- Travel Time Reliability
- Non-Interstate Travel Time Reliability
- Truck Travel Reliability Index

Performance Measures

RELIABILITY

Travel Time Reliability (Separate Interstate and Non-Interstate Measures) Travel time reliability is calculated by dividing the 80th percentile travel time by the 50th percentile travel time through four daily time periods, weekdays 6am—10am, weekdays 10am—4pm, weekdays 4pm—8pm, and weekends 6am—8pm. A ratio less than 1.5 is considered reliable. This number will be used to calculate the percentage of person travel miles that are reliable

TRUCK TRAVEL TIME RELIABILITY

Travel time reliability is calculated by dividing the 95th percentile travel time by the 50th percentile travel time through five daily time periods, weekdays 6am–10am, weekdays 10am–4pm, weekdays 4pm–8pm, weekends 6am–8pm, and overnights 8pm to 6am.

RELIABILITY MEASURES	MEASURE	BASELINE CONDITION (2022-2025)	2-YEAR TARGETS	4-YEAR TARGETS
Reliability	Level of Travel Time Reliability of the Interstate	97.1%	80%	80%
Reliability	Level of Travel Time Reliability of the Non-Interstate NHS	94.4%	75%	75%
Reliability	Freight Reliability Measure on the Interstate	1.31	1.60	1.60

TABLE 13

CONGESTION MITIGATION AND AIR QUALITY

This measure is designated for urbanized areas, that contain NHS miles, and have a population over 200,000. (Phase 1 of this reporting is only for populations with over 1,000,000). As Ann Arbor is part of the SEMCOG region with a population over 1 million, this measure must be included in the applicable planning documents.

- Peak Hour Excessive Delay (PHED)
- Percentage of Non-Single Occupancy Vehicle Travel

AIR QUALITY MEASURES	MEASURE	BASELINE CONDITION (CY 2017)	2-YEAR TARGETS	4-YEAR TARGETS
CMAQ	Annual hours of peak hours excessive delay per capita	9.0 hours	16.0 hours	16.0 hours
CMAQ	percent of non-single occupancy vehicle travel	31.9%	29.7%	16.0 hours
CMAQ	mobile source emission reduction for nitrogen oxide	13,118.8 (kg/day)	5,227 (kg/day)	10,455 (kg/day)
CMAQ	mobile source emission reduction for particulate matter	1,527.492 (kg/day)	595.0 (kg/day)	1191.0 (kg/day)

* 1 kg = 2.2 lbs

TABLE 14

Performance Measures

PEAK HOUR EXCESSIVE DELAY

This measures the total excessive delay on the NHS measured in per capita hours. The threshold is travel speeds of 20 mph or 60% of the posted speed, whichever is greater. This number will be aggregated for all reporting segments throughout an urban area.

PERCENTAGE OF NON-SINGLE OCCUPANCY VEHICLE TRAVEL

This is a measure of the share that non-single occupancy travel comprises of an urban area's travel modes. These modes include but are not limited to carpooling, transit, biking, and walking. This data is reported in the Census Bureau's American Community Survey.



STATE OF GOOD REPAIR—TRANSIT

The Federal Transit Administration Transit Asset Management Rule requires a group Transit Asset Management (TAM) plan to set one or more performance targets for each applicable performance measure. The targets should be based on realistic expectations, and both the recent data available and the financial resources from all sources that are reasonably expected funding the TAM plan horizon period. The three asset classes to be in the Transit Asset Management plan are: Revenue Vehicles, Service Vehicles, and Facilities.

TRANSIT ASSET MANAGEMENT PLAN

Pursuant to (49 CFR 625.25) transit operators based upon their fleet size will develop a Transit Asset Management Plan (TAM) that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and prioritization of investments. MDOT will develop a group TAM plan while TheRide will develop their own.

Performance Measures

MICHIGAN STATEWIDE TRANSIT MEASURES

ASSET CLASSES	CURRENT CONDITION	2024 TARGET	GOALS
Revenue Vehicles - Autos/SUV	15% Past ULB*	Not more than 10% will exceed ULB by 7 years	No more than 20% of each agency's fleet will exceed ULB
Revenue Vehicles - Vans	16% Past ULB*	Not more than 10% will exceed ULB by 7 years	No more than 20% of each agency's fleet will exceed ULB
Revenue Vehicles - Cutaways	7% Past ULB*	Not more than 10% will exceed ULB by 10 years	No more than 20% of each agency's fleet will exceed ULB
Revenue Vehicles - Bus Med Duty	16% Past ULB*	Not more than 15% will exceed ULB by 10 years	No more than 20% of each agency's fleet will exceed ULB
Revenue Vehicles - Bus Med Heavy Duty and Large	5% Past ULB*	Not more than 15% will exceed ULB by 14 years	No more than 20% of each agency's fleet will exceed ULB
Revenue Vehicles - Ferry Boats	20% Past ULB*	Not more than 40% will exceed ULB by 42 years	No more than 50% of each agency's fleet will exceed ULB
Non-Revenue Service Vehicles	71% Past ULB*	50% may exceed ULB by 7 years	No more than 50% of each agency's fleet will exceed ULB
Non-Revenue Admin Vehicles	72% Past ULB*	100% may exceed ULB by 7 years	Local Decision, MDOT does not set a goal or provide funding
Equipment over \$50,000	47% Past ULB*	Not more than 50% will exceed ULB (varies)	No more than 50% of each agency's equipment inventory will exceed ULB
Facilities	3% Past ULB*	Not more than 5% will exceed ULB (assessment rating less than 3)	No more than 50% will receive a rating of 3 or lower

*ULB = Useful Life Benchmark

TABLE 15

FUNDING 2017 ASSUMPTIONS	FUNDING AMOUNT
5339	\$1,600,000
5310	\$3,200,000
5311 Flex	\$3,500,000
FEDERAL FERRY BOAT PROGRAM	\$2,700,000
State Match Up to the Above	\$2,800,000
Total	Up to \$13,800,000

TABLE 16

Conclusion

CONCLUSION

As we look ahead to 2050, the Washtenaw Area Transportation Study (WATS) Long Range Plan is committed to creating a transportation system that is not just efficient, but also fundamentally aligned with the safe, equitable, and environmentally sustainable vision of our community. This ambitious plan serves as a blueprint for the future, guiding strategic investments and fostering innovations that address both today's challenges and tomorrow's opportunities.

Central to our vision is the understanding that the strategies identified in this plan are only a component of a broader community effort to achieve a safe sustainable future for all. We are paving the way for a transportation network that enhances connectivity, supports economic growth, and makes Washtenaw County a model for inclusive and sustainable growth. By focusing on strategic partnerships, leveraging technology, and prioritizing community engagement, we are setting the stage for a dynamic and resilient future.

Looking forward, the implementation of the WATS 2050 Plan will require continuous collaboration, proactive policy-making, and a commitment to adapt and respond to emerging trends and community feedback. Together, we will work to ensure that our transportation system not only meets the logistical needs of our region but also upholds our shared values of equity and environmental stewardship, making Washtenaw County a better place for all.

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