



June 2000

© SEMCOG 2000

## Abstract

More than \$24 billion will be invested in preserving, enhancing and operating Southeast Michigan's transportation system by 2025, a system including roadways, bridges, airports, non-motorized pathways and transit vehicles and facilities. The 2025 Regional Transportation Plan for Southeast Michigan is a technically-sound plan that assesses current conditions and needs, estimates the system's future funding expectations and identifies and analyzes solutions for those needs. The 2025 RTP includes two companion pieces — Project List and Public Involvement in Regional Transportation Planning — which are available from SEMCOG Information Services.

Preparation of this document was financed in part through grants from the U.S. Department of Transportation, Federal Transit Administration and Federal Highway Administration through the Michigan Department of Transportation and local membership contributions.

*Permission is granted to cite portions of this publication with proper attribution. The first source attribution must be SEMCOG, the Southeast Michigan Council of Governments; subsequently, SEMCOG is sufficient. Reprinting in any form must include the publication's full title page.*

### SEMCOG

Southeast Michigan Council of Governments

Information Services

660 Plaza Drive, Suite 1900

Detroit, MI 48226

313-961-4266 • fax 313-961-4869 • <http://www.semCog.org>

**This page is intentionally blank.**

## Page

xi	<b>Executive Summary</b>
xvii	<b>Acronyms</b>
xxiii	<b>Glossary</b>
1	<b>Introduction</b>
1	Why Is a 2025 RTP Needed?
1	What Does the 2025 RTP Include?
2	How Does the 2025 RTP Affect the Region?
2	How Does SEMCOG Use the 2025 RTP?
2	How Does the 2025 RTP Differ from the 2015 and 2020 RTPs?
3	How Does the 2025 RTP Relate to Federal Legislation?
3	How Was the 2025 RTP Developed?
3	Phase 1: Early plan development
5	Phase 2: Draft plan evaluation
6	Phase 3: Plan review and approval
9	<b>Regional Demographic and Land Development Future</b>
9	Demographic Changes
9	Population
10	Households
10	Employment
12	Future Land Development Patterns
12	Relationship to Future Transportation in Southeast Michigan
13	<b>2025 Regional Transportation Plan for Southeast Michigan</b>
13	Goals and Objectives
15	Providing Accessibility and Mobility for All People and Goods
15	Improving Mobility for All People
15	Private vehicle users
19	Pedestrian and bicyclists
20	Transit Users
24	Air passengers
26	Special population groups
27	Improving Mobility for All Goods
27	Existing freight conditions
34	Freight needs
34	Freight initiatives
37	Investing Strategically in the Transportation Infrastructure to Enhance the Vitality of the Community

**Page**

37	Selecting Transportation Improvement Projects
39	Congestion
40	Congestion needs
40	Congestion initiatives
44	Pavement
44	Pavement needs
44	Pavement initiatives
45	Bridges
45	Bridge needs
50	Bridge initiatives
50	Aviation
50	Aviation needs
52	Aviation initiatives
53	Public Transit
53	Public transit needs
55	Public transit initiatives
59	Intelligent Transportation System (ITS)
60	ITS needs
60	ITS initiatives
61	Promoting a Safe and Secure Transportation System
61	Traffic Safety Needs
62	Traffic safety trends
62	Traffic Safety Initiatives
63	Safety management system
64	Freeway Courtesy Patrol
66	Incident management system
67	Transit Safety and Security Needs and Initiatives
67	Traffic crashes
68	Passenger facility safety
68	On-board passenger safety
69	Transit employee safety
69	Protecting and Enhancing the Environment
70	Environmental Needs
70	Non-motorized transportation
72	Environmental Initiatives
72	Toward Walkable Communities
73	Southeast Michigan Greenways Initiative
75	Non-motorized Web site
75	Non-motorized mode connections
75	RideShare
76	Air quality
77	Transportation and land use
78	Regional review of transportation projects

**Page**

81	<b>2025 RTP Evaluation</b>
81	Financial Plan
82	Transportation Funding Programs
82	Surface Transportation Program (STP)
83	STP Safety Program
83	STP Enhancement Program
83	Congestion Mitigation Air Quality (CMAQ)
84	Highway Bridge Replacement and Rehabilitation Program (HBRRP)
84	National Highway System (NHS)
84	Interstate Maintenance (IM)
84	Minimum Guarantee (MG)
84	Transportation Economic Development Fund (TEDF)
85	Michigan Transportation Fund (MTF)
85	2025 Financial Forecast Results
85	Local road agency forecast
87	Michigan Department of Transportation (MDOT) forecast
90	Transit agency forecast
91	Summary of Available Funds for the 2025 RTP
92	Project List Summary
92	Financial Constraint
95	Total Transportation Needs
95	Evaluating progress made
96	Future transportation needs
101	Air Quality Conformity Analysis
101	Southeast Michigan Air Quality Status
102	2025 Regional Transportation Plan Conformity Results
103	Environmental Justice
104	Identification of Minority Populations and Low-income Populations
110	Project Implementation
110	Transit issues
111	Public Involvement
112	Accessibility to Jobs
112	Results
113	Public Involvement
113	Local Public Involvement Activities
113	Public involvement conducted by local communities
114	Public involvement conducted by transit providers
114	Public involvement conducted by area transportation studies
114	SEMCOG Public Involvement Activities
114	Phase 1: Establishing an oversight committee
115	Phase 2: Educating and collaborating with the public
124	Phase 3: Publicizing the 2025 RTP after adoption
124	Ongoing public involvement

**Page**

124	Federal Planning Factors
124	Support the Economic Vitality of the Metropolitan Area, Especially by Enabling Global Competitiveness, Productivity and Efficiency
125	Increase the Safety and Security of the Transportation System for Motorized and Non-motorized Users
126	Increase the Accessibility and Mobility Options Available to People and for Freight
127	Protect and Enhance the Environment, Promote Energy Conservation and Improve Quality of Life
128	Enhance the Integration and Connectivity of the Transportation System Across and Between Modes for People and Freight
128	Promote Efficient System Management and Operation
129	Emphasize the Preservation of the Existing Transportation System
129	Regional Goals and Objectives
130	Provide Accessibility and Mobility for All People and Goods
131	Invest Strategically in Transportation Infrastructure to Enhance the Vitality of the Community
132	Provide a Safe and Secure Transportation System
132	Protect and Enhance the Environment
133	2025 RTP Project List
133	Bridge needs
134	Safety needs
134	Pavement needs
135	Congestion needs
136	Meeting regional needs
139	<b>2025 Regional Transportation Plan for Southeast Michigan Policies, Initiatives and Projects</b>
139	2025 RTP Policies
139	Public transit
139	Mobility issues for persons with special needs
139	Intermodal freight
139	Infrastructure improvements
140	Transportation system management
140	New technologies
140	Economic vitality
140	Capacity improvements
140	Safety management
140	Transit security
140	Non-motorized activities
140	Environmental protection
140	Transportation equity
140	Public involvement
141	2025 RTP Initiatives

**Page**

141	Initiatives improving accessibility and mobility for all people and goods
141	Initiatives preserving the transportation infrastructure
142	Initiatives promoting a safe and secure transportation system
142	Initiatives enhancing and protecting the environment
143	2025 RTP Projects

**Appendices**

A-1	Bibliography
B-1	Michigan Department of Transportation State Long Range Transportation Plan Strategies, 2000-2025
C-1	2025 Long Range Transportation Plan for Washtenaw County, Executive Summary
D-1	2025 Transportation Plan for St. Clair County - Available in Hard Copy Only

## Table of Data Displays

### Page

Tables		
7	Table 1	2025 RTP Review and Approval Process
10	Table 2	Southeast Michigan Population by County, 2000 and 2025
11	Table 3	Southeast Michigan Households by County, 2000 and 2025
11	Table 4	Southeast Michigan Employment by County, 2000 and 2025
28	Table 5	Rail/Truck Facilities in Southeast Michigan
31	Table 6	Total Miles of Active Rail, 1999
31	Table 7	Air Cargo Levels, 1995-1999
32	Table 8	Waterborne Commerce/Trade for the Port of Detroit
33	Table 9	Southeast Michigan/Canada Border Crossings, Motor Vehicle Volumes, 1996-1999
39	Table 10	Summary of Available Funds for the 2025 RTP
42	Table 11	Comparison of 2000, 2025 No Build Scenario and 2025 RTP Average Weekday Travel Forecasts
66	Table 12	Freeway Courtesy Patrol Services Provided, September 1997 to April 1998
76	Table 13	1998 Carpool and Vanpool Statistics
86	Table 14	Forecast of Federal, State and Local Transportation Funding Available to Counties, Cities and Villages (Locals)
87	Table 15	Michigan Transportation Fund for Local Government Operations and Maintenance
88	Table 16	Michigan Department of Transportation Core Federal Apportionments Statewide vs. Transportation Improvement Program Funding Programmed in Southeast Michigan
89	Table 17	Forecast of Federal and State Transportation Capital Funding Available to Michigan Department of Transportation for Southeast Michigan Projects
90	Table 18	Forecast of Federal, State and Local Transportation Funding Available to Transit Agencies
91	Table 19	Summary of Available Funds for the 2025 RTP
93	Table 20	Summary of 2025 RTP Projects
94	Table 21	Demonstration of Financial Constraint
95	Table 22	25-Year Transportation System Investment in Southeast Michigan
100	Table 23	Estimated 2025 Regional Transportation Needs
102	Table 24	Draft Ozone Precursors and Carbon Monoxide
104	Table 25	Percent of Minority Populations and Low-income Households in Southeast Michigan
112	Table 26	Number of Traffic Analysis Zones Where Accessibility to Jobs Decreased
119	Table 27	2025 RTP Review and Approval Process
137	Table 28	Transportation Investment Along the Region's Most Heavily Traveled Corridors

**Page**

	Figures	
4	Figure 1	2025 Regional Transportation Plan Process
25	Figure 2	System Airports in Southeast Michigan
29	Figure 3	State Truck Routes in Southeast Michigan
30	Figure 4	Rail Network for Southeast Michigan
41	Figure 5	Congestion with 2025 RTP Projects in Southeast Michigan
46	Figure 6	Number of Bridges in Southeast Michigan
46	Figure 7	Bridges by Maintaining Agency in Southeast Michigan
47	Figure 8	Percentage of Open, Restricted and Closed Bridges in Southeast Michigan
47	Figure 9	Highway Bridges by Deficiency in Southeast Michigan
49	Figure 10	Highway Bridges by Deficiency, by County in Southeast Michigan
49	Figure 11	Bridges by Funding Eligibility
65	Figure 12	Freeway Courtesy Patrol, 6:30-9:00 a.m.
65	Figure 13	Freeway Courtesy Patrol, 3:00-6:30 p.m.
65	Figure 14	Freeway Courtesy Patrol, 6:30-10:30 p.m.
74	Figure 15	SEMCOG Walkable Community Audits, Completed Communities
93	Figure 16	2025 RTP Project List by Work Type, Percent of Total Capital Funds
97	Figure 17	Planned vs. Programmed Projects by Work Type, FY 1996-2000
99	Figure 18	2025 Regional Transportation System Needs
99	Figure 19	2025 Regional Transportation System Needs, Met vs. Unmet Needs
105	Figure 20	Location of Low-income Households
106	Figure 21	Location of African-American Populations
107	Figure 22	Location of Hispanic Populations
108	Figure 23	Location of Asian-American Populations
109	Figure 24	Location of Native American Populations
120	Figure 25	2025 Regional Transportation Plan Development

x

**This page is intentionally blank.**

## Executive Summary

More than \$24 billion will be invested in preserving, enhancing and operating Southeast Michigan's transportation system by 2025, a system including roadways, bridges, airports, non-motorized pathways and transit vehicles and facilities. The 2025 Regional Transportation Plan for Southeast Michigan (2025 RTP) is a technically-sound plan that assesses current conditions and needs, estimates the system's future funding expectations and identifies and analyzes solutions for those needs.

The plan concentrates on preserving and, where possible, enhancing the existing transportation infrastructure, supporting the region's economic vitality and improving traveler safety while protecting the environment and sustaining quality of life.

The plan is a collaborative effort managed by SEMCOG, with input from local and state transportation planners, transit agencies, business interests, the general public and special interest organizations concerned with the environment, non-motorized travel, persons with disabilities, low-income persons and members of racial and ethnic populations.

The plan does not fix everything. It identifies \$24 billion of projects and programs over the next 25 years, well short of the estimated \$41 billion of transportation system needs. But, Southeast Michigan is making progress. The 2020 RTP identified only \$8 billion in anticipated funding toward \$26 billion in identified needs. Since then, the Transportation Efficiency Act for the 21<sup>st</sup> Century (TEA-21) has increased the amount of federal transportation funding available and passage of the 4¢ state gas tax increase has generated additional state revenues.

## Background

Under TEA-21, Metropolitan Planning Organizations, like SEMCOG, are required to develop regional transportation plans, in cooperation with local and state authorities.

Several developments shaping the Southeast Michigan region contributed to creation of the 2025 RTP.

- The region has experienced growth in population, particularly the elderly, jobs and developed land.
- It has become an international crossroads for freight movement to and from Canada, Mexico and the other states.
- Just-in-time inventory parts shipments to auto and other plants have increased truck traffic in the region.
- Intelligent Transportation Systems (ITS) have begun transforming congestion management on the region's roads.

Those developments and many others have changed the region and its transportation system, providing the backdrop for creating the 2025 RTP for Southeast Michigan.

## Goals and Objectives

Four goals focus the 2025 RTP: 1) providing accessibility and mobility for all people and goods, 2) investing strategically in the transportation infrastructure to enhance the vitality of the community, 3) promoting a safe and secure transportation system and 4) protecting and enhancing the environment. Those goals are further refined by 23 objectives (page 14).

### 2025 RTP Policy

The 2025 RTP contains a variety of policies guiding the direction of the region's transportation system. In some instances, policies support projects and actions specified in the plan. In other cases, policies support development of new initiatives addressing unresolved issues.

#### Infrastructure

- Maintain and improve the existing infrastructure, including roadways, bridges, airports, non-motorized pathways and transit vehicles and facilities.
- Use new technologies to improve the maintenance, operation and future development of the regional transportation system.
- Balance the desire for efficient and unimpeded vehicle travel with the equally important desire of walkers and bicyclists to safely access public spaces and fully utilize non-motorized travel opportunities.
- Support appropriate roadway capacity improvements in areas where other strategies, including congestion management and public transit, fail to improve traffic flow to acceptable levels, balancing capacity needs with environmental protection and community priorities.

#### System management

- Preserve and enhance the existing transportation system via effective and innovative management strategies and technologies.
- Enhance and refine a regional safety management system that increases the safety and security of all travelers.
- Develop outreach activities involving populations traditionally underrepresented in transportation decision-making processes.

#### Economic vitality

- Improve economic vitality while enhancing mobility, safety, environmental resources and overall quality of life.
- Improve intermodal freight movement within and through the region through collaboration of planning agencies, private enterprises and public organizations, both foreign and domestic.

#### Human and physical environment

- Protect and enhance the natural and built environment.
- Reduce disproportionate negative transportation impacts on any group of persons, balancing transportation needs with neighborhood and community priorities.

## 2025 RTP Initiatives

Implementation of 2025 RTP policies takes the form of initiatives. Initiatives are implemented by various regional agencies, including SEMCOG, the Michigan Department of Transportation (MDOT), regional transit providers, county and local transportation agencies and special interest groups.

### **Initiatives improving accessibility and mobility for all people and goods**

Initiatives improving accessibility and mobility fall into several categories.

#### Transit capital improvements

- Replace aging transit vehicles.
- Improve existing and construct new operational facilities.
- Improve passenger facilities and ensure accessibility for passengers with disabilities.

#### Transit service enhancements

- Increase service frequency, operating hours and service areas.
- Support collaboration among transit users and providers, improving service and efficiency.
- Develop innovative private/public partnerships.
- Support agencies in their efforts to secure funding by competing for federal, state, local and private grant monies.
- Support initiatives serving persons transitioning from welfare to work.

#### Elderly mobility and safety

- Continue coordinating with federal, state and local partners to promote elderly-friendly traffic engineering practices, improved alternative transportation options, centralized referral resources for transportation services and enhanced education and awareness efforts.

#### Public perception

- Demonstrate the benefits of an improved transit system, promoting transit as a viable, safe and attractive travel option.

#### Intermodal freight movement

- Continue coordinating with agencies and organizations within and outside the region (both in the U.S. and Canada) to enhance travel for both people and freight and to address border access issues.
- Participate in interstate and national consortia investigating trade corridors from Mexico to Canada and throughout the U.S.

### **Initiatives preserving the transportation infrastructure**

Initiatives preserving the existing transportation infrastructure fall into several categories.

#### Transportation management

- Maintain the quality, safety and efficacy of the existing transportation system by responsibly allocating available resources.

- Assist local communities in identifying and addressing locations experiencing above-average traffic crash frequency and severity.

#### Congestion mitigation

- Develop and maintain a regional congestion management system to effectively manage increasing travel demand.
- Continue supporting increased ability to manage roadway incidents (including traffic crashes and breakdowns), including the Michigan Intelligent Transportation Systems (MITS) Center activities, the Freeway Courtesy Patrol and the proposed eight-hour abandoned vehicle legislation.
- Support alternative commute programs, including ridesharing, vanpooling and telecommuting.
- Develop and support a regional ITS strategy encouraging coordination and cooperation among local ITS programs.
- Support appropriate roadway projects improving system capacity.
- Support efforts increasing local non-motorized systems and encouraging walkable and bikeable communities.

#### Infrastructure management

- Develop and maintain regional pavement management and bridge management systems to quantify existing conditions, prioritize needs and allocate available funding.
- Support a regional aviation plan to maintain regional airport capacity.

#### Public transit

- Support efforts improving regional public transit, including initiatives addressing funding issues, enhanced services, use of ITS and collaborative partnerships among transit agencies.

### **Initiatives promoting a safe and secure transportation system**

Initiatives promoting a safe and secure transportation system fall into several categories.

#### Traffic safety

- Assist local communities in identifying and addressing locations experiencing above-average frequency and severity of traffic crashes.
- Continue supporting efforts increasing the ability to manage roadway incidents (e.g., traffic crashes and vehicle breakdowns), including MITS Center activities and the Freeway Courtesy Patrol.
- Support innovative strategies designed to better manage access of drivers, bicyclists and pedestrians to adjacent land uses.

#### Transit security

- Support initiatives designed to improve the safety and security of transit passengers and employees.

## **Initiatives enhancing and protecting the environment**

Initiatives enhancing and protecting the environment fall into several categories.

### Non-motorized travel

- Support activities enabling communities to be more harmonious with the needs of walkers and bicyclists, including new ideas and programs improving non-motorized mode connections (e.g., bike racks on buses).
- Continue working with the Southeast Michigan Greenways Initiative and Rails to Trails Conservancy to develop non-motorized facilities.
- Support land use strategies protecting the physical environment while accommodating sustainable growth.
- Mitigate negative impacts and invest equitably in all communities and neighborhoods.
- Continue acting as the Single Point of Contact for the Michigan Federal Project Review System and reviewing the impact of federally funded projects on the built and natural environments.

## **2025 RTP Projects**

Projects represent the most commonly recognized component of the regional transportation strategy (e.g., roadway, non-motorized and transit infrastructure improvements). SEMCOG performs technical analyses of current and forecasted conditions, including trends in transportation funding, in order to assist local agencies and MDOT in selecting the best mix of projects fundable under current financial constraints.

There are 1,819 projects in the 2025 RTP Project List, with a total cost of \$17.6 billion. These projects represent a good balance. The total \$13.3 billion planned for capital projects include preservation (40 percent of total capital projects), bridge projects (16 percent), other (12 percent), roadway capacity improvements (12 percent), transit capital (nine percent), safety projects (nine percent), studies (one percent) and non-motorized developments (one percent). It is anticipated that projects resulting from the studies will enhance the overall system by improving traffic flow and reducing congestion. (The 2025 RTP Project List is a separately bound companion document.)

## **2025 RTP Process**

The 2025 RTP process was a complex collaborative effort involving SEMCOG, the Federal Highway Administration, MDOT, Ann Arbor-Ypsilanti Urban Area Transportation Study (AAYUATS), St. Clair County Transportation Study (SCCOTS), regional transit providers, county and local transportation agencies, special interest groups and the general public. The plan went through a three-phase development process.

**Phase 1: Early plan development**

Goals and objectives were developed as a basis for the plan. Several basic elements were analyzed, including 1) federal, state and local transportation funding available for FY 2001-2025; 2) forecasted demographic trends, including population, households and jobs; 3) impacts on transportation planning of federal and state legislation, including TEA-21 federal transportation funding, Michigan's gas tax increase and federal environmental justice regulations and 4) technical analyses of congestion, pavement and bridge conditions, traffic safety and transit. A draft 2025 RTP was developed, including policies, initiatives and projects for implementation.

**Phase 2: Draft plan evaluation**

The draft plan was evaluated against several criteria: 1) Fiscal Constraint — project costs do not exceed expected funding levels; 2) Air Quality Conformity — emission levels associated with plan projects do not worsen the region's air quality; 3) Environmental Justice — public involvement activities reach those traditionally underrepresented in the transportation planning process; project implementation does not disproportionately impact low-income or minority populations nor do implemented projects disproportionately decrease accessibility for those populations; 4) Public Involvement — SEMCOG's public involvement process meets or exceeds all federal requirements; 5) Federal Planning Factors — the plan successfully incorporates seven federal planning factors reflecting sound planning principles and linking transportation decision making to social, economic, environmental and land use impacts; 6) Regional Goals and Objectives — the plan realizes progress toward the goals and objectives defined and approved by SEMCOG's members, planning partners and residents of Southeast Michigan.

**Phase 3: Plan approval**

The 2025 RTP was subjected to a number of local, state and federal review and approval processes. It was reviewed and recommended for approval by AAYUATS, SCCOTS and SEMCOG's Transportation Advisory Council. SEMCOG's Executive Committee, in turn, reviewed and approved the plan, forwarding it to the General Assembly for final adoption. Following adoption, the plan was reviewed by MDOT, the Michigan Department of Environmental Quality, the U.S. Department of Transportation and the U.S. Environmental Protection Agency. Following those approvals, the plan moved to implementation.

## Acronyms

**ADA**

Americans with Disabilities Act of 1990

**AATA**

Ann Arbor Transportation Authority

**AAYUATS**

Ann Arbor-Ypsilanti Urban Area Transportation Study

**BWATC**

Blue Water Area Transportation Commission

**CAAA**

Clean Air Act Amendments of 1990

**CMAQ**

Congestion Mitigation Air Quality Program; a federal-aid program

**CO**

Carbon monoxide

**DDOT**

Detroit Department of Transportation

**DPM**

Detroit People Mover

**DTC**

Detroit Transportation Corporation; operates the Detroit People Mover

**EBTC**

Eastern Border Transportation Coalition

**ERFA**

(Detroit) East River Front Area

**FAC**

Federal-aid Committee

**FCP**

Freeway Courtesy Patrol

**FHWA**

Federal Highway Administration

**FTA**

Federal Transit Administration, formally the Urban Mass Transit Administration

**GIS**

Geographic Information Systems

**HBRRP**

Highway Bridge Replacement and Rehabilitation Program; a federal-aid program

**HOV**

High occupancy vehicle; vehicles with two or more occupants, including buses, taxis and carpools

**IM**

Interstate Maintenance; a federal-aid program

**ISTEA**

Intermodal Surface Transportation Efficiency Act of 1991; authorized federal surface transportation programs for highways, highway safety and transit

**ITA**

International Trade Alliance

**ITS**

Intelligent Transportation Systems

**LETC**

Lake Erie Transportation Commission

**LETS**

Livingston Essential Transportation Service

**LOS**

Level of service

**MAC**

Metropolitan Affairs Coalition

**MASP**

Michigan Aviation System Plan

**MDOT**

Michigan Department of Transportation

**MDEQ**

Michigan Department of Environmental Quality

**MG**

Minimum Guarantee; a federal-aid program

**MITIS Center**

Michigan Intelligent Transportation Systems Center

**MPO**

Metropolitan Planning Organization

**MSI&A Database**

Michigan Structure Inventory and Appraisal Database; contains data describing the condition and performance of bridges

**MTF**

Michigan Transportation Fund; a State of Michigan transportation funding program

**NAAQS**

National Ambient Air Quality Standards

**NHS**

National Highway System

**NHTSA**

National Highway Traffic Safety Administration

**NO<sub>x</sub>**

Nitrogen oxides

**PM<sub>10</sub>**

Particulate matter less than 10 microns in diameter

**RASP**

Regional Aviation System Plan

**ROW**

Right-of-way

xx

**RTP**

Regional Transportation Plan

**SCCOTS**

St. Clair County Transportation Study

**SDFO**

Structurally deficient and functionally obsolete; defines the performance of a bridge

**SEMCOG**

Southeast Michigan Council of Governments

**SIP**

State Implementation Plan

**SIB**

State Infrastructure Bank

**SMART**

Suburban Mobility Authority for Regional Transportation

**SOV**

Single occupancy vehicle

**STP**

Surface Transportation Program; a federal-aid program

**TAC**

SEMCOG's Transportation Advisory Council

**TCM**

Transportation control measure

**TDM**

Transportation demand management

**TEA-21**

Transportation Equity Act for the 21<sup>st</sup> Century; authorizes federal surface transportation programs for highways, highway safety and transit

**TEDF**

Transportation Economic Development Fund; a State of Michigan transportation funding program

**TIP**

Transportation Improvement Program

**USDOT**

U.S. Department of Transportation

**USEPA**

U.S. Environmental Protection Agency

**VMT**

Vehicle miles traveled

**VOCs**

Volatile organic compounds

**This page is intentionally blank.**

## Glossary

### **Apportionment**

A legal division or assignment of funds, based on prescribed formulas in the law.

### **Access management**

The process of providing and managing access to land development, while preserving the regional flow of traffic in terms of safety, capacity and speed.

### **Air quality conformity**

The requirement, established by the CAAA (Clean Air Act Amendments) of 1990, that metropolitan plans and programs be consistent with the State Implementation Plan (SIP).

### **Bridges**

Structures greater than 20 feet in length. Highway bridges carry vehicular traffic (e.g., cars and trucks). Non-highway bridges carry non-vehicular traffic (e.g., pedestrians and trains). Structures less than 20 feet in length are referred to as culverts.

### **Bus rapid transit**

Motorbus transit service, often operating in an exclusive right-of-way. Successful systems, such as in Curitiba, Brazil, tend to have an integrated network encouraging efficient boarding processes and road performance.

### **Capacity**

The maximum rate of flow at which persons or vehicles can be reasonably expected to travel during a specified time period under prevailing roadway, traffic and control conditions.

### **Capital**

Refers to long-term assets such as land, stations or buildings. Capital costs are those non-recurring or infrequently recurring costs of capital, which often include related expenses. Capital funding is financial assistance from federal, state or local sources to finance public highway or transit capital projects.

### **Clean Air Act Amendments (CAAA) of 1990**

Federal environmental legislation establishing strategies to achieve and maintain National Ambient Air Quality Standards (NAAQS).

### **Choice riders**

Those who have access to a personal vehicle but choose to travel by transit for reasons of speed, comfort, convenience, traffic avoidance or environmental principle.

### **Commuter rail**

Long-haul rail passenger service operating along fixed rail lines, often between metropolitan and suburban areas.

### **Congestion**

Occurs when the number of vehicles on a roadway segment exceeds the roadway's capacity for efficiently carrying vehicles, resulting in travel slower than the roadway's design speed. Roadways may experience either recurring congestion (regularly exceeding capacity) or non-recurring congestion (caused by a roadway incident, such as a traffic crash or abandoned vehicle). SEMCOG defines congestion for the 2025 RTP analyses as level of service (LOS) "F" (or volume to capacity ratio greater than 1.0).

### **Congestion Mitigation Air Quality Program (CMAQ)**

A category of funding established under the Intermodal Surface Transportation Efficiency Act (ISTEA) for Transportation Control Measures (TCM) and other programs and projects designed to help meet ambient air quality goals set forth in the State Implementation Plan (SIP).

### **Corridor study**

Conducting a thorough analysis of current and projected needs and developing recommendations for improving travel along a specific corridor.

### **Cross-jurisdictional**

Describes transportation service that is provided across municipal boundaries.

### **Daily**

An average weekday in Southeast Michigan.

### **Demand**

In transportation planning, a term for the number of potential users of a system and their desired travel times and routes.

### **Demand-response transit service**

Passenger cars, vans or buses with fewer than 25 seats operating in response to calls from passengers or their agents to the transit operator, which then dispatches a vehicle to pick up the passengers and transport them to their destinations. Typically, the vehicles do not operate over a fixed route or on a fixed schedule and typically the vehicle may be dispatched to pick up several passengers at different pick-up points before taking them to their respective destinations. Also called "dial-a-ride" and "paratransit."

### **Dial-a-ride**

See demand-response transit service.

### **Door-to-door**

A transit service that picks up passengers at the door of their place of origin and delivers them to the door of their place of destination. This service may include passenger assistance between the vehicle and the doors.

**Drivers**

Traffic crash terminology for all motor vehicle operators as well as bicyclists, pedestrians and train engineers.

**Elderly**

Persons age 65 and older.

**Elderly-friendly**

Transportation service, initiatives, development, projects and/or policies that encourage mobility of and access for older adults.

**Farebox revenue**

Cash, tickets, tokens and pass receipts used as payment for using a transit system.

**Federal-aid Committee (FAC)**

Committee charged with managing federal transportation spending, generally at the county level. The City of Detroit has its own FAC.

**Federal Highway Administration (FHWA)**

Administers, plans, funds and regulates the federal highway system.

**Federally-legislated**

Laws, acts, rules and/or regulations enacted at the federal (or national) level.

**Federal Transit Administration (FTA)**

Administers, regulates and helps fund all public transportation in the U.S.

**Financial constraint**

Federal regulations require that the Regional Transportation Plan (RTP) be financially constrained. All projects must have an identified source of funding that is reasonably expected to be available.

**Fixed-route transit service**

Transit service provided on a repetitive, fixed-schedule basis along a specific route with vehicles stopping to pick up and deliver passengers to specific locations. Each fixed-route trip serves the same origins and destinations, unlike demand-response transit service, but may include route deviation service where vehicles deviate from fixed routes on a discretionary basis.

**Freight**

Any commodity being transported.

**Functionally obsolete**

Defines the performance of a bridge. Bridges may be eligible for federal funding depending on obsolescence and a calculated federal sufficiency rating.

**High-speed rail**

A rail transportation system with exclusive right-of-way serving densely traveled corridors at speeds of 124 miles per hour and greater.

**Incapacitating injury**

Traffic crash terminology for any injury that prevents the injured person from normally continuing the activities they were capable of performing before the injury.

**Intelligent Transportation Systems (ITS)**

Use of computer and communications technologies to facilitate the flow of information between travelers and system operators.

**Intermodal**

Planning and infrastructure focusing on connectivity between modes (such as trucks, planes, boats and planes) as a means of facilitating linked tripmaking.

**Just-in-time**

A method of inventory control minimizing warehousing. The container is the movable warehouse and must arrive “just in time.”

**Level of service (LOS)**

A qualitative measure describing operational conditions within a traffic stream. Generally described in terms of factors such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience and safety. SEMCOG defines congestion for the 2025 RTP analyses as LOS “F” (or volume to capacity ratio greater than 1.0).

**Light rail**

Lightweight passenger rail cars operating on fixed rails in right-of-way that is not separated from other traffic for much of the way.

**Local roads**

Roads and local neighborhood streets that are owned by a municipality.

**Metropolitan Planning Organization (MPO)**

Organization designated by the governor that is responsible, along with the state, for comprehensive transportation planning.

**Michigan Intelligent Transportation Systems (MITS) Center**

The Michigan Department of Transportation’s facility at which the freeway message boards and other transportation communication technologies are operated.

**Multimodal**

Planning or infrastructure reflecting consideration of more than one mode to serve transportation needs in an area.

**National Ambient Air Quality Standards (NAAQS)**

Federal standards that set allowable concentrations and exposure limits for various pollutants.

**National Highway System (NHS)**

Interconnected system of routes serving major population centers, international border crossings, airports, public transportation facilities and both interstate and interregional travel. Also refers to a federal transportation funding program.

**No-build scenario**

Assumes no road improvements are made between 2000 and 2025.

**Non-incapacitating injury**

Traffic crash terminology for any injury not incapacitating but evident to observers at the scene of the crash.

**Non-motorized**

Bicycling and walking used as a means of travel.

**Obligations**

Commitments made by federal agencies to pay out money as distinct from the actual payments. Generally incurred after the enactment of budget authority.

**Operating expenses**

Expenses to provide transportation service, plan and coordinate improvements and maintain safe conditions, including both direct costs (such as wages and fuel) and indirect costs (computer expenses and advertising).

**Operating funds**

Financial assistance from federal, state or local sources to finance public highway or transit operating expenses.

**Paratransit**

See demand-response transit service.

**Park-and-ride lot**

Lot to which passengers drive their cars, leave them for the day and board transit vehicles or carpool.

**Pedestrian**

An individual traveling on foot (or wheelchair in the case of a person with a disability).

**Pedestrian-friendly**

Transportation service, initiatives, development, projects and/or policies that encourage mobility of and access for pedestrians.

**Possible injury**

Traffic crash terminology for any injury reported or claimed that is not a fatal injury, incapacitating injury or non-incapacitating injury.

**Public Act 51 of 1951**

Directs the collection and distribution of transportation-related revenues in the State of Michigan. Identifies sources of funding including fuel user fees, vehicle registration fees, driver license fees and miscellaneous sources.

**Public comment**

Feedback from the community as part of the region’s public involvement process. SEMCOG encourages comments from the public on the 2025 Regional Transportation Plan for Southeast Michigan.

**Public involvement**

Public involvement efforts include a variety of techniques targeting the entire community (including ethnic, minority and low-income groups) and ensures the public has the opportunity to help shape the substance of plans and projects.

**Public transit**

Passenger transportation service operating on established schedules along designated routes or lines with specific stops and moving relatively large numbers of people at one time. Examples include bus, light rail and rapid transit. Also known as mass transit, public transportation, mass transportation and transit.

**Region**

An entire metropolitan area including designated urban and rural subregions. The Southeast Michigan region includes Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne Counties.

**Regional development forecast**

Socioeconomic forecasts of population, households and employment prepared by SEMCOG. These forecasts describe how the region is expected to develop between now and 2025 and provide critical input to the travel demand forecasting process which is the basis for forecasting the number of trips in the region.

**Regional Transportation Plan (RTP)**

The long-range (20-25 year) multi-modal transportation plan documenting the projects, policies and programs designed to meet the surface transportation needs of the region.

**Reverse commute**

A commute in the direction opposite to the main flow of traffic (e.g., from the central city to a suburb during the morning peak).

**Ridership**

Number of passengers using a transportation system within a given period of time.

**RideShare**

SEMCOG program encouraging carpooling and vanpooling. Program aims include conserving energy, reducing pollution and alleviating congestion, crashes and injuries.

**Right-of-way (ROW)**

The land needed for the construction and operation of a transportation facility.

**Roundabout**

A circular roadway (often with a raised, landscaped island in the center) at the intersection of two streets used to reduce traffic speeds and crashes without diverting traffic onto adjacent residential streets. A technique used in traffic calming. Also referred to as a traffic circle.

**Single occupancy vehicle (SOV)**

A vehicle carrying only the driver.

**State Implementation Plan (SIP)**

The statewide plan for achieving National Ambient Air Quality Standards (NAAQS) as mandated by the Clean Air Act Amendments (CAAA) of 1990.

**State Infrastructure Bank (SIB)**

A state (or multistate) revolving fund offering loans and non-grant forms of credit assistance to public and private sponsors of Title 23 highway construction projects or Title 49 transit capital projects.

**Structurally deficient**

Defines the fitness of a bridge. Bridges may be eligible for federal funding depending on deficiency and a calculated federal sufficiency rating. Structurally deficient does not mean the bridge is unsafe or structurally unsound.

**Suburb to suburb**

Public transit serving passengers traveling from one suburb to another.

**System airport**

Airport whose level of activity most directly influences aviation and travel in the Southeast Michigan region.

**Traffic calming**

A concept concerned with reducing the adverse impact of motor vehicles on built-up areas, which usually involves activities reducing vehicle speeds and/or providing more space for pedestrians and bicyclists.

**Transit dependent**

Persons who must rely on public transit or paratransit services for most of their transportation.

**Transportation Advisory Council (TAC)**

SEMCOG's transportation advisory council, which includes elected officials, transportation technicians and representatives of special interest organizations.

**Transportation control measure (TCM)**

An action or measure designed to reduce vehicle emissions or concentrations of air pollutants from transportation sources through improvements to vehicular flow or by reducing the number of vehicle trips.

**Transportation demand management (TDM)**

Consists of strategies that manage the demand for transportation facilities and promote travel behavior that increases transit share and vehicle occupancy, decreases tripmaking and lowers growth of vehicle miles traveled associated with single occupancy vehicle (SOV) trips.

**Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)**

Authorizes federal surface transportation programs for highways, highway safety and transit for the six-year period, 1998-2003.

**Transportation Improvement Program (TIP)**

SEMCOG's document listing transportation projects to be funded under federal transportation programs for a three year period. (To be eligible for federal funding a project must be included in the TIP.)

**Transportation infrastructure**

The physical underpinnings of society at large, including, but not limited to, roads, bridges, transit, sidewalks and bikeways.

**Transportation network**

A computerized description of an existing or proposed transportation system providing transportation supply information to the travel demand forecast models.

**Transportation study**

See corridor study.

**Transportation study area**

A transportation study is established by law as a sub-regional planning agency. Its primary goal is aiding in the development and coordination of an area's transportation system through comprehensive planning involving all levels of government, public agencies, civic groups and members of the general public.

**Transportation system**

An intermodal system containing all forms of transportation in a unified, interconnected manner, including highways, transit, non-motorized pathways, aviation, marine ports, etc.

**Travel demand forecast**

Statistical planning models/analyses that may be used to evaluate the demand for proposed transportation facilities, the impact of development on transportation facilities and consequences of transportation policies and actions.

**Trip**

Any travel by a person which involves use of a motorized vehicle, walking (five minutes or more) or use of a bicycle. Walking for exercise, neighborhood strolling and recreational biking are not considered trips.

**Trunkline roads**

Major roads such as interstates and state highways that are owned by the State of Michigan.

**Ubiquitous transit**

The Detroit Department of Transportation's downtown vision to have trolleys all around downtown taking passengers where they want to go when they want to go there.

**Vehicle miles traveled (VMT)**

A measure of roadway travel that totals the miles traveled by each vehicle in the region. VMT measures provide planners and decision makers with an indication of current and future driving conditions for roadway segments.

**Welfare-to-work**

Refers to the federal Job Access and Reverse Commute grant program which assists states and localities in developing new or expanded transportation services connecting welfare recipients and other low-income persons to jobs and other employment-related services.

**This page is intentionally blank.**

## Introduction

The 2025 Regional Transportation Plan for Southeast Michigan (2025 RTP) is the framework for regional transportation planning. While it is a federal regulatory requirement, it represents much more. Transportation is truly key to regional vitality. Successful transportation planning requires a broad-based, collaborative process based upon existing conditions and future expectations. Having a solid foundation of long-term goals helps focus current direction and address coming trends.

Regional transportation plan (RTP) development is a complex process based upon several distinct types of activities, ranging from macro-level goal setting to micro-level technical analyses. In an effort to make the plan as easy to understand and as useful as possible, the following section of questions and answers was developed.

### Why Is a 2025 RTP Needed?

The RTP is the initial step in the process allowing federal funds to be spent on state, regional and local transportation projects. Without a current RTP meeting federal guidelines, no federal transportation funds can be allocated to the region. A current plan ensures the most recent federal guidelines are met. The 2025 RTP is important for other reasons as well. It compiles the most recent information about the region and uses it to identify transportation needs and priorities. Specifically, there have been significant changes in the region's demographic profile, including more people, households and jobs. There have also been changes in state and federal funding. Finally, initiatives such as transportation-to-work issues and an increased emphasis on environmental justice have expanded the focus of transportation planning. Once these needs are understood, the next step, developing meaningful projects and initiatives, can take place.

### What Does the 2025 RTP Include?

The 2025 RTP includes a description of transportation needs and initiatives with respect to:

- C transportation users, including vehicle users, pedestrians, bicyclists, transit users, air passengers and special needs populations;
- C intermodal freight networks, including truck, rail, air and marine and international border crossings;
- C transportation infrastructure, including congestion mitigation, pavement, bridges, aviation and transit;
- C traffic safety and transit security and
- C environmentally-friendly planning practices, including non-motorized development.

The 2025 RTP also includes an evaluation based on federal and regional guidelines and a summary of regional policies, initiatives and projects for implementation. The appendices include a bibliography as well as additional documentation submitted by the Michigan Department of Transportation (MDOT), Ann Arbor-Ypsilanti Urban Area Transportation Study (AAYUATS) and St. Clair County Transportation Study (SCCOTS). A companion document — 2025 RTP Project List — contains a compilation of transportation improvement projects for FY 2001-2025. Another companion document — Public Involvement in Regional Transportation Planning — outlines SEMCOG’s transportation public involvement process and details specific activities pertaining to the 2025 RTP process.

### **How Does the 2025 RTP Affect the Region?**

In essence, the 2025 RTP supports a first-class transportation system providing accessibility and mobility, attracting economic investment, maintaining quality of life and preserving precious and irreplaceable resources. Although the 2025 RTP is an important planning document, it is critical to note it is designed to be used in tandem with other local and regional plans and policies, including sustainable land use, housing, clean air and water, community connectivity, social harmony and economic development. In total, these plans and policies help shape the overall prosperity of the Southeast Michigan region.

### **How Does SEMCOG Use the 2025 RTP?**

SEMCOG uses the 2025 RTP to implement basic transportation policies. These policies guide agency decision making and crafting of solutions to transportation needs. SEMCOG also uses the plan to qualify projects for federal funding via the short-range Transportation Improvement Program. The 2025 RTP Project List attempts to balance roadway and transit improvements designed to forward regional goals and objectives within projected financial constraints.

### **How Does the 2025 RTP Differ from the 2015 and 2020 RTPs?**

The 2025 RTP is the third in a series of regional plans. SEMCOG produced its first regional plan in 1993 and three years later the second. Fundamentally alike, all three plans focus on maintaining and improving a transportation system that will move people and freight across the region efficiently and safely while at the same time preserving the natural and built environment. Each plan revolves around regional goals, transportation analyses and regional strategies based upon federal, state and local guidance. Differences among the plans reflect demographic changes in the region and new federal and state funding levels and policies. Although each plan is unique and addresses current transportation system needs, all three plans have the same basic objective — improving the region’s transportation system.

## **How Does the 2025 RTP Relate to Federal Legislation?**

The 2025 RTP follows the guidelines set forth by the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). The plan is fiscally constrained, was reviewed at various stages of its development by the public and forwards initiatives defined by federal planning factors.

The 2025 RTP is also linked to the federal Clean Air Act Amendments of 1990 (CAAA). The CAAA formally establish the link between vehicle emissions and air quality and define conformity requirements which must be met if the 2025 RTP is to be adopted and implemented.

## **How Was the 2025 RTP Developed?**

Developed through a cooperative effort, the 2025 RTP took shape over a period of 18 months. Partners included SEMCOG, the Federal Highway Administration (FHWA), MDOT, AAYUATS, SCCOTS, regional transit providers, county and local transportation agencies, special interest groups and the general public.

The collaboration between these groups included establishment of a 2025 RTP Committee providing oversight and mapping out a three-phase development process, including early plan development, draft plan evaluation and plan approval (Figure 1).

### **Phase 1: Early plan development**

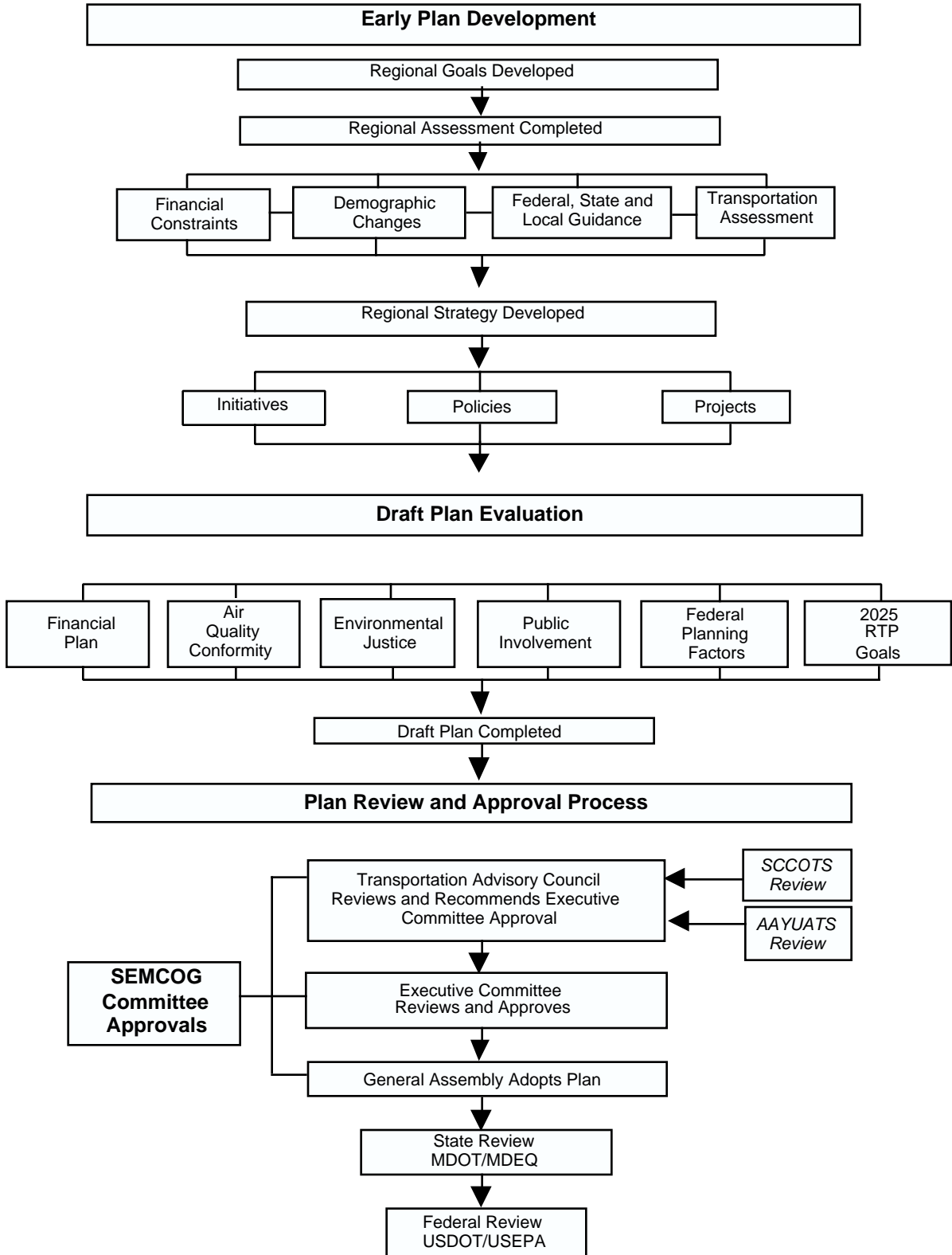
Early plan development involved a number of distinct activities guided by regional goals and objectives, federal planning factors defined in TEA-21, technical advice from SEMCOG's partners and input received via public involvement.

First, regional goals and objectives were developed and approved. In this case, the goals and objectives from the 2020 RTP were reviewed and determined to still be relevant and, therefore, were retained for the 2025 RTP.

Next, a regional analysis was completed.

- Financial analysis — An analysis of federal, state and local transportation funding (including transit funds) available in Southeast Michigan for FY 2001-2025 was completed.
- Demographic changes — A review of forecasted demographic trends was performed, including analyses of future population, households and jobs.
- Federal, state and local guidance — A review of current federal and state legislation as well as local initiatives was completed and the impacts on transportation planning analyzed. For example, TEA-21 results in significant increases in transportation funding levels and contains revised federal planning factors which must be incorporated into the 2025 RTP. The State of Michigan also increased transportation funding via a 4-cent increase in the state gasoline tax. Finally, federal executive orders provided additional guidance on issues of environmental justice.

Figure 1  
2025 Regional Transportation Plan Process



- Transportation assessment — A number of technical analyses were performed identifying current and projected transportation needs in terms of congestion, pavement and bridge conditions, traffic safety and transit.

The results of the regional analyses were used by MDOT, AAYUATS, SCCOTS, county and local transportation agencies and transit agencies to identify federally-funded projects for inclusion in the 2025 RTP Project List. Furthermore, the goals and objectives were used to formulate a regional transportation strategy including policies, initiatives and the proposed projects for implementation. Finally, a draft 2025 RTP document was developed defining these analyses and the regional strategy.

### **Phase 2: Draft plan evaluation**

There were a number of important criteria which had to be met prior to finalizing the 2025 RTP. During that phase, the policies, initiatives and projects defining the regional strategy were scrutinized and evaluated against these criteria.

- Fiscal constraints — TEA-21 requires the 2025 RTP be fiscally constrained. That is, the total cost of the proposed projects cannot exceed reasonably predicted financial resources. Since proposed costs were less than expected funding levels, the 2025 RTP was found to be fiscally constrained.
- Air quality conformity — Air quality conformity is a federal regulation of the CAAA. The CAAA require regional transportation plans in designated areas conform to the state's air quality plan or State Implementation Plan (SIP). The projects included in the 2025 RTP Project List were analyzed to determine their net impact on certain pollutant levels as defined in the SIP. Because calculated emissions levels associated with the projects on the 2025 RTP Project List were below levels established in the SIP, the 2025 RTP was found to be in conformity with air quality requirements.
- Environmental Justice — Title VI of the 1964 Civil Rights Act prohibits the exclusion of minority populations from participation in or denial of benefits from any federally-funded program or activity, including the transportation planning process and project implementation. Federal Executive Order 12898 and U.S. Department of Transportation (USDOT) and FHWA regulations provide additional guidance for addressing "environmental justice" in low-income populations and minority populations. SEMCOG evaluated compliance of the 2025 RTP with environmental justice regulations in four areas — public involvement, project implementation, accessibility to jobs and transit issues. The public involvement process was found to adequately encourage and utilize public input from all groups, particularly those traditionally underrepresented in the transportation planning process. Project implementation was found to not negatively impact low-income populations or minority populations in a disproportionate manner. Transportation accessibility levels were found to not be disproportionately unfavorable to low-income populations or minority populations. Finally, regional transit initiatives were found to address issues relevant to all population groups, including low-income populations and minority populations. Therefore, the 2025 RTP was found to be in compliance with Title

VI of the 1964 Civil Rights Act, Federal Executive Order 12898 and USDOT and FHWA guidelines.

- Public involvement — A minimum level of public involvement in the 2025 RTP development process is a federal requirement. SEMCOG maintained a high level of public involvement during all stages of plan development, evaluation and approval, including media releases, open committee meetings, public forums and presentations and wide-spread announcement and distribution of the plan documents. SEMCOG also strove to reach out to population groups traditionally underrepresented in the transportation decision-making process. SEMCOG's public involvement process was found to meet or exceed all federal requirements.
- Federal planning factors — TEA-21 requires the regional transportation planning process incorporate seven federal planning factors reflecting sound planning principles and linking transportation decision making to other important factors, including social, economic, environmental and land use impacts. The policies, initiatives and projects defined in the 2025 RTP were found to successfully advance these principles to the benefit of the region.
- Regional goals and objectives — Perhaps most important, the policies, initiatives and projects proposed in the 2025 RTP must advance the goals and objectives defined and approved by SEMCOG's members and planning partners and the residents of Southeast Michigan. These goals and objectives provide the foundation for plan development and guide all decisions regarding plan implementation. An evaluation of the 2025 RTP revealed a realization of progress toward achieving these important goals and objectives.

### **Phase 3: Plan review and approval**

Before the policies, initiatives and projects in the 2025 RTP can be implemented, the process (including the analyses used in early plan development and evaluation of the draft plan) is subject to a number of local, regional and federal review and approval processes (Table 1).

AAYUATS and SCCOTS reviewed the draft 2025 RTP and recommended approval by SEMCOG's committee structure. The document was reviewed by SEMCOG's Transportation Advisory Council and recommended for approval by the Executive Committee. The formal public comment period began at this time. The Executive Committee, in turn, reviewed and approved the draft 2025 RTP and presented it to the General Assembly for final adoption. Finally, the 2025 RTP was reviewed by the MDOT, the Michigan Department of Environmental Quality, USDOT and the U.S. Environmental Protection Agency.

Table 1  
**2025 RTP Review and Approval Process**

Committee	Action	Date
Ann Arbor-Ypsilanti Urban Area Transportation Study	<i>2025 Long Range Transportation Plan for Washtenaw County</i> approved and submitted for inclusion in the 2025 RTP for Southeast Michigan	03/15/00
Transportation Advisory Council	March draft 2025 RTP introduced	03/22/00
2025 RTP Committee	March draft 2025 RTP forwarded to Transportation Advisory Committee	04/03/00
St. Clair County Transportation Study Advisory Committee	March draft 2025 RTP endorsed	04/04/00
St. Clair County Metropolitan Planning Commission	March draft 2025 RTP endorsed	04/19/00
Transportation Advisory Council	March draft 2025 RTP recommended for approval by Executive Committee	04/26/00
Executive Committee	May draft 2025 RTP introduced	04/28/00
Executive Committee	May draft 2025 RTP approved	05/19/00
General Assembly	June 2025 RTP adopted	06/22/00

Sources: SEMCOG, Ann Arbor-Ypsilanti Urban Area Transportation Study and St. Clair County Transportation Study

**This page is intentionally blank.**

## Regional Demographic and Land Development Future

Southeast Michigan's transportation system plays an important role in the daily lives of those who live in and around the region. A sound and effective transportation system is important because it not only helps to maintain quality of life but also serves to sustain regional growth. By examining population, housing, employment and land development in the region, it is possible to assess future travel needs and plan for an efficient regional transportation system.

### Demographic Changes

SEMCOG's regional development forecasts show moderate growth in population (up 12 percent regionwide), households (up 20 percent) and jobs (up six percent) from 2000 through 2025. With such steady growth, the region can look forward to a positive economic future.

SEMCOG's 2000-2025 regional development forecasts were derived from "state of the practice" econometric models with the region functioning within the overall U.S. economy. The general result was overall moderate economic and demographic growth for Southeast Michigan. County and community level forecasts were based on regional totals and models accounting for available local level data pertaining to recent performance in attracting jobs and people. The forecasts for Wayne County and the City of Detroit were modified to reflect changes in historical growth patterns, i.e., the rate of loss in population and jobs was decreased.

### Population

Southeast Michigan's population is growing at approximately one-half percent per year. That growth will continue, putting the region at 5.4 million people in 2025. Over the 25-year period, Oakland County will experience the greatest numerical population increase in the region (311,000) while Livingston County will see the greatest percentage increase (41 percent). The only county to experience a decrease in population will be Wayne County, which will lose over 55,000 people for a loss of three percent. (Table 2 shows 2000 and 2025 population figures for the region.)

The biggest change in the forecast period relates to the aging of the population, especially the baby boom population — people born between 1946 and 1964. The elderly — those age 65 and older — make up a growing segment of the Southeast Michigan region. A 73 percent increase in the total number of elderly people is expected (from 587,000 in 2000 to 1,073,000 in 2025) as is a 64 percent increase in the proportion of elderly (from 12 percent of the total population in 2000 to 20 percent in 2025).

Table 2  
**Southeast Michigan Population by County, 2000 and 2025**

County	2000	2025	Change	
			Number	Percent
Livingston	153,484	217,045	63,561	41.4
Macomb	814,400	964,682	150,283	18.5
Monroe	146,319	170,594	24,274	16.6
Oakland	1,199,864	1,511,072	311,208	25.9
St. Clair	163,605	194,853	31,248	19.1
Washtenaw	307,595	347,441	39,847	13.0
Wayne	2,079,109	2,023,339	-55,770	-2.7
Region	4,864,376	5,429,025	564,650	11.6

Source: SEMCOG’s 2000-2025 regional development forecasts

**Households**

In 2000, there are slightly over 1.8 million households in the region. This figure is expected to increase by 20 percent to 2.2 million households in 2025. As Table 3 indicates, Oakland County will see the greatest numerical increase, 163,000 households, while Livingston County will experience the greatest percentage increase of all counties in the region (53 percent). The remaining counties will experience moderate growth (between 16 and 28 percent), except Wayne County, which will see only a slight increase in households over the 25-year period (six percent).

The 2.54 average household size in 2000 is nearly one full person smaller than the persons per household 30 years prior. By 2015 or so, most baby boomers will no longer have children living at home and by 2025, the average household size will fall even further, to 2.46.

**Employment**

Employment is expected to increase by six percent between 2000 and 2025, resulting in over 172,000 more jobs added in the region. As shown in Table 4, Livingston County will see the greatest percentage job growth (up 30 percent) while Oakland County will add 178,000 more jobs by 2025. Wayne County will see a significant decrease in employment, a loss of over 119,000 jobs by 2025. Even as the number of jobs increases, the region will lose approximately 166,000 workers as baby boomers reach retirement. Finding workers to fill those new jobs will continue to be a challenge.

Table 3  
**Southeast Michigan Households by County, 2000 and 2025**

County	2,000	2025	Change	
			Number	Percent
Livingston	52,119	79,752	27,633	53.0
Macomb	312,908	399,307	86,399	27.6
Monroe	52,244	67,082	14,837	28.4
Oakland	460,290	623,696	163,406	35.5
St. Clair	59,399	75,384	15,985	26.9
Washtenaw	114,461	133,114	18,654	16.3
Wayne	780,907	824,446	43,539	5.6
Region	1,832,328	2,202,781	370,453	20.2

Source: SEMCOG's 2000-2025 regional development forecasts

Table 4  
**Southeast Michigan Employment by County, 2000 and 2025**

County	2000	2025	Change	
			Number	Percent
Livingston	58,331	75,653	17,322	29.7
Macomb	415,060	463,006	47,946	11.6
Monroe	53,703	59,071	5,368	10.0
Oakland	891,604	1,069,265	177,661	19.9
St. Clair	68,830	77,202	8,371	12.2
Washtenaw	239,177	274,442	35,265	14.7
Wayne	1,006,621	887,212	-119,409	-11.9
Region	2,733,326	2,905,851	172,524	6.3

Source: SEMCOG's 2000-2025 regional development forecasts

## **Future Land Development Patterns**

As of 2000, 35 percent of the region's 4,600 square mile area is developed. With a 12 percent projected growth in population and a 20 percent projected growth in households between 2000 and 2025, the expansion of developed land will likely continue in the future. An additional 235,000 acres (24 percent) may need to be developed to accommodate the anticipated growth in Southeast Michigan if current policies and trends continue. (Land development forecasts were developed by tracking current local land use development patterns. As local patterns and priorities change, so may the regional development forecast.) As population growth continues, it will be necessary to accommodate development while maintaining quality of life. The quantity of land consumed may be minimized and the quality of that land improved if a variety of development practices are implemented — compact, high-density housing which conserves land; preservation of green space; more emphasis on redevelopment and stronger community requirements, such as wetlands or wooded lot ordinances.

### **Relationship to Future Transportation in Southeast Michigan**

The increases in population, jobs, employment and land development will have a major effect on the transportation system and travel in the region. The increase of people will result in an increase in travel on the region's roads as well as an increase in congestion, unless transit alternatives increase or travel patterns change. (It should also be noted that projects proposed in the 2025 RTP Project List are expected to manage congestion as well.) Additionally, the changes in demographics as well as travel patterns continue to worsen some already serious transportation problems. The increases in suburb-to-suburb travel and commuting times continue to have serious effects on the region's transportation system. Traditionally rural counties, such as Livingston and St. Clair, are already experiencing rapid increases in population, households and employment, which are expected to continue through the year 2025. Much of the infrastructure on the urban fringe was not built to handle such rapid growth and fringe development often overloads transportation infrastructure designed for rural capacities. As a result, a system not capable of handling an increase in traffic buildup is plagued by congested intersections and road segments.

The increase in the elderly segment of the population also presents challenges that need to be addressed. Like most Americans, many elderly use the automobile as the primary source of transportation. Also, like many Americans, a growing number of the region's elderly live in the suburbs. Unfortunately, most suburban communities in the region are not built to accommodate people who do not drive. In addition, low population densities and the absence of public transit perpetuate a dependence upon the automobile.

Investments in the region's transportation system as well as alternative transportation options are needed to support current and anticipated travel demand and meet changing mobility needs. Investments should take into account not only the need to accommodate the region's growth but also the need to provide sustainable growth.

## 2025 Regional Transportation Plan for Southeast Michigan

The Southeast Michigan region is currently home to 4.8 million people and growing. Total population is expected to increase 12 percent between 2000 and 2025. At the same time, average household size is decreasing, leading to a 20 percent increase in the number of households. The region is also expanding economically. Employment continues to rise as more and more businesses locate and expand within the region.

One result of increased community and economic prosperity is increased travel. While growth is desired, it must be balanced. A quality transportation system is, therefore, needed to sustain this growth. A first-class transportation system enables Southeast Michigan to attract economic investment, maintain quality of life and preserve precious and irreplaceable resources. In essence, transportation is the tie that binds the region together socially, economically and environmentally.

SEMCOG is the designated Metropolitan Planning Organization for Southeast Michigan. Recognizing the importance of transportation to regional vitality, SEMCOG brings local communities together to plan in a comprehensive, cooperative and ongoing manner. The center piece of the regional transportation planning process is the 2025 Regional Transportation Plan for Southeast Michigan (2025 RTP).

Through the 2025 RTP, plans are made for a transportation system that is safe, accessible, vital and environmentally friendly. This is accomplished through a series of four goals aiming to:

- provide accessibility and mobility for all people and goods,
- invest strategically in the transportation infrastructure to enhance the vitality of the community,
- promote a safe and secure transportation system and
- protect and enhance the environment.

Each of these goals, although autonomous, is also interrelated. This chapter describes, for each individual goal, existing conditions, issues and trends, identified needs and initiatives for meeting those needs. Finally, the plan describes how these goals work together to achieve the ultimate aim — a transportation system that lends itself to the ongoing prosperity of the region.

### Goals and Objectives

Setting realistic goals and objectives is a bottom-up collaborative process. Four goals and 23 objectives were developed for the 2020 Regional Transportation Plan as a result of input from local and state officials, the public, businesses and special interest groups. Standing the test of time, these goals and objectives were carried over into the 2025 RTP.

A goal of the 2025 RTP is providing accessibility and mobility for all people and goods. Objectives include:

- Reduce distance or time spent traveling.
- Increase the occupancy rate for motorized modes.
- Reduce barriers to the use of the transportation system, including non-right-of-way elements.
- Increase the continuity of transportation service across the region with appropriate access to major land uses.
- Emphasize multi-modal and intermodal improvements to enhance the movement of goods and people.
- Improve facilities and operations at junctions of modes.

Another goal is investing strategically in the transportation infrastructure to enhance the vitality of the community. Objectives include:

- Give priority to preservation and maintenance of the existing transportation system.
- Develop a financially responsible plan that best allocates available resources.
- Preserve current and planned rights-of-way for transportation system improvements.
- Develop transportation services that are consistent with regional and local land use plans as well as other development plans.
- Encourage creative public and private partnerships in transportation investments.
- Provide a transportation system that encourages employment growth, economic productivity and international competitiveness of the region.

An additional goal of the 2025 RTP is promoting a safe and secure transportation system. Objectives include:

- Reduce the number and severity of traffic crashes.
- Increase the safety and security of the transportation system, its users and those the system serves.
- Reduce crashes between rail, auto, transit and non-motorized modes.

Finally, a goal of the 2025 RTP is protecting and enhancing the environment. Objectives include:

- Reduce air, water and noise pollutant emissions and concentrations.
- Reduce energy consumption.
- Reduce the disruption of or damage to wetlands and natural habitats.
- Increase the use of public transportation and ridesharing.
- Reduce the risks associated with transportation of hazardous materials.
- Preserve and enhance the aesthetic natural and cultural qualities of the region.
- Encourage the development and use of non-motorized facilities and programs.
- Identify and reduce potential negative effects of the transportation system on:
  - " households and neighborhoods, particularly those with low-income or minority families;
  - " commercial and industrial facilities;
  - " prime agricultural, open space and recreational resources and
  - " historic sites and districts.

## **Providing Accessibility and Mobility for All People and Goods**

Accessibility and mobility for all people and goods is the heart of the region's transportation system. A quality transportation system provides balance among regional growth and prosperity, improved quality of life and preservation of precious, irreplaceable natural resources. Achieving this balance is central to the region's long-range transportation plan.

The initiatives designed to achieve that goal, as outlined in this section, are truly intermodal and multimodal in nature. They range from regional and international trade movements via rail, freeway corridors and border crossings to corridor studies designed to enhance the movement of vehicles (both private and commercial); from air travel to public transit; from mobility for the elderly to those transitioning from welfare to work. While these initiatives may at first appear unrelated, they are all parts of a comprehensive transportation system serving a wide variety of needs.

Ultimately, the transportation system must be accessible if Southeast Michigan is to remain a vital region of citizens and businesses. Personal mobility is key to quality of life. Accessibility to resources and commercial markets is key to continued economic prosperity. A world-class transportation system is necessary if the region's people and goods are to travel safely and efficiently, with minimal disruption to the natural environment.

### **Improving Mobility for All People**

Personal transportation in the Southeast Michigan region requires a complex — but coordinated — network of multi-modal transportation options, including motorized travel via public highways, transit, passenger rail and non-motorized travel, such as biking and walking. The following sections analyze personal transportation needs of various groups — private vehicle users, pedestrians and bicyclists, transit users and air passengers. Additional needs of special population groups are also addressed. Initiatives designed to improve the individual modes while increasing system coordination are outlined.

#### **Private vehicle users**

Not surprisingly, a vast majority of all daily travel in the region is made via private vehicles. Even with adequate availability of motorized transportation, users are affected by an imperfect transportation system and development patterns which limit their accessibility and mobility. The roadway network's ability to function optimally is impaired by safety deficiencies, congestion and deteriorating pavement and bridges.

There are any number of improvements that can enhance traffic operations and decrease congestion, ranging from travel demand management to increased use of public transit and non-motorized modes to safety improvements and added roadway capacity. All must be considered in a transportation decision-making process that identifies needs, develops solutions and prioritizes them according to available resources.

This process is collaborative in nature. The transportation system is a complex network with many different needs requiring multi-faceted solutions. For example, widening a congested corridor may not be the most efficient means for increasing capacity and decreasing congestion. Safety improvements at key intersections, access management and increased public transit may also be needed to improve traffic flow and meet excess travel demand. Furthermore, coordination among multiple jurisdictions (e.g., cities, villages and townships, county road commissions and the Michigan Department of Transportation (MDOT)) is also necessary to most effectively utilize limited resources. In this manner, safety and infrastructure projects can be implemented, ultimately balancing competing needs.

Many initiatives are designed to improve the highway system, ranging from pavement, bridge and capacity improvements, to increased public transit, to methods for better managing the current system through Intelligent Transportation Systems (ITS) technologies. (Pages 37-61 contain descriptions of these initiatives. Individual roadway improvement projects are detailed in the companion document — 2025 RTP Project List.)

Included in the 2025 RTP Project List are a number of transportation corridor studies. Corridor studies are designed to conduct a thorough analysis of current and projected needs and develop recommendations for improving travel along high-priority corridors. The following corridor studies are currently being conducted or planned in the region.

- Southern Livingston County/Northern Washtenaw County Study — SEMCOG, MDOT, the Ann Arbor-Ypsilanti Urban Area Transportation Study (AAYUATS) and affected county and local agencies are planning a joint study of current and future transportation system needs and improvements in the southern Livingston County and northern Washtenaw County areas. Funding for the study has not yet been determined.
- I-73/I-74 Corridor Study — The study of the proposed I-73/I-74 corridor (which would pass through Monroe County) is a multi-state project sponsored by Michigan, Ohio, West Virginia, Virginia, North Carolina and South Carolina. Study goals include increasing economic growth, improving safety, increasing national security, increasing tourism travel, improving quality of life and decreasing energy waste.
- I-75 Business Loop — The study of the I-75 Business Loop from I-75 to M-125 in Monroe County is designed to identify and construct a more suitable business route for the greater Monroe urban area. The study focuses on the southern element of the overall business route with particular concern regarding commercial access, including rail activity near the existing Dunbar/LaPlaisance Road intersection.
- I-75 — The goal of the I-75 Corridor Study in Oakland County is developing a series of coordinated transportation improvements for I-75 and the connecting road system sufficient to relieve travel problems and meet current and projected economic development needs. The study examines the entire length of I-75 through Oakland County. Additional studies involve specific interchange improvements along the corridor.

- Northwestern Connector — The Northwestern Connector study explores a variety of alternatives for relieving traffic congestion on various roadway links within the study area, including Northwestern Highway, 14 Mile Road, M-5 (Haggerty Connector), Maple Road and Orchard Lake Road. Alternatives to be considered include improvements to the existing road system as well as other innovative treatments, such as roundabouts.
- M-15 — MDOT is studying the M-15 corridor from I-75 to I-69 to identify operational improvements, including resurfacing strategies, to address current and future capacity needs.
- M-59 — MDOT is studying M-59 from Ryan Road to Crooks Road to identify capacity improvements addressing recurring congestion problems along the corridor.
- I-96 — MDOT is conducting a study of the I-96 corridor from Novi Road to US-23, identifying future capacity and operational needs. Dramatic increases in growth and development have caused concerns regarding congestion.
- West Oakland County Corridor Study — The West Oakland County Corridor Study is designed to evaluate potential north-south corridors in western Oakland County between I-96 and M-59 and select a preferred route for a new state trunkline. Study goals include reducing traffic congestion and improving safety within identified social, economic and environmental constraints while maintaining community character and strengthening economic viability.
- M-25 — The M-25 study addresses congestion along the M-25 corridor — especially 24<sup>th</sup> Avenue — in St. Clair County as well as the need for an additional Black River crossing. The study focuses on determining levels of shared responsibility for solving the M-25 congestion problem; determining the need for, character of (i.e., local crossing or bypass) and location of an additional Black River crossing and developing access management policies to ensure continued effectiveness of improvements to both M-25 and the corridor serving the new river crossing.
- St. Clair County Downriver Area — The Downriver Area Access Study addresses access management along Marine City Highway/26 Mile Road, King Road and Chartier Road in St. Clair County. Possible improvements include access management, zoning and traffic impact ordinances as well as intersection modifications.
- Range Road — The Range Road Corridor Advisory Committee will develop a corridor plan guiding future land use and transportation improvements along Range Road in St. Clair County. Possible results include access management and traffic impact ordinances.
- M-19 — The St. Clair County Transportation Study (SCCOTS) is considering conducting a study of the M-19 corridor from Fisher Road to Boardman Road, perhaps extending into northern Macomb County. Funding is not currently designated for this study.

- Capac Road — SCCOTS is considering conducting a study of the Capac Road corridor from Dudley Road to the southern county limits, perhaps extending into northern Macomb County. Funding is not currently designated for this study.
- M-14 — The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) identifies a high-priority project relocating the M-14 interchange at Barton Drive in Ann Arbor. MDOT and the AAYUATS are proposing the TEA-21 language be modified to allow for a comprehensive study of freeway access in northern Ann Arbor and surrounding townships. The study will then evaluate freeway access alternatives addressing current land use, freeway safety standards and possible social and environmental impacts.
- Ellsworth Road — A study of the Ellsworth Road corridor from South State to Platt in Ann Arbor, which continues to experience growth and related congestion, will address congestion and non-motorized deficiencies.
- Geddes Road — The Washtenaw County Road Commission is planning a study of the Geddes Road corridor from Huron Parkway to Dixboro. The study will address congestion and non-motorized issues as they affect travelers, particularly commuters traveling between Washtenaw and Wayne Counties.
- North Main Street — The North Main Street corridor from Depot to US-23 in Ann Arbor continues to experience congestion in the area of M-14. A study of the corridor will be designed to address congestion and non-motorized deficiencies.
- South State Street — Congestion along the South State Street corridor from Eisenhower to Ellsworth in Ann Arbor will be studied and alternatives designed to relieve congestion, particularly non-motorized modes, will be examined.
- I-375 — The I-375 study seeks to improve access to I-375 from the Detroit East River Front Area (ERFA), including Jefferson Avenue. The project is intended to facilitate new developments in downtown Detroit while maintaining an acceptable level of accessibility and mobility. Study objectives include, but are not limited to, modifications to I-375 to address the operation and safety of the I-375/Jefferson Avenue intersection; provision of pedestrian-friendly access along Jefferson Avenue and coordination and interface of roadway access improvements with other outside transportation influences, such as the Ambassador Bridge Gateway Project, Lansing to Detroit Rail Study and Detroit Department of Transportation's ERFA transit study.
- I-94 — A reconstruction and widening study of the I-94 corridor from I-96 to Conner Avenue is currently being conducted. Study goals address capacity, safety and mobility issues along the corridor. Of particular concern is facilitating the movement of trucks along this important international route. The section of I-94 from M-39 to I-96 is also being studied for improvements. Additional sections of I-94 may be studied for reconstruction in the future.

- M-2 — MDOT is currently conducting a study to identify a new east-west trunkline location in Wayne County's Downriver area and continues developing additional recommendations for the area as well. The new route is expected to facilitate expanding economic development.
- Water Taxi — A possible study of water taxi service between downtown Detroit and the suburbs along the Detroit River, Lake St. Clair and St. Clair River is currently being discussed. The goal would be alleviating congestion along I-94 by providing an additional travel option. Funding is not currently designated for this study.
- Regional Trunkline Study — SEMCOG and MDOT will conduct a study of regional trunkline needs and improvements. The goal is addressing current and future transportation needs in a comprehensive and coordinated manner.

### **Pedestrians and bicyclists**

Although improved vehicle travel does benefit the majority of system users, significant numbers of people do not have the option of using a private vehicle for transportation. They must rely upon other forms of transportation, such as shared rides with family or friends, taxis, public transit, inter-city bus, i.e., Greyhound, walking and biking. Unfortunately, these travel options provide only a fraction of the mobility and accessibility associated with vehicle travel, limiting not only where people can go but when they can go. Also, by limiting non-motorized facilities, children are forced to be dependent upon their parents for their transportation needs. This fact affects the quality of life of an entire family. Special consideration must, therefore, be given to the needs associated with non-vehicle travel.

Pedestrians (including persons in wheelchairs) and bicyclists are an often over-looked group of travelers. People walk and bicycle both by choice and by necessity. These two groups often face very different needs. Roadway conditions constrain where pedestrians and bicyclists can safely travel. Walking and bicycling are possible where well-designed and continuous walkways and bike paths are available, connecting residential areas to desired destinations. Where they are lacking, pedestrians and bicyclists are forced to either limit their activity or travel under unsafe conditions. Unfortunately, those who walk or bicycle to meet basic needs — such as going to the store, doctor's office or place of employment — often have no choice but to endure any unsafe conditions.

Clearly, there is a need to balance the desire for efficient and unimpeded vehicle travel with the important desire of pedestrians and bicyclists to access public spaces and fully utilize non-motorized travel. To that end, non-motorized travel must be made a priority and initiatives advanced that increase the ability of pedestrians and bicyclists to travel safely and efficiently. Benefits are obvious and far reaching — increased pedestrian and bicyclist safety, improved community participation for those who have limited access to private vehicle travel, improved quality of life and decreased vehicle travel, which increases the longevity of the road network and decreases congestion and air and water pollution. (Pages 72-79 contain specific initiatives related to non-motorized travel.)

## **Transit users**

Transit users also face limitations. Where transit service exists, inconsistent route coverage is a significant factor severely limiting mobility. Other areas have limited or no transit service, making efficient and seamless travel by bus across a region as geographically vast as Southeast Michigan impossible. For example, no regional transit currently exists connecting smaller urbanized areas (e.g., Port Huron) with the City of Detroit.

Transit users are also limited as to when they can travel — adhering to pre-determined schedules (including transfers) on bus routes and to advance-notice requirements for demand-response systems. Some additional flexibility is available through more advanced demand-response systems, such as taxi cabs. However, this benefit increases user cost significantly, putting it beyond the financial reach of many.

Provision of transit is an extremely complex issue. The ability to provide reliable and cost effective transit is dependent on a number of factors, including funding, capital programs, service levels and coordination. (Pages 53-59 identify needs and initiatives in terms of capital programs and service levels.) This current section focuses on summarizing existing conditions and needs — as related to funding, planning and corridor studies — and laying out regional initiatives designed to address them. (The Bibliography outlines additional sources of information.)

### Existing conditions

In FY 1998, regional transit agencies provided over three million hours of service, traveling 41 million miles while carrying 72 million passengers. Of the total passenger trips provided, 98 percent were fixed-route and two percent were demand-response trips, e.g, door-to-door and dial-a-ride services.

Major transit providers include the Detroit Department of Transportation (DDOT), Suburban Mobility Authority for Regional Transportation (SMART) and Ann Arbor Transportation Authority. Additional service is provided by the Blue Water Area Transportation Commission, in the Port Huron urbanized area, the Lake Erie Transit Commission serving Monroe County, Livingston Essential Transportation Services in Livingston County and the Detroit Transportation Corporation, which operates the Detroit People Mover. In addition to the major publicly provided transportation services, demand-response services for users with specialized transportation needs are provided by over 300 human service and community organizations as well as private companies.

The majority of transit customers within the region are transit dependent, meaning they have no other means of transportation. Included in the transit-dependent market are those with low incomes, persons with disabilities, older adults, youth, families with no cars and families whose travel needs cannot be met by just one car. Those who have access to an automobile but choose to make their trip by transit are considered “choice riders.” They do not need to use transit but choose to do so for reasons of speed, comfort, convenience, traffic avoidance or environmental principle.

Despite transit's many benefits for society, its use within the region is minimal. The current system has captured only a very small percentage of choice commuters and many riders (choice or otherwise) remain underserved. Attracting and retaining more riders requires a higher level of transit service as well as active promotion and marketing of that service. A higher level of service would mean increasing the frequency of buses on existing routes and/or expanding into areas not currently served by transit. These options would require increased funding.

### Funding needs

Diminishing federal and state funding sources challenge transit providers' abilities to deliver adequate service. Current funding, including funding from local sources, is not sufficient to meet public transit needs in Southeast Michigan. Of the top 25 urbanized areas in the nation, metropolitan Detroit ranks 20<sup>th</sup> in terms of local operating funding per capita<sup>1</sup>.

Adding to this dilemma are federally-legislated requirements for which only limited funding is available. Although transit providers recognize the usefulness of these requirements, additional funding is needed to effectively implement them. For example, the Americans with Disabilities Act requires all current and future fixed rail and bus systems across the country be fully accessible to those with disabilities. Supplemental demand-response paratransit service must also be provided for people who cannot access fixed-route service.

### Planning and coordination needs

In order to increase ridership, improve service quality and preserve resources, transit providers may need to coordinate essential operational and/or capital activities. Coordination of services can refer to two or more agencies simply cooperating with each other as well as executing more formal joint-use agreements. Yet another type of coordination between agencies is the consolidation of services.

A frequent issue raised about public transit in Southeast Michigan is merger of DDOT and SMART. Merger is seen by some as a means for improving overall transit service and efficiency in the region. Others see it as a costly and unnecessary step, noting that most major metropolitan regions currently function with two, or more, transit systems. A third view casts consolidation of appropriate services as an efficiency improvement that avoids the negatives of merger. Currently, DDOT and SMART have coordinated some services and continue seeking other opportunities to do so. They are using technology, such as Geographic Information Systems (GIS) and specialized software to coordinate schedules and improve other aspects of transit planning as well as jointly investigating a new terminal facility in downtown Detroit.

Enhanced transportation planning within the region is only possible if an effective means of determining and measuring regionwide transit deficiencies exists. This need may be addressed with continued, coordinated long-range planning between SEMCOG, the transit

---

<sup>1</sup> Based on data compiled from the National Transit Database, Transit Profiles, Federal Transit Administration, FY 1997.

providers and other key stakeholders. For example, SEMCOG is coordinating with the Wayne State University Transit Center of Excellence to develop a transit component of the regional GIS that includes data such as fixed-route lines and bus stops. The end result will be GIS applications and tools designed to assist transit providers in improving service.

### Transit corridor studies

While buses may be the more common form of transit, other transit modes could potentially serve regional transportation needs as well. A number of studies have recently been completed or are currently being conducted in the region. (The Bibliography outlines additional sources of information.)

- The ongoing Detroit-Chicago High-Speed Rail Passenger Corridor Study continues to identify an implementation strategy for high-speed passenger rail service in the Detroit to Chicago corridor. SEMCOG supports the long-range implementation efforts which have begun in western Michigan, including:
  - " implementing an "Incremental Train Control System" from the Michigan/Indiana state line to Kalamazoo,
  - " realigning tracks near Battle Creek and connecting tracks in Detroit,
  - " identifying at-grade rail crossings for improvement, closure or grade separation,
  - " designing a new Amtrak station in Detroit and
  - " completing a Canadian Pacific intermodal freight transfer facility in Detroit, facilitating Amtrak express mail and package service.
- The Lansing to Detroit Passenger Rail Study examines the possibility of providing rail service for commuters and other users who travel between Lansing and Detroit. The main study goal is determining if passenger rail between Lansing and Detroit is feasible with regard to service cost and passenger projections.
- The Downtown Detroit to Detroit Metro Airport Rail Study examines the feasibility of establishing commuter rail from Downtown Detroit to Detroit Metro Airport.
- Bus rapid transit along the region's major transit corridors is a concept being explored in a study by the *SpeedLink* Collaborative. The Collaborative includes the Metropolitan Affairs Coalition, Detroit Regional Chamber, Detroit Renaissance and Greater Downtown (Detroit) Partnership. Headed by the Metropolitan Affairs Coalition, the study focuses on *SpeedLink*, a "train on tires" delivering bus rapid transit service comparable to a train, with dedicated busways, sheltered passenger stations, signal preemption and train-like articulated buses.
- The Woodward Avenue Corridor Transit Alternatives Study is designed to identify public transit infrastructure and service improvements in the Woodward Avenue Corridor as part of Detroit's comprehensive downtown reinvestment strategy. The first phase of the study, which has been completed, focused primarily on four alternatives — light rail, bus rapid transit, commuter rail and automated guideway transit technology, similar to the Detroit People Mover. The results indicated the bus rapid transit and light rail transit alternatives would:

- N be more economical to operate than current services along the corridor,
- N provide greater efficiency and service quality to current transit-dependent riders and attract more choice riders,
- N generate additional ridership,
- N lower emissions,
- N better utilize existing infrastructure and
- N stimulate economic development along the corridor.

Lack of some form of rapid transit is a serious deficiency within the region's public transportation infrastructure and puts Southeast Michigan at a competitive disadvantage compared to many other metropolitan areas for businesses, jobs, tourism, conventions and overall quality of life. Therefore, SEMCOG supports examining and developing rapid transit alternatives that can cost effectively move residents to employment and needed services as well as connect visitors with regional amenities.

In that regard, SEMCOG supports the Detroit Transportation Corporation's proposal to move the bus rapid transit and light rail transit alternatives forward to the next study phase and secure funding for an Alternatives Analysis along the Woodward Avenue corridor. This analysis should be conducted in a regional context — taking into consideration and coordinating with efforts, such as *SpeedLink*, that are examining prospects for developing a comprehensive, regional network of rapid transit services.

#### Future initiatives

SEMCOG will continue developing its appropriate role in regional public transit, assisting local transit providers to enhance and coordinate needed services throughout the region with future initiatives.

#### *Transit funding*

Clearly, there is a need to not only maintain current transit funding levels but to actively seek, develop and maintain additional funding sources. That will continue to be difficult because roadway needs already far outweigh available resources, leaving less room in prioritization of available funds for transit. For example, Michigan legislation allows up to 10 percent of state transportation funds to be allocated to public transit, but other priorities have kept public transit from receiving the full 10 percent of available funds.

#### *Public perception of transit*

Positive public perception of transit is crucial to its future success. Transit must become viewed as a viable, attractive travel option for all people and not solely a last resort for the transit dependent. This change in attitude will require a concerted effort on the part of transit providers, government agencies and advocacy groups to demonstrate the overall benefit of an improved transit system and develop a stronger foundation of support throughout the region.

### *Transit vision*

Even before these other issues can be addressed, regional transit needs must be more fully understood and prioritized. A commitment to developing a consolidated, long-term transit vision for the region is required. Such a regional vision would establish the foundation needed to clearly define needs, specify and prioritize regional initiatives and promote sustained transit funding efforts.

Transit providers currently have such visions — for their own operations. There is at least one private sector vision, the *TransitChoice* vision developed by the Metropolitan Affairs Coalition in collaboration with the Detroit Regional Chamber. *TransitChoice* is a regional vision recommending a regional level of fixed-route service supported by extensive small bus inter-community service, providing feeder service to the fixed routes.

Support for better regional public transit will remain fragmented and ineffective until a single regional transit vision is crafted and endorsed by local governments, working through SEMCOG, transit operators, the private sector, labor and the general public. Therefore, SEMCOG will facilitate development of a long-range and comprehensive transit vision for Southeast Michigan. SEMCOG's visioning process will include transit providers, government funding agencies and representatives of the populations served by transit. The vision will include existing services and consider previous and current efforts to develop additional transit options, including the transit corridor studies previously discussed. The end result will be a vision for a regional system representing the most appropriate mix of transit services and generating the public and political will necessary to sustain it.

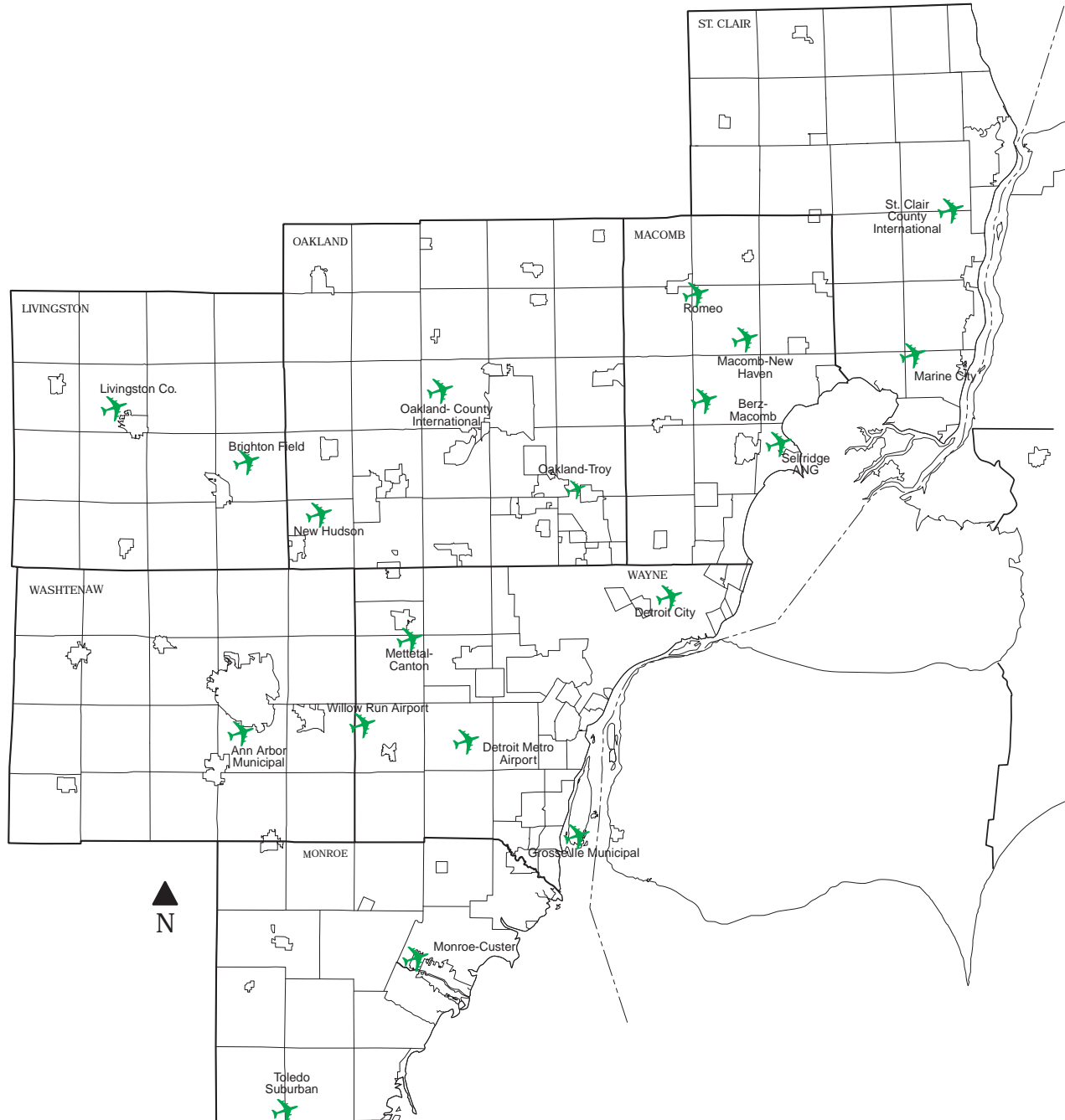
### **Air passengers**

Travel by air is also an important element of the transportation system. There are a total of 37 airports in Southeast Michigan (36 general aviation facilities and one military facility). Nineteen of the 37 facilities are considered system airports because their level of activity most directly influences aviation and travel in the region (Figure 2). There are also five airports external to the region which are system airports — Flint's Bishop International, Canada's Windsor International, Lapeer-Dupont in Lapeer County, Jackson County-Reynolds Field in Jackson County and Toledo Express in Ohio.

Only two airports in the region, however, provide scheduled passenger service — Detroit City and Detroit Metro. To qualify as having air service, a facility must show scheduled passenger service by at least one flight on at least five different days each week. Such airports qualify as air carrier airports. Prior to 1997, Detroit Metro was the only airport in Southeast Michigan meeting this definition. Scheduled passenger service resumed at Detroit City Airport in 1997 with Pro Air airline after four years of no service.

The *1998 Regional Aviation System Plan Update* (RASP) contains a number of initiatives designed to maintain the capacity of the region's aviation system, thereby improving conditions for regional air passengers. (Pages 52-53 summarize those initiatives. The Bibliography outlines additional sources of information.)

Figure 2  
System Airports in Southeast Michigan



Source: SEMCOG

## **Special population groups**

The initiatives described thus far are intended to improve the transportation system for all the region's travelers. However, specific initiatives are sometimes required to better meet the specialized or additional needs of particular population groups, including the elderly and welfare-to-work participants. The special needs of these groups often include specific barriers to accessibility and mobility that must be recognized and addressed.

### Elderly mobility and safety

The elderly — defined as persons age 65 and older — represent a growing segment of our society. As the number of older persons continues increasing, important issues affecting this population segment need to be addressed. One such issue is preserving and enhancing mobility and safety. Unfortunately, many factors related to the safety and mobility of the transportation system only take into account the needs of a younger population. Furthermore, the transportation system offers few options for people who cannot or choose not to drive.

In 1998, SEMCOG convened an Elderly Mobility & Safety Task Force, assessing the issues and developing statewide recommendations for consideration by the Michigan State Safety Commission. Because the issues addressed affect everyone — young and old — they should be part of a systematic approach carried out in all state, regional and local transportation planning, design and policy decisions.

SEMCOG will continue furthering the goal of providing accessibility and mobility for the elderly by incorporating the following initiatives into the long-range planning process.

- Continue coordinating with federal, state and local partners in promoting implementation of “elderly-friendly” traffic engineering practices in the region.
- Coordinate with the Michigan Intelligent Transportation Systems (ITS) committee to seek ITS solutions for the specific issue of elderly mobility.
- Promote funding for additional traffic engineering services at the local level that will also focus on elderly issues.
- Continue coordinating with federal, state and local partners to seek additional and long-term funding for public transit services.
- Support development of centralized transportation resource centers at the regional level to disseminate information and generate coordinated resources.
- Seek to remove legislative and programmatic barriers to cross-jurisdictional transit service provision.
- Continue coordinating with federal, state and local partners to implement other initiatives as they arise.

### Welfare-to-work

A new challenge in the regional planning process is integrating the commuting needs of the welfare-to-work population and the general public into one regional strategic plan targeted toward improving transportation system performance. To reduce transportation barriers to employment, SEMCOG continues working collaboratively with federal, state and local government agencies, representatives from business and industry, faith-based organizations and transportation providers by:

- chairing the Welfare-to-Work Transportation Task Force which continues to form new alliances, create innovative public transportation programs and seek sustained funding resources,
- facilitating productive relationships among local transportation providers, service agencies and governmental agencies, including the state and federal departments of transportation, labor and health and human resources and
- providing grant assistance so local agencies can most effectively leverage needed funding for their welfare-to-work programs.

(The Bibliography outlines additional sources of information.)

### **Improving Mobility for All Goods**

The 2025 RTP goal of improving accessibility and mobility applies not only to people, but goods (freight) as well. A good transportation infrastructure is vital to the region's economy, moving people to jobs and shopping, materials to factories and goods to market.

Of particular importance is the region's role as an international crossroads for freight movement, an important gateway to Canada, Chicago and the midwest, Mexico and the world. For example, ships using ports in the region connect with other Great Lakes cities and, via the St. Lawrence Seaway, with ports in Europe and the rest of the world. Air freight operations, trains and trucks also link Southeast Michigan with markets across the nation and around the world. As a result, a major transportation concern is intermodal freight movement — facilities for transferring of freight among boats, planes, trains and trucks in the international flow of freight to, from and through the region.

#### **Existing freight conditions**

This section summarizes the existing condition of the region's multi-modal freight transportation system. (The Bibliography outlines additional sources of information.)

##### Truck network

Trucks carry more than 50 percent of the state's freight movements, including bulk commodities such as steel, gravel, fuel, grain and forest products. State roadways provide the highest level of service to truck traffic in terms of truck width, length and weight. State trunklines in Southeast Michigan include interstate, federal and state highways. (Figure 3 shows state trunklines in the region.)

Trucks are at the center of intermodal freight movement. They haul freight, particularly cargo containers, between ships, planes and trains and haul new vehicles between plants and trains. They are critical to the auto industry's "just-in-time" inventory process. As a result, a number of rail terminals in the region are combined with truck operations for efficient intermodal transfer of freight. (Table 5 identifies rail/truck intermodal facilities in Southeast Michigan.)

Table 5  
**Rail/Truck Facilities in Southeast Michigan**

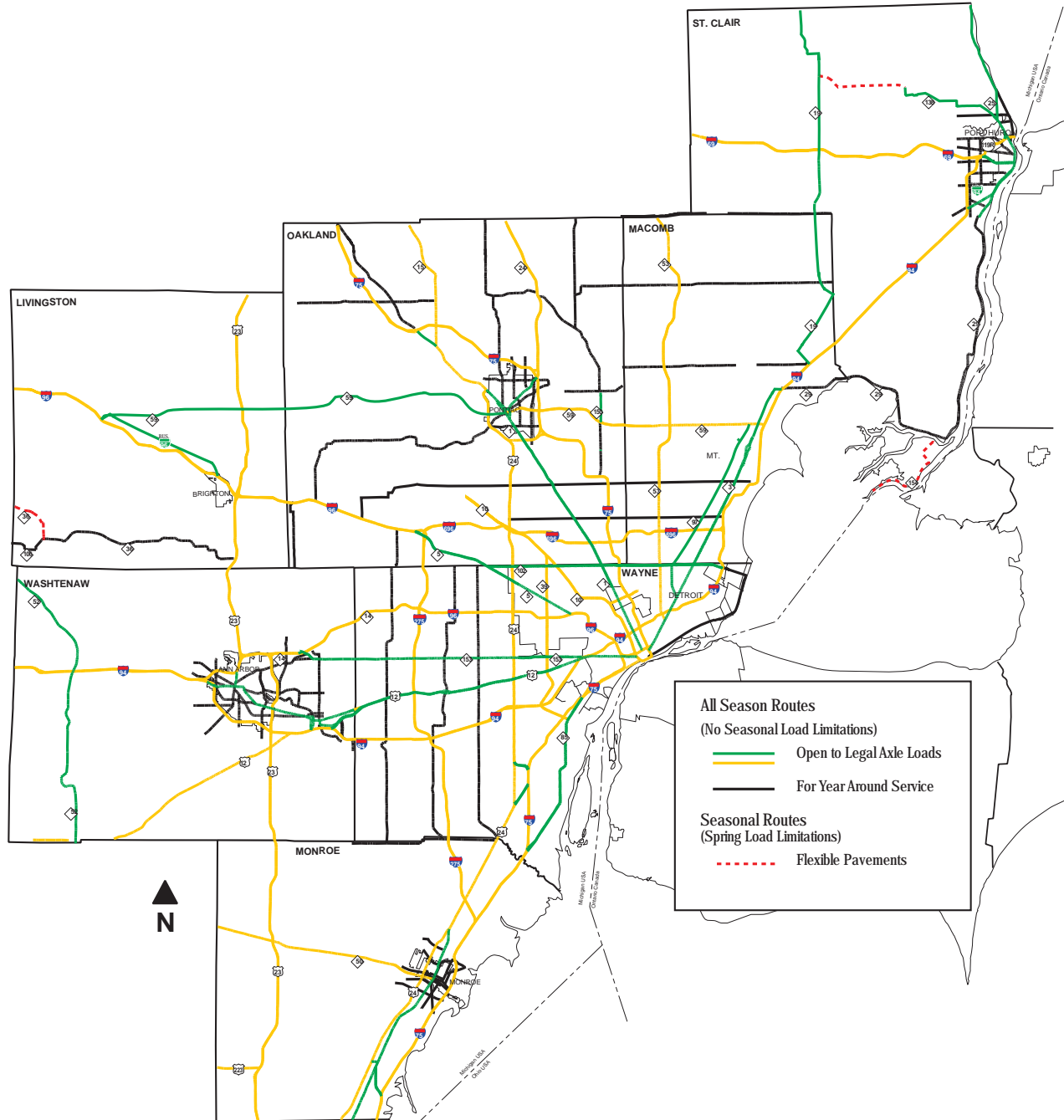
Facility	Connecting Route	County
Canadian National North America Moterm	Fern Street at M-102	Oakland
Canadian Pacific Rail System Oak Yard	On M-39	Wayne
Detroit Junction/Livernois Intermodal Terminal	Mercier Street at Wyoming	Wayne
New Boston Auto Ramp	Sibley Road at I-275	Wayne
Norfolk Southern - Triple Crown	South Wabash Street near Dix Road	Wayne
Norfolk Southern - Delray	On Fort Street	Wayne
Norfolk Southern - Oakwood	Hess Street near Schaefer	Wayne
Norfolk Southern - Thoroughbred Bulk Transfer Facility	McKean Street near I-94/ Rawsonville	Washtenaw

Source: Michigan Department of Transportation

### Rail

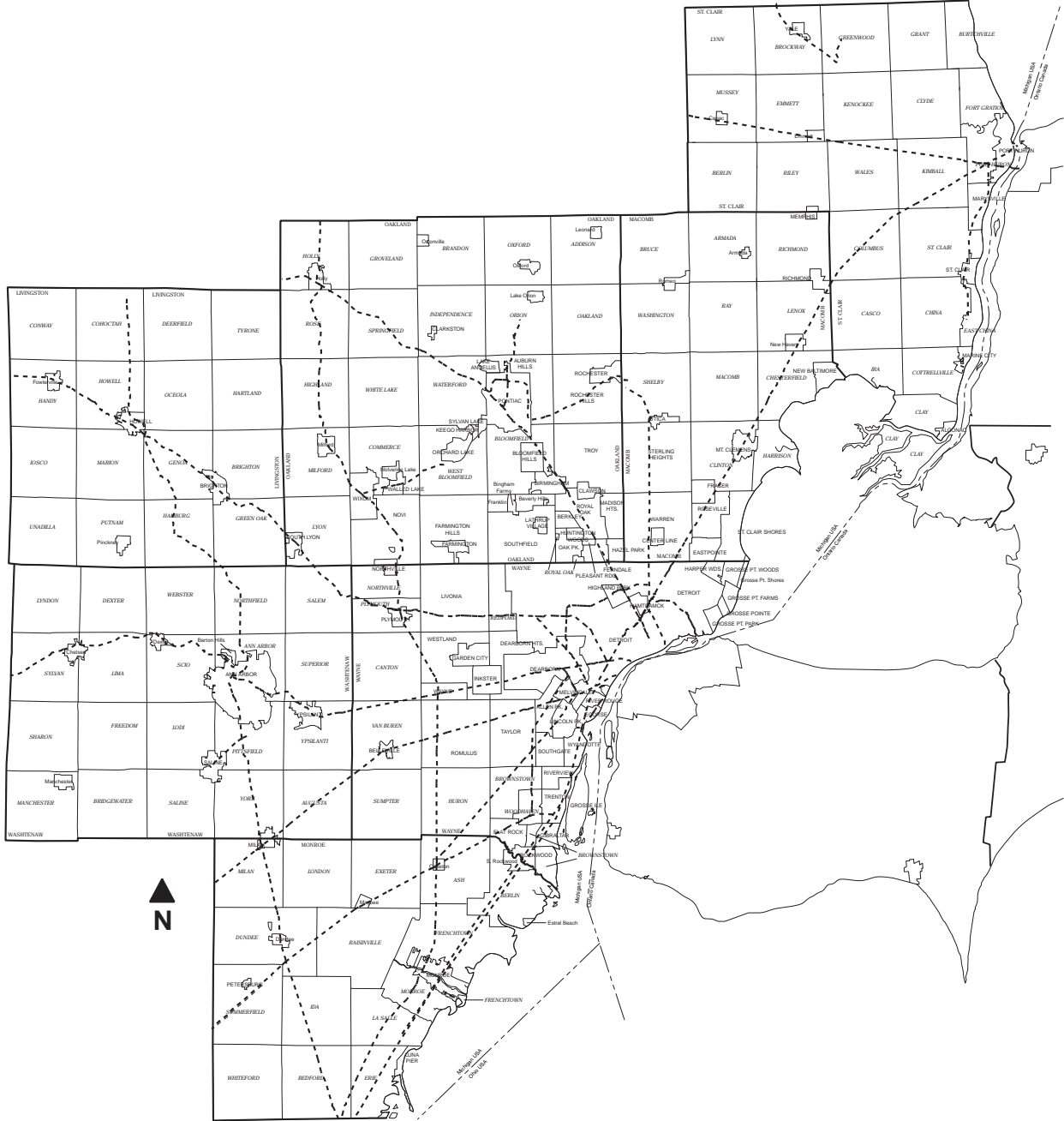
Southeast Michigan's regional rail network plays a key role in the shipment of bulk commodities, parts and finished products. The primary rail companies active in the region are Norfolk Southern, CSX Transportation, Canadian National, Conrail and Canadian Pacific. (Table 6 shows the breakdown of active rail lines by county in the region. Figure 4 illustrates Southeast Michigan's rail network.)

Figure 3  
State Truck Routes in Southeast Michigan



Source: MDOT Truck Operators' Map, 1999

Figure 4  
Rail Network for Southeast Michigan



Source: SEMCOG

Table 6  
**Total Miles of Active Rail, 1999**

County	Miles of Active Rail	Percent of Total
Livingston	69	7.54%
Macomb	69	7.54%
Monroe	200	21.86%
Oakland	119	13.01%
St. Clair	65	7.10%
Washtenaw	101	11.04%
Wayne	292	31.91%
Total	915	100.00%

Source: SEMCOG

#### Air cargo

Air cargo is a significant generator of aviation activity and is also important for “just-in-time” delivery of manufacturing and transportation equipment, with trucks, again, providing intermodal linkages. Air cargo levels in the region accounted for a majority of state totals between 1995 and 1999. In those years, Detroit Metro and Willow Run Airports ranked first and second in the state for air cargo shipments (Table 7).

Table 7  
**Air Cargo Levels, 1995-1999**  
**(in 1,000s of pounds)**

Airport <sup>1</sup>	1995	1996	1997	1998	1999
Detroit City	4,650	3,770	3,867	4,617	5,587
Detroit Metro	488,342	499,302	479,867	455,548	507,528
Willow Run	71,457	39,200	36,127	41,739	166,867

<sup>1</sup> Oakland County International Airport, which is also a significant air cargo generator, does not submit air cargo figures.

Source: Michigan Department of Transportation Bureau of Transportation Planning, 2000

### Marine

Waterborne transportation is not only a significant part of intermodal transportation but is an essential component of the region's international trade. The ports in the region are linked to the world market via the Great Lakes/St. Lawrence Seaway. The largest port in the region and the state, the Port of Detroit is an international port with seven privately owned terminals located on the Detroit and Rouge Rivers. (Table 8 details trade totals at the Port of Detroit.) Port facilities along the St. Clair River handle 13 million tons of freight annually.

Table 8

### **Waterborne Commerce/Trade for the Port of Detroit (in 1,000s of tons)**

	1990	1991	1992	1993	1994	1995	1996	1997
Total Trade <sup>1</sup>	17,135	14,321	16,303	17,422	18,718	18,661	18,604	18,136

<sup>1</sup> Tonnage figures computed as short tons of 2,000 pounds.

Source: *Port of Detroit World Handbook*, 1999/2000

### Border crossings

While Southeast Michigan and Southwest Ontario share an 87-mile international border, transportation connections for truck, automobile and rail movements are limited to two primary locations, Port Huron/Sarnia and Detroit/Windsor. In Port Huron, access is provided by the Blue Water Bridge and a double-stack cargo rail tunnel. In Detroit, access is via the Detroit-Windsor Tunnel, Ambassador Bridge and a single-stack rail tunnel. On a smaller scale, a freight barge operates on the Detroit River as an alternative for commercial crossings (primarily hazardous materials) and passenger/car ferries operate along the St. Clair River.

The Ambassador Bridge currently carries more truck traffic than any other international border crossing in North America, carrying 3.4 million trucks in 1999 (27.6 percent of the total number of vehicles crossing that year). The Detroit-Windsor tunnel is second for all U.S./Canada traffic with 9.6 million vehicles (205,000 of which were trucks) using the facility in 1999. Port Huron's Blue Water Bridge was ranked fifth in overall U.S./Canada vehicle travel and third in truck traffic with approximately 1.5 million truck crossings. (Table 9 details auto and truck crossing data for the region.)

Table 9  
**Southeast Michigan/Canada Border Crossings**  
**Motor Vehicle Volumes, 1996-1999**

	1996	1997	1998	1999
<b>Ambassador Bridge</b>				
Truck	2,476,360	2,697,176	2,993,292	3,428,151
Passenger	7,883,640	8,181,968	8,686,625	8,924,571
Total	10,360,000	10,879,144	11,679,917	12,440,026
Percent Truck	23.90%	24.79%	25.63%	27.56%
<b>Blue Water Bridge</b>				
Truck	1,184,862	1,269,552	1,350,860	1,495,325
Passenger	3,855,203	3,881,728	3,846,668	4,042,502
Total	5,040,065	5,151,280	5,197,528	5,545,320
Percent Truck	23.51%	24.65%	25.99%	26.97%
<b>Detroit-Windsor Tunnel</b>				
Truck	269,388	257,557	241,271	205,015
Passenger	8,827,268	8,728,571	9,204,648	9,337,106
Total	9,096,656	8,986,128	9,445,919	9,608,655
Percent Truck	2.96%	2.87%	2.55%	2.13%

Source: United States-Canada Bridge and Tunnel Operator's Association

Overall, 28 million vehicles traveled between the U.S. and Canada through Southeast Michigan crossings in 1999. Between 1996 and 1999, truck traffic at all crossings increased 31 percent, from 3,930,610 to 5,128,491. The bulk of this truck traffic is at the Ambassador Bridge and the Blue Water Bridge, which increased by 38.4 percent and 26.2 percent, respectively. However, while overall traffic increased by 5.6 percent, truck traffic at the Detroit-Windsor Tunnel decreased 23.9 percent between 1996 and 1999.

The Ambassador Bridge Gateway study estimates that crossings at the Ambassador Bridge alone will increase to 11.5 million autos by the year 2020 while truck traffic is projected to increase to five million during the same time period. Traffic volumes are also likely to increase on the Blue Water Bridge following the opening of its second span in 1999.

Estimates indicate nearly 900,000 rail cars move through regional rail tunnels at Detroit and Port Huron annually. Traffic and trade occurring at these crossings will likely increase following Canadian National's acquisition of Illinois Central, CSX Transportation and Norfolk Southern's recent acquisition of Conrail and planned rail facility improvements.

### **Freight needs**

As freight movement continues playing an ever-increasing role in the economic viability of the region, it is important to address whatever problems and issues may arise. The all-encompassing issue is the increasing inefficiency of the system. Issues common to all modes which negatively affect the system's efficiency include inadequate maintenance of facilities (particularly the road network), inadequate access between transportation modes, inadequate funding, conflicts with adjacent land uses and inconsistencies in the networks. Specific issues include:

- poor condition of freeways and major roadways, which make up a small portion of the road network in the region yet carry an increasingly significant amount of freight traffic;
- lack of coordination between the counties in the region regarding designation of truck routes. Each county in the region has different criteria for the designation of truck routes, resulting in difficulty for drivers as they cross county boundaries;
- lack of a combined, shared rail/truck intermodal facility in Detroit;
- transport of containers by truck to Toledo and Chicago because of low capacity at freight terminals in Detroit;
- costly operation of rail lines for rail companies;
- need for better communication and coordination between rail companies and all levels of government, especially local units;
- lack of coordinated planning with areas outside the SEMCOG region, leaving inconsistencies in the system;
- lack of information available on specific modes for general planning purposes, (e.g., truck, rail and border crossing data) and
- poor access on both sides of the Ambassador Bridge, where increases in both passenger and truck traffic have caused increased delays and congestion.

### **Freight initiatives**

Several general and specific issues contributing to inefficiencies in the freight transportation system have been identified. SEMCOG is actively involved in numerous activities and projects to address these issues and enhance the system. Activities representing a cross-section of what is being done in the region include border and corridor planning and partnerships; rail studies, projects and activities; freight partnerships and initiatives and other intermodal projects and activities. (The Bibliography outlines additional sources of information.)

#### Border and corridor planning and partnerships

- Ambassador Bridge Gateway Project — This project focuses on improving access to the bridge from Michigan's highway system as well as the relationship of the facility to the surrounding Mexicantown neighborhood.

- Border Crossing Capacity Study — The Gateway Project study estimates the Ambassador Bridge will reach capacity in 2015. A study done by Windsor suggests the bridge's capacity could be reached as early as 2012. This study will identify options for addressing the bridge capacity problem, examining such options as expanding the bridge or building a second bridge.
- Eastern Border Transportation Coalition (EBTC) — The EBTC study seeks to establish a coherent and effective strategy for enhancing trade flows along the eastern U.S./Canada border.
- I-94 International Trade Alliance (ITA) — I-94 from Chicago through Detroit and Port Huron to Windsor and Sarnia links the heartlands of the United States, Canada and Mexico. SEMCOG is Secretariat for the I-94 ITA, which brings together private sector, public sector and labor organization partners to study and enhance transportation movements along this corridor.
- SEMCOG/Windsor Partnership — Recognizing the need for coordination of transportation infrastructure planning and implementation, SEMCOG and City of Windsor staff work together, sharing relevant data and information. That cooperation enhances the transportation planning processes in the individual regions as well as begins the process of integrating regional systems and plans.
- Bi-national planning process — SEMCOG coordinates with applicable local, state, provincial and federal governments and transportation agencies/facilities in Southeast Michigan and Southwest Ontario. Goals include establishing working relationships, providing better understanding of bi-national transportation interrelationships and identifying and correcting inconsistencies in the individual planning processes.
- Blue Water Bridge — The Michigan Department of Transportation completed a Blue Water Bridge and toll plaza operations study in fall 1998 as a result of safety concerns related to traffic congestion at the U.S. customs plaza. In addition to addressing safety issues, the study includes short- and long-term capacity analyses and solutions for the bridge. A study of a new I-94 crossing at the Black River in Port Huron is also being conducted. The new crossing would improve access to the Blue Water Bridge.
- Partnerships with other agencies and coalitions — SEMCOG provides technical assistance and reciprocal membership for various public/private Canadian organizations and coalitions. These efforts focus on methods for facilitating trade and transportation improvements between Canada and the U.S.

#### Rail studies, projects and activities

- U.S./Canada tunnels — SEMCOG participates with a group of public and private sector representatives studying the feasibility of providing domestic double-stack cargo shipping capability for the Detroit-Windsor rail tunnel. Currently, domestic double-stack train

shipments must be routed through the Port Huron-Sarnia tunnel, creating system inefficiencies.

- Rail system and operation changes — The rail industry's attempts to become more efficient and competitive with alternative modes of freight transport include efforts to streamline both its operations and infrastructure. SEMCOG currently reviews all rail abandonment and merger/acquisition proposals as they relate to rail traffic increases, new construction, changes in activity at intermodal facilities and rail yards.
- Intermodal terminal development — The 2020 RTP identified a shortage of intermodal transfer facilities in the region and called for a combined regional rail/truck intermodal facility to meet this need, which still exists. SEMCOG participates on the Detroit Intermodal Terminal Steering Committee, which seeks to develop a combined regional rail/truck intermodal terminal at the Junction Yard site in Detroit. In addition to these efforts, several other intermodal facilities have been proposed or are being developed in the region, including the Canadian Pacific intermodal terminal in Southwest Detroit for the shipment of truck trailers between Detroit and Toronto.

#### Freight partnerships and initiatives

- Rail map development — SEMCOG is currently working with rail companies to develop a map of Southeast Michigan showing rail lines and terminals in the region with rail ownership clearly identified. Such a map, developed as a component of SEMCOG's Geographic Information Systems (GIS), is beneficial to planners, engineers, rail companies and local communities for analyzing both the rail system and its interface with the rest of the regional transportation system.
- Truck route map development — In an effort to provide information to users in a more functional and efficient manner, SEMCOG is developing a regional truck route map. The map is being built using GIS software, allowing for association of route information with other pertinent data sets (e.g., traffic volumes and bridge restrictions).

#### Other intermodal freight projects and activities

- Economic region map development — SEMCOG's Economic Region Map depicts the Southeast Michigan area from an economic perspective and focuses on the intermodal freight network connecting Southeast Michigan with adjacent regions — Toledo, Southwest Ontario and Flint.
- Intermodal site tour — SEMCOG worked with rail companies, marine facilities and the Detroit-Wayne County Port Authority to conduct a tour of various intermodal sites in the region for local, state and federal officials and business representatives. The tour provided an increased understanding of rail/truck/marine intermodal operations and issues — as well as increased awareness of the condition of the intermodal connections between these facilities and the region's road system. Additional tours are planned in the future.

- Intermodal task forces — SEMCOG’s Freight and Aviation Task Forces have been instrumental in further defining and identifying issues as well as in development of such products as the Southeast Michigan Truck Operator’s Route Map, Southeast Michigan Rail Ownership Map, *1998 Regional Aviation System Plan Update* and the non-motorized Web site.

## **Investing Strategically in the Transportation Infrastructure to Enhance the Vitality of the Community**

The goal of investing strategically in the region’s transportation infrastructure focuses on preserving and maintaining the existing system. In light of the region’s social and economic growth, the aim is to provide a transportation system that encourages employment growth, economic productivity and international competitiveness while at the same time meeting the accessibility and mobility needs of people and freight and preserving natural resources. In order to maintain a regional transportation system, the planning process must remain consistent with regional and local land use and development plans. By bringing together public and private partners who have an investment in the transportation system, SEMCOG is able to develop a financially responsible plan that best allocates available resources.

The following sections describe needs and initiatives related to the region’s infrastructure. The sections focus on selecting transportation improvement projects, congestion, pavement, bridges, aviation, transit and Intelligent Transportation Systems.

### **Selecting Transportation Improvement Projects**

Selection of transportation improvement projects is a complex task. If there were enough federal, state and local funds to meet all regional transportation needs, there would be no need to prioritize and choose among competing projects. However, with great demand for limited resources, projects must be strategically reviewed to select those that, as a whole, most effectively meet the current and expected needs of the transportation system. To establish fiscal constraints and provide a guide for selecting projects, SEMCOG provided a 25-year financial forecast to each of the seven counties and City of Detroit as well as transit agencies and the Michigan Department of Transportation (MDOT). As described in the Financial Plan (page 81), this financial forecast estimated \$24 billion in federal, state and local transportation funding will be available in Southeast Michigan for FY 2001-2025. With this information, the counties, transit agencies, City of Detroit and MDOT could reasonably predict their ability to address current and future transportation system needs through project implementation.

SEMCOG also provided data analyses to road and transit agencies for assessing the needs of the region's transportation system.

- Congestion — A list of congested roadway segments was provided as identified by the travel demand forecast model process. Agencies were asked to consider the deficient locations as they developed their lists of projects.
- Pavement — Because no regional analyses of pavement conditions were available, local agencies were asked to utilize other appropriate analysis techniques for prioritizing and submitting pavement projects.
- Bridges — SEMCOG developed lists of high-priority bridge locations based upon structural deficiency and functional obsolescence as well as eligibility for federal rehabilitation and replacement funding.
- Traffic safety — SEMCOG developed lists of high-priority crash intersection locations prioritized by the five-year average of total crashes from 1993-1997.
- Transit — SEMCOG provided the transit agencies with a list of deficient roadway segments to plan routes. They were also provided with projected land use information to assist in planning for future needs.

With knowledge in hand of available funding (Table 10), transportation system needs and deficiencies, the seven counties, City of Detroit, transit agencies and MDOT selected projects for the 25-year span of this RTP. (The 2025 RTP Project List is a separately bound companion document.)

The complete list includes 1,819 projects, with a total cost of \$17.6 billion. These numbers reflect 62 percent more projects and 120 percent more money than was included in the 2020 RTP Project List. (Pages 81-100 contain more information on the Financial Plan.)

Infrastructure projects are designed to improve the local areas where the individual improvements are made. However, cumulative impacts of local improvements also benefit the regional transportation system as a whole. Transportation improvements identified in the 2025 RTP Project List will bring the region closer to the ultimate goal of a safe, accessible, cost-effective and environmentally-friendly transportation system that contributes to social and economic prosperity. But, there will not be enough funding in the next 25 years to achieve those goals through those funded projects alone.

In light of this reality, SEMCOG continues to progress toward a balanced planning strategy that seeks to better maintain the existing infrastructure within current financial constraints. The following sections describe these management activities and initiatives.

Table 10  
**Summary of Available Funds for the 2025 RTP**  
**(in 1,000s of 1999 dollars)**

	2001-2005	2006-2025	Total
<b>Federal</b>			
Local Road Agencies	465,122	1,517,408	1,982,530
Michigan Department of Transportation	1,349,307	4,436,428	5,785,735
Transit Agencies	232,015	800,775	1,032,790
<b>Total Federal</b>	<b>2,046,444</b>	<b>6,754,611</b>	<b>8,801,055</b>
<b>State and Local</b>			
Local Road Agencies	520,759	1,817,423	2,338,182
Michigan Department of Transportation	381,132	1,205,155	1,586,287
Transit Agencies	1,131,754	3,355,225	4,486,979
<b>Total State and Local</b>	<b>2,033,645</b>	<b>6,377,803</b>	<b>8,411,448</b>
<b>Total Available Funds</b>	<b>4,080,089</b>	<b>13,132,414</b>	<b>17,212,503</b>

Source: SEMCOG

### Congestion

In order to effectively plan for the region's transportation system, it is necessary to anticipate future travel needs. It is also necessary to develop a mechanism for assessing the effectiveness of different transportation improvement options. SEMCOG uses a set of sophisticated computer models to forecast future travel and congestion on the region's roads. These travel demand models use forecasted population and employment along with information on household trip characteristics and travel patterns to forecast future travel and identify roadway congestion. Typically, travel is measured in vehicle miles traveled, which provides planners and decision makers with an indication of current and future driving conditions for roadway segments throughout the region.

Congestion occurs when the number of vehicles on a roadway segment exceeds the roadway's capacity for efficiently carrying vehicles, resulting in travel slower than the roadway's design speed. Roadways may experience either recurring congestion (regularly exceeding capacity) or non-recurring congestion (caused by a roadway incident, such as a traffic crash or abandoned vehicle).

### **Congestion needs**

Currently, there are approximately 132 million weekday vehicle miles of travel (VMT) on the region's roadways, with approximately 23.3 percent of this travel occurring under congested conditions. If no changes were made to the current transportation system (No Build Scenario), 2025 travel would result in 147 million VMT, 32.7 percent of which would take place in congested conditions. If the projects proposed in the 2025 RTP Project List were implemented (2025 RTP Scenario), 2025 travel would result in 146 million VMT, 28 percent of which would be in congested conditions (Table 11).

Figure 5 shows congestion levels in 2025, including locations where congestion would be eliminated if the projects included in the 2025 RTP Project List are implemented. If these projects are not implemented, the eliminated and remaining congestion depicted in Figure 5 (both red and blue) would worsen. Additional routes would likely be congested as well.

### **Congestion initiatives**

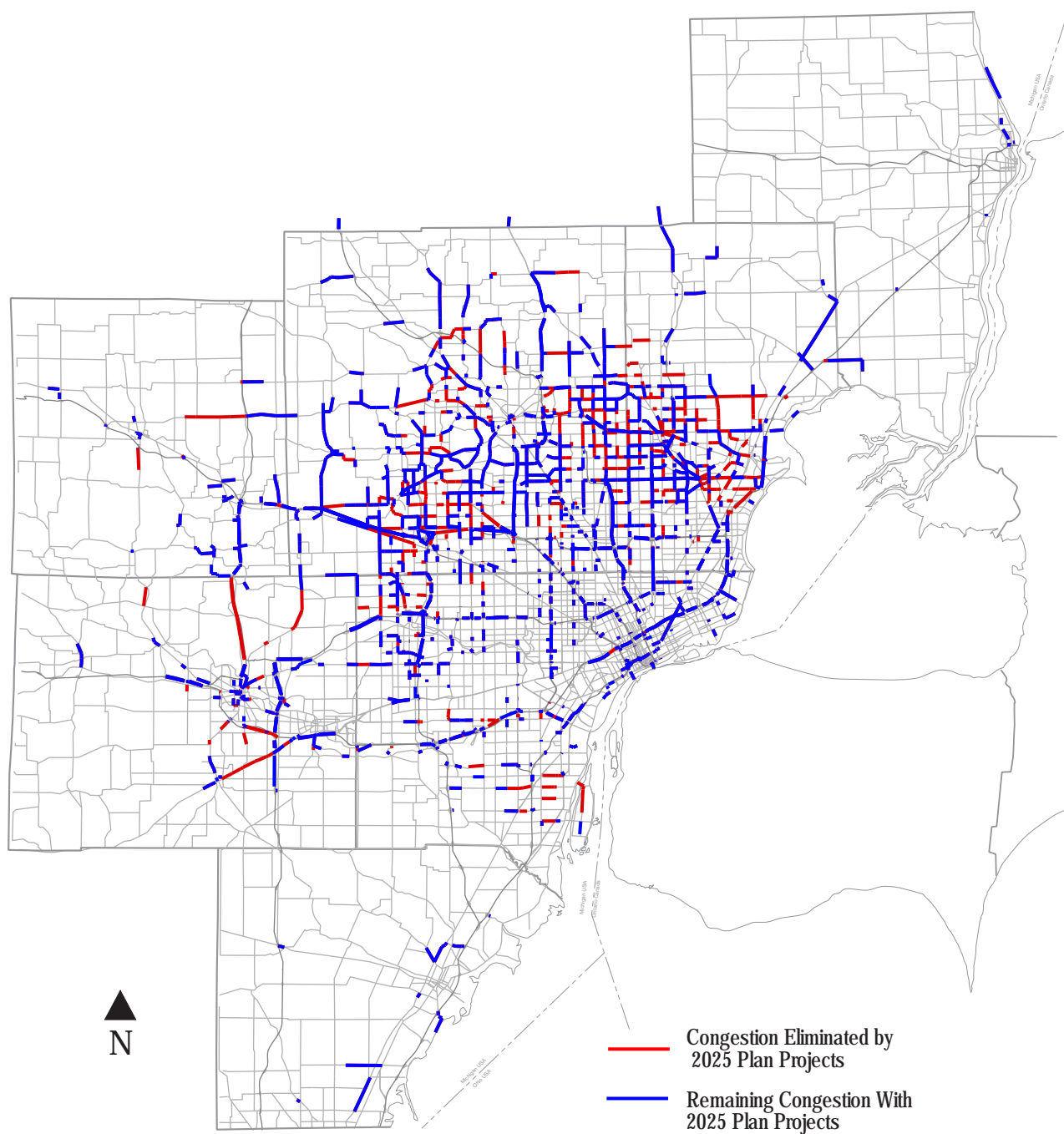
Clearly, there is a need to mitigate traffic congestion in the region. A comprehensive and wide-ranging congestion mitigation program requires coordination among many aspects of the transportation system — from public transit and non-motorized alternatives to highway and safety improvements. It is therefore necessary to develop and maintain a regional Congestion Management System, including continual evaluation of the effectiveness of current congestion mitigation efforts, research on new technologies and implementation of promising initiatives. The following activities assist in congestion mitigation.

#### Roadway improvements

In some cases, selective highway improvements can increase roadway capacity, thereby decreasing congestion. The 2025 RTP Project List includes 294 specific projects to increase roadway capacity. The majority of these 294 projects involve the widening of existing roads. Only 18 of the projects involve construction of new facilities, resulting in approximately 13 miles of new roadway over the next 25 years. (Table 20, page 93 contains additional details regarding roadway improvements.) As Table 11 shows, these projects will result in a 5.2 percent increase in the region's roadway capacity.

Table 11 illustrates that vehicle miles of travel in the region is expected to increase 11.4 percent between 2000 and 2025, if no changes are made to the current transportation system (No Build Scenario). The 2025 RTP capacity projects would result in a 5.2 percent increase in the region's roadway capacity. Travel forecasts reveal that if these projects are implemented, congested VMT on the region's roadways would decrease 14.7 percent by 2025. Specifically, about 146.3 million average weekday VMT would occur, with about 28 percent of this travel occurring on congested roadways. (The Bibliography outlines additional sources of information.)

Figure 5  
Congestion with 2025 RTP Projects in Southeast Michigan



Source: SEMCOG

Table 11  
**Comparison of 2000, 2025 No Build Scenario and 2025 RTP  
 Average Weekday Travel Forecasts**

	2000	2025 No Build Scenario <sup>1</sup>	% Change 2000 to No Build	2025 RTP Scenario <sup>2</sup>	% Change No Build to 2025 RTP
Population <sup>3</sup>	4,804,400	5,294,200	10.2%	5,294,200	N/A
Households <sup>3</sup>	1,827,400	2,123,400	16.2%	2,123,400	N/A
Employment <sup>3</sup>	2,615,200	2,773,100	6.0%	2,773,100	N/A
Lane Miles of Roadway <sup>4</sup>	19,300	19,300	0.0%	20,300	5.2%
Vehicle Miles of Travel (VMT)	131,999,400	147,036,400	11.4%	146,269,100	-0.5%
Congested VMT <sup>5</sup>	30,808,700	48,007,400	55.8%	40,955,300	-14.7%
% Congested VMT	23.3%	32.7%	-----	28.0%	-----

<sup>1</sup> The No Build Scenario assumes no road improvements are made between 2000 and 2025.

<sup>2</sup> The 2025 RTP Scenario is based upon road improvements in the 2025 RTP Project List.

<sup>3</sup> Note that, for technical reasons, the population, household and employment data, i.e., demographic data, utilized for modeling purposes differs from demographic data cited in other sections of the 2025 RTP, although both are based upon SEMCOG's regional development forecasts.

<sup>4</sup> Lane miles of roadway does not include local streets.

<sup>5</sup> Volume to capacity ratio exceeds 1.0 (Level of Service F).

Source: SEMCOG 2025 RTP Travel Forecasts

The travel demand forecast analysis of 2025 RTP projects includes only projects that increase roadway capacity. In addition to these capacity projects, a number of severely congested travel corridors, such as I-94 and I-75, have been identified for more detailed study. Although these corridor study projects cannot currently be included in the analysis — because specific solutions have not yet been defined — it is anticipated that their recommended solutions will also contribute to reduced congestion. (Pages 16-19 contain additional information on these corridor studies.)

#### Safety management

Locations experiencing above-average frequency and/or severity of traffic crashes also experience severe non-recurring congestion problems. Identifying such locations and developing countermeasures to reduce the frequency and severity of traffic crashes is another means of congestion management. (Page 63 contains additional information on safety management.)

### Incident management

Despite significant advancements in traffic safety, traffic incidents — including crashes and stalled or abandoned vehicles — remain a regional transportation challenge. Effective incident management involves quickly and efficiently identifying, responding to and clearing incidents. It is therefore a vital component of congestion mitigation. (Page 66 contains details on regional incident management initiatives.)

### Public transit

Increased use of public transit also serves to decrease roadway congestion. More transit trips (particularly by choice riders, i.e., those who could use a private automobile for a trip but choose transit instead) result in fewer automobile trips. Fewer vehicles on the road results in less congestion. However, the current lack of a coordinated regional transit system limits the positive impact of transit on regional congestion levels. A number of initiatives designed to improve regional transit provision are therefore proposed pages 23-24).

### Non-motorized travel

Increasing the use of non-motorized transportation modes, such as walking and bicycling, serves to decrease traffic congestion by decreasing reliance on the automobile. However, the impact of walking and bicycling on overall regional travel patterns is constrained by several factors, including:

- lack of continuity among walking/bicycling systems and between desired origins and destinations (e.g., between residential neighborhoods and retail centers),
- poor pavement conditions and gaps in the system,
- lack of dedicated funding,
- lack of a comprehensive non-motorized planning process and minimal consideration of non-motorized modes in roadway project planning,
- limitations in evaluating non-motorized travel and analyzing current trends and needs and
- low priority of non-motorized solutions to transportation needs.

A number of initiatives are proposed addressing these factors and promoting walking and bicycling as an important component of the regional transportation system. (Pages 72-75 contain more details regarding these initiatives.)

### Alternative modes of transportation

Alternatives to single occupancy vehicle use, such as RideShare, public transit and non-motorized travel, may also lead to a reduction in roadway congestion. All three alternatives reduce the number of vehicles on roadways and contribute to traffic crash avoidance (Pages 75, 23 and 72 have more details on RideShare, public transit and non-motorized initiatives, respectively). Recognizing the importance of alternative modes of transportation, SEMCOG is updating current forecasting models to enable analysis of a variety of transportation-related options for congested corridors, such as high occupancy vehicle lanes and transit alternatives. The revised model would allow for evaluation of different transit alternatives and estimation of the number of riders each system would attract.

## **Pavement**

Rehabilitating and repairing the region's 22,576 road miles is a daunting task. Increased travel (both personal vehicles and commercial trucks) continues impacting the roadway system. At the same time, competing transportation needs constrain the amount of transportation funding available for pavement projects. Therefore, state and local transportation agencies are left to maintain adequate pavement conditions with shrinking resources.

A comprehensive Pavement Management System (PvMS) is key to managing available resources and implementing the most appropriate pavement improvement projects. For example, the Michigan Department of Transportation (MDOT) utilizes a PvMS for evaluating road surface conditions and assigning a condition rating for all roadways under MDOT jurisdiction. Recognizing that not all pavement needs can be met simultaneously, MDOT uses the results of PvMS analyses to prioritize roadway improvements and implement a balanced program, including long-term pavement reconstruction, resurfacing and preventive maintenance. MDOT also uses the data collected and maintained through the PvMS to meet other related needs.

### **Pavement needs**

Although it is estimated that the majority of the region's transportation needs relate to pavement improvement, these needs are currently the most difficult to quantify. SEMCOG currently has no regional PvMS to facilitate collection, maintenance and analysis of pavement data. These analyses, therefore, remain the responsibility of local communities, many of which, unfortunately, lack the resources and expertise needed to develop a PvMS. Even among agencies with an operational PvMS, lack of consistency in data collection, maintenance and analysis continues to represent a significant barrier to developing and utilizing a regional PvMS. A regional PvMS is therefore needed to serve the needs of local communities and identify the most effective and efficient means for preserving our region's transportation infrastructure.

### **Pavement initiatives**

Pavement restoration and maintenance represent significant transportation needs in Southeast Michigan. To address those needs, SEMCOG is developing a regional PvMS, which will assist with efficient and effective allocation of transportation funding. The regional PvMS would enable SEMCOG to:

- provide objective information about the overall "health" or condition of the region's roadway network,
- provide objective pavement condition ratings for roadway projects that are submitted for inclusion in the long-range RTP and short-range Transportation Improvement Program,
- serve as a reference for Southeast Michigan pavement-related data initiatives,
- more accurately estimate funding needs for the region and
- predict how different funding levels and maintenance/rehabilitation strategies might affect the long-term condition of the region's roadway system.

Initiatives to facilitate implementation of a regional PvMS include:

- conducting research on the basic concepts of pavement management and investigating the features of a PvMS,
- conducting a survey to assist in determining the current status of local PvMS implementation in the region,
- initiating a regional PvMS Task Force to assist in developing a strategy for creating and maintaining a regional PvMS,
- conducting regional workshops designed to promote the benefits of pavement management and facilitate implementation of a regional PvMS and
- developing a PvMS component of SEMCOG's regional Geographic Information Systems.

These initiatives will be coordinated with MDOT and local agencies to ensure a regional system that is comprehensive and best meets state, regional and local needs.

## **Bridges**

Bridges make up a significant portion of the region's transportation infrastructure. The Michigan Structure Inventory and Appraisal (MSI&A) Database, maintained by MDOT, was used to generate a summary of regional bridge conditions.

Currently, there are 3,543 bridges in the region, defined as structures greater than 20 feet. Of these, 3,068 or 86.6 percent are highway bridges, i.e., bridges carrying vehicle traffic. The remaining 13.4 percent (475) carry non-vehicle traffic, such as pedestrians, bicycles and rail lines.

### **Bridge needs**

Figure 6 illustrates the number of bridges by county while Figure 7 illustrates responsible maintenance agencies. In some instances, ownership and maintenance may reside with two separate agencies.

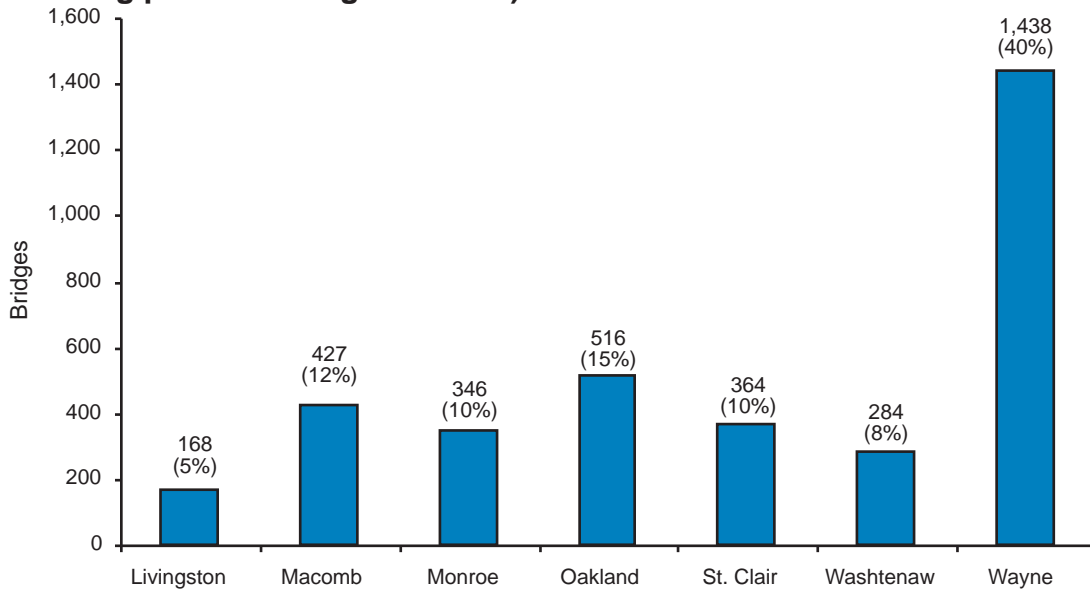
### Status

An important element of the MSI&A database is bridge status, which indicates if bridges are open with no restrictions, posted with restrictions (e.g., load, height, capacity) or closed to traffic. As seen in Figure 8, the majority of bridges in Southeast Michigan are open with no restrictions posted. However, those closed or having posted restrictions (9.1 percent of all bridges) impact the overall system because traffic unable to use those bridges is diverted to nearby roads. That additional traffic leads to increased traffic volumes, delay, congestion and pollution.

### Deficiency and obsolescence

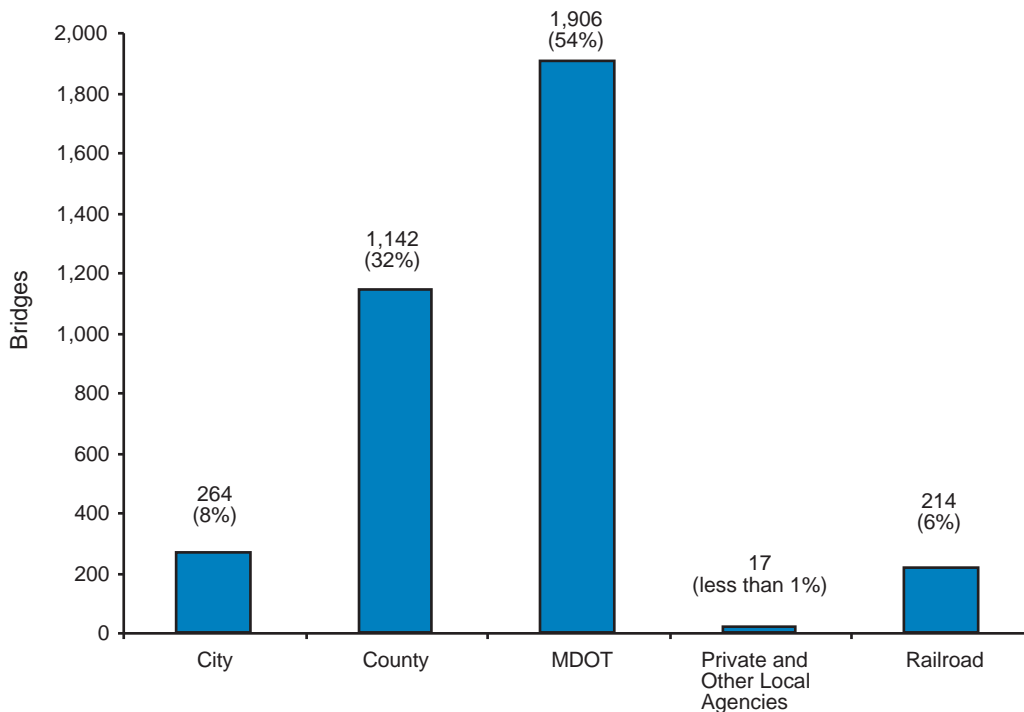
A related component to the MSI&A is the structurally deficient and functionally obsolete indicator. Structural deficiency describes the health of a bridge while functional obsolescence defines its performance. Along with federal sufficiency ratings, deficiency and obsolescence are used to determine funding eligibility.

**Figure 6**  
**Number of Bridges in Southeast Michigan by County**  
**(including percent of regional total)**



Source: Michigan Department of Transportation (Michigan Structure Inventory and Appraisal Database), SEMCOG, 1999

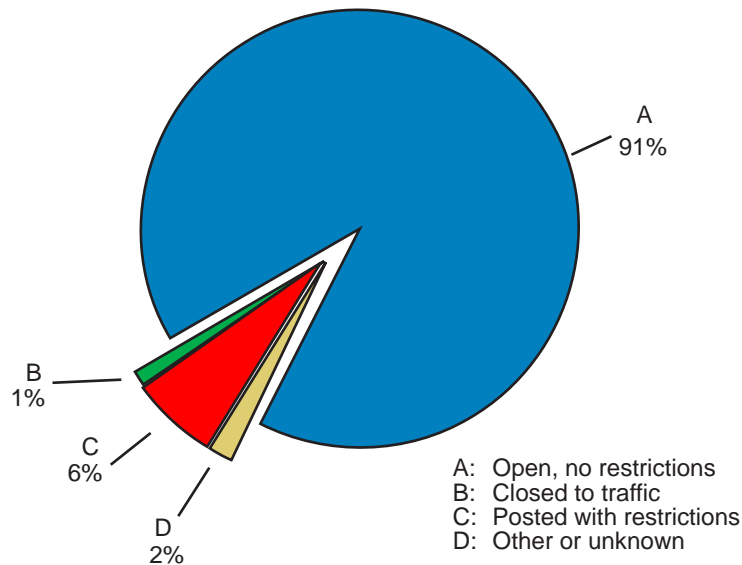
**Figure 7**  
**Bridges by Maintaining Agency in Southeast Michigan**  
**(including percent of regional total)**



Note: Some bridges are owned by one agency and maintained by another agency.

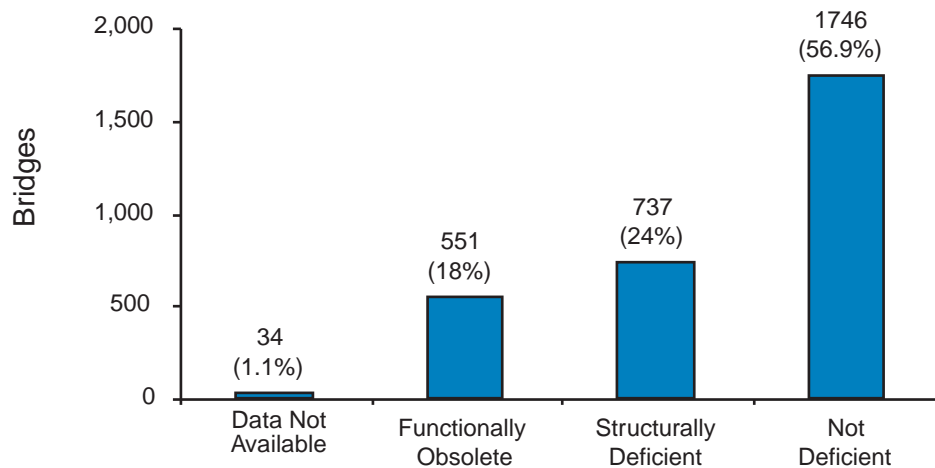
Source: Michigan Department of Transportation (Michigan Structure Inventory and Appraisal Database); SEMCOG, 1999

**Figure 8**  
**Percentage of Open, Restricted and Closed Bridges in Southeast Michigan**



Source: Michigan Department of Transportation (Michigan Structure Inventory and Appraisal Database); SEMCOG, 1999

**Figure 9**  
**Highway Bridges by Deficiency in Southeast Michigan**  
**(including percent of regional total)**



Note: Highway Bridges include only those bridges that carry cars and trucks. The total number of all bridges is 3,543. The total number of highway bridges is 3,068. Structural deficiency defines the fitness of a bridge while functional obsolescence defines its performance. Bridges may be eligible for federal funding depending on deficiency and a calculated federal sufficiency rating. It is important to note that structurally deficient does not mean that the bridge is unsafe or structurally unsound. Data was not available to determine the deficiencies of some structures.

Source: Michigan Department of Transportation (Michigan Structure Inventory and Appraisal Database); SEMCOG, 1999

Figure 9 shows that 42 percent of highway bridges in Southeast Michigan are structurally deficient and/or functionally obsolete. Figure 10 illustrates deficient bridges by county. There is clearly a need not only to rehabilitate or replace currently deficient bridges but also to maintain non-deficient bridges in a satisfactory manner, thereby preventing their deterioration.

#### Highway bridge funding

Eligibility for federal funding under the Highway Bridge Replacement and Rehabilitation Program is determined by two criteria, bridge deficiency and federal sufficiency ratings. A sufficiency rating of 100 indicates a completely sufficient bridge while a rating of 0 indicates a completely deficient bridge.

Bridges that are structurally deficient or functionally obsolete and have a federal sufficiency rating of 80 or less are eligible for federal funding. A rating of 50 to 80 qualifies for federal rehabilitation funds while a rating less than 50 qualifies for both rehabilitation and replacement funds. Figure 10 illustrates the percentage of structurally deficient or functionally obsolete bridges eligible for funds.

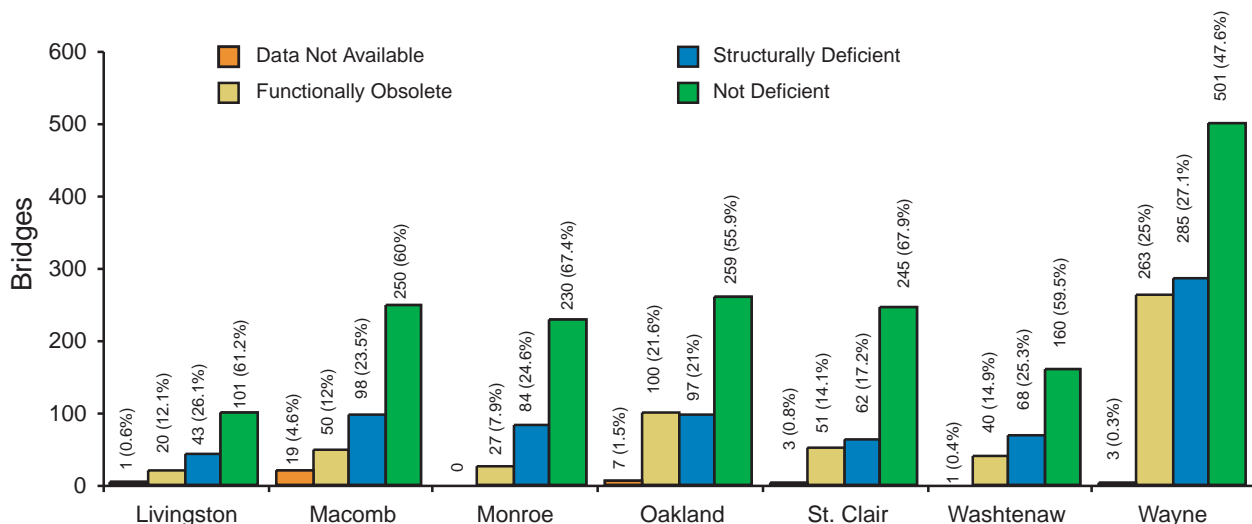
As Figure 11 shows, 85 percent of deficient bridges in the region are eligible for some form of federal funding. However, bridge rehabilitation and replacement is extremely costly. In general, federal funding covers only 80 percent of eligible costs, leaving the local maintenance agency to cover the remaining 20 percent of eligible costs plus 100 percent of ineligible costs (e.g., engineering and right-of-way costs).

To aid in matching requirements of local agencies for federal funding, MDOT administers the Local Critical Bridge Program. The program covers 15 percent of eligible costs for approved local bridge projects, leaving the local agency to pay only five percent (plus engineering and right-of-way costs). Even with this assistance, the backlog of bridges either approved or submitted for funding remains a serious transportation need. As of July 1999, there were 129 bridges on the active Critical Bridge list, i.e., projects selected for funding but not yet let to contract; an additional 494 applications remained on file and 127 new or updated applications were awaiting review and prioritization by the Critical Bridge Committee.

#### Other bridges

Because only eligible structures, i.e., structures greater than 20 feet in length, can receive funds, ineligible structures — the majority of which are culverts along local roadways — receive no federal or state set-aside funds. Although costs for rehabilitation and replacement of culverts are considerably less than bridges, they are still formidable. Local communities continue struggling to maintain culverts with local funding. Funding assistance for these types of projects is often cited as a critical transportation need.

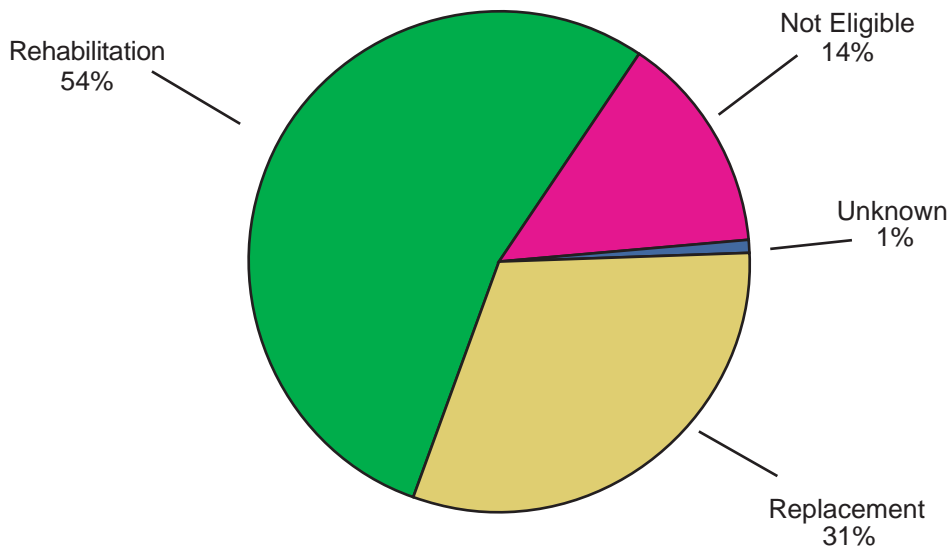
Figure 10  
**Highway Bridges by Deficiency by County in Southeast Michigan**  
 (including percent of county total)



Note: Highway Bridges include only those bridges that carry cars and trucks. The total number of all bridges is 3,543. The total number of highway bridges is 3,068. Structural deficiency defines the fitness of a bridge while functional obsolescence defines its performance. Bridges may be eligible for federal funding depending on deficiency and a calculated federal sufficiency rating. It is important to note that structurally deficient does not mean that the bridge is unsafe or structurally unsound. Data was not available to determine the deficiencies of some structures.

Source: Michigan Department of Transportation (Michigan Structure Inventory and Appraisal Database); SEMCOG, 1999

Figure 11  
**Bridges by Funding Eligibility**



Source: SEMCOG

### **Bridge initiatives**

There is significant need to remedy the backlog of regional bridges in need of rehabilitation and replacement. In addition to seeking additional funding for identified bridge projects, SEMCOG will develop a proactive and aggressive regional Bridge Management System via a number of initiatives.

- Develop a bridge management component of the regional Geographic Information Systems to assist in identifying and prioritizing regional bridge needs.
- Convene a regional Bridge Management Committee to identify needs, conduct research and offer recommendations for improvement.
- Conduct regional workshops as needed to assist local governments in identifying and meeting bridge needs.
- Develop a regional bridge management strategy including policy recommendations.

### **Aviation**

Another significant component of the region's transportation system is airports. Airports not only provide a means for the region to grow socially and economically but they also link Southeast Michigan to the nation and world at large. As noted previously, there are 37 airports in the region, 19 of which are considered system airports. (Page 24 contains more information on system airports.)

#### **Aviation needs**

A number of issues impacting current and future aviation development in Southeast Michigan are identified in the *1998 Regional Aviation System Plan Update (RASP)*. The RASP extends the state system planning approach by examining, in detail, aviation system needs for Southeast Michigan. It analyzes aviation system operations regulated by the Federal Aviation Administration (FAA) and the Michigan Department of Transportation and is consistent with the continuing system planning process set by FAA. The RASP also incorporates issues in the *Michigan Aviation System Plan* while RASP findings and recommendations are included in the state planning process.

#### Effects of growth and land use

Growth in population, households and employment will continue to cause growth in air travel, increasing airport demand/capacity problems. Growth in rural/suburban areas may shift air travel demand to geographic locations farther from existing facilities.

There is a heavy concentration of residential land uses around the region's airports as well as extensively developed public rights-of-way and commercial and industrial uses. Residential subdivisions, for example, have been permitted too close to airports, which ultimately generates complaints about various aspects of airport operations, especially noise. Despite that, land values, particularly non-residential, surrounding airports have and will continue to increase substantially. In some cases, development and environmental concerns will make future airport expansion both difficult and costly.

### Growth in air traffic and capacity problems

The near saturation of the existing airport system is a critical issue. Expansion of Detroit Metropolitan/Wayne County (Detroit Metro) Airport will mitigate congestion at that airport. However, some reliever airports are now experiencing capacity problems as well. Oakland County International and Willow Run Airports, for example, are experiencing operational increases that suggest the need for capacity-increasing development. Both operational and functional capacity problems continue to raise concern for the long-term availability of other facilities as well.

### Airport closures

Existing airports currently provide enough general aviation capacity despite growth in based aircraft. However, closing of a majority of privately-owned airports would result in a shortage of space for regional aircraft. General aviation airports continue to be at risk in the region because many, being privately owned, are not likely to secure federal improvement funds or are compelled to close because of development pressure. The loss of two privately-owned airports (Spencer Field and Big Beaver Airports) as well as the loss of four small, private airports with turf runways underscores the need to expand federal funding guidelines to help private airports remain open. Oakland County is also purchasing New Hudson Airport to prevent the loss of another airport.

### Airport ownership and management changes

Certain problems associated with airport ownership, operation and maintenance might be addressed by changes in ownership and organizational structure, such as more public ownership of smaller airports to ward off development pressures. Public entities that may own airports include state government, local government and airport authorities. Mettetal-Canton and Romeo Airports, for example, were purchased in 1993 and 1997, respectively, by the State of Michigan to ensure they remain open as reliever airports.

### Funding

Financing of general aviation airports continues to be a major problem. The available revenue base is usually insufficient to support significant capital improvements as revenues fail to rise at the same rate as property taxes and skyrocketing maintenance costs. Land development surrounding general aviation airports will continue intensifying pressure to sell airports to developers at prices greater than the airport's return on investment.

In addition, decreases in federal airport funding significantly affect privately-owned airports. These airports are at a disadvantage because they must be designated as reliever airports before they are eligible for federal funds. At the same time, they must compete with publicly-owned airports for other available funding.

### Changes in the airline industry

While the full effects of deregulation have yet to be seen, initial deregulation of scheduled air carriers produced a surge of hub-and-spoke activity. This was reflected in growth at Detroit Metro which, in turn, began experiencing capacity problems. Further, hub-and-spoke operations create the opportunity for some operators to provide scheduled service to smaller,

more convenient airports. This frequently brings unforeseen demands in the form of runway length requirements, additional terminal facilities and improved surface transportation access.

### Airspace

Airspace plays an important role in existing and proposed airport/aircraft operations and development of existing and proposed airport sites. Airspace use in Southeast Michigan is generally complex due to the mixture of general aviation, high performance military and commercial aircraft operating in and out of airports in the region. Airspace utilization in Southeast Michigan is a product of the incremental evolution of the current system, as opposed to a system that was planned and developed to enhance the overall airspace capacity of the region based on its comprehensive needs.

### Surface transportation access

Although it is important to maintain accessibility both in and around airports, ground access needs are primarily focused on the street systems surrounding airports. Several projects have improved access around Detroit Metro, including rebuilding the I-94 interchange to the airport and constructing a south access road past the new Midfield Terminal, connecting to the existing road from I-94. Congestion problems also remain at some of the region's smaller airports because traffic volumes are either at or over capacity during peak hours.

### **Aviation initiatives**

To address aviation needs, it is necessary to have a regional aviation system planning process which establishes a long-term program for airport growth and development. Such a program is necessary to address regional population and economic changes that affect the system. The RASP provides recommendations identifying actions necessary to meet existing and future aviation needs and encourage development of a regional airport improvement program. Those recommendations are consistent with the goals of the 2025 RTP regarding safety, accessibility, community impact, comprehensive planning, economic and financial considerations, efficiency, environmental impacts and mobility.

The RASP recommends the following initiatives:

- Public acquisition of two privately-owned airports — Berz-Macomb and Romeo — and development of these facilities to FAA standards for airport classifications. Both airports serve as reliever airports to the more congested hub airports in the region. (Romeo Airport was purchased by the State of Michigan in November 1998 and is now a publicly-owned airport.)
- Provision of at least one Transport Category airport in each county. Transport airports are the most highly-developed general aviation facilities, with paved primary and crosswind runways. Typically, these airports have more than 10 registered aircraft, more than 20,000 total annual operations (including significant jet aircraft activity), all-weather capability and year-round operation.
- Development of a new Transport Category airport in Washtenaw County. Washtenaw County currently has only one airport and upgrading it to Transport Category is not

feasible. Therefore, a new Transport Category airport is recommended in Washtenaw County. Upgrading existing airports to the Transport Category is recommended in the other counties.

- Selective expansion of other publicly-owned airports based upon existing and forecasted levels of aircraft types and operations.

## **Public Transit**

Despite limited resources, the region's public transit providers have taken significant steps to address public transit needs. The ability to provide a reliable and cost-effective alternative to private automobile travel is dependent on a number of factors, including funding, capital programs, service levels and appropriate levels of cooperation.

During 1998, the region's transit agencies provided more than 72 million passenger trips on 957 vehicles, operating on more than 140 fixed routes and offering paratransit service for persons with disabilities.

Significant obstacles for those agencies include funding for capital programs, such as vehicle replacement and construction of bus storage/maintenance facilities and compressed natural gas fueling stations. Without adequate funding for capital improvements, the agencies' levels of service will be compromised. The following sections examine transit capital needs.

### **Public transit needs**

Regional transit conditions and needs as they pertain to funding, planning and corridor studies are described on pages 20-24. In addition to these needs, there are also current and projected capital transit needs.

#### Vehicles

Replacement of aging transit vehicles is a constant necessity for the public transit industry. Transit agencies in the region recognize the need to consistently maintain and upgrade vehicles for efficiency and safety purposes. They will need to replace their fleets several times over the next 25 years.

#### Operational facilities

Construction, renovation or purchasing of fixed facilities, such as bus storage terminals and/or maintenance facilities, is a necessary capital investment. The Detroit Department of Transportation (DDOT) is in immediate need of significant improvements, repairs and upgrades to its aging facilities and recognizes that its present facilities are, or soon will be, obsolete. Many factors contribute to the obsolescence of DDOT facilities, including changing health standards, technological changes in repair and maintenance apparatus, increases in coach dimension as well as fleet size and increased storage and stocking needs. DDOT's three current garages are insufficient to accommodate any expansion of the DDOT bus fleet. Other transit providers in the region have similar terminal and maintenance facility improvement needs.

The region's transit providers also recognize the need for more transfer centers, which provide faster, more convenient service to riders by minimizing the amount of time they must wait when changing buses. The Cadillac Square transfer facility is located in an area of downtown Detroit designated for redevelopment. Without the replacement of this facility, DDOT and the Suburban Mobility Authority for Regional Transportation (SMART) will be unable to provide a major transfer point for the majority of bus routes serving downtown. Both agencies are examining alternatives for a replacement alternative as well as for the movement of transit passengers into and through downtown Detroit. SMART also needs another bus layover center in downtown Detroit because its previous bus layover privileges at the Renaissance Center have been denied by the center's new tenant, General Motors.

#### Passenger facilities

Construction, purchase or renovation of passenger boarding facilities and equipment, such as shelters, benches, trash receptacles, information displays, bus turnouts and bicycle racks, is necessary for customer convenience. While some bus stops in the region have passenger amenities, the vast majority do not. Other amenities such as lighting and telephones would also contribute to passenger safety and comfort. Barrier free bus stops that are in compliance with the Americans with Disabilities Act are equally important.

Both SMART and the Ann Arbor Transportation Authority (AATA) have identified park-and-ride capital facility needs. Neither currently owns any park-and-ride property — most lots are located in malls, where owners allow park-and-ride use.

#### Unfunded capital needs

Many of the above described needs are expected to be addressed and have been incorporated into the fiscally-constrained 2025 RTP Project List. However, there are additional capital needs for which no funding can be identified and the projects cannot be placed on the project list until funding is identified.

DDOT has identified four specific unfunded facility needs — replacement of the Cadillac Square Transit Center (Page 56 contains additional information on DDOT's vision for downtown Detroit, which includes replacement of Cadillac Square), construction of four neighborhood bus facilities called Timed Transfer Centers, construction of a terminal/maintenance facility and construction of a bus bay facility at the Detroit Intermodal Transportation Center. SMART, the Lake Erie Transportation Commission (LETC) and the Blue Water Area Transportation Commission (BWATC) have identified two specific unmet capital needs — future replacement of fixed-route and paratransit buses, vans and related equipment and facility renovations.

SMART has also identified technology improvements to its Intelligent Transportation Systems (ITS) and management information system as unfunded needs.

## **Public transit initiatives**

Public transit initiatives seek an acceptable level of regional transit service by effectively managing the transit infrastructure. The following initiatives relate to capital programs, funding, service and partnerships.

### Capital Initiatives

Capital initiatives include:

- purchase of more than 5,000 large fixed-route and small paratransit buses at a cost of more than \$680 million,
- purchase of 10 new automated Detroit People Mover rail vehicles (two cars per vehicle) to replace the Detroit Transportation Corporation's aging fleet,
- improvements at DDOT and SMART terminal facilities,
- construction of a new storage and maintenance facility for BWATC as well as a compressed natural gas (CNG) fueling system as BWATC converts its fleet to CNG vehicles,
- renovation of an AATA operations/maintenance facility,
- construction of park-and-ride lots along the city of Ann Arbor's Main Street Corridor and at various other locations and
- construction of DDOT neighborhood bus facilities called Timed Transfer Centers, the first of which is planned for construction on Detroit's far east side, inside Detroit's Empowerment Zone. Almost \$4 million is currently programmed in FY 2000 of the region's Transportation Improvement Program for Phase 1 of this project which will service transit transfers from neighborhood shuttles and 24-hour, seven day a week childcare needs of the community. Additional phases may include retail shopping, a community center, park-and-ride service, employment and job training facilities, expanded childcare and a police mini-station.

### Funding initiatives

Recognizing that funding is one of transit's most critical needs, transit providers have developed new sources of funds for their programs as well as creative funding mechanisms (e.g., third-party payments, public/private partnerships or non-traditional agencies receiving transportation funding). A number of innovative funding sources are currently used by regional transit providers.

- **Get Downtown** — Developed by AATA in conjunction with the Ann Arbor Downtown Development Authority and the Ann Arbor Chamber of Commerce, this program provides free bus passes to all downtown Ann Arbor employees. The cost is paid by Ann Arbor employers.
- **State Infrastructure Bank** — LETC arranged a state infrastructure loan to finance \$2 million of the \$4.24 million cost of a transfer bus terminal in the central business district of the City of Monroe. Transit agencies have rarely used the state's low-interest revolving fund loans, which generally are used for roadway projects.
- **Shared revenue** — The Municipal Credit Program is a revenue sharing program that supports operation of local transportation services. All cities, townships and villages in

Macomb, Oakland and Wayne counties are eligible to receive Municipal Credits and the funds are allocated by MDOT on a per capita basis. SMART assists in allocating the funds to communities within Wayne, Oakland and Macomb counties, while the City of Detroit receives its funds in a direct allocation from MDOT.

- Grant funded services — A consortium of DDOT, SMART and the city of Detroit's Employment and Training Department (DE&T) secured over two million dollars in funding (including all matching funds) from MDOT, the Federal Transit Administration and the U.S. Department of Labor. As a result of this innovative partnership, funding will be used to enhance transit options for low-income and welfare recipients. For example, the grant will enable several transportation service enhancements.
  - " *EZ Ride*, which will become the grants coordinating agency, will purchase an automated schedule and dispatch system and hire a mobility manager.
  - " DDOT will develop a neighborhood Flex Route on the west side of Detroit, whereby parents will be able to call and schedule a ride to take their children to a child care center on a reservation basis. From the child care center they will be able to connect to a major bus route.
  - " SMART will extend four routes, linking Detroit residents to suburban job locations. In cooperation with MDOT, the grant will also encourage more promotion of the commuter choice program (a program encouraging benefits that employers can offer employees to commute to work by methods other than driving).

### Service initiatives

Transit demands will change as the region's population grows and continues to spread into suburban fringe areas and as the region's older population continues to grow larger. The region's transit providers will be faced with increasing service needs, requiring larger service areas and easier connections from one transit provider to another while also addressing evening, holiday and weekend needs of riders. Several agencies address these challenges with coordination of service, Geographic Information Systems and ITS innovations, while others have added or expanded service.

### *Innovative and flexible service initiatives*

Innovative service initiatives address the needs of the elderly, persons with disabilities and transit-dependent employees as well as the general public.

- In response to new downtown Detroit development, DDOT is considering a vision for downtown Detroit designed to offer improved downtown mobility. It's primary elements include rapid transit along major travel corridors, a new terminal to replace Cadillac Square, preferred parking at lots and structures adjacent to People Mover Stations, ubiquitous trolleys, enhanced People Mover service, good signage and the latest applications of Intelligent Transportation Systems technology.
- In response to the needs of persons making the transition from welfare to work, DDOT developed a highly effective and innovative new type of service on Detroit's far east side. This flexible route offers reservation and curb-to-curb service. This service has become

a valuable community-based service, connecting residents with child care facilities, schools and jobs.

- Addressing additional welfare to work initiatives in Detroit, DE&T and DDOT — using state, local, county and private monies — fund a variety of flexible services to meet the transit needs of persons transitioning from welfare to work.
- In response to the needs of persons with disabilities, DDOT developed its Metro Lift program — a reservation program offering door-to-door service, with vehicles equipped with wheelchair lifts and drivers trained to offer physical assistance to riders. SMART also provides services to the elderly and persons with disabilities in Wayne, Oakland and Macomb Counties. This community-based service is demand responsive, curb to curb and offers both a reservation program and same-day service.
- SMART developed a flexible service along Groesbeck Road, a light-industrial corridor. The service slightly deviates from Groesbeck to pick up and drop off passengers.
- AATA has developed the most comprehensive system of advanced bus electronics found in North America. AATA's work is ongoing. The next stage will provide real-time information on current bus locations and arrival times to customers via the Internet and kiosks at major boarding locations and selected bus stops.
- Wanting to improve rider transfers from one bus to another, LETC purchased a new computerized dispatching system as well as automated vehicle location equipment for all its vehicles. Using this new technology, LETC plans to monitor bus timing to communicate delays to other buses and help riders make their connections more effectively.
- Livingston Essential Transportation Services (LETS) developed the first phase of its flexible route dedicated to persons transitioning from welfare to work, in cooperation with the county Family Independence Agency and Michigan Works Department. Currently, the van service connects Fowlerville residents with job centers in Howell. LETS hopes to expand service to other communities as well as extend hours of operation.

#### *Expanded service initiatives*

All of the region's transit providers are concentrating planning activity on service expansion.

- The region's three largest transit providers — DDOT, SMART and AATA — all provide service at least 15 hours a day, seven days a week on some routes. During the past year, DDOT and SMART have extended service hours on many routes to include more late-night and weekend hours.
- SMART's short-range plan for fixed-route expansion is focused on improving frequency and hours of service on existing routes to make the system convenient for riders.

- AATA also offers a late-night demand-response program called Night Ride. In 1998, this service was extended to cover holidays. With this change, AATA now provides public transit service in Ann Arbor 24 hours a day, 365 days a year.
- The Blue Water Area Transportation Commission (BWATC) in St. Clair County is in the process of expanding its service to the entire county. As a result of increased demand for coordinated paratransit service, BWATC entered into agreements with human service and faith-based organizations to provide transportation for their clients. Gradually, over the next few years, BWATC will assume responsibility for this expanded service.
- The St. Clair County Master Plan calls for developing a transit corridor connecting the shoreline communities within St. Clair County. Specifically, express routes linking Capac, Emmett, Memphis, Yale and other development centers to the transit corridor would be developed. Such a system would enhance travel between primary residential centers in Port Huron and Marysville with developing employment centers in southern St. Clair County. Buses would be the primary source of transit service although other transit options and non-motorized systems could also be possible.
- Recognizing the limited availability of medical facilities within Livingston County, LETS has expanded its demand-response service for medical trips to the four surrounding counties. The service is offered to any county resident and is relatively low cost.

#### Partnership and coordination initiatives

Recognizing the importance of providing seamless transit across political borders while at the same time acknowledging the limitations funding creates, many transit providers have entered into cooperative agreements with each other as well as human service, non-profit and faith-based agencies. Innovative agreements are aimed at making transit more responsive to users while containing costs.

- Improved transportation for the welfare-to-work population — A coordinated drop-off/pick-up location was developed by DDOT and SMART. Their two flexible routes move people from a residential area on Detroit's far eastside to the employment rich Groesbeck corridor in Macomb County.
- Agreements with human service agencies — Serving rural Monroe County, LETC entered into agreements with the county's senior centers and community mental health programs allowing it to add county-wide paratransit service to its existing fixed-route service, which operates exclusively in the City of Monroe. Similarly, BWATC, through cooperative agreements with social service agencies, assumed responsibility for the transportation of agency clients countywide.
- Sharing technology — In 1995, MDOT and SEMCOG initiated the Transit Geographic Information Systems project. The project's goals are improving transit management systems, enhancing the analytical capacity of transit providers and facilitating coordination between transit providers. Another example of how expensive technology is shared is the joint Trapeze software project sponsored by DDOT and SMART, who jointly purchased the

software and coordinated their database development so that information can be easily shared.

- Private, non-profit cooperation with government agencies — *EZ Ride* connects residents with regional fixed-route service in a project spearheaded by the Metropolitan Affairs Coalition in cooperation with DDOT, DE&T and the Detroit Disabled Transportation Coalition.
- Matching people, jobs, transit — Recognizing the need to maximize transportation utility as a resource, SMART developed the SMART Match program, matching people, jobs and fixed-route bus service. Designed to help residents find jobs that can be reached via SMART service, SMART made information available to anyone over the phone. SMART has turned the SMART Match program over to the Michigan State Department of Career Development, which uses its access to the computerized Michigan Talent Bank to match people with jobs along existing transit routes
- Detroit's Office of Mobility Management — Developed in response to the needs of persons transitioning from welfare to work, the Office of Mobility Management helps:
  - " work with employers to develop transportation alternatives for employees,
  - " identify existing line-haul service to serve employees,
  - " develop new transportation options when needed and
  - " work with job/career specialists to increase their knowledge of developing personal transit plans for their clients.
- RideSource — Formerly known as County Transportation Systems Management, RideSource grew out of the merger between Child and Family Services and Huron Services for Youth. Designed to provide low-cost transportation across Washtenaw and Wayne County lines, RideSource contracts its services with communities in western Wayne County and transports people into the Ann Arbor-Ypsilanti area for medical appointments or for work. In addition to the direct service provided, RideSource also acts as a clearinghouse for transportation information. Like a mobility manager, RideSource helps service agencies find the most appropriate transportation services for their clients.

### **Intelligent Transportation Systems (ITS)**

As our transportation system continues expanding to meet increased user demand, the cost of maintaining the system will continue exceeding available resources. Consequently, more energy must be devoted to better managing and optimizing the infrastructure currently in place. ITS solutions can provide very effective and relatively low-cost solutions to transportation needs. Benefits of integrating advanced technologies with the surface transportation system include:

- improving system safety, capacity and operational efficiency,
- enhancing personal mobility, convenience and comfort,
- reducing environmental impacts and
- enhancing current and future productivity of individuals, organizations and the economy as a whole.

The Federal Highway Administration's Metropolitan ITS Program provides a model for more efficiently managing and operating regional transportation systems through the use of advanced technologies and cooperative institutional arrangements. Components of a metropolitan ITS infrastructure are:

- freeway, incident, transit and emergency management systems,
- traffic signal control,
- regional multi-modal traveler information,
- electronic fare payment and toll collection and
- railroad grade crossing warning systems.

ITS applications can also be applied to commercial vehicle operations, streamlining the commercial vehicle safety regulatory system, supporting a safe and seamless intrastate/interstate system and enhancing effectiveness of the commercial trucking industry.

### **ITS needs**

Southeast Michigan has many examples of successful ITS operations. However, individual ITS projects generally lack strong integration and coordination, which would allow various ITS projects to "talk" to each other through compatible software. Benefits of coordination are clear — reduced costs, increased efficiency and improved service for users. The Transportation Efficiency Act for the 21<sup>st</sup> Century requires all ITS projects funded under the Highway Trust Fund conform to the National ITS Architecture and encourages implementation of a more applicable Regional ITS Architecture at the Metropolitan Planning Organization level. (The Bibliography outlines additional sources of information.)

The National ITS Architecture provides a common ITS vocabulary and, most importantly, guidance for developing a more applicable Regional ITS Architecture or integration strategy. The goals of this strategy are:

- involving a wide range of stakeholders, including state, regional and local agencies, transit agencies and the private sector,
- developing flexible deployment and operation requirements that meet local needs,
- promoting integration of various ITS components and subsystems,
- facilitating electronic information sharing,
- facilitating cost-effective expansion of ITS systems and
- providing for future inter-operability of key regional ITS systems at the national level.

### **ITS initiatives**

In order to encourage sound operation and management of the transportation system, SEMCOG will develop a Regional ITS Architecture via a number of specific initiatives, including:

- creating an ITS subcommittee formed by and responsible to SEMCOG's Transportation Advisory Council,
- participating in ITS Architecture Development Workshops conducted by the Federal Highway Administration,

- developing a Regional ITS Architecture, or integration strategy, outlining existing metropolitan ITS components as well as methods for ensuring conformity of proposed projects with regional and national standards and
- incorporating the integration strategy into the process for developing the RTP and Transportation Improvement Program so that applicable projects are in conformity with the strategy.

## **Promoting a Safe and Secure Transportation System**

Promoting a safe and secure transportation system by reducing the frequency and severity of traffic crashes as well as impacts on the transportation system and its users is a goal of the 2025 RTP. Traffic crashes remain a serious epidemic, claiming nearly 500 lives in Southeast Michigan every year. This is equivalent to one fatality every 17.5 hours.

The societal costs of traffic crashes are significant and felt by every resident. According to a study conducted by the National Highway Traffic Safety Administration, the cost of traffic crashes nationwide in 1994 totaled \$150.5 billion, or \$580 per U.S. resident. Traffic crash costs include loss of productivity, property damage and medical, legal and insurance costs. Another important, but often over-looked, cost results from travel delays. Traffic crashes have significant impacts on post-crash travel near the crash site, including congestion, secondary crashes, increased vehicle emissions and air pollution. In fact, various studies indicate between 60 and 70 percent of all non-recurring roadway congestion is caused by incidents including traffic crashes and breakdowns.

Clearly, improving traffic safety will have widespread positive impacts on the entire transportation system. Most importantly, improved traffic safety results in fewer crashes, injuries and fatalities. At the same time, traffic safety increases accessibility. For example, pedestrian-friendly engineering design facilitates walking as an additional travel option which can be particularly important for those who lack access to motorized transportation. A safe system also helps preserve existing infrastructure by decreasing congestion and increasing available roadway capacity. In turn, decreasing congestion and associated vehicle emissions enhances the environment. In total, maintaining traffic safety as a regional priority improves quality of life in Southeast Michigan by securing a safe, accessible, efficient and environmentally-sound transportation system.

### **Traffic Safety Needs**

Traffic safety needs are typically measured by crash statistics collected and analyzed at the state and local levels. The Michigan State Police, Criminal Justice Information Center collects and maintains traffic crash data for the state. Each year, SEMCOG receives, analyzes and distributes regional crash data. Various data analyses are used to highlight traffic crash trends in the region and assist local communities in identifying and addressing high-crash locations. Results of these analyses are documented in various SEMCOG publications.

SEMCOG periodically publishes a 10-year traffic crash profile highlighting significant crash trends, including severity, safety belt usage, drunk driving, pedestrian crashes, young driver crashes and elderly crashes. Southeast Michigan also experiences a significant number of vehicle/deer crashes and red light running crashes, which SEMCOG tracks. Additionally, SEMCOG publishes traffic crash summary statistics annually, outlining the past year's crash characteristics. Finally, SEMCOG performs specialized traffic crash studies as needed. For example, in 1999 SEMCOG analyzed elderly traffic crash trends as background for an elderly mobility and safety assessment.

### **Traffic safety trends**

SEMCOG's *1998 Southeast Michigan Traffic Crash Summary Statistics* reveals a number of important trends. (The Bibliography outlines additional sources of information.)

- Decline in total traffic crashes — In 1998, there were a total of 186,693 traffic crashes in Southeast Michigan, representing a 6.5 percent decrease compared to 1997.
- Decline in injury crashes — The total number of injury crashes (47,200) declined for the third straight year, by six percent compared to 1997 totals.
- Decrease in fatal crashes — Fatal traffic crashes decreased as well, although to a lesser degree. From 1997 to 1998, fatal crashes decreased by approximately three percent, from 476 to 463.
- Alcohol involvement — While the total number of crashes continues to decrease, crash severity remains a concern, particularly when alcohol is involved. Alcohol is clearly a factor in traffic crash injuries and fatalities. While only 4.4 percent of total crashes involve alcohol, 7.7 percent of injury crashes and 38.4 percent of fatal crashes involve alcohol.
- Increase in pedestrian crashes — Pedestrians are more susceptible to injury and death when involved in traffic crashes. Of the approximately 2,300 pedestrians involved in traffic crashes in 1998, 83 percent were injured and 4.2 percent were killed. In fact, pedestrians represent 25 percent of all traffic crash fatalities in the region. Unfortunately, 1998 represented a 5.5 percent increase in pedestrian crashes compared to 1997.
- Elderly crashes — Elderly crashes also continue to be a concern. While elderly crashes, i.e., crashes involving at least one driver or pedestrian age 65 and older, represent only 11 percent of total crashes, they tend to be more severe in terms of injury. In fact, elderly drivers are three times more likely than all drivers to be killed in traffic crashes.

### **Traffic Safety Initiatives**

The following initiatives are designed to achieve the goal of safety and security by reducing the frequency and severity of traffic crashes and increasing the overall safety and efficiency of the transportation system.

### Safety management system

Traffic crashes have a significant impact on the safety and security of the region's transportation system. Routine traffic safety management activities are vital to preserving a safe and secure transportation system. Unfortunately, many communities in Southeast Michigan lack the resources to retain full-time traffic safety personnel.

In an effort to improve traffic safety throughout the region, SEMCOG will continue developing the capability of local communities to improve traffic safety.

- Supply traffic crash data to local communities, media and private citizens upon request. SEMCOG will continue developing more user-friendly formats, including standard reports detailing relevant crash characteristics for intersections and segments throughout the region. Customized data will also be generated as needed for special studies.
- Further develop the *Traffic Safety Manual* and Comprehensive Analysis Safety Tool (CAST) software. In 1996, SEMCOG developed the *Traffic Safety Manual* to assist local communities in performing traffic crash studies and identifying countermeasures for implementation. The manual will continue to be updated as needed to reflect current research and industry standards. SEMCOG also developed the PC-based CAST traffic crash analysis software package to facilitate use of the techniques contained in the manual and the wealth of available data.
- Provide engineering services at the local level. Local traffic engineering services are an integral part of investing in and maintaining an efficient transportation system. In an effort to assist communities in meeting their traffic safety needs, SEMCOG will continue to offer a variety of engineering services, including:
  - " direct traffic engineering assistance, such as traffic crash studies, countermeasure recommendations, traffic signal timing, etc.;
  - " provision of standard and specialized traffic crash and roadway characteristic data (e.g., traffic volumes);
  - " development of regional and community-specific traffic crash analyses (e.g., traffic crash profiles detailing particular traffic crash trends);
  - " development of a traffic crash component of SEMCOG's Geographic Information Systems and associated regional and community products (e.g., maps of deer crashes) and
  - " identification of traffic engineering training opportunities as needed to meet specified needs.
- Maintain and enhance the Transportation System Monitoring database. In addition to traffic crash data, SEMCOG collects and maintains a number of other useful datasets, including traffic volumes, traffic control/signalization, number of lanes and other roadway characteristics useful in traffic crash analyses. SEMCOG will also continue collaborating with other agencies, including its traffic count committee, to enhance the accuracy and usefulness of the myriad datasets currently collected outside SEMCOG. For example, the Michigan Intelligent Transportation Systems (MITS) Center, Michigan State Police (MSP) and SEMCOG continue working together to develop methods for collecting, maintaining

and sharing data collected from incident reports received at the MITS Center. (The MITS Center is discussed in more detail later in this section.)

- Collaborate with other regional and statewide traffic safety partners, including the Office of Highway Safety Planning, Traffic Safety Association of Michigan, Safe America, Transportation Improvement Association of Oakland County, the Traffic Safety Association of Macomb and individual communities (e.g., “Safe Communities” participants) to develop the most efficient and effective tools for traffic safety.

Highway incidents (e.g., traffic crashes and vehicle breakdowns) are the major cause of non-recurring congestion. While the safety management system strategies described here seek to decrease the frequency and severity of traffic crashes, additional initiatives are needed to reduce the travel impacts of traffic crashes and other highway incidents that do occur. The following sections describe these initiatives currently underway in the region.

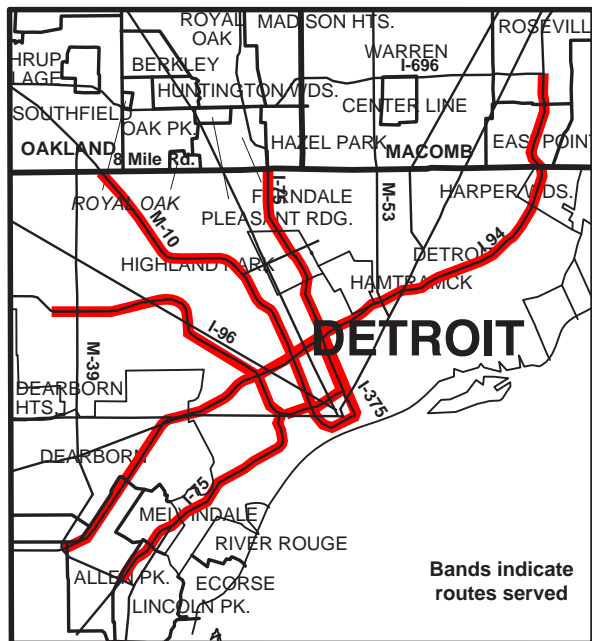
### **Freeway Courtesy Patrol**

In 1994, the Alliance for a Safer, Greater Detroit established the Freeway Courtesy Patrol (FCP) to provide responsive assistance to stranded motorists traveling freeways within the City of Detroit and adjoining communities. Since then, FCP has been expanded twice to existing Phase III operations — six fully-equipped emergency vans operating along six major freeways, Monday through Friday (Figures 12, 13 and 14). All routes are operational during the afternoon peak period, four during the morning peak period and two have extended evening hours. An eight-month study of Phase III operations reported timely, consistent and reliable assistance for 6,643 stranded motorists. (Table 12 contains additional detail regarding services provided.) This assistance yielded a 99.8 percent satisfaction rating and a benefit-cost savings for motorists of 17:1.

SEMCOG’s *Freeway Courtesy Patrol Phase III Evaluation Report* identifies several initiatives for continuing the program’s success.

- Gradually expand the program to include all freeways and major arterials in Southeast Michigan.
- Improve communication links between MSP and the MITS Center to provide better, more timely and cost-effective service, particularly during off-peak hours.
- Work with agencies such as the Michigan Department of Transportation (MDOT) to assist in identifying problem areas on freeways using the data collected.
- Develop a public information campaign to ensure the public is informed of available FCP services.
- Review the current FCP administrative structure to ensure efficient operations.

Figure 12  
Freeway Courtesy Patrol Routes  
6:30-9:00 a.m.



Source: SEMCOG

Figure 13  
Freeway Courtesy Patrol Routes  
3:00-6:30 p.m.



Source: SEMCOG

Figure 14  
Freeway Courtesy Patrol Routes  
6:30-10:30 p.m.



Source: SEMCOG

Table 12  
**Freeway Courtesy Patrol Services Provided, September 1997 to April 1998**

	Presenting Problem								
	Total Percent Receiving	Tire	Gas	Radiator	Other Mechanical	Traffic Crashes	Debris	Abandoned Vehicles	Other
Directly related to problem	67.6	74.5	82.0	50.0	5.9	N/A	94.0	99.0	N/A
Tow/Move	3.8	2.4	1.2	4.2	20.5	3.2	—	0.1	2.8
Called Help	9.1	2.3	0.3	6.3	16.7	41.0	1.6	0.2	4.4
Other Service	20.4	7.7	4.6	21.9	31.9	33.8	3.3	0.1	59.7
Declined Service	14.2	12.8	11.6	17.7	23.8	2.0	—	0.4	31.1
<b>Total Incidents</b>	<b>6,643</b>	<b>953</b>	<b>345</b>	<b>96</b>	<b>1,347</b>	<b>405</b>	<b>183</b>	<b>2,996</b>	<b>318</b>

Source: *Freeway Courtesy Patrol Phase III Evaluation Report*

### **Incident management system**

In general, incident management is defined as the integration of various technologies — including Intelligent Transportation Systems (ITS) — for the purpose of detecting, verifying and clearing incidents and increasing traveler information. Implementation of the three main components of incident management programs — incident detection and verification, incident clearance and traveler information — can range in complexity from routine police or courtesy patrols to demand-response towing services, from radio broadcast traffic reports to traffic loop detectors, from signal preemption for emergency/towing vehicles to changeable message signs. Regardless of the level of sophistication, the most effective and efficient incident management system operates in a coordinated and integrated manner.

The majority of regional incident management activity is housed at the MITS Center, located in downtown Detroit and operated by MDOT. MITS Center technology is used to monitor 32 miles of regional freeways via 24 television monitors, 11 television cameras, 14 changeable message signs and 1,240 in-pavement vehicle detectors. Under the Phase 2 Deployment

Plan, 148 additional miles of freeway will be added to the monitoring system and MITS Center operations will be integrated with Oakland County's FAST-TRAC (Faster and Safer Travel Through Routing and Advanced Controls) traffic operations center.

An MSP Regional Dispatch operation is also housed at the MITS Center. The Regional Dispatch receives approximately 37,000 emergency (911) cellular calls per month and dispatches those calls to the appropriate local emergency response agencies. Being situated in the MITS Center allows for access to the monitoring system, resulting in more appropriate and timely emergency dispatch services.

SEMCOG continues coordinating with the MITS Center to improve incident management activities in the region.

- Incident Data — Continue enhancing collection, maintenance, analysis and sharing of incident data collected and maintained by the MSP Regional Dispatch. Data pertaining to traffic incidents reported to Regional Dispatch via 911 calls can be used by SEMCOG to more efficiently develop traffic safety and incident management strategies regarding incident-related congestion.
- Regional ITS Architecture Development — The Transportation Equity Act for the 21<sup>st</sup> Century requires all federally-funded ITS projects to conform to the National ITS Architecture and encourages a more specific Regional ITS Architecture — or integration strategy — based upon national standards but facilitated at the Metropolitan Planning Organization level. SEMCOG will, therefore, continue coordinating with state and local stakeholders to develop a regional framework for ITS project development/design and foster integration of ITS technologies with the transportation planning process. (Pages 59-61 contain additional information.)
- Phase 2 Deployment Plan — Continue coordinating with the MITS Center to expand and implement appropriate incident management technologies throughout the region as it relates to the Regional ITS Architecture or integration strategy.
- Abandoned vehicles — Continue supporting legislation reducing the waiting period from 48 to eight hours for removing and impounding vehicles abandoned on the roadways.

### **Transit Safety and Security Needs and Initiatives**

Transit safety and security is another important component of the regional transportation system. Transit safety ranges from traffic crashes involving transit vehicles to the security of passengers while walking to and from, waiting for or traveling on transit vehicles and safe work environments for transit agency employees.

#### **Traffic crashes**

While traffic crashes involving transit vehicles represent only a very small proportion of regional totals, they continue to be a concern for SEMCOG, transit agencies and local communities. Clearly, transit safety is not limited to the confines of the transit vehicles or even

to the immediate surroundings of transit bus stops and transfer facilities. The safety of transit users as they access transit services is equally important. Therefore, the efforts of SEMCOG, the Michigan Department of Transportation (MDOT) and local communities to improve the safety of pedestrians and bicyclists also enhance transit safety.

### **Passenger facility safety**

Passenger boarding facilities and equipment, such as shelters, benches, trash receptacles, information displays, lighting and telephones, improve not only convenience but safety as passengers wait for transit vehicles and depart for their final destinations. Barrier-free bus stops that are in compliance with the Americans with Disabilities Act (ADA) are equally important. ADA requirements include flat, well-drained bus pads and accessible sidewalks connecting with bus stops. The following initiatives are examples of efforts to improve passenger facility safety.

- The Greater Detroit Transit Geographic Information Systems (GIS) Project is a cooperative effort among SEMCOG, Detroit Department of Transportation (DDOT), Suburban Mobility Authority for Regional Transportation (SMART), MDOT and Wayne State University Transit Center for Excellence. It includes collecting bus stop information and incorporating it into a transit component of the regional GIS. GIS applications will then be developed to assist in planning purposes.
- DDOT is currently implementing a Bus Stop Safety Program funded by MDOT. Using the GIS application previously described, DDOT is analyzing bus stop safety issues, including the existence, or lack thereof, of shelters, lighting and telephones. The surrounding area is also analyzed to ascertain the condition of the sidewalks/bus pads, vegetation (e.g., overgrown trees or weeds) and nearby buildings. Based on this analysis, DDOT will develop a prioritized list of needed improvements. Following implementation, an analysis will be conducted to determine the impact of improvements on transit security.

### **On-board passenger safety**

Passenger safety is of the utmost importance to regional transit providers. While transit is an important mode of transportation in the region, its use is often hampered by both real and perceived threats to passenger safety. The following initiatives are designed to enhance the safety of passengers traveling on transit vehicles:

- The Ann Arbor Transportation Authority (AATA) continues to be a leader in the use of Intelligent Transportation Systems technologies for passenger safety. AATA has installed on-board video surveillance cameras on all buses. It also operates an automated vehicle location (AVL) system monitoring the location of all vehicles, thereby facilitating emergency response to situations impacting passenger safety.
- AATA coordinated with the Ann Arbor Police Department to place a police mini-station at the Blake Transit Center.
- AATA is currently testing a rear-end collision avoidance system. The system utilizes cameras on the rear of buses to detect approaching vehicles and provides audio and/or visual warning to transit drivers when vehicles come too close to the buses.

- The Blue Water Area Transportation Commission (BWATC) has installed a digital audio recorder monitoring all vehicle radio transmissions. BWATC is also considering implementing on-board video surveillance and AVL technologies.
- BWATC has installed devices that cut seat belt straps in emergency situations, such as traffic crashes, so that passengers are not trapped.
- SMART is currently piloting an on-board video surveillance system and hopes to expand based upon pilot results.

### **Transit employee safety**

Safety of transit employees, including drivers, dispatchers and maintenance personnel, is equally important. For example, compressed natural gas (CNG) vehicles are becoming increasingly more common. Therefore, proper training on operating and maintaining CNG vehicles is needed. Providing secure procedures for removing and depositing transit fare box revenues is another example of how transit agencies are improving safety for their employees.

## **Protecting and Enhancing the Environment**

In keeping with the intent of the goal to protect and enhance the environment, the 2025 RTP encourages compatibility of Southeast Michigan's transportation system with the natural and built environment. The transportation system must not only be safe, accessible and vital, but environmentally friendly as well. It must sustain the region's neighborhoods, commercial and industrial facilities, prime agricultural, open space and recreational resources and historic sites and districts.

Objectives concerned with protecting and enhancing the environment focus on reducing those societal costs which are often associated with the transportation system. Generally, the objectives involve actions reducing negative effects of roadway travel and preserving the region's natural and built environment.

In addition to protecting the natural environment, this goal also encompasses safeguarding the human environment. It acknowledges that transportation planning can potentially affect the everyday lives of people for better or worse. Special consideration is given to those segments of the population who may have been underrepresented in the past, including low-income populations and minority populations.

Essentially, actions protecting and enhancing the environment go beyond traditional planning and engineering solutions to transportation issues. They encourage increased use of public transit and ridesharing, development and use of non-motorized facilities and preservation and enhancement of natural and cultural resources. Finally, they strive to analyze and balance any potentially negative effects of the transportation planning process among all groups of people.

## Environmental Needs

A safe, reliable and efficient transportation system is crucial to the success of the region's economy. People rely on various modes of transportation, such as cars and buses, to transport them to work, shopping malls, medical appointments and other various destinations. Businesses rely on the system for carrying employees to their jobs, materials to plants and products to market.

In spite of the many benefits of transportation, however, there are also impacts of the transportation system on the region's environment. Pollution, energy consumption, damage to wetlands and natural habitats and risks associated with transport of hazardous materials are all examples of potentially harmful and adverse effects of the transportation system.

Increased roadway travel and congestion, particularly by single occupancy vehicles, contributes to increased vehicle emissions and energy consumption, with increased vehicle emissions adversely impacting air quality. Trucks and personal vehicles are major polluters as emissions from millions of vehicles on the road add up.

In Southeast Michigan, air quality is affected by three major pollutants: ozone (and its precursors, volatile organic compounds and nitrogen oxides), carbon monoxide (CO) and particulate matter less than 10 microns in diameter (PM<sub>10</sub>). Ozone, the primary constituent of smog, can cause damage to the lungs as well as to vegetation and building materials. CO, a colorless and odorless gas, is toxic because of its tendency to reduce the oxygen-carrying capacity of blood. PM<sub>10</sub> particles penetrate to the deeper portions of the lung, affecting sensitive population groups, such as children and people with respiratory diseases. (Pages 101-103 contain more information about air quality in the 2025 RTP, specifically air quality conformity analysis requirements and results.)

### **Non-motorized transportation**

As congestion and air pollution continue impacting the Southeast Michigan region, it is becoming increasingly important to look at alternative modes of transportation. Non-motorized transportation, such as walking and bicycling, provides an effective and environmentally-friendly alternative to motorized transportation.

Providing a safe and efficient regional non-motorized system reduces the number of vehicles using the road, thereby reducing congestion and vehicle emissions that adversely impact air quality and energy use. Creation of local non-motorized opportunities can improve safety and generally improve the quality of life for the citizens of a community. A continuous non-motorized system can help connect neighborhoods, parks, recreation areas and community/retail activity centers, giving citizens of all ages and abilities an additional and viable transportation option.

### Existing non-motorized conditions

Walking and bicycling account for about seven percent of all daily trips made in Southeast Michigan. Traveling to school and social activities are the most common destinations for

people walking or bicycling, accounting for more than 33 percent of total non-motorized trips. There is a growing regional interest in increasing the use of non-motorized transportation for other types of travel, including commuting to and from work and shopping. There is also a desire to design communities that are both walkable and bikeable and to retrofit already developed communities with non-motorized facilities, both to give citizens a non-motorized option and improve community viability.

The region's non-motorized system is made up of different parts. There are currently 725 miles of existing walking and bicycling paths as well as 22,576 miles of roadway and thousands of miles of sidewalk. The system is constantly evolving, with more miles of paths and sidewalks and roadway being added. Since development of the 2020 RTP three years ago, more than \$21.5 million have been programmed into the Transportation Improvement Program for non-motorized projects. Additional funding was allocated via non-specific non-motorized improvements (e.g., sidewalk enhancements and paved road shoulders included as part of road widening or paving projects).

#### Non-motorized transportation deficiencies

The major non-motorized problem facing the region continues to be lack of a continuous non-motorized system with connections to other modes of transportation (e.g., transit and carpool locations). Other non-motorized deficiencies and issues which adversely affect the development of a regional non-motorized system include:

- lack of continuity in the non-motorized system, including connections to mode transfer facilities and to daily transportation destinations (e.g., secure bike racks and other facilities at bus stations and at destinations, such as employment, education and shopping centers);
- poor pavement conditions for bicyclists and pedestrians;
- a lack of education of the general public as to the right of non-motorized modes to share the road;
- usability of the system, which is reduced by frequent gaps (e.g., sidewalk or bicycle routes that end abruptly) along with safety and security issues;
- the need for more funding at local, state and federal levels for non-motorized infrastructure improvements. Problems with the existing system contribute to its low usage and, in turn, minimize support for the system's enhancement;
- lack of non-motorized transportation plans or the process for developing plans at the local, county, regional and state levels;
- the need for decision makers, planners and the general public to recognize the importance of the non-motorized system as a legitimate, practical and efficient mode of transportation, including consistent consideration of non-motorized projects in a comprehensive project planning process and
- a need for better non-motorized data collection and travel analysis.

Southeast Michigan is making progress toward addressing non-motorized deficiencies. Efforts such as SEMCOG's Toward Walkable Communities in Southeast Michigan project and the Southeast Michigan Greenways Initiative are examples of non-motorized actions

which protect and enhance the environment. They strive toward preserving open space and natural resources while addressing transportation issues.

### **Environmental Initiatives**

SEMCOG performs and/or supports initiatives and activities throughout Southeast Michigan which protect and enhance the environment. They range from efforts offering options to single occupancy vehicle travel to efforts balancing transportation and land use issues. The 2025 RTP encourages continuation of such initiatives and activities into the future, as well as development of additional transportation strategies benefitting the environment.

### **Toward Walkable Communities**

By giving people viable options to motorized transportation, it is possible to reduce the number of motorized trips, thereby reducing auto emissions and congestion.

SEMCOG's Toward Walkable Communities in Southeast Michigan project provides local government officials, planners, engineers and others with an understanding of design techniques and practical applications that help communities become more walkable and bikeable, such as traffic calming and control, street layout and design and non-motorized safety. The project is sponsored by SEMCOG, AAA Michigan and the Traffic Safety Association of Michigan, with funding from the Michigan Department of Transportation (MDOT) and the Michigan State Police, Office of Highway Safety Planning.

A major component of the project is the walkable community audit. Walkable community audits are an excellent tool for helping communities understand what it means to be bicyclist and pedestrian friendly. A walkable community audit provides information and examples about how to improve pedestrian conditions within the community. Traffic calming measures suggested during a walkable audit, for example, may increase pedestrian safety by slowing traffic in a certain area.

Completed audits provide a wealth of information about walkability in both urban and rural communities regardless of their stages of development. Each half-day audit is conducted by a national consultant and concentrates on an "area of focus" identified by community officials. (Figure 15 is a map of communities which have completed SEMCOG walkable community audits.)

SEMCOG intends to continue the Toward Walkable Communities project by seeking support and providing resources to communities planning to advance toward more pedestrian- and bicyclist-friendly communities.

- Identifying needs — SEMCOG will survey participating communities, determining how to best provide support for implementing measures to increase a community's non-motorized system.
- Developing resources — SEMCOG will develop and publish a resource guide providing communities with information about walkable communities. Information will include funding techniques, design guidelines and standards, traffic calming methods (e.g., traffic circles

and bulbouts), a bibliography of resource material and local, state and national case examples.

- Coordinating efforts — SEMCOG will continue coordinating with agencies to identify funding for communities wanting to improve pedestrian conditions.
- Conducting workshops — SEMCOG may conduct workshops on topics related to the walkable communities project.

### **Southeast Michigan Greenways Initiative**

The Southeast Michigan Greenways Initiative (SMGI) continues working within the region to develop and implement a regional greenways network. The non-motorized trail database developed by SMGI has been incorporated into SEMCOG's Geographic Information Systems (GIS) database. The database is used to identify the location of existing trail and path networks in Southeast Michigan and identify where improvements to the system need to be made. SEMCOG is continually updating the trail database and will incorporate new information into its existing GIS system.

The Rails to Trails Conservancy is currently merging the SMGI project with other regional organizations attempting to address quality of life and land use issues. The purpose of this umbrella organization is providing connectivity among organizations in the region striving toward the same goals. They will coordinate on funding and policy issues, create partnerships and support common goals connecting communities. SEMCOG will continue working with this new coalition in developing a continuous non-motorized system in Southeast Michigan.

Other greenways organizations within the region include the Greenways Initiative in Livingston County, the Greenways and Trailways Vision in Oakland County and the Downriver Linked Greenways Initiative. A primary objective of these projects is realizing a vision of trails and greenways by encouraging local communities to develop their own natural resource conservation and community development plans. Communities take a proactive approach on future development by identifying important resources and guiding development around these resources.

For example, the proposed Downriver Linked Greenways Brownstown/Flat Rock/Rockwood East-West Connector will help create a multi-community system of walking/bicycling trails. The 4.5 miles of proposed non-motorized trails will provide a key link to 24.5 miles of existing or planned trails through six communities. This project is also part of a much larger plan of the Downriver Linked Greenways Initiative and Greater Detroit American Heritage River Initiative to connect Lake Erie to Lake St. Clair via 120 miles of continuous greenways.

The organizations address issues common to all local communities as a result of rapid growth in the area — diminishing open spaces, traffic congestion and loss of rural character. Multiple benefits to be gained include conservation, community character, habitat, recreation and non-motorized transportation.



**Non-motorized Web site**

SEMCOG has a non-motorized component of its Web site ([www.semco.org/depts/trans/non\\_motor/index.html](http://www.semco.org/depts/trans/non_motor/index.html)). The site is used to distribute information about the non-motorized system to officials, planners, citizens and other interested parties. The site provides basic information related to regional non-motorized transportation programs and issues with which SEMCOG is involved. The Web site will continue evolving, reflecting changes to non-motorized issues in Southeast Michigan.

**Non-motorized mode connections**

Non-motorized mode connection improvements are also occurring within the region through transit agencies, which have utilized strategies encouraging connections to non-motorized travel. For example, the Ann Arbor Transportation Authority and Blue Water Area Transportation Commission have implemented programs to install bicycle racks on their buses, improving the non-motorized system by allowing people to gain access to the bus system by bicycle. This can increase the number of people able to use both bicycles and transit for transportation needs, including commuting, shopping and recreational trips.

Enhancement funds from the federally funded Surface Transportation Program are commonly used to construct bicycle pathways or improve pedestrian connections. Examples of the program's use in the region include large portions of the Bay to Bridge, Lakeland and Paint Creek trails.

**RideShare**

SEMCOG's RideShare program provides free carpool and vanpool matching services to individuals and businesses throughout the region. Promotional programs at work sites are conducted throughout the year by program staff. Nearly 100 roadside signs urge motorists to call 313-963-RIDE for information. Alternative work schedules and telecommuting are also encouraged.

The RideShare program enhances Southeast Michigan's environment by reducing the number of vehicles on roadways. Fewer vehicles leads to reductions in the vehicle miles traveled (VMT) and in the amount of pollutants generated. Fewer vehicles also lead to avoidance of crashes and injuries as well as conservation of fuel. Annual totals are:<sup>1</sup>

- estimated VMT reduced: 124,097,000 miles;
- estimated gallons of gas conserved: 6,054,000;
- estimated tons of pollutants reduced: 3,570;
- estimated number of crashes avoided: 565 and
- estimated number of injuries avoided: 160.

---

<sup>1</sup> Based on RideShare 1998 monthly status report.

Table 13 shows 1998 carpool and vanpool statistics. Based on 240 work days in 1998, vanpools traveled 977,280 miles per year, equaling 13,857,295 passenger miles<sup>1</sup> per year, while carpools traveled 55,080,000 miles per year, equaling 110,160,000 passenger miles per year.

Table 13  
**1998 Carpool and Vanpool Statistics**

	Car Pools	Van Pools
Car/Vanpoolers	20,400	553
Average Occupancy	2	14
Average Round Trip Miles Per Day	22.5	104.41
Total Round Trip Miles Per Day	229,500	4,072

Source: SEMCOG RideShare program

### **Air quality**

Many of the previously-mentioned initiatives, such as Toward Walkable Communities and RideShare, indirectly improve air quality. Other initiatives have a primary objective of cleaning the region's air.

### Congestion mitigation

The federally funded Congestion Mitigation Air Quality (CMAQ) program provides a flexible funding source to state and local governments for transportation projects and programs to meet air pollution reduction requirements of the Clean Air Act. Projects using CMAQ funds must address a deficiency in the transportation system (e.g., traffic backups with emission-generating motor idling) and demonstrate a positive impact on congestion and air quality.

Examples include:

- signal interconnection,
- replacement of age-eligible buses with clean burning ones,
- turn lanes,
- outreach programs such as RideShare and Ozone Action!,
- incident management programs such as Freeway Courtesy Patrol and
- operating assistance for new transit service

---

<sup>1</sup> Passenger miles is determined by multiplying the number of carpools or vanpoolers times the average length of their trips.

### Ozone Action!

The Clean Air Coalition of Southeast Michigan is a partnership of business, government, labor, health and environmental organizations which created and supports the Ozone Action! project. Ozone Action! days are declared when weather conditions are likely to combine with pollutant emissions in elevating ground level ozone to unhealthy levels. People and businesses are asked to take voluntary actions reducing pollutant levels to minimize ozone formation. (Specific actions — refueling, vehicle maintenance, vehicle travel and household activities — can be found at [www.semco.org/ozoneaction](http://www.semco.org/ozoneaction).)

### Clean Cities

The Clean Cities program, sponsored by the U.S. Department of Energy (DOE), is designed to encourage the use of alternative fuel vehicles (AFVs) and support infrastructure throughout the nation. The Detroit-Toronto Clean Cities Coalition, currently administrated by SEMCOG, is the largest International DOE Clean Cities designation. The coalition continues increasing awareness of the program and benefits of AFVs, including compressed natural gas buses.

### **Transportation and land use**

Transportation is an integral part of land use development. Changes in the transportation system affect land use development and vice versa. As a result, decisions concerning the two must be made hand in hand.

Projected increases in population, households and employment and estimated land use development patterns will mean an additional 235,000 acres of land will be needed to accommodate anticipated growth in Southeast Michigan between 2000 and 2025. That growth and resulting development will require coordinated planning to maintain a necessary balance between transportation and land use. (Land development forecasts were developed by tracking current local land use development patterns. As local patterns change, so may the regional development forecast and associated transportation impacts.)

Since development of the last regional transportation plan three years ago, various projects have been underway to protect and enhance the environment as it pertains to balancing the interrelated concerns of transportation and land use. A number of projects have been documented in SEMCOG's *Best Practices for Sustainable Development*.

These projects are examples of initiatives which contain policies and strategies that go beyond the traditional planning and engineering strategies of creating more and better highways.

### Lotz Road Corridor Development Plan, Corporate Park Overlay District, Charter Township of Canton

Canton's population has increased dramatically since 1990, making the township one of the fastest growing communities in Wayne County and Southeast Michigan. As a result of the tremendous increase in the number of new households (over 1,000 per year), there has been a dramatic increase in demand for new commercial services. The Ford Road/Lotz Road corridor has been identified as a key focal point for new economic development.

To balance transportation and land use concerns in the Lotz Road Corridor, the township mandates that new development utilize consistent site design standards and compatible architectural design within a park-like setting, emphasizing preservation of open space and sensitivity to natural features. Objectives include minimizing impact on existing residents, encouraging smooth and logical traffic flow, retaining existing woodlands and wetlands and incorporating workable sewer, water and storm drainage systems.

#### FAST-TRAC (Road Commission for Oakland County)

Over the past 10 years, Oakland County has faced extensive traffic congestion. Population growth due to increasing employment opportunities was making travel through urban areas difficult and slow. Because reconstructing and widening the existing infrastructure was too expensive, an alternative applying technological innovations to the existing roadway capacity was pursued. This alternative is called FAST-TRAC (Faster and Safer Travel through Traffic Routing and Advanced Controls).

Initiated in 1990 to provide safe, efficient travel within existing roadway capacity, FAST-TRAC deploys an automated traffic signal control system that adjusts to traffic demand. According to the Road Commission for Oakland County, to date, FAST-TRAC has reduced personal injury crash severity by 50 percent and vehicle delay times by 30 percent in some main corridors.

#### **Regional review of transportation projects**

Given the many transportation projects occurring throughout Southeast Michigan, it is important to have a system in place that monitors and reviews regionally significant projects for their effects on all aspects of the region, including the environment. SEMCOG performs reviews of regionally significant projects as the designated Single Point of Contact for the Michigan Federal Project Review System (MFPRS) and as the regional clearinghouse and review agency for Southeast Michigan. In this capacity, SEMCOG has examined the potential environmental impacts of transportation projects, such as intermodal centers, rail acquisitions and/or abandonments, interchange construction/ improvements and airport capacity and service enhancements.

As the designated Single Point of Contact for the MFPRS, SEMCOG carries out oversight, record-keeping and coordination responsibilities. The MFPRS is a process for notifying state and local government agencies of proposed federally-funded projects, affording such agencies the opportunity to review and comment on the impact the proposed projects could have on their plans and projects. Such review is required under Presidential Executive Order 12372. During the review period, state and regional clearinghouse and review agencies, i.e., all state departments and designated regional planning agencies, determine if a proposed project raises issues of significance to the state or region, respectively. If there are comments about issues of significance raised, the state or regional agency may notify the funding agency of its comments directly. Or, the agency may request a State Process Recommendation, which directs the funding agency to respond to the comments. The funding agency may, but is not required to, make changes based on the comments.

SEMCOG also serves as the regional clearinghouse and review agency for Southeast Michigan. As a regional clearinghouse, SEMCOG performs various regional review activities and is responsible for the review of federal, state and local projects and programs having a direct impact on Southeast Michigan.

In addition to federally-funded projects covered under Presidential Executive Order 12372, the following types of projects are subject to regional review:

- projects seeking federal or state assistance for multi-family and senior citizen housing as they relate to impacts on the transportation system;
- projects seeking federal or state assistance for recreational purposes as they relate to impacts on the trail and non-motorized systems as well as impacts on general access;
- environmental surveys and reports;
- large, multi-county projects with regional impacts, as designated by SEMCOG's Regional Clearinghouse Review Committee;
- rail line abandonments and
- selective license and permit applications.

SEMCOG will continue serving in its capacity as both the Single Point of Contact for review of federally-funded projects in the State of Michigan and the regional clearinghouse and review agency for projects (federal, state or local) impacting Southeast Michigan.

**This page is intentionally blank.**

## 2025 RTP Evaluation

A great deal of time, thought, evaluation, expertise and cooperation went into developing *The 2025 Regional Transportation Plan for Southeast Michigan (2025 RTP)*. An important final step in this process was to take a step back and consider how well the plan does what it was intended to do. This plan evaluation section of the 2025 RTP does just that. Most of the analyses that follow are required by federal regulations with the exception of the analysis of regional goals and objectives. This important assessment, while not required, is included to evaluate progress made toward meeting regional goals. The big question is how well does this plan address the current and future needs of Southeast Michigan's transportation system?

Is the plan financially constrained, i.e., is there likely to be sufficient funding over the next 25 years to accomplish all that is proposed? Are pollutant emission levels associated with implementing the plan consistent with designated limits as identified in the State Implementation Plan? Can it be shown that implementation of the 2025 RTP projects and initiatives will not cause a disproportionate negative effect on minority populations and low-income populations? Does the planning process and resulting 2025 RTP effectively solicit and take into consideration input from the region's citizenship? Does the plan consider and reflect the seven federal planning factors as laid out in the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)? Does this plan, through its policies, initiatives and projects, forward the region's goals and objectives? The answer to all of these questions is "yes."

### Financial Plan

TEA-21 requires that the long-range transportation plan be financially constrained. The sum of the costs for the planned projects cannot exceed reasonably available financial resources. Because of this mandate, estimates of future revenues for transportation improvements are the first step in developing a project list. SEMCOG projected federal, state and local transportation funding available in Southeast Michigan for FY 2001-2025.

The results of this forecast were provided to local road agencies, the Michigan Department of Transportation (MDOT) and transit agencies. The local road agencies consist of transportation study areas<sup>1</sup> in St. Clair and Washtenaw Counties, as well as federal-aid committees<sup>2</sup> in Livingston, Macomb, Monroe, Oakland and Wayne Counties and the City of Detroit. With the long-range funding forecast in hand, agencies could reasonably predict their abilities to address current and future transportation system needs and develop project lists for the 2025 RTP.

---

<sup>1</sup> A transportation study is established under state law as a sub-regional planning agency. Its primary goal is aiding in the development and coordination of an area's transportation system through comprehensive planning involving all levels of government, public agencies, civic groups and members of the general public.

<sup>2</sup> A federal-aid committee is charged with managing federal transportation spending. Committee members include transit officials, county highway engineers, city engineers and county, city, village and township officials.

Two significant changes have taken effect since the 2020 RTP was completed in 1997 that relate to transportation funding. TEA-21 was signed into law in June 1998 and Michigan's state gasoline tax increased from 15 to 19 cents per gallon in July 1997. Three cents of the four-cent increase are available for distribution under the State of Michigan Public Act 51 formula of 39.1 percent to state, 39.1 percent to counties and 21.8 percent to cities and villages. The remaining one cent is reserved for bridge work on state trunklines. None of the state gas tax increase is distributed to transit agencies. These changes mean a significant increase in available resources, with federal categories predicted to provide 65 percent more funding than was forecast for the 2020 RTP and state funding 27 percent more.

The forecast was completed in cooperation with staff from MDOT. Both input data and methodology were discussed and agreed upon. Several key assumptions were made in completing this forecast.

- Federal funding levels will continue the trend set in FY 1999-2003 apportionments pursuant to TEA-21 legislation.
- Michigan Transportation Fund (MTF) levels will continue the trend set in FY 1998-2000 (the first three full years following the increase in the state gas tax).
- There will be no change in the State of Michigan Public Act 51 law which defines distribution formulas for MTF to cities, villages and counties.
- Construction costs will increase by three percent compounded annually.
- Road mileage will not significantly change in Southeast Michigan in proportion to mileage in the rest of the state.
- Population in Southeast Michigan will change as projected by SEMCOG.
- State MTF dollars to local governments will be used 20 percent for capital expenses and 80 percent for operation and maintenance expenses.

### **Transportation Funding Programs**

The most commonly used state and TEA-21 federal-aid programs in Southeast Michigan were included in the forecast and are described below. These programs can be broken down into those distributing funds based on a specific formula and those distributing funds on a competitive basis. Allocated programs include Surface Transportation Program—Urban and Rural, Transportation Economic Development Fund Categories C and D, National Highway System, Interstate Maintenance, Minimum Guarantee and Michigan Transportation Fund. Competitive programs include STP—Safety, STP—Enhancement, Congestion Mitigation Air Quality and Highway Bridge Replacement and Rehabilitation Program. These funds must be applied for on a project-by-project basis. There is no guarantee a particular agency will receive any of these competitive funds.

#### **Surface Transportation Program (STP)**

STP is a federal program that provides funding that may be used by either MDOT or local agencies for projects on eligible highways and major roadways, bridge projects, transit facilities and bus purchases. This program provides great flexibility in the type of projects it can fund, which TEA-21 expanded to include the modification of sidewalks to meet Americans with Disabilities Act requirements and Intelligent Transportation Systems capital

improvements. Eighty percent of STP funds go to state and local agencies for projects such as these. This portion includes funding to the Urban and Rural programs, which are allocated by formula to specific areas based on population. The transportation studies and federal aid committees decide how their own STP Urban and Rural funds are spent. These groups include representatives from both road and transit agencies. The remaining 20 percent of STP funds are set aside for safety and enhancement projects.

### **STP Safety Program**

TEA-21 mandates a minimum of 10 percent of all STP funding be used for safety projects. To be eligible for this funding, a project must address demonstrated safety problems. Safety funds are distributed competitively, based on cost effectiveness and can be used for projects such as:

- intersection improvements, including widening for turn lanes, stop bars and signalization,
- guardrails,
- larger traffic signal heads,
- lane markings,
- railroad crossing improvements and
- roadway improvements related to transit or non-motorized safety.

### **STP Enhancement Program**

TEA-21 mandates a minimum of 10 percent of all STP funding be used for enhancement projects. Funds are distributed on a competitive basis among state and local agencies. Applications are submitted to SEMCOG for support and MDOT for selection. Michigan funds a range of project types with its enhancement program, including:

- landscaping and streetscaping,
- non-motorized facilities for pedestrians and bicyclists,
- mitigation of highway stormwater runoff,
- preservation of historic transportation facilities,
- scenic or historic highway programs,
- control and removal of outdoor advertising and
- transit amenities such as bus stop upgrades.

### **Congestion Mitigation Air Quality (CMAQ)**

CMAQ is a federal program funding projects which demonstrate a positive impact on congestion and air quality. Approximately 80 percent of Michigan's share of CMAQ funds is used for projects in Southeast Michigan. Projects are selected on a competitive basis based upon the benefit received in proportion to the cost. Typical projects funded through this program include:

- signal interconnection,
- replacement of age-eligible buses with clean burning ones,
- turn lanes,
- outreach programs such as RideShare and Ozone Action!,
- incident management programs such as Freeway Courtesy Patrol and
- operating assistance for new transit service.

**Highway Bridge Replacement and Rehabilitation Program (HBRRP)**

HBRRP is a federal program providing funds to replace or rehabilitate highway bridges on public roads which are deemed significantly important and deficient by MDOT. Bridges must be either structurally deficient or functionally obsolete (page 48). Michigan's share of these federal funds is typically split 85 percent for MDOT and 15 percent for local projects statewide.

**National Highway System (NHS)**

NHS is a federal program providing funds for any construction, reconstruction or rehabilitation project on the National Highway System. The entire interstate system is a component of the National Highway System, as is a large percentage of principal arterials and highway connectors. These funds may also be used for improvements to such things as publicly owned bus terminals, Intelligent Transportation Systems and natural habitat mitigation. MDOT generally reserves all NHS funding for its own use.

**Interstate Maintenance (IM)**

Federal IM funds can be used for resurfacing, restoration, rehabilitation and reconstruction projects on the interstate system. It can also be used for preventive maintenance to extend the life of interstates. While most federal-aid programs require a 20 percent local match, IM requires only 10 percent. MDOT reserves for its own use all IM funds coming to Michigan.

**Minimum Guarantee (MG)**

The amount of federal MG funds distributed to Michigan is expected to remain constant over the life of the 25-year financial forecast. By state law, 15 percent of those funds go to the Transportation Economic Development Fund (TEDF) Category C and 16.5 percent to TEDF Category D. The balance of MG funds are used by MDOT and are similar to STP funds in their flexibility.

**Transportation Economic Development Fund (TEDF)**

The State of Michigan created the TEDF program in 1987 to assist in the funding of highway, road and street projects necessary to support economic growth. The program mission is enhancing the ability of the state to compete in an international economy, serving as a catalyst for economic growth and improving quality of life. Those eligible to apply for funds are MDOT, county road commissions and city and village street agencies.

While this is a state program, it combines state and federal funding, with the shares of each varying depending on the TEDF category. Categories A and F consist of all state funding, while Categories C and D are approximately one-third state funding to two-thirds federal. SEMCOG forecast only the latter two categories, which are distributed based on formula. The types of projects in Southeast Michigan eligible for TEDF assistance are:

- Category A – road projects related to economic development and redevelopment opportunities,
- Category C – roadway improvements that reduce traffic congestion in urban counties, including Macomb, Oakland and Wayne,
- Category D – road improvements to create an all-season road network in rural counties, including Livingston, Monroe, St. Clair and Washtenaw and
- Category F – road and street improvements in cities in rural counties.

### **Michigan Transportation Fund (MTF)**

Michigan collects taxes and fees from a number of transportation-related sources, including fuel taxes and vehicle registration fees. These revenues make up the MTF. After portions of this fund are taken off the top, up to 10 percent is reserved for transit. The remainder of MTF is distributed by a specific formula established in the State of Michigan Public Act 51 law. MDOT receives 39.1 percent, county road commissions 39.1 percent and 21.8 percent goes to cities and villages. None of this money goes directly to townships. Public roads in townships are under the jurisdiction of the respective county road commissions. MTF funds are the primary source for making the general 20 percent local match to 80 percent federal funds for transportation projects.

### **2025 Financial Forecast Results**

Results of the available funding forecast are outlined in a series of tables in which the forecast is displayed for the first five years, followed by the last 20 and, finally, a total amount. It is important to remember that for purposes of demonstrating financial constraint, the most important figure is the 25-year total. Projects currently planned for one time period in the plan instead of another can be moved forward or back, depending on changing priorities of state or local agencies. The numbers presented are in “1999 dollars,” meaning they have been adjusted over the 25-year span of the forecast to take into account transportation project cost inflation estimated at three percent annually. (The Bibliography outlines additional sources of information.)

### **Local road agency forecast**

Table 14 summarizes the forecast of federal, state and local funds available for capital expenses to county road commissions, cities and villages throughout Southeast Michigan.

Most federal-aid funding may only be used for capital expenses to make improvements to the transportation system. In most cases, this money is used to cover 80 percent of an eligible project’s costs. The responsible state or local government, i.e., city, village or county, is therefore required to put up a 20 percent match. The federal-aid share for projects can vary from 100 percent federal-aid funding for signal projects under the Congestion Mitigation Air Quality (CMAQ) program to projects which may receive no federal-aid funding. Enhancement projects generally receive less than 80 percent federal-aid funding because of the competitive nature of the application and award procedure.

Table 14  
**Forecast of Federal, State and Local Transportation Funding  
 Available to Counties, Cities and Villages (Locals)**  
 (in 1,000s of 1999 dollars)

	2001-2005	2006-2025	Total
<b>Federal</b>			
Surface Transportation Program, Urban	257,130	870,445	1,127,575
Economic Development (Categories C & D)	91,676	256,897	348,573
Surface Transportation Program, Rural	10,637	36,010	46,647
Enhancement, Non-motorized	24,709	83,645	108,354
Safety	6,604	18,506	25,110
Congestion Mitigation Air Quality	74,365	251,905	326,270
<b>Total Federal</b>	<b>465,122</b>	<b>1,517,408</b>	<b>1,982,530</b>
<b>State and Local</b>			
Michigan Transportation Fund (for capital)	388,599	1,288,783	1,677,382
Other Local Resources <sup>1</sup>	132,160	528,640	660,800
<b>Total State and Local</b>	<b>520,759</b>	<b>1,817,423</b>	<b>2,338,182</b>
<b>Total Funding Available to Locals</b>	<b>985,881</b>	<b>3,334,831</b>	<b>4,320,712</b>

<sup>1</sup> Other local resources include general fund, millage, downtown development authority or tax increment financing.

Source: SEMCOG

#### Operations and maintenance (O/M) funds for local road agencies

Unlike most federal-aid, Michigan Transportation Fund (MTF) funds may be used for either capital or O/M expenses. The share of MTF funds that local units of government use for capital projects varies. The 2025 forecast for Southeast Michigan (Table 15) assumes local governments will split their MTF funding 20 percent for capital expenses and 80 percent for operations and maintenance. This 80/20 split comes from an examination of historical Act 51 data supplied by the Michigan Department of Transportation. Therefore, Table 15 estimates the amount of MTF funding that will be available for O/M to local governments in Southeast Michigan.

Table 15  
**Michigan Transportation Fund for Local Government Operations and Maintenance  
(in 1,000s of 1999 dollars)**

	2001-2005	2006-2025	Total
Michigan Transportation Fund (for O/M)	1,554,396	5,155,136	6,709,532

Source: SEMCOG

In addition to state MTF funds, local units of government have available a wide variety of other funding sources for either capital or O/M expenses. These are often referred to as non-user fees because they are not directly related to actual use of the transportation system. Some examples of non-user fees include general funds, millages, downtown development authority funds, assessments or tax increment financing. The numbers outlined in Table 14 for “Other Local Resources” are only a rough estimate of what local governments will actually spend from these resources for transportation. In reality, the numbers can vary widely from one community to another depending on priorities and budgets. SEMCOG plans to conduct an in-depth analysis of these for the next regional transportation plan.

#### **Michigan Department of Transportation (MDOT) forecast**

Michigan law dictates that most federal-aid highway funds be split 75 percent for MDOT and 25 percent for local units of government. Exceptions to this 75/25 split include CMAQ, Enhancement, Demonstration, Discretionary and Highway Bridge Replacement and Rehabilitation Program (HBRRP) funds. Historically, MDOT has reserved Interstate Maintenance (IM), National Highway System (NHS) and Minimum Guarantee (MG) funds as part of its 75 percent share of federal funds. The IM and NHS funds are restricted to use on the Interstate and National Highway Systems, respectively. This allows local governments to use primarily Surface Transportation Program (STP) funds, which are more flexible.

The MDOT share of federal funds was forecast using the same methodology used for counties, cities and villages. The first step was forecasting what MDOT could reasonably expect to receive statewide. The next logical question was how much might reasonably be expected to be available for highway projects in Southeast Michigan. To answer that, SEMCOG analyzed Transportation Improvement Program (TIP) data for FY 1998- 2002. The total federal apportionments on a statewide level for MDOT’s share of five core federal-aid programs were compared to total TIP project costs programmed in Southeast Michigan for those same programs and fiscal years (Table 16).

Table 16

**Michigan Department of Transportation Core Federal Apportionments Statewide vs. Transportation Improvement Program Funding Programmed in Southeast Michigan (in 1,000s of dollars)**

	Total Apportionments (IM, NHS, STP, HBRRP, MG)	Transportation Improvement Program (TIP)	Percent TIP to Apportionments
1998	463,468	177,069	38.2%
1999	535,588	283,146	52.9%
2000	541,109	280,897	51.9%
2001	551,443	233,692	42.4%
2002	560,177	295,104	52.7%
Total	2,651,785	1,269,908	47.9%

Source: SEMCOG

The result of the analysis indicated that MDOT had historically programmed 47.9 percent of its available federal funds in Southeast Michigan. This share of the total is reflected in Table 17, summarizing all available federal and state funds for MDOT to use in Southeast Michigan with the exception of Congestion Mitigation Air Quality (CMAQ) funding. CMAQ forecast for MDOT is equal to the amount forecast for locals in Southeast Michigan. (In total, approximately 80 percent of CMAQ funds to the state come to this region.) There is no requirement that MDOT continue spending this share of its total in the region, but this analysis provides a good guide to what can reasonably be expected over the life of this 25-year plan.

Table 17  
**Forecast of Federal and State Highway Capital Funding Available to Michigan Department of Transportation for Southeast Michigan Projects (in 1,000s of 1999 dollars)**

	2001-2005	2006-2025	Total
<b>Federal</b>			
Interstate Maintenance	326,367	1,087,581	1,413,949
National Highway System	397,200	1,332,046	1,729,246
Surface Transportation Program	179,970	609,241	789,211
Bridge Replacement and Rehabilitation Program	213,534	713,264	926,798
Congestion Mitigation Air Quality	74,365	251,905	326,270
Minimum Guarantee	157,871	442,391	600,262
<b>Total Federal</b>	<b>1,349,307</b>	<b>4,436,428</b>	<b>5,785,735</b>
<b>State</b>			
Michigan Transportation Fund (for capital)	274,304	905,795	1,180,098
1¢ Michigan Transportation Fund (bridges)	106,828	299,360	406,188
<b>Total State</b>	<b>381,132</b>	<b>1,205,155</b>	<b>1,586,287</b>
<b>Total Funding Available to MDOT</b>	<b>1,730,439</b>	<b>5,641,583</b>	<b>7,372,022</b>

Source: SEMCOG

### Transit agency forecast

The 2025 RTP transit forecast (Table 18) was drafted using information collected from National Transit Database reports. Information from these reports was augmented by data received directly from the region's transit agencies. The assumptions used were consistent with those used in the roads forecast, where applicable.

Table 18

### Forecast of Federal, State and Local Transportation Funding Available to Transit Agencies (in 1,000s of 1999 dollars)

	2001-2005	2006-2025	Total
<b>Federal</b>			
Capital	191,673	661,543	853,216
Operating	40,342	139,232	179,574
<b>Total Federal</b>	<b>232,015</b>	<b>800,775</b>	<b>1,032,790</b>
<b>State</b>			
Capital	33,567	124,619	158,186
Operating	446,126	1,305,988	1,752,114
<b>Total State</b>	<b>479,693</b>	<b>1,430,607</b>	<b>1,910,300</b>
<b>Local</b>			
Capital	9,014	35,890	44,904
Operating	426,736	1,251,042	1,677,778
<b>Total Local</b>	<b>435,750</b>	<b>1,286,932</b>	<b>1,722,682</b>
<b>Fares</b>			
Operating	216,311	637,686	853,997
<b>Total State, Local and Fares</b>	<b>1,131,754</b>	<b>3,355,225</b>	<b>4,486,979</b>
<b>Total Funding Available to Transit</b>	<b>1,363,769</b>	<b>4,156,000</b>	<b>5,519,769</b>

Source: SEMCOG

### Summary of available funds for the 2025 RTP

To aid in project selection, SEMCOG provided the financial forecast results to the transportation area studies and federal-aid committees of the seven counties and City of Detroit, transit agencies and MDOT. As previously stated, funding levels changed significantly as a result of the new federal Transportation Equity Act for the 21<sup>st</sup> Century legislation as well as the four-cent increase in the state gas tax. Available funds were the limiting factor in assuring that the plan was financially constrained. The forecast provided a reasonable estimate of each agency's ability to address identified deficiencies and needs. (Table 19 provides a summary of the financial forecast completed for local road agencies, MDOT and transit agencies.)

Table 19  
**Summary of Available Funds for the 2025 RTP**  
**(in 1,000s of 1999 dollars)**

	2001-2005	2006-2025	Total
<b>Federal</b>			
Local Road Agencies	465,122	1,517,408	1,982,530
Michigan Department of Transportation	1,349,307	4,436,428	5,785,735
Transit Agencies	232,015	800,775	1,032,790
<b>Total Federal</b>	<b>2,046,444</b>	<b>6,754,611</b>	<b>8,801,055</b>
<b>State and Local</b>			
Local Road Agencies	520,759	1,817,423	2,338,182
Michigan Department of Transportation	381,132	1,205,155	1,586,287
Transit Agencies	1,131,754	3,355,225	4,486,979
<b>Total State and Local</b>	<b>2,033,645</b>	<b>6,377,803</b>	<b>8,411,448</b>
<b>Total Available Funds</b>	<b>4,080,089</b>	<b>13,132,414</b>	<b>17,212,503</b>

Source: SEMCOG

## **Project List Summary**

With knowledge in hand of available funding and transportation system needs and deficiencies, the seven counties, City of Detroit, transit agencies and Michigan Department of Transportation selected projects for the 25-year span of the 2025 RTP. The complete list includes 1,819 projects, with a total cost of \$17.6 billion. These numbers reflect 62 percent more projects and 120 percent more money than was included in the 2020 RTP Project List. It should be noted that the 2025 RTP Project List includes \$4.3 billion for transit operating projects which were not included in the 2020 RTP.

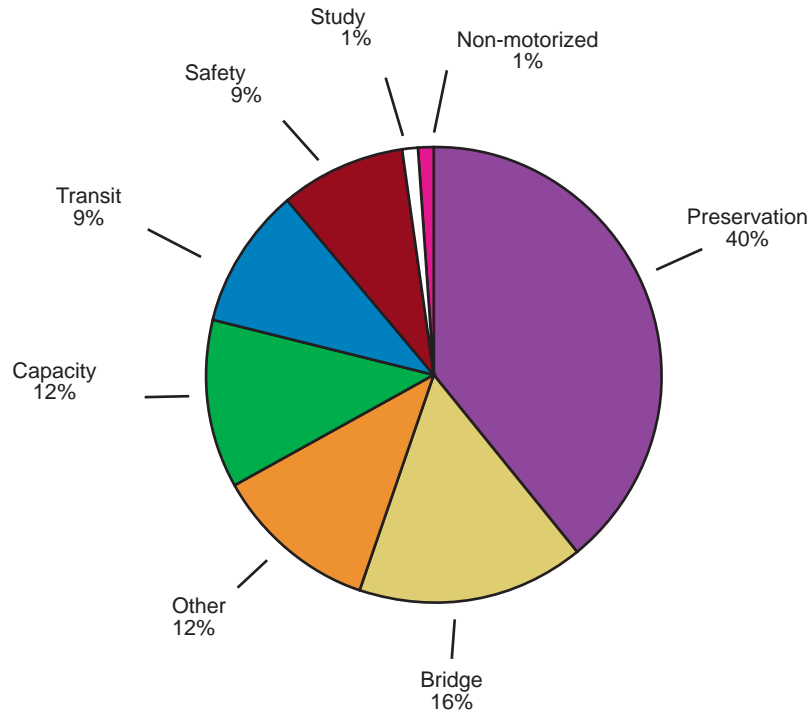
These projects represent a good balance of different work types which, in sum, will make significant improvements to the transportation system in Southeast Michigan. The total \$13.3 billion planned for capital projects broken down by work type includes 40 percent for pavement preservation, 16 percent for bridge improvements, 12 percent for other, 12 percent for road capacity improvements, nine percent for transit capital, nine percent for safety, one percent for non-motorized and one percent for studies (Figure 16). (The 2025 RTP Project List is a separately bound companion document.)

For many, it may be difficult to conceive of 1,819 projects by simply looking at a list. In addition to the work-type breakdown previously described, the projects were analyzed to compute specific data on the improvements that will be realized if all projects in this plan are completed by 2025. How many miles of roadway will be resurfaced or newly built? How many new buses will be purchased in the region? Table 20 answers these types of questions.

## **Financial Constraint**

The forecast of federal funds was the key factor in determining financial constraint of the 2025 RTP Project List. Available revenue was compared to the sum of project costs for the entire 25 years of the plan. Because projects may move in or out of the first five years depending on changing priorities, financial constraint for the long-range plan is based on the 25-year revenues and spending. Although the results outlined in Table 21 appear to indicate the 2025 RTP Project List expends \$162 million more federal funds than will be available, this is misleading. The list includes 76 projects which identify use of federal funds not included in SEMCOG's forecast, such as Highway Bridge Replacement and Rehabilitation Program (HBRRP), High Priority and Surface Transportation Program — Small City. (These funds will be included in the forecast for the next long-range plan.) With this in mind, it is reasonable to assert this plan is financially constrained and the projects included in the 2025 RTP Project List can be accomplished based upon the amount of federal transportation funding expected.

Figure 16  
**2025 RTP Project List by Work Type**  
**Percent of Total Capital Funds**



Source: SEMCOG

Table 20  
**Summary of 2025 RTP Projects**

Transportation Improvement	Quantity
Roadway Resurfaced or Replaced	7,103 miles
Roadway Widened	425 miles
Roadway Added	13 miles
Non-motorized Paths	616 miles
Bridges Repaired or Replaced	2,064
Intersections Improved	7,405
Landscaping Projects	41
Transit Vehicles Purchased	5,168
Facilities Added or Upgraded	43

Source: SEMCOG

The total non-federal funds in the 2025 RTP Project List exceeds the total forecast by \$273 million. This is not an indication, however, that the region's transportation agencies are unrealistic in their planning. The forecast assumed that the share of Michigan Transportation Fund (MTF) dollars which agencies use for capital versus operating expenses was 20 percent. These numbers indicate that local agencies plan to spend more than 20 percent of MTF on capital expenses and less than 80 percent on operation and maintenance.

Table 21  
**Demonstration of Financial Constraint**  
**(in 1,000s of 1999 dollars)**

	2001-2025	
	Forecast	Projects
<b>Local Roads</b>		
Federal	1,982,530	2,140,983
Non-federal	2,338,182	2,613,556
Total	4,320,712	4,754,539
<b>Michigan Department of Transportation</b>		
Federal	5,785,735	5,789,055
Non-federal	1,586,287	1,584,201
Total	7,372,022	7,373,256
<b>Transit</b>		
Federal	1,032,790	1,032,786
Non-federal	4,486,979	4,486,979
Total	5,519,769	5,519,765
<b>2025 RTP</b>		
Federal <sup>1</sup>	8,801,055	8,962,824
Non-federal	8,411,448	8,684,736
Grand Total	17,212,503	17,647,560

<sup>1</sup> The sum of federal funds for the project list in excess of the total forecast is caused by 76 projects, which identify federal funds not accounted for in SEMCOG's forecast such as HBRRP, High Priority and Surface Transportation Program – Small City.

This plan to spend \$17.6 billion does not provide a complete picture of the total spending expected to address transportation needs over the next 25 years. As previously described, road agencies expend significant portions of their MTF dollars on operations and maintenance activities (Table 15). SEMCOG estimates these expenses will total \$6.6 billion over 25 years for counties, cities, villages and the Michigan Department of Transportation. This brings the region's expected total investment to operate, maintain and address transportation system deficiencies to \$24 billion as outlined in Table 22.

Table 22

**25-Year Transportation System Investment in Southeast Michigan  
(in 1,000s of 1999 dollars)**

	Amount
<b>In the 2025 RTP Project List</b>	
Transit Capital	1,235,507
Transit Operating	4,284,258
Road Capital	12,127,795
Total 2025 RTP Project List	17,647,560
<b>Not in the 2025 RTP Project List</b>	
Road Operating	6,580,000
<b>Total 25-Year Transportation System Investment</b>	<b>24,227,560</b>

Source: SEMCOG

### Total Transportation Needs

The 2025 RTP Project List represents an enormous investment in Southeast Michigan's transportation system. Upon completion, the projects and road operating expenditures will go a long way toward addressing the four goals of this plan. How close will this \$24 billion come to meeting the needs anticipated over the next 25 years? When the 2020 RTP was adopted, it identified \$26 billion in needs for this region and \$8 billion to meet those needs. Looking back, how much has actually been accomplished since then? Looking forward, what are the needs projected to be over the next 25 years?

### Evaluating progress made

The Transportation Improvement Program (TIP) is a dynamic list of projects programmed in the region. Because no transportation project may receive federal-aid funds without first being part of an approved TIP, it is the best available indication of work completed. Similar to the

RTP, the total list of projects in the TIP is constrained by the amount of available funding. Between fiscal years 1996 and 2000, the first five years of the 2020 RTP, a total of \$1.7 billion was planned for transportation projects across the region. The amount of money actually programmed for projects in the TIP for those years was \$3.3 billion, nearly double the amount planned. (Figure 17 provides detail of the increase in dollars by project work type between what was planned in the 2020 RTP and what was programmed in the TIP.)

There are many ways to explain why the total programmed was so much higher than originally planned. Certain groups of projects, such as Congestion Mitigation Air Quality (CMAQ), Enhancement and Safety, were programmed in the TIP without ever being specifically listed in the 2020 RTP. These projects were all consistent with the adopted long-range plan, but the scope was such that they did not warrant individual recognition. They were approved for inclusion in the TIP because they were consistent with the goals and objectives of the 2020 RTP. In total, these projects accounted for \$822 million in programming not specified in the plan.

Bridge and capacity improvement projects accounted for an additional \$375 million and \$242 million, respectively, in funding programmed in the TIP over the amount planned in the 2020 RTP. Because the amount of transportation funding significantly increased for agencies in our region with the passage of the federal Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and the increase in the state gasoline tax, many of these relatively expensive projects were completed ahead of schedule. Certain projects that had been originally planned for construction after fiscal year 2000 were moved forward as additional funds became available. Additionally, an increase in the cost of these projects accounted for some of the difference between the value of projects planned and programmed.

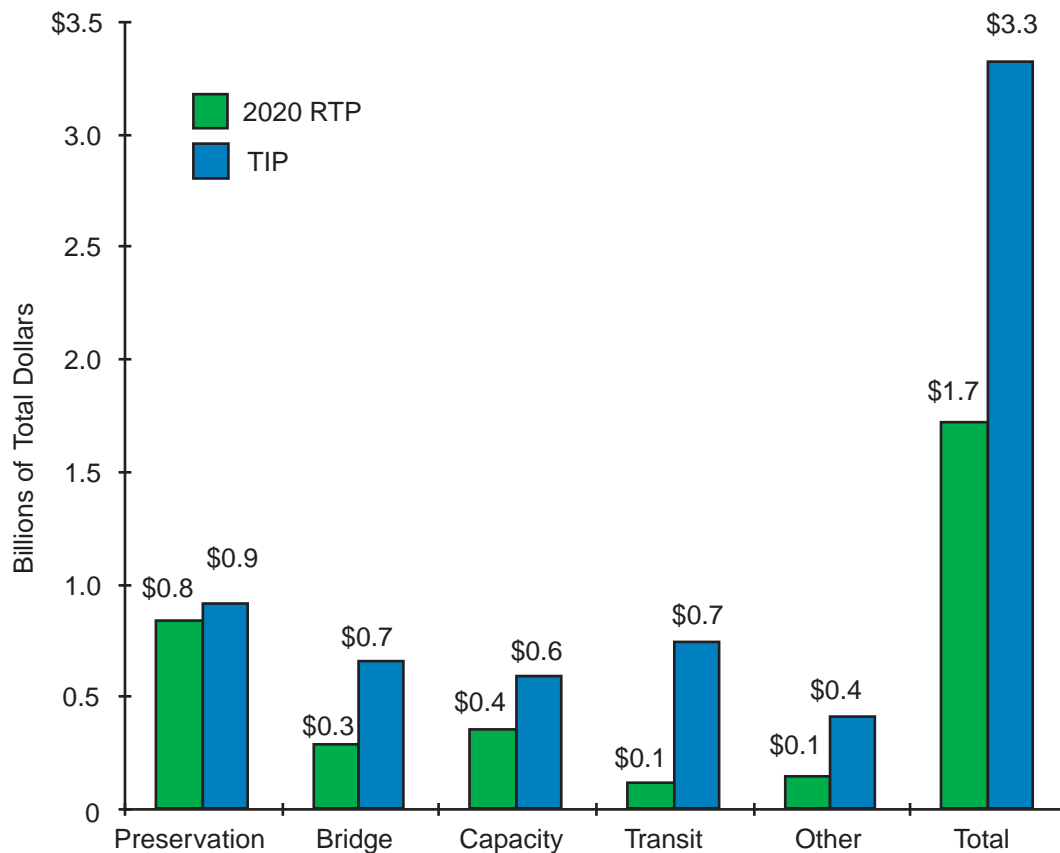
Transit funding accounted for another large portion of spending programmed over what was planned. The bulk of that, \$490 million, was in transit operating funding that was included in the TIP but not specifically listed in the 2020 RTP. Similar to CMAQ, Enhancement and Safety projects, transit operating funding was eligible for programming in the TIP because it was consistent with the goals and objectives of the 2020 RTP. In contrast, the 2025 RTP does include transit operating in the project list for a total of \$4.3 billion over the life of the plan.

It is clear that Southeast Michigan made remarkable progress toward addressing identified transportation needs between fiscal years 1996 and 2000. The next step was quantifying those needs into the future.

### **Future transportation needs**

SEMCOG estimated that \$41 billion will be needed to operate, maintain and address deficiencies in the region's transportation system through the year 2025. This reflects a 58 percent increase over needs identified in the 2020 RTP, but the comparison can not be made that simply. Although the basic assumptions used to compute total needs remained the same (e.g., roads, bridges and transit vehicles perpetually require repair or replacement) there were significant differences between the 2020 and 2025 calculations.

Figure 17  
Planned vs. Programmed Projects by Work Type,  
FY 1996-2000



Source: SEMCOG

- Operations and maintenance expenses for roads were accounted for in the 2025 RTP (adding \$7 billion).
- Transit operating expenses were included (adding \$4.5 billion).
- Bridge deficiencies were considered over 25 years rather than 10 (adding \$3.2 billion).
- The entire public roadway system was considered in the pavement cost rather than only county and state roads (adding \$0.3 billion).
- Miscellaneous expenses for such things as signs and guardrails were included (adding \$0.2 billion).
- Transportation project costs increased because of inflation for everything from construction to bus purchases.

Table 23 outlines the assumptions made and total needs calculated for each project category.

As previously explained, this total is considerably higher than the \$26 billion in needs identified in the 2020 RTP. The most significant additions are transit and road operating funds. (Figure 18 provides perspective on this with a breakdown of the total \$41 billion in needs by operating and capital expenses.)

The region's ability to meet these needs is limited by available financial resources. The 2025 RTP financial forecast and 2025 RTP Project List indicate that approximately \$24 billion will be available for transportation projects and operating expenses across the region over the next 25 years. Figure 19 demonstrates that 59 percent of the needs can therefore be met. Although this is an improvement over the 2020 RTP when only 30 percent of needs were addressed in the plan, it still falls far short of the level of funding needed. Southeast Michigan has a long list of transportation network deficiencies in everything from transit to pavement, from congestion relief to safety and non-motorized facilities. Sufficient funding to address these areas would allow the region to more effectively meet its stated goals and objectives.

While SEMCOG included all funding reasonably expected over the 25 years of this plan in its forecast, it is conceivable that new funding will be made available in the future that is not accounted for. One potential source of funding that was not included was the state's proposed Build Michigan III program. The Michigan Department of Transportation describes it as "an aggressive . . . plan to invest an additional \$1 billion (statewide) into road repair projects from 2000-2004." If implemented, it could provide significant new funding to the region to address some portion of these unmet needs.

Figure 18  
**2025 Regional Transportation System Needs**

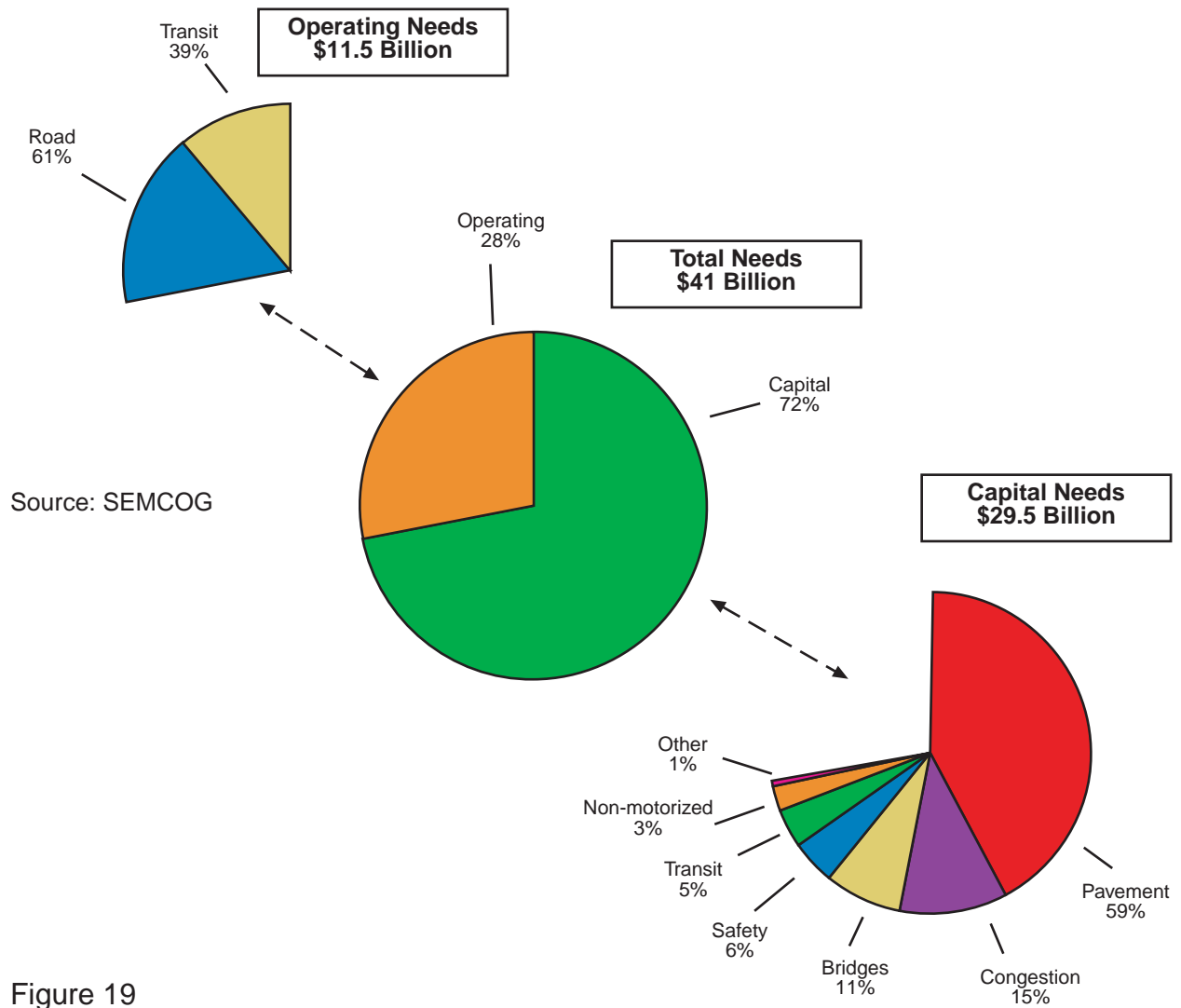
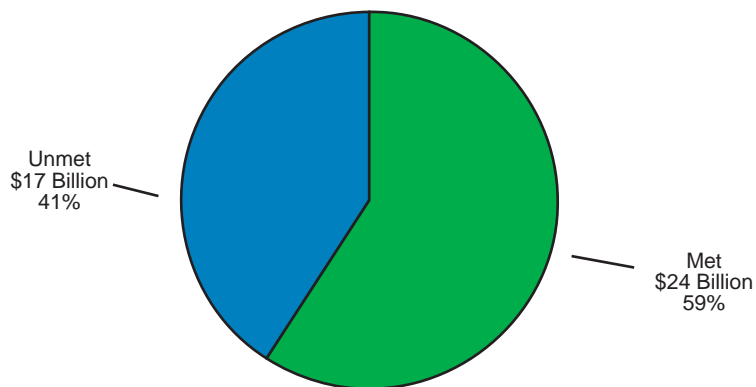


Figure 19  
**2025 Regional Transportation System Needs**  
**Met vs. Unmet Needs**



Source: SEMCOG

Table 23  
**Estimated 2025 Regional Transportation Needs  
(in 1999 dollars)**

Category	Assumptions	\$ Need
Pavement	All 22,576 miles of existing public roadway will need to be resurfaced or replaced at least once.	17.2 billion
Road Operating	Operating and maintenance expenses for the region's roadway system will require approximately 80 percent of the Michigan Transportation Funds forecast for locals plus a smaller share for the Michigan Department of Transportation.	7.0 billion
Transit Operating	Transit operating expenses will increase by approximately five percent over current levels to provide enhanced service.	4.5 billion
Congestion	Projected congestion on freeways, major arterials and other strategic roadways will be addressed with a mix of Intelligent Transportation Systems technology, transit and widening.	4.4 billion
Bridges	All 3,068 highway bridges in the region will be rehabilitated or replaced at least once.	3.2 billion
Safety	Existing safety deficiencies will be studied and addressed as identified in the 2020 RTP.	1.9 billion
Transit Capital	All transit vehicles will be replaced a minimum of two times and facilities will be maintained, replaced or added as needed.	1.6 billion
Non-motorized	Additional non-motorized paths will be constructed as identified in the 2020 RTP.	1.0 billion
Other Capital	Approximately one percent of the cost to maintain roads will be needed for miscellaneous signs and guardrails, etc.	0.2 billion
<b>Total Needs</b>		<b>41.0 billion</b>

Source: SEMCOG

## Air Quality Conformity Analysis

As the lead regional air quality planning agency in the region, SEMCOG is responsible for managing and facilitating the transportation air quality conformity process in Southeast Michigan. Conformity is a federal regulation of the 1990 Clean Air Act Amendments (CAAA) requiring transportation plans, programs and projects in designated areas to conform to the state's air quality plan, known as the State Implementation Plan (SIP). Essentially, the 2025 RTP must undergo a quantitative analysis demonstrating that emission levels associated with implementing the plan do not worsen the region's air quality and are consistent with designated budgets, i.e., emission level limits in the SIP.

The transportation conformity process establishes the major connection between transportation planning and emission reductions from transportation sources. According to the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) metropolitan planning requirements, federally-funded projects cannot be approved, funded or implemented unless they are in a conforming long-range regional transportation plan and short-range transportation improvement program. Enactment of the CAAA and TEA-21 created a new regulatory climate where transportation agencies are directed to make air quality a goal and are given fiscal incentives for compliance.

### Southeast Michigan Air Quality Status

Air quality conformity analyses for Southeast Michigan involve two major pollutants — ozone (and its precursors, volatile organic compounds and nitrogen oxides) and carbon monoxide (CO). These pollutants may potentially cause or exacerbate health problems, as well as affect ecosystems and the built environment, through corrosion. Air quality is also affected by particulate matter less than 10 microns in diameter (PM<sub>10</sub>). However SEMCOG is not required to include PM<sub>10</sub> in air quality conformity analyses.

The National Ambient Air Quality Standards (NAAQS) for these pollutants are set at levels the U.S. Environmental Protection Agency believes will protect public health and welfare. NAAQS are used as the basis for determining an area's air quality designation, i.e., status, as "attainment" or "nonattainment." Generally, a nonattainment area is one which does not meet the NAAQS. An area may be in nonattainment for one pollutant and in attainment for others. The process of re-evaluating and reclassifying an area's air quality status from nonattainment to a maintenance area is called redesignation.

Southeast Michigan has varying air quality status and conformity requirements corresponding to each respective pollutant.

- In 1995, the region was redesignated from nonattainment to a maintenance area for ozone. Although the region has reached attainment status for ozone, it still must implement a maintenance plan (contained in the ozone redesignation request for the region) by maintaining budgets for volatile organic compounds (VOCs) and oxides of nitrogen (NOx). In order for a positive determination to be made in the ozone portion of the conformity analysis, emission levels for VOCs and NOx cannot exceed 1993 mobile source inventory

levels of 230.7 thousand kilograms per day (kgs/day) of VOCs and 364.9 thousand kgs/day of NOx for any period included in the analysis.

- In 1999, the region was redesignated from a nonattainment to a maintenance area for CO. Similar to ozone, in order for a positive determination to be made in the CO portion of the conformity analysis, emission levels for CO cannot exceed mobile source inventory levels of 2,473.6 thousand kgs/day.

### 2025 Regional Transportation Plan Conformity Results

The 2025 RTP air quality conformity analysis results (Table 24) indicate that emissions for VOCs, NOx and CO are below established mobile source emission budgets for each analysis period. Additionally, emissions for all three pollutants decrease from 2000 to 2025 as 2025 RTP projects are implemented.

Table 24  
**Ozone Precursors and Carbon Monoxide<sup>1</sup>**

	2000	2005	2010	2015	2020	2025
VOCs Budget (1,000s kgs/day)	230.7	230.7	230.7	230.7	230.7	230.7
VOCs Emissions (1,000s kgs/day)	166.1	150.1	144.9	145.2	146.0	149.3
NOx Budget (1,000s kgs/day)	364.9	364.9	364.9	364.9	364.9	364.9
NOx Emissions (1,000s kgs/day)	305.3	280.4	271.5	269.9	271.2	276.6
CO Budget (1,000s kgs/day)	2,473.6	2,473.6	2,473.6	2,473.6	2,473.6	2,473.6
CO Emissions (1,000s kgs/day)	1,940.0	1,699.9	1,655.3	1,655.7	1,661.6	1,693.6
Summer Season Daily VMT for VOCs and NOx (1,000s)	131,999.4	136,209.8	139,667.7	141,901.5	143,338.8	146,269.1
Winter Season Daily VMT for CO (1,000s)	99,184.4	101,682.4	103,706.9	105,009.9	105,559.8	107,427.1

<sup>1</sup> Ozone emissions are calculated using summer season VMT, CO emissions are calculated using winter season VMT.

Table 24 also compares daily vehicle miles of travel (VMT) to emissions for each time period. Emissions from all three pollutants decrease while VMT increases. Although VMT is expected to increase, implementation of the 2025 RTP projects contributes to improved traffic flow and reduced congestion which leads to reduced emissions over time. (The Bibliography outlines additional sources of information.)

## Environmental Justice

Recognizing the population diversity of Southeast Michigan, SEMCOG strives to meet the transportation needs of all citizens, particularly those who have special needs (e.g., the elderly and persons with disabilities) and those who have traditionally been underrepresented in transportation decision making (e.g., the transit dependent, low-income persons and members of racial and ethnic minority populations). In addition to its customary practices designed to facilitate collaborative interaction during all phases of the transportation planning process, SEMCOG is required to evaluate the impacts of this process on five groups — low-income, African-American, Hispanic, Asian-American and Native American persons.

Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” In the same spirit, President Clinton issued Executive Order 12898 on February 11, 1994, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The stated purpose of this order is to “make achieving environmental justice part of (each Federal agency’s) mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Similar orders followed from the U.S. Department of Transportation (USDOT) and Federal Highway Administration. The USDOT order specifically defines the five populations that must be included in environmental justice analyses.

Title VI, Executive Order 12898 and the USDOT order contain no specific requirements in terms of evaluating the impacts of the transportation planning process on the defined populations. SEMCOG chose to conduct analyses of 2025 RTP project implementation, public involvement, accessibility to jobs and regional transit provision. These analyses may be refined in the future as appropriate. SEMCOG evaluates its planning process and products on an ongoing basis to ensure compliance with Title VI and the various environmental justice orders.

### Identification of Minority Populations and Low-income Populations

The first step in evaluating compliance was identifying the location of the defined populations. Minority populations are defined in the USDOT order as persons who are African-American, Hispanic, Asian-American or Native American. Low-income means persons whose “household income is at or below the Department of Health and Human Services poverty guidelines.” SEMCOG identified areas within the region having significant populations meeting these criteria (Figures 20 through 24). In the case of minority populations, maps were developed by coding census block groups where the percentage population of any of the four identified groups met or exceeded the regional average. (The Bibliography outlines additional sources of information.)

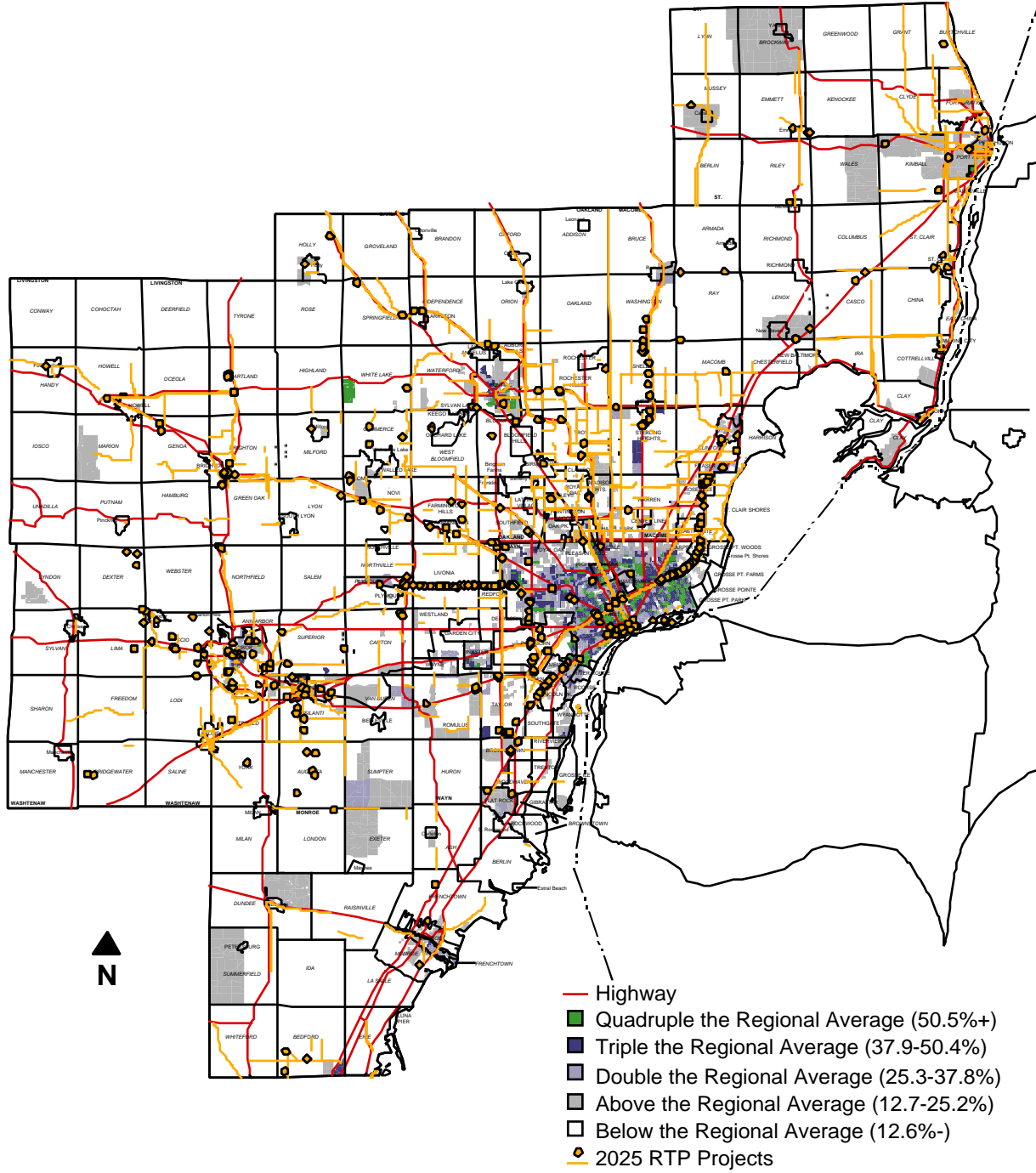
Similarly for low-income persons, maps identifying census block groups where the percentage of households living in poverty met or exceeded the regional average were developed. These analyses were based on 1990 U.S. Census Bureau data. More current census data will be utilized when available. (Table 25 outlines the regional percent of population for each of the specified groups in Southeast Michigan.)

Table 25  
**Percent of Minority Populations and Low-income Households in Southeast Michigan**

Category	Percent in Southeast Michigan
Low-income	12.60%
African-American	21.16%
Hispanic	1.95%
Asian-American	1.50%
Native American	0.39%

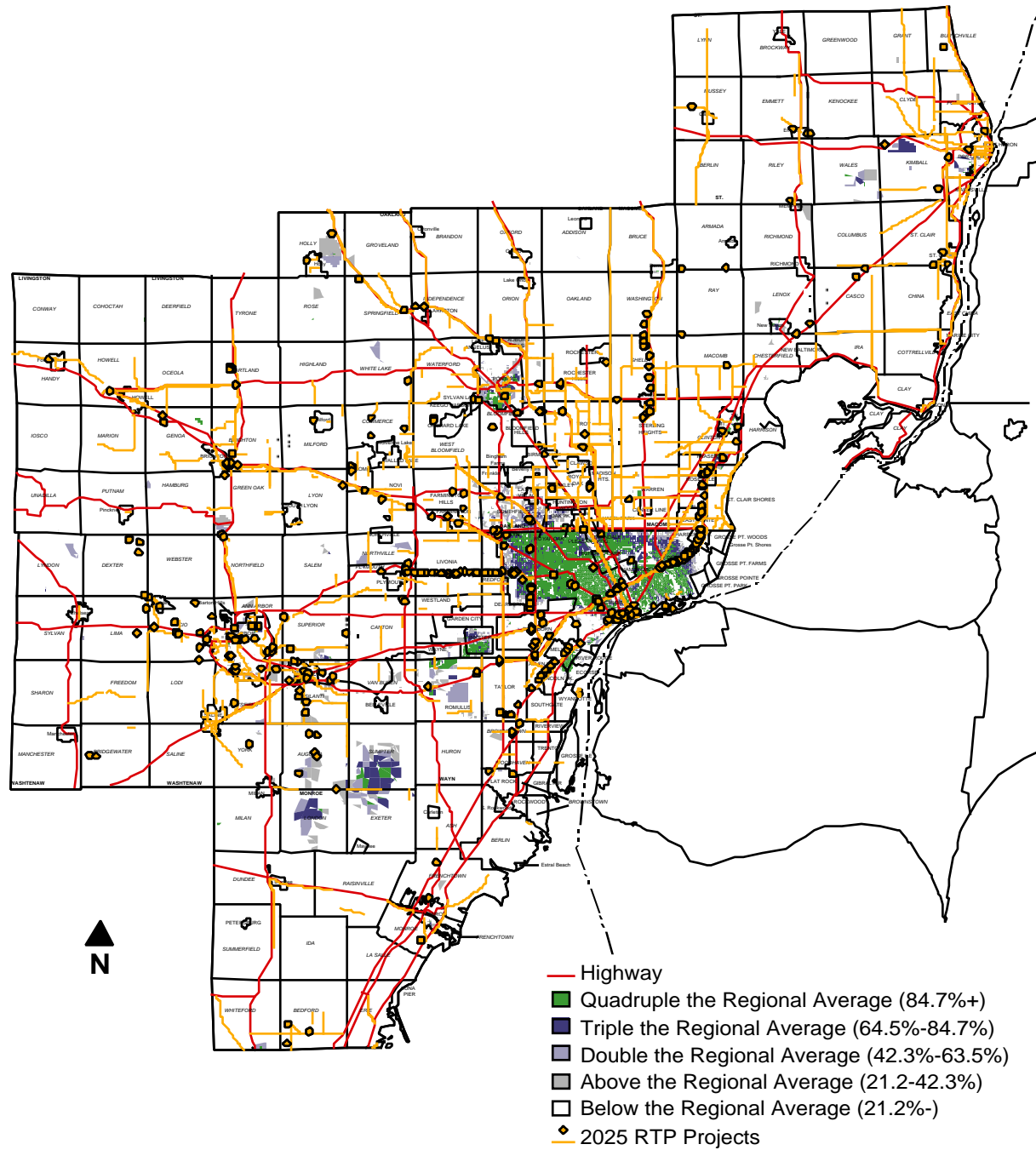
Source: 1990 U.S. Census Bureau

Figure 20  
**Location of Low-income Households**



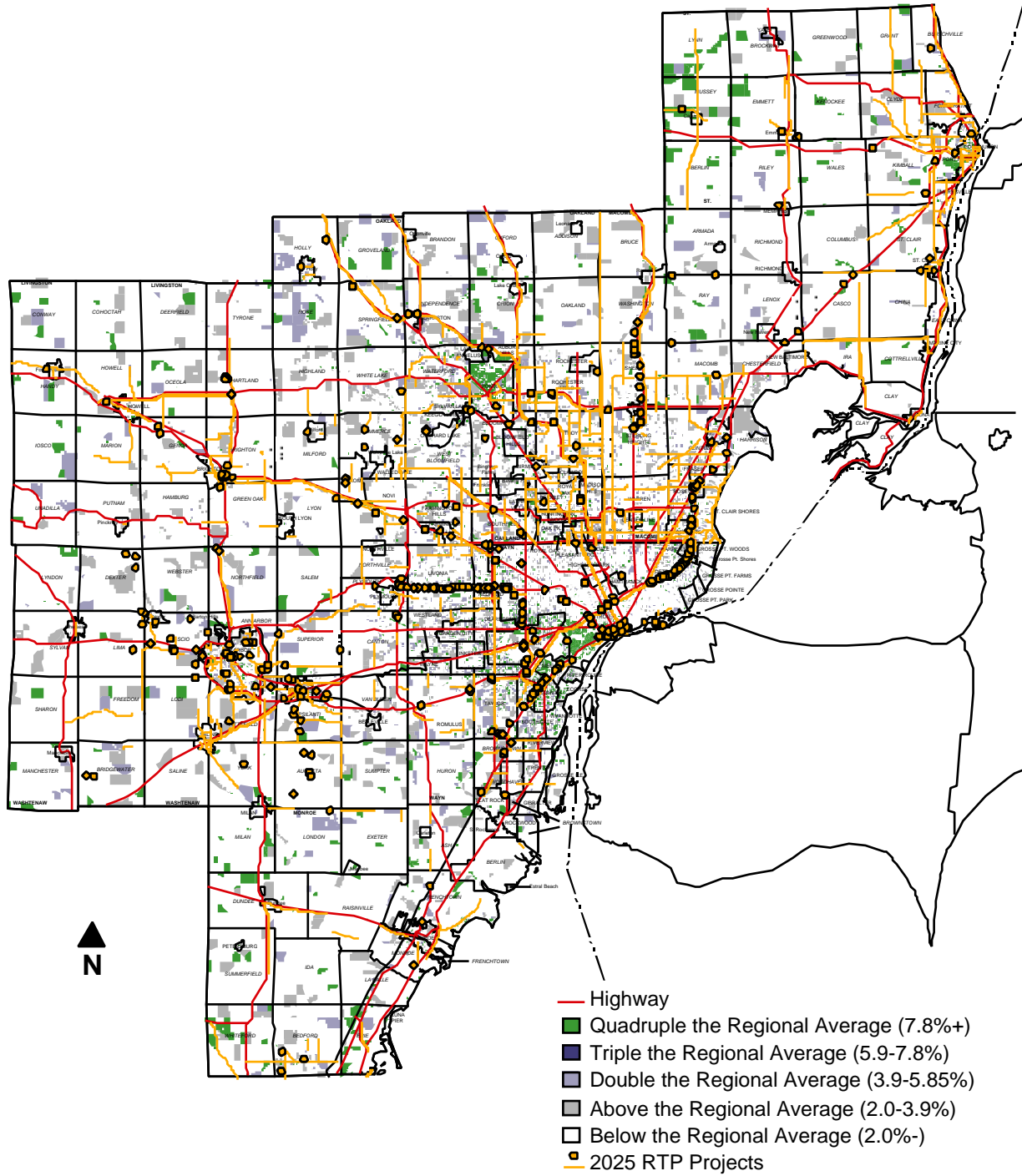
Source: SEMCOG

Figure 21  
Location of African-American Populations



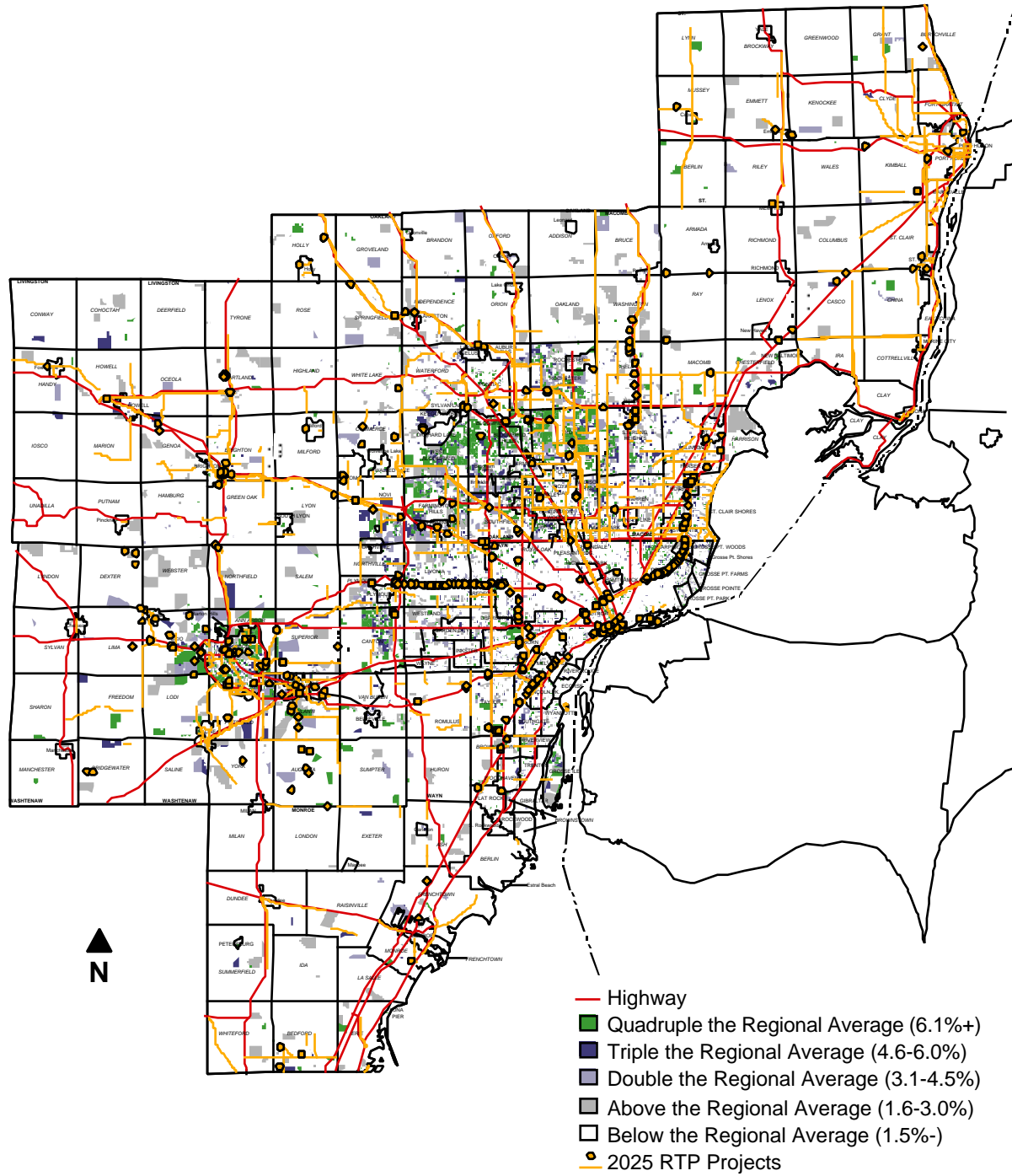
Source: SEMCOG

Figure 22  
**Location of Hispanic Populations**



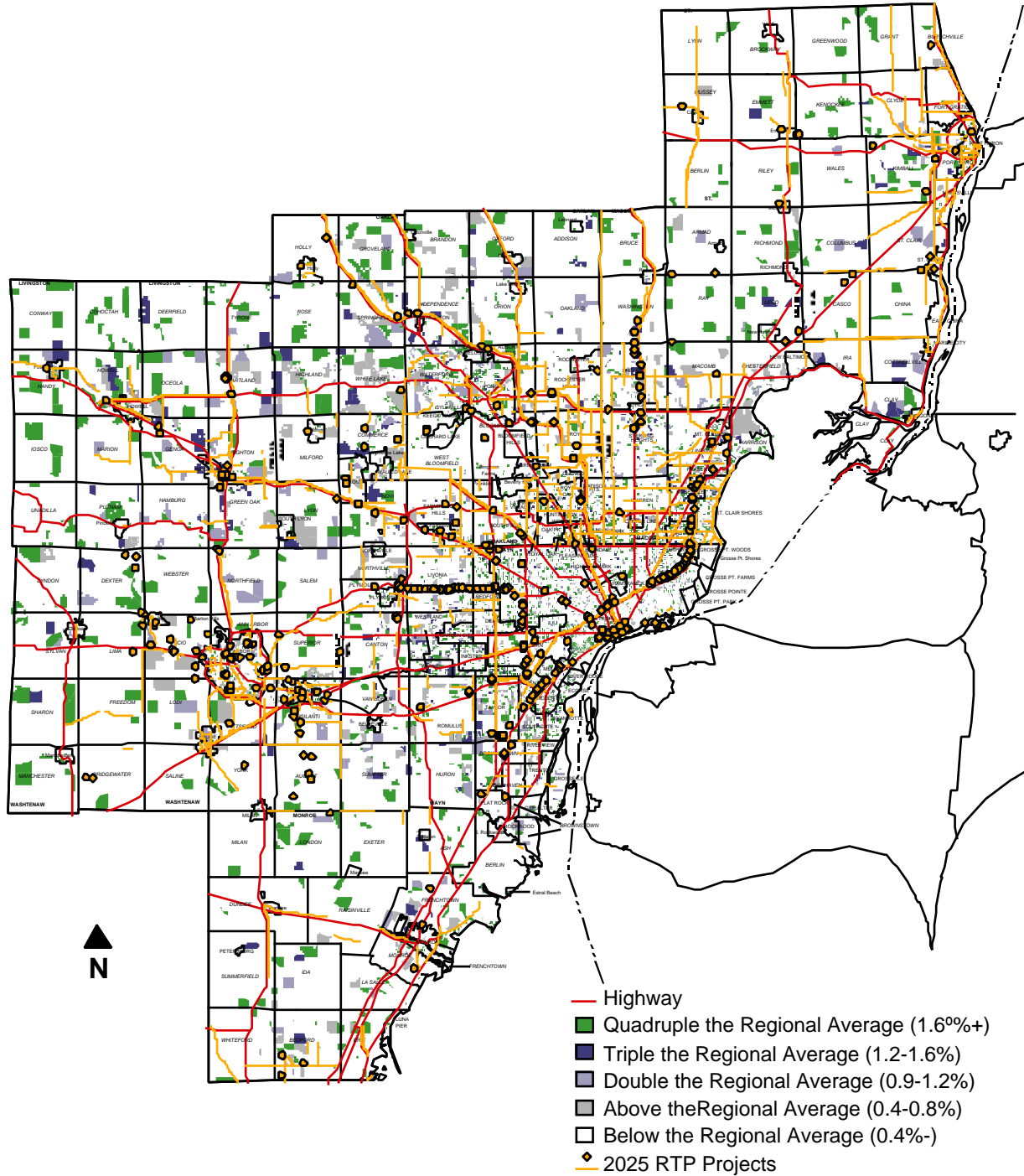
Source: SEMCOG

Figure 23  
Location of Asian-American Populations



Source: SEMCOG

Figure 24  
**Location of Native American Populations**



Source: SEMCOG

## Project Implementation

In an effort to evaluate the impact of implementing transportation projects, the various population maps were overlaid with all projects from the 2025 RTP Project List which were capable of being mapped, i.e., projects with specific locations as opposed to general line items such as “resurface 50 miles.” These maps were used by SEMCOG to visually analyze the distribution of 2025 RTP projects by work type across the region. This analysis particularly focused on project types which might have disproportionate negative impacts on minority populations and low-income populations, such as road widenings that require purchase of right-of-way, new roads that might divide an established neighborhood or freeway ramp closures that would restrict access. Road widening projects identified in the 2025 RTP are distributed throughout Southeast Michigan, both in areas containing relatively high and low proportions of minority and low-income populations.

Projects planned to improve the safety of motorists and pedestrians are another category of interest in SEMCOG’s environmental justice evaluation. Of the 261 safety related projects, 105 are attributable to specific locations and on the 2025 RTP project map. The remaining projects are line items with general descriptions by work type planned. The City of Detroit submitted 35 such projects representing a total safety investment of nearly \$300 million, or 24 percent of the total dollar value for safety projects. Detroit’s projects include work to modernize or add traffic signals, make geometric improvements to intersections and mark intersections and lanes. U.S. Census data from 1990 indicates that 32 percent of persons in Detroit are living in poverty, 76 percent are African-American and three percent are Hispanic. These percentages are regionally significant (see Table 25) and indicate that the large dollar value of safety-related projects planned in Detroit will greatly benefit these three groups.

### Transit issues

Finally, SEMCOG works extensively on transit issues to make accessibility a reality for low-income residents who have no alternative modes of transportation available to them. SEMCOG’s Executive Committee has officially endorsed the position that the state should increase funding to transit agencies, whose customer base is disproportionately low-income. In addition, SEMCOG continues to work closely with job developers and transit providers, both public and private, to enable the transition of people from welfare to work.

Unmet transportation needs are huge barriers to economic self-sufficiency for low-income persons and persons transitioning from welfare to work. Among this population in Detroit, only 32 percent own personal cars. Ninety percent of Work First customers participating in a recent transportation survey reported that they rely on DDOT and SMART to take them to work or training. Limitations in DDOT and SMART services translate into restricted movement for the population dependent upon them. Cost makes unsubsidized private van services and taxis out of reach.

To help address these challenges SEMCOG, working with a consortium of agencies including the Family Independence Agency, Detroit Employment and Training Department, Michigan

Department of Transportation, Archdiocese of Detroit, Detroit Department of Transportation, Suburban Mobility Authority for Regional Transportation, Child Care Coordinating Council, private and non-profit van operators and welfare reform service providers, secured a \$1.38 million grant in the first year of the Federal Transit Administration's five-year Job Access and Reverse Commute program. This grant lays the foundation for a variety of transportation projects to address the special needs of these commuters. Projects include establishing a mobility management office, facilitating and enhancing city to suburban job center commutes, providing emergency rides to and from work, rides for parents and children to daycare centers and promotion of a commuter choice tax credit to employers. (Page 55 contains more information about public transit funding initiatives.)

### **Public Involvement**

While project evaluation is an important aspect of ensuring environmental justice, so ,too, are planning processes such as public involvement. The public involvement process is an important element in transportation planning and SEMCOG values the input of all persons. It is of particular concern that those who have historically been overlooked be sought out and heard, including minority populations and low-income populations.

Because of the importance of public involvement, a special task force representing a wide range of population groups, including minority and low-income representatives, convened to review SEMCOG's overall public involvement process. This group will make recommendations to SEMCOG's Executive Committee for change and augmentation of public involvement to ensure all voices are solicited and considered in the planning process. In addition to this review process, SEMCOG took specific actions to reach out to minority populations and low-income populations when publicizing the 2025 RTP planning process and final document. Actions included placing paid advertisements in various news publications reaching African-American, Hispanic, Asian-American, Native American and low-income residents and focusing efforts to meet with and present information to these various groups. (Pages 113-124 contain a complete description of the 2025 RTP public involvement process).

A good example of strategies encouraging minority and low-income participation is the public involvement procedures followed when plans were formulated for the Ambassador Bridge area in Southwest Detroit. This area has a high concentration of Hispanic persons and low-income households. Because of the potentially negative impacts this project could have had on the residents, extensive measures were taken to encourage participation by as many residents as possible. This included distributing flyers to each home in the area, printed in both Spanish and English, forming a local committee to provide oversight and input and providing a Spanish-speaking interpreter at public meetings.

**Accessibility to Jobs**

Accessibility to jobs is another indication of the impact which the 2025 RTP projects could have on minority populations and low-income populations. How will areas be affected by implementation of the projects in this plan that increase capacity? Will accessibility be disproportionately gained or lost in one area over another? To answer these questions, measures of accessibility and travel time were developed from SEMCOG’s travel demand forecast model to estimate accessibility before and after implementation of the projects and identify any of the 1,442 traffic analysis zones which would be made worse off. The index used accounts for the attractiveness of each zone, i.e., jobs, and a representation of the separation between zones based upon travel time. Essentially, a higher accessibility index relates to improved accessibility. The last step was measuring the percent difference between each zone’s accessibility index before and after project implementation.

Accessibility to jobs was improved in all but 89 of the 1,442 zones. Are these 89 zones evenly distributed between those with and those without high percentages of minority populations and low-income populations? Table 26 breaks down those 89 zones according to whether the population is above the regional percentage or below (Table 25 outlines regional percentages). These numbers demonstrated that the negative effects would not be disproportionately felt by minority populations and low-income populations.

Table 26  
**Number of Traffic Analysis Zones Where Accessibility to Jobs Decreased**

	Zones with Population Above Regional Percent	Zones with Population Below Regional Percent	Zones at or Above Regional Percent
Low-income	29	60	332
African-American	25	64	325
Hispanic	17	72	350
Asian-American	31	58	555
Native American	27	62	410

Source: SEMCOG

**Results**

The 2025 RTP goal to protect and enhance the environment, with a stated objective to reduce the negative effects of the transportation system on households and neighborhoods, is consistent with the spirit of the federal requirements. In view of the analyses, planning processes and products described above, SEMCOG asserts that no disproportionately high and adverse effects on minority populations and low-income populations were anticipated as a result of implementation of the 2025 RTP.

## Public Involvement

Public involvement is an important element critical to regional plan development. Building upon a tradition of involving people in planning decisions, SEMCOG developed its public involvement program in three phases to maximize involvement opportunities. This included first, developing an oversight committee; second, collaborating with and educating the public and third, publicizing the plan following adoption.

Before looking at SEMCOG's public involvement activities, it is important to examine activities conducted by other transportation agencies and communities at the local rather than regional level.

### Local Public Involvement Activities

Collaborative discussions have the most influence during the earliest phase of plan development. Because individuals and special interest groups are most effective when working with local governments (e.g., township boards, city councils and county road commissions), SEMCOG worked with these entities to help identify projects of local concern and benefit. Public involvement activities designed for this earliest phase of plan development were created and implemented by local communities and other transportation agencies (e.g., transit providers). Once local jurisdictions had collaborated with residents and interest groups to identify transportation problems, solutions and suggestions for initiatives, their ideas then moved to the next step, where local initiatives were combined with others at a county level. Finally, federal-aid committees<sup>1</sup>, area transportation studies<sup>2</sup>, the Michigan Department of Transportation (MDOT) and transit agencies submitted projects to SEMCOG for inclusion in the 2025 RTP. (Figure 25, page 120 provides additional details on local public involvement.)

#### Public involvement conducted by local communities

Local communities routinely seek the input of residents and the business community regarding general transportation planning and specific project implementation. For example, the City of Saline is a rapidly changing and growing city. In an effort to "take control" of its development, a committee, Coalition for a Quality Community, was formed. This committee has sponsored ongoing community meetings as well as community-wide surveys where questions regarding transportation issues (both transit and roadways) were discussed.

---

<sup>1</sup> A federal-aid committee is charged with managing federal transportation spending. Committee members include transit officials, county highway engineers, city engineers and county, city, village and township officials.

<sup>2</sup> A transportation study is established under state law as a sub-regional planning agency. Its primary goal is aiding in the development and coordination of an area's transportation system through comprehensive planning involving all levels of government, public agencies, civic groups and members of the general public.

**Public involvement conducted by transit providers**

The region's transit providers conduct ongoing public involvement activities in an effort to continually improve their service and inform the public of service changes. The Detroit Department of Transportation (DDOT) publicizes its quarterly meetings in churches and neighborhood city halls. Meetings offer an open forum for citizens to voice concerns, offer guidance and learn about service changes. The Suburban Mobility Authority for Regional Transportation (SMART) also holds quarterly meetings with the public to gain insight into the public's needs. SMART meets regularly with area chambers of commerce to help develop bus service for employees. Another transportation provider, the Ann Arbor Transportation Authority (AATA), also holds meetings to provide the public with the opportunity to be informed about proposed changes in transit service and to offer an opportunity for the public to comment. Each transit provider also has a committee focusing on the transit needs of special needs groups, such as individuals with disabilities and the elderly. These committees meet regularly throughout the year.

**Public involvement conducted by area transportation studies<sup>1</sup>**

The Southeast Michigan region includes two urban transportation studies, the Ann Arbor-Ypsilanti Urban Area Transportation Study (AAYUATS) and the St. Clair County Transportation Study (SCCOTS). Both agencies develop and implement their own public involvement activities. Activities include publicizing transportation plans, distributing the plans throughout the county, establishing meetings where citizens can offer comments and holding formal meetings where their policy committees vote to adopt the long-range plan. They also provide opportunity for the public to participate in other specific actions. For example, SCCOTS is currently conducting three corridor studies (page 17) and proactively seeks public input and participation in these processes. (Appendices C and D contain additional documentation of AAYUATS and SCCOTS long-range planning efforts.)

**SEMCOG Public Involvement Activities**

SEMCOG developed a public involvement plan aimed at attracting the broadest range of people possible (including professionals, elected officials, special needs/interest groups and lay persons) and engaging them in meaningful dialogue about regional issues and solutions.

**Phase 1: Establishing an oversight committee**

The 2025 RTP Committee consisted of representatives of transit providers, county and municipal agencies, AAYUATS, SCCOTS, federal-aid committees, MDOT and Federal Highway Administration. The committee's role was establishing basic procedural guidelines for plan development, reviewing technical information and offering guidance to ensure the priorities outlined in the plan were truly representative of regional needs.

---

1

A transportation study is established under state law as a sub-regional planning agency. Its primary goal is aiding in the development and coordination of an area's transportation system through comprehensive planning involving all levels of government, public agencies, civic groups and members of the general public.

## **Phase 2: Educating and collaborating with the public**

The second phase of SEMCOG’s public involvement process focused on educating the public and engaging them in collaborative dialogue. In doing so, SEMCOG created numerous opportunities for involvement.

### Ongoing public collaboration

Long-range transportation planning is an ongoing and continual process. By law, the regional transportation plan must be updated every three years, responding to changes in transportation system needs, financial forecasts, community priorities and federal, state and local guidance. Although SEMCOG’s public involvement strategy intensifies in the months leading up to a newly adopted plan, every interaction with government agencies, private sector organizations, special interest groups and the general public is viewed as a public involvement opportunity. The 2025 RTP represents much more than a list of federally funded transportation projects. It represents the priorities of those agencies and individuals that in any way impact or depend upon the region’s transportation system.

Examples of public collaboration since the 2020 RTP was adopted in June 1997 include:

- public comment periods before every SEMCOG committee meeting,
- official public involvement processes at the project level (e.g., public hearings for the I-75 study in Oakland County, I-96 study in Livingston County and Ambassador Bridge Gateway Study),
- project-specific surveys, including two changeable message sign surveys and transit user surveys conducted by AATA, DDOT and SMART.
- official public involvement processes related to developing and amending the Transportation Improvement Program,
- walkable community audits,
- the Elderly Mobility & Safety Forum and focus groups and
- RideShare presentations.

(A complete listing of public collaboration opportunities since June 1997 is in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

### Transportation Advisory Council

Development of the 2025 RTP was managed by SEMCOG’s Transportation Advisory Council (TAC), through the 2025 RTP Committee. TAC meetings represented another opportunity for the public to be involved. Regular reports were made to TAC regarding 2025 RTP Committee activities and plan status. Because the meetings set aside time to hear from the general public, this was an important opportunity for the public to both learn about the plan’s development and offer comments. Comments made at TAC meetings were recorded and incorporated (when warranted) into the plan. (A complete listing of meeting dates, comments and responses is included in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

### Transportation visioning

Sponsored by SEMCOG, a regional transportation visioning forum was held in September 1999, early in the 2025 RTP development process. It was designed to bring together a broad range of people representing many points of view and solicit information for the plan. Over 150 participants identified transportation challenges, formulated solutions and analyzed those solutions. The results are detailed in *Transportation 2000 and Beyond — A Visioning Process: Forum Proceedings* and were incorporated, where appropriate, into the 2025 RTP. Longer-term ideas will continue to be incorporated into the long-range planning process and may be more thoroughly addressed in future plans.

### Regional survey

Beginning with the Transportation 2000 and Beyond Visioning Process, SEMCOG regularly asked citizens to complete a short questionnaire about transportation issues. This questionnaire was taken to all presentations and events where the 2025 RTP was discussed. This ongoing survey provided SEMCOG with timely information it used to refine the 2025 RTP. Results will also be used to help define the next plan. (A complete tabulation of comments is included in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

### Collaboration for project selection

The process used to create the 2025 RTP Project List involved the cooperation and collaboration of many individuals, business representatives, transportation agencies and other planning partners. SEMCOG, as the region's Metropolitan Planning Organization responsible for transportation planning, took the first step in the process by conducting several analyses that identified transportation needs (e.g., congestion, safety, bridge and transit needs) as well as a financial forecast that predicted funding levels for the duration of the 2025 RTP planning period. This information was then presented to MDOT, federal-aid committees, urban area transportation studies and transit providers. (To help them in their efforts to work with their local governments, private citizens and representatives of special interest groups received this information, upon request.) Agencies used the information to prioritize needs and develop projects that best met regional goals while remaining financially constrained. Each individual agency was responsible for soliciting public comments regarding project selection. (Pages 37-39 contain additional information on selecting transportation improvement projects.)

### Regional workshops

Each spring, SEMCOG holds workshops in each of the seven counties in the region, to give local elected officials, as well as private citizens, an update of SEMCOG's activities for the past year and a preview of future activities. Specifically, SEMCOG tailors its presentations to meet the interests and needs of each county. During the spring 2000 workshops (attended by 180 local government officials, private citizens and special interest/private sector representatives), transportation activities, including the 2025 RTP, were included in the presentation. (A complete listing of meeting dates, comments and responses is included in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

### Public Involvement Task Force

In February 2000, the Executive Committee formed a Public Involvement Task Force to evaluate SEMCOG's public involvement process, particularly with respect to the transportation planning process. Final recommendations are expected in fall 2000. In the interim, the Task Force assisted SEMCOG in identifying ways to reach populations traditionally underrepresented in transportation decision making. The Task Force also assisted in identifying civic groups, special interest groups, ethnic groups and transit groups where outreach efforts could be focused. Following the guidance of Title VI of the Civil Rights Act of 1964, Federal Executive Order 12898 and U.S. Department of Transportation and Federal Highway Administration orders on environmental justice, special attention was paid to outreach to groups located in areas having a predominance of low-income residents or ethnic and racial minorities. (Page 111 contains additional information about public involvement efforts with respect to environmental justice requirements.)

### Announcing the plan

Paid public notices announcing completion of the draft 2025 RTP and requesting comments were placed in the *Arab American News*, *Detroit News and Free Press* (Sunday Edition), *Michigan Chronicle* and *El Central*. Announcements were also placed on SEMCOG's Web site ([www.semco.org](http://www.semco.org)), in eight SEMCOG media releases and six *Regional Updates* — a biweekly SEMCOG publication.

A special edition of *SEMscope* (SEMCOG's quarterly magazine) was dedicated entirely to the 2025 RTP. *SEMscope* used non-technical language to describe the plan's goals, process, projects and finances. Copies were mailed to local and regional libraries, community groups, regional media, counties, cities, villages and townships with information pertaining to the plan and contact information for receiving additional copies and/or making comments. Copies were also made available at all RTP presentations and related events and upon request. The full text of *SEMscope* was made available on the SEMCOG Web site. In all, nearly 20,000 copies were distributed.

### Reaching persons with special needs

The special 2025 RTP edition of *SEMscope* was read on air by the Detroit Reader Information Service (DRIS)<sup>1</sup> and discussed on its public affairs program. The reading was also recorded onto audio cassettes. On-air advertisements announcing the plan and the availability of the taped reading were purchased through DRIS.

SEMCOG also had the *SEMscope* special edition translated into Spanish and Arabic. Translated editions were promoted via SEMCOG's Web site, media announcements, in *Regional Update* and by distributing them at Hispanic and Arabic events and through Hispanic and Arabic advocacy agencies.

---

<sup>1</sup> DRIS is a sub-channel on WDET. Its mission is making public information available to the "print impaired," i.e., persons with vision, language and physical problems preventing them from handling a book, magazine or newspaper.

### Distributing the draft plan

Two draft versions of the 2025 RTP were made available to the public — the March 2000 version as presented to SEMCOG's TAC and the May 2000 version as presented to SEMCOG's Executive Committee.

Copies of all those draft versions were distributed upon request and made available at all RTP presentations and related events. The May 2000 version was also distributed to 135 local and regional libraries, including those serving persons with disabilities, low-income populations, the elderly and ethnically diverse communities. (A summary of 2025 RTP distribution is included in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

### Speakers Bureau

SEMCOG regularly participates with committees, networking groups and public and private sector organizations to discuss transportation issues (e.g., Michigan Society of Planning Officials and the Urban Land Institute). Every SEMCOG presentation — on any issues related to transportation or regional planning in general — was viewed as an opportunity to facilitate additional public input on the 2025 RTP.

In addition, a Speakers Bureau was developed to make public presentations to any group upon request, the goal of which was educating organizations and individuals about the planning process in general and the specifics of the 2025 RTP. Additional outreach efforts were conducted to generate interest in presentations and a series of presentations geared to each audience's special interests was developed. Again, reaching groups traditionally underrepresented in the transportation planning process was a priority. As always, public comments were solicited and recorded at those sessions. (A complete listing of presentations made, comments and responses is included in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

### SEMCOG's Web site

SEMCOG maintains a Web site ([www.semco.org](http://www.semco.org)), including a 2025 RTP section. The 2025 RTP section contained the same information found in the special 2025 RTP edition of *SEMscope* as well as the 2025 RTP Executive Summary. The entire 2025 RTP was available for download in PDF format. An e-mail comment option ([Comment2025RTP@semco.org](mailto:Comment2025RTP@semco.org)) was also available. (A complete listing of comments and responses is included in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

### Committee review and approval

Additional opportunities for the public to be involved in planning occurred during the committee review and approval process (Table 27). The official 2025 RTP review and approval process began on March 22, 2000 when the draft 2025 RTP was introduced to SEMCOG's TAC. The official public comment period began at the same time and ended with adoption of the 2025 RTP by SEMCOG's General Assembly. All TAC, Executive Committee and General Assembly meetings are open to the public and comments were welcomed,

recorded and considered. (A complete listing of meeting dates, comments and responses is included in a separately bound companion document — Public Involvement in Regional Transportation Planning.)

Table 27  
**2025 RTP Review and Approval Process**

Committee	Action	Date
Ann Arbor-Ypsilanti Urban Area Transportation Study (AAYUATS)	<i>2025 Long Range Transportation Plan for Washtenaw County</i> approved and submitted for inclusion in the 2025 RTP for Southeast Michigan	03/15/00
Transportation Advisory Council	March draft 2025 RTP introduced	03/22/00
2025 RTP Committee	March draft 2025 RTP forwarded to Transportation Advisory Committee	04/03/00
St. Clair County Transportation Study (SCCOTS) Advisory Committee	March draft 2025 RTP endorsed	04/04/00
St. Clair County Metropolitan Planning Commission	March draft 2025 RTP endorsed	04/19/00
Transportation Advisory Council	March draft 2025 RTP recommended for approval by Executive Committee	04/26/00
Executive Committee	May draft 2025 RTP introduced	04/28/00
Executive Committee	May draft 2025 RTP approved	05/19/00
General Assembly	June 2025 RTP adopted	06/22/00

Source: SEMCOG, Ann Arbor-Ypsilanti Urban Area Transportation Study and St. Clair County Transportation Study

## Figure 25 2025 Regional Transportation Plan Development

A lengthy deliberative process assures that long-range transportation planning in Southeast Michigan takes into account the full range of issues and needs that affect the region's transportation system and its users. That process is outlined in this chart. It includes identification of opportunities for citizens to have input, via public involvement opportunities, at various stages of plan and project development.

The long-range plan is developed by SEMCOG in conjunction with the organizations identified in this figure. It is then reviewed and/or approved by SEMCOG committees. The plan's outcomes include policies, initiatives and projects, which are developed by SEMCOG and the region's transportation providers (1a-f in the figure).

1. SEMCOG Transportation Planning. Development of the Regional Transportation Plan for Southeast Michigan begins with analysis by SEMCOG of system needs, available resources, demographic forecasts and current legislation. Analysis of transportation system needs includes consideration of public comments received by SEMCOG through various public involvement activities (e.g., transportation visioning). (Pages yy-yy detail specific public involvement activities conducted during development of the 2025 RTP.) That information is provided to state and local transportation planners and transit providers, including estimated budgets of federal, state and local funding available for each county, the City of Detroit, MDOT and transit agencies. SEMCOG continues seeking public input throughout the plan development process.

1a. Local Units of Government. Local projects begin in cities, villages and townships, in their transportation committees, planning commissions and governing bodies. This is the most effective place for the public to address proposed or needed transportation projects. County road commissions are responsible for township roads and projects, although some urbanized townships also have local road millages. Local government meetings are open to the public.

1b. County Road Commissions. Major roads in each county and all township roads and streets are the responsibility of county road commissions (the Department of Public Services in Wayne County). Road commission meetings are open to the public (in Wayne County, the Board of Commissioners).

1c. Federal-aid Committees (FAC). Local governments in Livingston, Macomb, Monroe, Oakland and Wayne counties meet with their county FACs (Detroit has its own FAC) to prioritize projects within the SEMCOG-provided available funding budget for each county. Those meetings are open to the public. Once projects are prioritized, they are sent to SEMCOG for evaluation and inclusion in the long-range plan.

1d. County Transportation Study Organizations. Transportation project development is managed in St. Clair County by the St. Clair County Transportation Study (SCCOTS) and in Washtenaw County by the Ann Arbor-Ypsilanti Urban Area Transportation Study (AAYUATS), which submit their proposed projects to SEMCOG. Their meetings are open to the public.

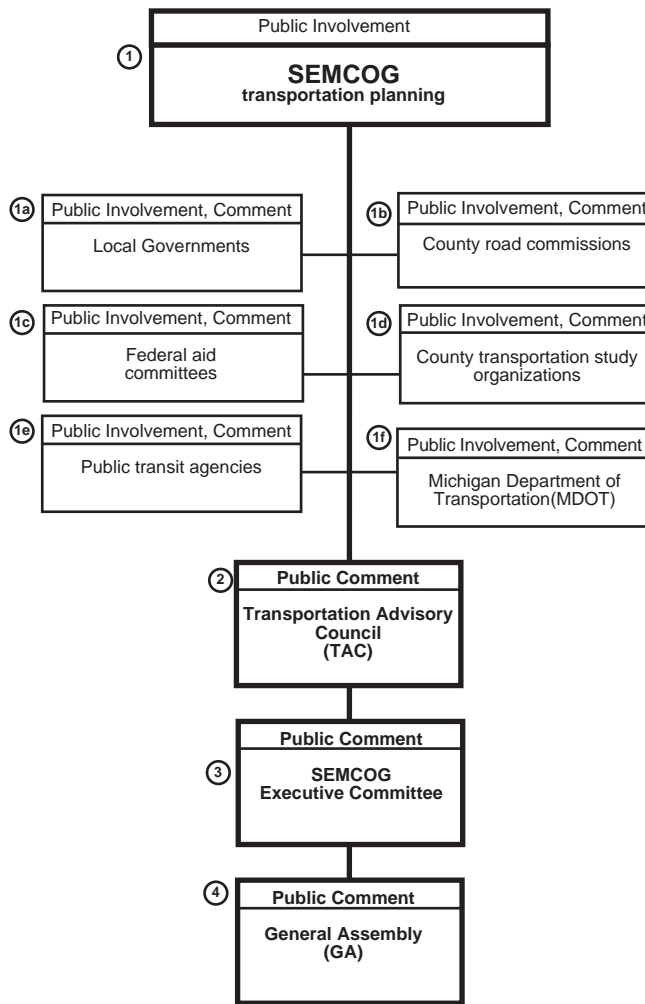
1e. Public Transit Agencies. Transit agencies develop their own priorities and projects. The Suburban Mobility Authority for Regional Transportation (SMART) submits its projects to SEMCOG; the Detroit Department of Transportation (DDOT) submits its projects to the Detroit FAC; the Ann Arbor Transportation Authority submits projects to AAYUATS and the Blue Water Area Transportation Authority submits projects to SCCOTS. Transit agencies have their own meetings, which include public comment periods.

1f. Michigan Department of Transportation (MDOT). Projects for freeways (I-75, etc.) and state roadways (M-10, etc.) in Southeast Michigan are determined by MDOT, then submitted to SEMCOG for evaluation and inclusion in the regional plan. MDOT maintains an official public information and involvement process. (Additional information on MDOT's public involvement process can be requested through MDOT's Office of Communications.)

2. SEMCOG Transportation Advisory Council (TAC). SEMCOG’s TAC is composed of local government officials, transportation technicians and special interest representatives. It reviews the long-range plan and project list. TAC’s recommendations are forwarded to SEMCOG’s Executive Committee. Amendments to the plan are also be considered by TAC. Public comments are heard at all TAC meetings.

3. SEMCOG Executive Committee. The Executive Committee is composed of local government officials representing SEMCOG’s 145 member governments. They review the TAC recommendations and approve the long-range plan, forwarding it to SEMCOG’s General Assembly for final action. There is a public comment period at all Executive Committee meetings. Certain aspects of the transportation plan development process may also include public meetings in conjunction with Executive Committee meetings. Such meetings are posted on SEMCOG’s Web site (www.semco.org) and publicized in various media. Amendments to the plan are also considered by the Executive Committee.

4. SEMCOG General Assembly. Final adoption of the long-range plan occurs at the General Assembly, which is composed of representatives of all 145 member governments. Once the plan is adopted by the General Assembly (and reviewed by state and federal agencies), projects in the plan become eligible for federal funding and inclusion in the Transportation Improvement Program. Amendments to the plan must also be adopted by the General Assembly. There is a public comment period at all General Assembly meetings. Certain aspects of the transportation plan development process may also include public meetings in conjunction with General Assembly meetings. Such meetings are posted on SEMCOG’s Web site (www.semco.org) and publicized in various media.



Source: SEMCOG

**Implementation: The Transportation Improvement Program (TIP)**

Implementation of projects included in the Regional Transportation Plan for Southeast Michigan occurs through an incremental series of three-year programs, the TIP. Many elements of the long-range plan process are also part of the TIP process. SEMCOG’s TIP Development Committee (TIPDC) reviews and prioritizes projects from the federal-aid committees, MDOT, SMART and county transportation study organizations. The TIPDC forwards its TIP recommendations to SEMCOG’s TAC for its review and action. TAC’s project list is forwarded to SEMCOG’s Executive Committee for final action in approving the TIP. As with the long-range plan deliberative steps, public comment periods are included at all SEMCOG meetings. Amendments to the TIP follow the same path.

### **Contacting Transportation Planning Organizations**

Again, the most effective place for the public to address proposed or needed transportation projects is at the local level. The public is always encouraged to contact any of the following agencies.

Ann Arbor Transportation Authority (AATA)  
2700 South Industrial Highway  
Ann Arbor, MI 48104-6272  
734-973-6500

Ann Arbor-Ypsilanti Urban Area Transportation Study (AAYUATS)  
278 Collingwood  
Ann Arbor, MI 48103-3810  
734-994-3127

Blue Water Area Transportation Commission (BWATC)  
2021 Cleveland Street  
Port Huron, MI 48060-6769  
810-987-7373

City of Detroit Department of Public Works  
513 C.A. Young Municipal Center  
Detroit, MI 48226  
313-224-3900

Detroit Department of Transportation (DDOT)  
1301 East Warren  
Detroit, MI 48207-1099  
313-833-7693

Lake Erie Transportation Commission (LETC)  
1105 West Seventh Street  
Monroe, MI 481861  
734-242-6672

Livingston County Road Commission  
3535 Grand Oaks Drive  
Howell, MI 48843-8575  
517-546-4250

Michigan Department of Transportation (MDOT)  
Bureau of Transportation Planning  
P.O. Box 30050  
Lansing, MI 48909  
517-373-9054  
<http://www.mdot.state.mi.us>

MDOT Office of Communications  
425 West Ottawa  
Lansing, MI 48933  
517-373-2160  
<http://www.mdot.state.mi.us/communications>

Monroe County Road Commission  
840 South Telegraph Road  
Monroe, MI 48161  
734-240-5132

Road Commission for Oakland County  
31001 Lahser Road  
Beverly Hills, MI 48025-3639  
248-645-2000 Extension 2266

Road Commission for Macomb County  
156 Malow, Box 2347  
Mt. Clemens, MI 48043-2182  
810-463-8671

St. Clair County Transportation Study (SCCOTS)  
200 Grand River Avenue #202  
Port Huron, MI 48060-4016  
810-989-6950

Suburban Mobility Authority for Regional Transportation (SMART)  
660 Woodward  
Detroit, MI 48226-3516  
313-223-2100

St. Clair County Road Commission  
21 Airport Drive  
St. Clair, MI 48079-1404  
810-364-5720

Washtenaw County Road Commission  
555 North Zeeb Road, Box 1528  
Ann Arbor, MI 48103-1556  
734-761-1500  
<http://www.co.washtenaw.mi.us>

Wayne County Department of Public Services  
415 Clifford, 3rd Floor  
Detroit, MI 48226-1596  
313-224-7687  
<http://www.wayne.co.mi.us>

### **Phase 3: Publicizing the 2025 RTP after adoption**

Copies of the final 2025 RTP document (as adopted by SEMCOG's General Assembly) were distributed to local and regional libraries and local government agencies upon request. The Speakers Bureau continued to actively promote the plan and gather public comments.

### **Ongoing public involvement**

The goal of public involvement is to include affected parties — from government agencies to private sector organizations and citizens — in every aspect of the transportation planning and decision-making processes. This includes not only plan development as described here, but plan implementation as well. The 2025 RTP is a dynamic process and public comment will continue to be necessary to insure the plan remains current and relevant as conditions and priorities change. All comments received from June 2000 on will also be considered during development of the 2030 Regional Transportation Plan for Southeast Michigan. (Figure 25 details public involvement in the transportation planning process.)

## **Federal Planning Factors**

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) requires the planning process take into account seven planning factors reflecting sound planning principles. These factors essentially link with other important factors, including social, economic, environmental and land use impacts. The 2025 Regional Transportation Plan for Southeast Michigan responds effectively to all seven factors.

### **Support the Economic Vitality of the Metropolitan Area, Especially by Enabling Global Competitiveness, Productivity and Efficiency**

This planning factor relates directly to the 2025 RTP goal of investing strategically in transportation infrastructure to enhance the vitality of the community. The 2025 RTP includes many activities supporting the movement of people to jobs, materials to plants and products to market, thereby improving the regional economy.

- Airports — The 2025 RTP includes projects designed to maintain the region's airport capacity by supporting public purchase of private airports and upgrading airport service levels. Further, the plan advocates resolving airport/community land use conflicts to allow for airport expansion and developing related industries and businesses as well as improving airport access for passengers and freight.
- Freight movement — The plan provides opportunities for private industry, freight haulers and local and county governments to collaborate and plan for intermodal connectivity, warehousing and transfer facilities. Specifically, the plan supports development of intermodal freight facilities, such as Junction Yard in southwest Detroit.

- **Border crossings** — The plan examines freight border crossing issues and develops plans accommodating future increases in freight traffic. This includes capital improvements for existing international bridges and tunnels and possible construction of an additional international crossing. The plan also calls for collaborating with public and private agencies in the U.S. and Canada to improve border crossing processes and eliminate delays.
- **Congestion reduction** — The plan includes projects reducing congestion on the region's roadways. These projects focus on improving the movement of people and freight. The plan also emphasizes using innovative strategies such as Intelligent Transportation Systems (ITS) and alternative commute programs.
- **Labor force mobility** — The plan puts into play a consortium of local work force/career development agencies, transit providers and human service agencies to develop responsive strategies for transporting people to work.

### **Increase the Safety and Security of the Transportation System for Motorized and Non-motorized Users**

This planning factor relates directly to the 2025 RTP goal of promoting a safe and secure transportation system. SEMCOG recognizes the importance of safety and security for all who are involved with the transportation system — not just users but service providers and community residents.

- **Safety management system** — The plan contains projects maintaining and improving the region's safety management system and supporting local communities by providing safety management tools such as SEMCOG's *Traffic Safety Manual* and the Comprehensive Analysis Safety Tool — a computer-based analytical software package.
- **Data collection and analysis** — The plan includes projects that improve and maintain a regional transportation system monitoring database. The wealth of data maintained and distributed by SEMCOG is used by local transportation agencies to evaluate and address transportation safety deficiencies.
- **Incident management** — The plan includes the use of technology to improve the region's incident management system. The plan supports continued collaboration with the Michigan Department of Transportation (MDOT), Michigan State Police, Michigan Intelligent Transportation Systems (MITS) Center and county and local road agencies to develop programs reducing the negative impact of incidents on the region's roadways.
- **Transit safety** — The plan calls for working with transit providers to develop strategies supporting transit passenger safety while traveling to, waiting for and riding transit as well as transit employee safety.

- Non-motorized system safety — The plan includes initiatives supporting work with representatives from the non-motorized community to build safer pedestrian and bicycle pathways.
- Local technical assistance — The plan supports SEMCOG's continuing efforts to provide crash data, data analyses and other safety engineering services to communities.

### **Increase the Accessibility and Mobility Options Available to People and for Freight**

Access and mobility issues are at the heart of the 2025 RTP. The plan supports initiatives designed to improve accessibility for private vehicle users, pedestrians and bicyclists, transit users, air passengers and special needs groups. Equally important is the intermodal movement of freight.

- Roadway congestion — The plan supports initiatives reducing roadway congestion so travel time for work-related trips and freight movement are kept at a minimum. Further, the plan endorses using new technologies to inform motorists of problems, such as those deployed by the MITS Center, including surveillance cameras to monitor traffic flow and changeable message signs.
- Transit service for increased mobility — The plan establishes a collaborative relationship among the regional transit providers to improve both fixed-route and paratransit service. The plan also includes projects to assist in developing coordinated technological applications (e.g., Geographic Information Systems) that will improve service. The plan includes initiatives to utilize ITS technologies to upgrade service whenever possible.
- Transit vision — The plan supports collaboration with regional interests to develop a transit vision facilitating a more comprehensive and seamless regional transit system.
- Transportation solutions for special populations — The plan focuses attention on the needs of specific populations, including persons with disabilities, the elderly, low-income persons and members of racial and ethnic minority groups.
- Bi-national cooperation — The plan includes initiatives supporting collaborative relationships with agencies and industries in the U.S. and Canada to improve methods for moving freight internationally.
- Transportation efficacy — The plan seeks to balance the desire for an efficient transportation system with the need to minimize negative impacts on people and the environment and to implement the most appropriate mix of projects within fiscal constraints.

## **Protect and Enhance the Environment, Promote Energy Conservation and Improve Quality of Life**

Feeling strongly that transportation cannot advance at the expense of the natural environment, communities and quality of life, SEMCOG follows a strategy closely aligned with this federal planning factor. The strategy is to protect and enhance the environment, both natural and built, with special emphasis on preserving and enhancing the aesthetic, natural and cultural qualities of the region. The goal also supports amelioration of the negative effects of transportation decisions on people, households, neighborhoods, businesses and farmland.

- Pedestrian and bicyclist friendly actions — The plan includes actions designed to assist local communities by providing information, planning tools and guidance so they can make their environment more walkable and bikeable. It also emphasizes the benefits of coordinating non-motorized travel with transit. The plan supports continued collaboration with special interest groups in their efforts to develop non-motorized facilities.
- Alternative fuel buses — The plan includes projects whereby transit providers replace older buses with compressed natural gas (CNG) buses, thus reducing dependence on gas and related air pollutants. Further, the plan supports efforts to build bus maintenance facilities servicing and fueling CNG vehicles.
- Alternative commute programs — The plan includes RideShare, a program promoting carpooling as a way to reduce work-related auto trips, which ultimately conserves gas and reduces auto-related air pollutants.
- Clean air programs — The plan includes projects supporting the Clean Air Coalition's Ozone Action! program. The program encourages people to take voluntary actions (e.g., carpooling, linking trips, telecommuting and fueling in cooler evening hours) reducing ozone-producing emissions. Activities support energy conservation and ultimately reduce auto-related air pollutants.
- Congestion mitigation — The plan includes activities supporting communities in their efforts to develop eligible projects for Congestion Mitigation Air Quality (CMAQ) program funds. Because CMAQ projects help improve air quality, these activities support this planning factor by protecting and enhancing the environment.
- Environmental protection through technology — The plan encourages the use of ITS solutions for congestion mitigation, such as the MITS Center. This program provides information for drivers so they can avoid congested areas, thus reducing the number of autos languishing in traffic congestion. Fewer idling cars results in better air quality.

### **Enhance the Integration and Connectivity of the Transportation System Across and Between Modes for People and Freight**

The 2025 RTP goal for providing accessibility and mobility for all people and goods addresses the issues of integration and connectivity of all modes for both people and goods. This goal specifically supports projects increasing the continuity of transportation service and improvements in multi-modal and intermodal systems.

- Intermodal passenger station — The plan includes an initiative supporting the completion of an intermodal passenger station in Detroit’s New Center area. This station would connect taxis, cars, buses and trains, thus enhancing the ability to travel across the region unimpeded.
- Transit passenger transfer — The plan encourages cooperation among the region’s transit providers and an inter-city bus service provider to locate a passenger station in downtown Detroit. This new passenger station would enable passengers to conveniently transfer from one system to another. These connections make passenger travel relatively seamless and increase the connectivity of the transit system.
- Continuous system — The plan supports development of service connecting one transit system with another and providing augmented service so passengers can reach their final destinations.
- Proposed trade corridors — The plan sets in place the mechanisms needed to continue working on the development of trade corridors connecting Michigan with other states and Canada. Improved trade corridors increase the connectivity of one mode (truck/train) with another, making freight movement more efficient.
- New intermodal freight facilities — The plan supports initiatives improving intermodal freight facilities. For example, the proposed Junction Yard facility in southwest Detroit would improve the connectivity of different components of the transportation system.

### **Promote Efficient System Management and Operation**

The 2025 RTP goal of investing strategically in transportation infrastructure is in line with this factor. Many of the plan’s initiatives, such as roadway improvements and funding forecasts, are aimed at making the system operate more efficiently.

- Using technology to achieve efficiency — The plan supports projects using technology designed to increase system efficiency. Examples include Oakland County’s FAST-TRAC system and MDOT’s MITS Center.
- Fiscal management improvements — The plan encourages collaboration between planning partners and communities to develop project life-cycle costs. Using this information, communities are able to compare the costs of various types of construction and long-term maintenance thereby gaining a full understanding of potential future costs. This is basic information planners need to make financially sound decisions.

- Reducing roadway congestion — The plan supports initiatives reducing roadway congestion. Further, it establishes work relationships with representatives from the freight industry to develop intermodal freight centers whereby truck traffic and congestion are reduced. Reduction in truck traffic will help increase roadway capacity and allow the system to operate more efficiently.
- Infrastructure improvements — The plan includes activities supporting collaboration between communities to improve the existing roadway system by better managing traffic flow rather than increasing capacity. This is key to efficiently managing the roadway system.

### **Emphasize the Preservation of the Existing Transportation System**

SEMCOG supports activities aimed at preserving the existing transportation system. The 2025 RTP goal for investing strategically in the transportation infrastructure is in keeping with this factor and a number of 2025 RTP initiatives.

- Transportation management systems — The plan includes initiatives maintaining and enhancing the various regional transportation management systems (e.g., pavement, bridge, safety, congestion and incident management). These systems evaluate needs and prioritize project funding. Without the information provided by these management systems, it would be difficult to prioritize and implement projects.
- Geographic Information Systems (GIS) — The plan supports use of GIS capabilities for mapping important data regarding pavement conditions, bridge conditions, congestion levels and crash locations to assist in prioritizing transportation needs and solutions.

### **Regional Goals and Objectives**

The 2025 RTP supports regional values embodied in the plan's statement of its goals which were developed and supported by SEMCOG's partners. (Pages 13-14 contain a complete listing of regional goals and objectives.) These goals aim to develop a transportation system that is safe, accessible, vital and environmentally friendly. The plan sets forth a strategy advancing these specific goals by:

- providing accessibility and mobility for all people and goods,
- investing strategically in transportation infrastructure to enhance the vitality of the community,
- promoting a safe and secure transportation system and
- protecting and enhancing the environment.

Clearly, the success of the policies, initiatives and projects outlined in the 2025 RTP is measured by how well they meet these regional goals.

## **Provide Accessibility and Mobility for All People and Goods**

Accessibility and mobility for all people and goods are the heart of the region's transportation system. A quality transportation system balances the desire for efficient travel with the need for accessibility and mobility for all travelers and freight carriers. Objectives designed to achieve that goal include reducing the distance or time spent traveling; increasing the occupancy rate for motorized modes; reducing barriers to the use of the transportation system and increasing service continuity. The efficient movement of people and goods across all modes is also emphasized.

- **Vehicle users** — The plan supports initiatives reducing roadway congestion and increasing traveler safety. Less congestion and increased traveler safety make the transportation system more accessible to vehicle users.
- **Pedestrians and bicyclists** — The plan supports initiatives designed to enhance non-motorized travel options, including walking and bicycling. It also emphasizes providing non-motorized access to transit. Increased support of non-motorized travel options makes it possible for people who have no access to a vehicle to get to work, recreation, shopping and other important activities, thus improving personal mobility.
- **Transit users** — The plan establishes a collaborative relationship between the regional transit providers to improve both fixed-route and paratransit service. Further, the plan sets a direction, supporting a collaboration with regional interests to develop an illustrative transit vision facilitating a more comprehensive and seamless regional transit system. The plan also supports studies of innovative transit systems including bus rapid transit and passenger rail. These activities help make the transit system more efficient and effective, thus increasing mobility and accessibility for more people.
- **Air passengers** — The 2025 RTP includes projects designed to maintain the region's airport capacity and improve access to airports thereby facilitating an efficient means of transportation from and to areas outside the region.
- **Special needs populations** — The plan supports initiatives designed to meet the additional needs of special populations, including the elderly and welfare-to-work program participants.
- **Freight movement** — The plan provides opportunities for private industry, freight haulers and local and county governments to collaborate and plan for intermodal connectivity, warehousing and transfer facilities. The plan's strategy examines freight border crossing issues and develops initiatives, including those for new facilities, that accommodate future freight traffic increases. The plan also calls for collaboration of public and private agencies in the U.S. and Canada to improve border crossing processes and eliminate delays.
- **Transit passenger transfers** — The plan encourages cooperation between the region's transit providers and the inter-city bus service provider to locate a passenger station in

downtown Detroit. This new passenger station would enable passengers to conveniently transfer from one system to another. These connections make passenger travel relatively seamless and increase the connectivity of the transit system.

- Continuous system — The plan supports development of service connecting one transit system with another and providing augmented service so passengers can reach their final destinations.
- Reducing roadway congestion — The plan supports initiatives to reduce roadway congestion. Further, it establishes relationships with representatives from the freight industry to develop intermodal freight centers whereby truck traffic and congestion are reduced. Reduction in truck traffic increases roadway capacity and allows the system to operate more efficiently.

### **Invest Strategically in Transportation Infrastructure to Enhance the Vitality of the Community**

This goal emphasizes careful evaluation of transportation system needs so that effective strategies guiding investment can be developed. This goal supports initiatives giving priority to preservation and maintenance of the existing system over new construction. This goal also seeks to develop investment strategies consistent with regional and local land use and development initiatives. Further, the goal strives to create a system encouraging employment and economic growth while advancing the region's position as an international trade partner. Initiatives included in the plan support this goal.

- Using technology to achieve efficiency — The plan supports projects using technologies, such as Oakland County's FAST-TRAC system and the Michigan Department of Transportation's (MDOT) Michigan Intelligent Transportation Systems (MITS) Center. These systems are designed to increase system efficiency.
- Transportation management systems — The plan includes initiatives maintaining and enhancing the various regional transportation management systems, i.e., pavement, bridge, safety, congestion and incident management. These systems evaluate needs and prioritize project funding.
- Geographic Information Systems (GIS) — The plan utilizes GIS capabilities for mapping important data regarding pavement conditions, bridge conditions, congestion levels and crash locations. Communities use this information to prioritize transportation needs and solutions.

### **Provide a Safe and Secure Transportation System**

A safe and secure transportation system is essential. The plan supports this concept by promoting initiatives and programs aimed at increasing system safety and security for all who are involved with the transportation system — not just users but service providers as well.

- Safety management system — The plan contains projects that maintain and improve the region’s safety management system and support local communities by providing safety management tools such as the *Traffic Safety Manual* and the Comprehensive Analysis Safety Tool (computer-based analytical software).
- Data collection and analysis — The plan includes projects that improve and maintain the region’s Transportation System Monitoring database. The wealth of data maintained and distributed by SEMCOG is used by local transportation agencies to evaluate and address transportation safety deficiencies.
- Incident management — The plan includes the use of technology to improve the region’s incident management system. The plan supports continued collaboration with MDOT, Michigan State Police, MITS Center and county and local road agencies to develop programs reducing the negative impact of incidents on the region’s roadways.
- Transit safety — The plan calls for working with transit providers to develop strategies keeping transit passengers and workers safe and secure. The plan supports transit passenger safety while traveling to, waiting for and riding transit. Transit employee safety is also emphasized.
- Non-motorized system safety — The plan includes initiatives supporting work with representatives from the non-motorized community to build safer pedestrian and bicycle pathways.
- Local technical assistance — The plan supports SEMCOG’s continuing efforts to provide crash data, data analyses and other safety engineering services to communities.

### **Protect and Enhance the Environment**

Feeling strongly that transportation cannot advance at the expense of the natural environment, communities and quality of life, SEMCOG follows a strategy of balancing transportation needs with community priorities. In doing so, the plan not only includes initiatives to protect and enhance the environment but also supports the amelioration of the negative effects of transportation decisions on people, households, neighborhoods, businesses and farmland.

- Pedestrian and bicyclist friendly actions — The plan includes actions designed to assist local communities by providing information, planning tools and guidance so they can make their environment more walkable and bikeable. The plan also supports continued collaboration with special interest groups in their efforts to develop non-motorized facilities.

- Green solutions — The plan includes projects whereby transit providers are encouraged to replace older buses with compressed natural gas buses which have less impact on the environment than diesel vehicles.
- Alternative commute solutions — The plan includes both RideShare and telecommuting programs aiming to reduce the number of work-related auto trips, which ultimately conserves gas and reduces auto emissions.
- Clean air programs — The plan includes projects supporting the Clean Air Coalition's Ozone Action! program encouraging drivers to carpool on days when ozone emissions pose a significant threat. These activities ultimately reduce auto-related air pollutants which cause irreversible and significant damage to people and the environment.
- Congestion mitigation — The plan includes activities supporting communities and their efforts to develop eligible projects for Congestion Mitigation Air Quality program funds thereby improving air quality.
- Environmental protection through technology — The plan encourages the use of Intelligent Transportation Systems solutions for congestion mitigation.

### **2025 RTP Project List**

In addition to the policies and initiatives defined above, the 2025 RTP Project List contains 1,819 transportation improvement projects for a total investment of \$17.6 billion. As a whole, the proposed projects are designed to most effectively meet the current and expected needs of the transportation system. As discussed in the Financial Plan (page 81), there is not enough transportation funding to meet all identified needs in the region. Therefore, projects must be prioritized, ensuring the most critical regional needs are addressed first. SEMCOG conducted both quantitative and qualitative analyses of the 2025 RTP Project List, identifying how proposed projects address regional needs.

#### **Bridge needs**

Regional bridge needs were defined using the Michigan Structure Inventory and Appraisal (MSI&A) Database and federal Highway Bridge Replacement and Rehabilitation Program (HBRRP) funding guidelines. According to the MSI&A Database, there are 1,288 highway bridges, i.e., bridges carrying vehicle traffic, in need of major repair or replacement in the region. Of those, eighty-five percent are eligible for HBRRP funding. Bridge improvements are also eligible for funds under other programs, including Congestion Mitigation Air Quality, Transportation Economic Development Fund, Transportation Equity Act for the 21<sup>st</sup> Century High Priority, Surface Transportation Program, Interstate Maintenance and National Highway System. The Michigan Department of Transportation (MDOT) also sets aside one cent of the four-cent state gas tax increase for use on state trunkline bridges. These other programs are more flexible than the HBRRP in terms of funding eligibility.

The 2025 RTP Project List includes 330 specific bridge projects, 30 countywide line items and five regionwide line items for a total investment of \$2.1 billion. The vast majority of these projects address defined bridge needs. But even those projects not corresponding to specific needs address regional concerns and serve to improve the overall transportation system. In some cases, bridges are proposed for rehabilitation or replacement in conjunction with major projects using road funding, such as freeway repaving or reconstruction, even if they are not eligible for HBRRP funds. In other cases, bridges are proposed for improvement using other federal or non-federal funds. For example, culverts (bridge structures less than 20 feet in length), which are not eligible for federal funds, are proposed for improvement with non-federal funds.

(Pages 45-50 contain additional information regarding regional bridge needs and funding. The Financial Plan (pages 81-100) contains additional road funding information.)

### **Safety needs**

Regional safety needs were defined by the five-year average crash frequency at intersections. The 2025 RTP Project List contains 261 safety projects, including Intelligent Transportation Systems (ITS) projects, for a total investment of \$1.2 billion. Of those projects, 156 do not specify locations for safety improvements, but propose countywide or citywide improvements, such as citywide traffic signal upgrades. While it was not possible to conduct a quantitative analysis of the impact of these projects on regional safety needs (due to lack of project specificity), a qualitative relationship between safety projects and regional transportation needs was established.

Obviously, safety improvements at intersections or along corridors are designed to decrease the frequency and severity of traffic crashes. Safety improvements can also help decrease congestion by improving traffic flow. For example, adding a left-turn lane or protected left-turn signal phasing not only decreases crashes but increases the capacity of the intersection. In fact, a comparison of safety projects and congestion needs reveals a number of locations where safety improvements are proposed along congested corridors. Although these locations may not currently have an above-average frequency of crashes, improvements made now can prevent serious safety problems in the future. (Pages 62-68 contain additional information on traffic safety.)

### **Pavement needs**

Pavement conditions continue to represent a serious concern among regional travelers, not just private vehicle users, but transit users and bicyclists who travel on the roadways. Not surprisingly, pavement preservation represents the largest capital investment in the region (Figure 16, page 93). The 2025 RTP includes 506 preservation projects for a total investment of \$5.3 billion. Because SEMCOG does not currently analyze regional pavement needs, a quantitative analysis of needs and projects was not possible. However, \$344 billion will be spent on pavement preservation projects along the most heavily traveled corridors in the region. (Table 28, page 137, lists the top ten most heavily traveled corridors in the region. Pages 44-45 contain additional information on pavement issues in the region.)

## **Congestion needs**

Congestion remains a serious transportation issue throughout the region. Currently, 132 million vehicle miles are traveled on major roadways daily. Approximately 23 percent of daily travel occurs under congested conditions. Assuming the roadway network remains as is and demographic and travel forecasts remain unchanged (2025 No Build Scenario), travel will increase 11 percent to 147 million vehicle miles daily by the year 2025. Congestion will increase as well, resulting in 33 percent of daily travel under congested conditions. The 2025 No Build Scenario congestion levels were used to define congestion needs along major roadway segments in the region. (Pages 39-44 contain additional details pertaining to congestion in the region.)

There are a variety of methods for decreasing congestion, with capacity projects being perhaps the most commonly recognized. Widening existing roadways and improving intersections (e.g., adding turn lanes) can increase traffic capacity. New roadways can provide additional routes for traffic, thereby relieving congestion on nearby existing roadways. The 2025 RTP Project List includes 294 capacity projects for a total investment of \$1.5 billion. A comparison of those capacity projects and identified congestion indicated a relationship between the two. In other words, capacity improvements are proposed where congestion exists or is likely to exist in the future.

Congestion will invariably increase as the region continues growing. The goal is managing the transportation infrastructure efficiently and minimizing expected increases by implementing appropriate capacity improvements. The long-term result of proposed capacity improvements is less congestion in the year 2025 than would otherwise be expected. In some cases, congestion is eliminated; in others, congestion is reduced or, at the very least, prevented from worsening (Figure 5, page 41). Assuming capacity projects proposed in the 2025 RTP Project List are implemented (2025 RTP Scenario), daily vehicle miles of travel in 2025 will total 146 million, slightly less than forecast for the 2025 No Build Scenario. Twenty-eight percent of travel will occur under congested conditions (compared to 33 percent for the 2025 No Build Scenario).

Increasing the physical capacity of roads and intersections is not the only way to address congestion needs. Bridge improvements can decrease congestion by re-opening closed bridges, removing restrictions on vehicle height and weight or increasing bridge capacity, thereby minimizing delays and detours. Safety projects can decrease congestion as well. It is estimated that over 60 percent of non-recurring congestion is the result of traffic incidents, including crashes. Projects that decrease the frequency or severity of traffic crashes or manage traffic flow in the event of an incident (e.g., changeable message signs on the freeway and other ITS technologies) can decrease congestion. Investments in the Freeway Courtesy Patrol also enhance motorist safety and decrease congestion related to freeway incidents. Finally, increased use of transit and non-motorized projects, such as pedestrian or bicyclist paths, help decrease congestion by relieving some of the demand for travel by private vehicles. The 2025 RTP Project List contains 238 transit projects (\$5.5 billion) and 107 non-motorized projects (\$158 million). (Additional information on regional transit can be found on

pages 20-24 and pages 53-59. Pages 70-72 contain additional information on non-motorized travel.)

In addition to the specific transportation improvement projects discussed thus far, the 2025 RTP Project List also includes a number of studies along some of the region's most congested corridors, including I-75 in Oakland County and I-94 in the City of Detroit. Common study goals include analyzing current and future transportation needs and identifying solutions that improve not only the function of the particular corridor but the efficiency of the overall transportation system. The 2025 RTP Project List also includes \$1.5 billion to implement the identified results of some of those studies. While roadway studies are required to include transit alternatives, the 2025 RTP Project List also contains a number of studies focusing on transit as a primary recommendation, such as the Woodward Avenue Corridor Transit Alternatives Study. (Complete lists of roadway and transit studies start on pages 16 and 22, respectively.)

### **Meeting regional needs**

Clearly, the projects proposed in the 2025 RTP Project List will improve the overall efficiency and operation of the regional transportation system. But, again, the \$17.6 billion in identified projects will not fix everything. As always, state and local agencies will continue to make improvements based upon available resources and current community priorities. The majority of improvements will continue to be along the most heavily traveled corridors in the region, thereby meeting the needs of the majority of regional travelers.

Table 28 lists the 10 most heavily traveled corridors in Southeast Michigan, most of which happen to be among the region's oldest roadways as well. Over \$775 million will be invested between FY 2000-2025 on these corridors, including:

- \$290 million for bridge improvements,
- \$344 million for pavement preservation,
- \$48 million for capacity improvements and
- \$92 million for studies along I-75 in Oakland County and I-94 in the City of Detroit.

Based upon the results of those studies, millions of dollars in capital improvements could be made along those corridors in the future. (As previously discussed, MDOT has allocated \$1.5 billion dollars for future implementation of study results throughout the region.)

MDOT will spend another \$1.9 billion on pavement preservation and \$1.5 billion on bridges in the region. While these totals appear as line items in the 2025 RTP Project List (meaning specific locations have not yet been identified), the funds will be spent on MDOT roads, including major freeways and state routes. Again, these most heavily traveled corridors also represent some of the oldest transportation infrastructure in the region and a significant portion of these line item resources will likely be spent preserving these critical regional links.

Table 28  
**Transportation Investment Along the Region's Most Heavily Traveled Corridors**

Rank	Route	Traffic Volume <sup>1</sup>	Total Investment (in 1,000s of dollars)
1	I-75 - Wayne County	225,000	\$206,566
2	I-75 - Oakland County	216,000	\$107,290
3	I-696 - Macomb County	207,000	\$7,661
4	M-39 - Wayne County	204,000	\$61,308
5	I-275 - Wayne and Oakland Counties	200,000	\$8,110
6	M-39 - Oakland County	200,000	\$29,923
7	I-96 - Wayne County	192,000	\$95,670
8	I-696 - Oakland County	179,000	\$7,603
9	M-10 - Wayne County	173,000	\$14,839
10	I-94 - Wayne County	163,000	\$236,525
<b>Total</b>			<b>\$775,495</b>

<sup>1</sup> Annual average daily traffic

Sources: SEMCOG  
 Michigan 1998 Annual Average 24-Hour Traffic Volumes, Michigan Department of Transportation

**This page is intentionally blank.**

## **2025 Regional Transportation Plan for Southeast Michigan Policies, Initiatives and Projects**

The 2025 Regional Transportation Plan for Southeast Michigan (2025 RTP) is the “blueprint” for long-range transportation planning in the region. It was developed via a deliberative process involving federal, state and local governments, transit agencies, special interest groups, the private sector and all regional citizens.

The 2025 RTP revolves around a regional strategy defined by broad-range policies, specific initiatives and transportation projects and based on current conditions. While the 2025 RTP represents an important milestone, the process is continual. Demographic, land development and travel patterns change over time, as do community priorities, and subsequent plans will reflect those changes.

### **2025 RTP Policies**

The 2025 RTP contains many policies guiding the direction of the region’s transportation system. They are based upon the plan’s goals; federal, state and local guidance; current and forecasted funding scenarios; anticipated demographic changes and technical analyses. These policies are aimed at enhancing mobility, preserving economic vitality and improving traveler safety while protecting the environment and sustaining quality of life. In some instances, policies support initiatives and projects specified in the plan, yet in other cases provide a foundation from which new initiatives — addressing unanticipated or unresolved issues — can be developed and implemented. The following section describes these important policies.

#### **Public transit**

Increase the use of public transit as a viable alternative to automobile travel for both the transit dependent and choice riders.

#### **Mobility issues for persons with special needs**

Support programs meeting the needs of the region’s many different population groups, including persons with disabilities, the elderly, transit-dependent workers and other special needs populations.

#### **Intermodal freight**

Support collaboration with planning agencies, private enterprises and public organizations, both foreign and domestic, to improve intermodal freight movement within and through the region.

#### **Infrastructure improvements**

Support initiatives and projects designed to improve the existing transportation infrastructure, including roadways, bridges, airports, non-motorized systems and transit vehicles and facilities.

**Transportation system management**

Support transportation initiatives and projects enhancing and preserving the existing system via effective and innovative management strategies.

**New technologies**

Support use of new technologies, including data collection and analysis, Geographic Information Systems (GIS) and Intelligent Transportation Systems (ITS), to improve the maintenance, operation and future development of the regional transportation system.

**Economic vitality**

Improve economic vitality while enhancing mobility, safety, environmental resources and overall quality of life.

**Capacity improvements**

Support appropriate roadway capacity improvements in areas where other strategies, including congestion management and public transit, fail to improve traffic flow to acceptable levels. Balance capacity needs with environmental protection and community priorities.

**Safety management**

Support the continued enhancement and refinement of a regional safety management system, thereby increasing safety and security for all travelers.

**Transit security**

Support programs meeting the safety and security needs of transit passengers and employees.

**Non-motorized activities**

Balance the desire for efficient and unimpeded automobile travel with the equally important desire of pedestrians and bicyclists to safely access public spaces and fully utilize non-motorized travel opportunities.

**Environmental protection**

Support initiatives protecting and enhancing the natural and built environments, including sustainable development strategies.

**Transportation equity**

Reduce disproportionate negative transportation impacts on all groups. Balance transportation needs with neighborhood and community priorities.

**Public involvement**

Support development of outreach activities aiming to involve populations traditionally under-represented in transportation decision-making processes. Support a planning process open to collaboration with the public.

## 2025 RTP Initiatives

The far-reaching policies described above are translated into initiatives or actions for implementation. As part of a coordinated effort to improve the region, the following initiatives will be implemented by various regional agencies, including SEMCOG, the Michigan Department of Transportation (MDOT), regional transit providers, county and local transportation agencies and special interest groups.

### **Initiatives improving accessibility and mobility for all people and goods**

- Public transit — Support efforts to improve regional public transit, including initiatives addressing funding issues, enhanced service, use of ITS and collaborative partnerships among transit agencies.
- Transit funding — Continue advocating for increased state and federal support of transit. Support funding agreements between private organizations, service agencies and transit providers to creatively fund transit services. Support an appropriate balance of regional roadway and transit funding.
- Transit vision — Support development of a transit vision for Southeast Michigan.
- Public perception of transit — Demonstrate the benefit of an improved transit system and promote transit as a viable, safe and attractive travel option.
- Elderly mobility and safety — Continue coordinating with federal, state and local partners to promote elderly-friendly traffic engineering practices, improved alternative transportation options, centralized referral resources for transportation services and enhanced education and awareness efforts.
- Job access — Support initiatives serving persons transitioning from welfare to work. Support regional mobility management coordinating transportation-to-work services. Support agencies in their efforts to secure funding by competing for federal, state, local and private funding.
- Collaborative partnerships — Continue coordinating with agencies and organizations, both public and private, within and outside the region (both in the U.S. and Canada) to enhance freight movement.
- International trade — Continue collaborating with U.S. and Canadian partners to address border access issues.
- Freight corridors — Participate in interstate and national consortia investigating trade corridors to and from Mexico, Canada and the states.

### **Initiatives preserving the transportation infrastructure**

- Congestion mitigation — Develop and maintain a regional congestion management system to effectively manage increasing travel demand and mitigate congestion.
- Alternative commuting — Support alternative commute programs, including ridesharing, vanpooling, flexible work scheduling and telecommuting.
- Pavement improvement — Develop and maintain a regional pavement management system to quantify existing pavement conditions and allocate funding for pavement projects.
- Bridge conditions — Develop and maintain a regional bridge management system to identify and prioritize bridge needs and funding.

- Airport capacity — Support the *Regional Aviation System Plan*, which is designed to maintain airport capacity and improve access to airports.
- Intelligent Transportation Systems (ITS) — Develop and support a regional ITS implementation strategy encouraging coordination and cooperation among local ITS programs.
- Transit capital improvements — Replace aging transit vehicles. Improve existing and construct new operational facilities (e.g., bus storage and maintenance facilities). Improve passenger facilities and ensure accessibility for passengers with disabilities and other special needs.
- Transit service enhancements — Increase transit service frequency, operating hours and service area.
- Transit partnerships and coordination — Support collaboration among transit users and providers, thereby improving service and efficiency.
- Capacity improvements — Support appropriate roadway projects designed to improve system capacity.

#### **Initiatives promoting a safe and secure transportation system**

- Traffic safety — Assist local communities in identifying and addressing locations experiencing above-average frequency and severity of traffic crashes.
- Incident management — Continue supporting efforts increasing the ability to manage roadway incidents (e.g., traffic crashes and vehicle breakdowns), including Michigan Intelligent Transportation Systems Center activities and the Freeway Courtesy Patrol.
- Access management and traffic calming — Support innovative strategies designed to better manage access of drivers, bicyclists and pedestrians to adjacent land uses. Support techniques designed to calm the flow of traffic (e.g., roundabouts).
- Transit security — Support initiatives designed to improve the safety and security of transit passengers and employees.

#### **Initiatives enhancing and protecting the environment**

- Walkable and bikeable communities — Support activities enabling communities to be more compatible with respect to the needs of pedestrians and bicyclists.
- Collaboration — Continue working with public, private and non-profit agencies (e.g., the Southeast Michigan Greenways Initiative and Rails to Trails Conservancy) to develop non-motorized facilities.
- Non-motorized mode connections — Investigate and support new ideas and programs improving non-motorized mode connections (e.g., bike racks on buses).
- Non-motorized travel — Support efforts increasing non-motorized systems and encouraging walkable and bikeable communities, including initiatives designed to increase non-motorized access to other modes of transportation (e.g., transit).
- Land use strategies — Support land use strategies protecting the physical environment while accommodating sustainable growth.
- Increasing transportation efficiency — Support initiatives designed to increase transportation efficiency (e.g., traffic flow) without increasing capacity.

- Regional review — Continue acting as the Single Point of Contact for the Michigan Federal Project Review System and reviewing the impact of projects on the built and natural environments.
- Environmental justice — Mitigate negative impacts and invest equitably in all communities and neighborhoods, particularly those that have traditionally been underrepresented in the transportation decision-making process.

## 2025 RTP Projects

Projects represent the most commonly recognized component of the regional transportation strategy, (e.g., roadway, non-motorized and transit infrastructure improvements). SEMCOG performs technical analyses of current and forecasted conditions, including trends in transportation funding, to assist local agencies and MDOT in selecting the best mix of projects fundable under current financial constraints.

There are 1,818 projects in the 2025 RTP Project List, with a total cost of \$17.6 billion. These numbers reflect 62 percent more projects and 120 percent more money than was included in the 2020 RTP. These projects represent a good balance of different work types, which, in sum, will make significant improvements to the transportation system in Southeast Michigan. The total \$13 billion planned for capital projects (Figure 16, page 93) includes 40 percent for pavement preservation, 16 percent for bridge improvements, 12 percent for other, 12 percent for road capacity improvements, nine percent for transit capital, nine percent for safety, one percent for non-motorized improvements and one percent for studies. It is anticipated that projects resulting from studies will enhance the overall system by improving traffic flow and reducing congestion. It is anticipated that projects resulting from these studies will enhance the overall system by improving traffic flow along some of the region's most congested corridors. The following corridor studies have been identified in the region:

- Various corridors in southern Livingston County and northern Washtenaw County, including M-36,
- I-73/I-74 in Monroe County,
- I-75 Business Loop in the City of Monroe,
- I-75 in Oakland County,
- Northwestern Connector,
- M-15 from I-75 to I-69,
- M-59 from Ryan Road to Crooks Road,
- I-96 from Novi Road to US-23,
- New north-south state trunkline in western Oakland County,
- M-25, including an additional Black River crossing,
- Downriver Area in St. Clair County, including Marine City Highway/26 Mile Road, King Road and Chartier Road,
- Range Road in St. Clair County,
- M-19 from Fisher Road to Boardman Road,
- Capac Road from Dudley Road to the southern St. Clair County line,
- M-14 interchange at Barton Drive,

- Ellsworth Road from South State Street to Platt,
- Geddes Road from Huron Parkway to Dixboro,
- North Main Street from Depot to US-23,
- South State Street from Eisenhower to Ellsworth,
- I-375 in the Detroit East River Front Area, including Jefferson Avenue,
- I-94 from I-96 to Conner Avenue,
- New M-2 corridor from I-275 to I-75 in Wayne County,
- Water taxi service along the Detroit River and Lake St. Clair and
- Regional trunklines.

(The 2025 RTP Project List is a separately bound companion document.)

## **Appendix A**

### **Bibliography**

**This page is intentionally blank.**

**Background Papers and Companion Documents**

SEMCOG, the Southeast Michigan Council of Governments. *2020 Southeast Michigan Regional Transportation Plan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1997.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Project List*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Public Involvement in Regional Transportation Planning*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Technical Memorandum — Air Quality Conformity*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Technical Memorandum — Financial Plan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Technical Memorandum — Intermodal*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Technical Memorandum — Public Transit*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Technical Memorandum — Transportation Deficiency Analysis*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *2025 Regional Transportation Plan for Southeast Michigan, Technical Memorandum — Travel Demand Forecast Model*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *SEMScope - 2025 Regional Transportation Plan for Southeast Michigan: A Summary*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *Transportation 2000 and Beyond - A Visioning Process, Forum Proceedings*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

**General**

1998 Annual Average 24-Hour Traffic Volumes. Michigan Department of Transportation: 1999.

Ann Arbor-Ypsilanti Urban Area Transportation Study. *2025 Long Range Transportation Plan for Washtenaw County*. Ann Arbor: Ann Arbor-Ypsilanti Urban Area Transportation Study, 2000.

Applied Management and Planning Group. *1994 SEMCOG Household-Based Person Trip Survey*. Detroit: SEMCOG, Southeast Michigan Council of Governments, 1995.

Michigan Department of Transportation. *I-96 East Howell Area Access Study: Draft Environmental Impact Statement and Section 4(f) Evaluation/Major Investment Study*. Lansing: Michigan Department of Transportation, 1998.

Michigan Department of Transportation. *State Long Range Transportation Plan Strategies, 2000 - 2025*. Lansing: Michigan Department of Transportation, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *Best Practices for Sustainable Development*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. (1999). *Federal Project Regional Review*, [Online]. Available: <http://www.semco.org/services/rreview.html>

SEMCOG, the Southeast Michigan Council of Governments. *State of Michigan Federal Project Review System and State Single Point of Contact*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1996.

SEMCOG, the Southeast Michigan Council of Governments. *Transportation Fact Book for Southeast Michigan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 2000.

SEMCOG, the Southeast Michigan Council of Governments, website. Available: <http://www.semco.org>.

Southeast Michigan Transportation Improvement Program (TIP) data. SEMCOG, Southeast Michigan Council of Governments; FY 1996 - FY 2000.

St. Clair County Metropolitan Planning Commission. *Master Plan Summary*. Port Huron: St. Clair County Transportation Study, 2000.

U.S. Department of Transportation - Federal Highway Administration. (1998). *TEA 21 - Moving Americans into the 21<sup>st</sup> Century*, [Online]. Available: <http://www.fhwa.dot.gov/tea21/sumcov.htm>.

U.S. Department of Transportation - Federal Highway Administration. (1999). *Title 23 - Highways: Part 450 - Planning Assistance and Standards*, [Online]. Available: <http://frwebgate.access.gpo.gov/cgi-bin/get-cfr.cgi?TITLE=23&PART=450&SECTION=322&YEAR=1999&TYPE=TEXT> [2000, March 23].

### **Air Quality**

Michigan Department of Environmental Quality. *Re-designation of the Detroit Carbon Monoxide Non-attainment Area: Technical Support Document*. Lansing: Michigan Department of Environmental Quality, 1999.

SEMCOG, the Southeast Michigan Council of Governments. (No date). *Ozone Action! Let's Clean the Air*, [Online]. Available: <http://www.semco.org/ozoneaction>.

U.S. Department of Transportation and U.S. Environmental Protection Agency, "Guidance for Determining Conformity of Transportation Plans, Programs, and Projects with Clean Air Act Implementation Plans During Phase 1 of the Interim Period," June 7, 1991; The final conformity rule is published in Federal Register, Vol. 58, pp. 3758-3798, January 11, 1993.

U. S. Environmental Protection Agency, "Air Quality: Transportation Plans, Programs, and Projects; Federal or State Implementation Plan Conformity; Rule", November 24, 1993; The final conformity rule is published in the Federal Register, Vol. 58, No. 225 pp. 62188-62253.

U. S. Environmental Protection Agency. (1999). *Regulation: Clean Air Act*, [Online]. Available: <http://www.epa.gov/oar/caa/contents.html>

### **Aviation**

Michigan Department of Transportation. *Michigan Aviation System Plan*. Lansing: Michigan Department of Transportation, 2000.

SEMCOG, the Southeast Michigan Council of Governments. *1998 Regional Aviation System Plan Update (RASP)*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1998.

### **Bridges**

1999 Michigan Structure Inventory and Appraisal (MSI&A) Database. Michigan Department of Transportation: 1999.

Michigan Department of Transportation. *Michigan Structure Inventory and Appraisal (MSI&A) Coding Guide*. Lansing: Michigan Department of Transportation, 1997.

### **Congestion Management**

Grenzeback, Lance R. and Clyde E. Woodle. "The True Costs of Highway Congestion." *Institute of Transportation Engineers*. pp. 6-10.

Northeast Ohio Areawide Coordinating Agency. *NOACA CMS Manual of Practice*. Cleveland: Northeast Ohio Areawide Coordinating Agency, 1997.

Schrank, David and Tim Lomax. *1999 Annual Mobility Report*. College Station, Texas: Texas Transportation Institute, 1999.

SEMCOG, the Southeast Michigan Council of Governments. *2020 Regional Transportation Plan Travel Forecasts*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. (No date). *RideShare - Stop Driving Alone*, [Online]. Available: <http://www.semco.org/rideshare/index.html>

### **Demographic and Land Use Development**

SEMCOG, the Southeast Michigan Council of Governments. *Land Use and Land Development in Southeast Michigan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. *Land Use Tools & Techniques: A Handbook for Local Communities*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1994.

SEMCOG, the Southeast Michigan Council of Governments. *The Past and Future Growth of Southeast Michigan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1998.

### **Elderly**

SEMCOG, the Southeast Michigan Council of Governments. *Elderly Mobility and Safety Final Plan of Action*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. *Elderly Mobility and Safety Focus Group Research Report*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. *Elderly Mobility and Safety Forum, April 12, 1999, Troy, Michigan: Forum Proceedings*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. (1999). *Elderly Mobility and Safety - The Michigan Approach*, [Online].

Available: <http://www.semco.org/depts/trans/eldmob/elderly.html>

SEMCOG, the Southeast Michigan Council of Governments. *Elderly Mobility and Safety— The Michigan Approach: Background Paper #1 - Population, Travel Pattern and Crash Characteristics analysis State of Michigan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1998.

SEMCOG, the Southeast Michigan Council of Governments. *Elderly Mobility and Safety - The Michigan Approach: Background Paper#2 - Literature Review and Resource Inventory*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. *Elderly Pedestrian and Driver Study: Southeast Michigan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

### **Environmental Justice**

1990 Census of Population. U.S. Bureau of Census: 1990.

Northwestern Indiana Regional Planning Commission. *Vision 2020 Northwest Indiana Regional Transportation Plan*. Portage: Northwestern Indiana Regional Planning Commission, 1999.

Schust, Sunny Mays, ed. "Executive Digest." *The AASHTO Journal: Weekly Transportation Report* (Volume 99, No. 49, December 10, 1999).

SEMCOG, the Southeast Michigan Council of Governments. *Patterns of Diversity and Change in Southeast Michigan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1994.

U.S. Department of Transportation - Federal Highway Administration and Federal Transit Administration. (1999). *ACTION: Implementing Title VI Requirements in Metropolitan and Statewide Planning*, [Online]. Available: <http://www.tea21.org/dotmemo.htm> [2000, January 11].

U.S. Environmental Protection Agency - Enviro\$en\$. (1994). *Executive Order 12898 - Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*, [Online].

Available: <http://es.epa.gov/program/initiative/justice/envjsteo.html>

## **Freight**

Detroit/Wayne County Port Authority. *Port of Detroit World Handbook 1999/00*. St. Clair Shores: The Fourth Seacoast Publishing Co., Inc. 1999.

Freight data. U.S. Department of Transportation - Bureau of Transportation Statistics. Available: <http://www.bts.gov>.

Michigan Department of Transportation. (2000). *Measures of Michigan Air Service Demand* [Online]. Available: <http://www.mdot.state.mi.us/planning/airportstats/index.cfm>

Michigan Department of Transportation. *Michigan Transportation Facts and Figures*. Lansing: Michigan Department of Transportation, 1999.

Michigan Department of Transportation, *Truck Operators' Map, 1999* (Lansing: Michigan Department of Transportation, 1999), 28, fig. 3.

Motor Vehicle Volume data. United States/Canada Bridge and Tunnel Operator's Association: 1995 - 1999.

U.S. Army Corps of Engineers. *NDC Publications and Waterway Data* [CD]. U.S. Army Corps of Engineers : Vol. 5, 1999.

## **Incident Management**

Road Commission for Oakland County. (1998-2000). *FAST-TRAC*, [Online]. Available: <http://www.rcocweb.org>

SEMCOG, the Southeast Michigan Council of Governments. *Freeway Courtesy Patrol Phase III Evaluation Report*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1998.

## **Intelligent Transportation Systems (ITS)**

Michigan Department of Transportation. (No date). *Michigan Intelligent Transportation Systems*, [Online]. Available: <http://www.mdot.state.mi.us/mits/>.

U.S. Department of Transportation - Federal Highway Administration and Federal Transit Administration. (1998) *Interim Guidance on Conformity with the National ITS Architecture and Standards*. [Online]. Available: <http://www.its.dot.gov/archconsis/iguidanc.htm>

U.S. Department of Transportation - ITS Joint Program Office. (No date). Welcome to the World of Intelligent Transportation Systems, [Online]. Available: <http://www.its.dot.gov>.

U.S. Department of Transportation - ITS Joint Program Office. *You Are About to Enter the Age of Intelligent Transportation*. Washington DC: U.S. Department of Transportation - ITS Joint Program Office, 1998.

## **Non-motorized**

Burden, Dan. *Walkable Communities: Designing for Pedestrians*. High Springs, Florida: Walkable Communities, Inc., 1998.

SEMCOG, the Southeast Michigan Council of Governments. (1999). *Non-motorized Transportation*, [Online].

Available: [http://www.semcog.org/depts/trans/non\\_motor/index.html](http://www.semcog.org/depts/trans/non_motor/index.html)

## **Traffic Safety**

SEMCOG, the Southeast Michigan Council of Governments. *1987-1996 Traffic Crash Profile for Southeast Michigan*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. *1998 Southeast Michigan Traffic Crash Summary Statistics*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1999.

SEMCOG, the Southeast Michigan Council of Governments. *Traffic Safety Manual*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1996.

U.S. Department of Transportation - National Highway Traffic Safety Administration. *The Economic Cost of Motor Vehicle Crashes, 1994*, [Online].

Available: <http://www.nhtsa.dot.gov/people/economic/ecomvc1994.html>

## **Transit**

American Public Transit Association. *Transit Fact Book*. Washington DC: American Public Transit Association, 1998.

Area Agency on Aging 1-B. *SMART Transportation Resources Manual: What You Need to Know to Operate Transportation Services for Older Adults and People with Disabilities*. Detroit: Area Agency on Aging 1-B and SMART, Suburban Mobility for Regional Transportation, 1998.

City of Detroit Employment and Training Department. *Job Access and Reverse Commute program grant application, Year 1*. Detroit: City of Detroit Employment and Training Department, 1999.

The Greater Detroit Chamber of Commerce and MAC, the Metropolitan Affairs Coalition. *TransitChoice - A New Vision for Greater Detroit*. Detroit: The Greater Detroit Chamber of Commerce and MAC, the Metropolitan Affairs Coalition, 1997.

IBI Group. *Detroit Transportation Corporation - Woodward Corridor Transit Alternatives Study: Final Report*. Irvine, California: IBI Group, 2000.

MAC, Metropolitan Affairs Coalition. (2000). *EZRide Summary*, [Online]. Available: [http://www.semco.org/mac/mac\\_ride.html](http://www.semco.org/mac/mac_ride.html)

MAC, Metropolitan Affairs Coalition. *SpeedLink...A Train on Tires: Rapid Transit for Greater Detroit in our Lifetime*. Detroit: MAC, the Michigan Affairs Coalition, 2000.

National Transit Database, Transit Profiles. Federal Transit Administration: FY 1997.

SEMCOG, the Southeast Michigan Council of Governments. *Specialized Transportation Services Referral Manual, 1998*. Detroit: SEMCOG, the Southeast Michigan Council of Governments, 1998.

SEMCOG, the Southeast Michigan Council of Governments. *Southeastern Michigan Regional Rail Study: Summary Technical Report*. Lansing: MDOT, Michigan Department of Transportation, 1997.

U.S. Department of Transportation - Federal Transit Administration. (1999). *Explanation of Commuter Choice Options*, [Online]. Available: <http://www.fta.dot.gov/library/policy/ecco.htm>.

**Appendix B**

**Michigan Department of Transportation  
State Long Range Transportation Plan Strategies  
2000 - 2025**

**April 7, 2000**

**This page is intentionally blank.**

## ***Introduction***

The State Long Range Transportation Plan strategies are intended to provide direction for implementing various features of the State Long Range Transportation Plan and achieving its seven goals. They address the issues and help realize the vision for 2025. Strategies have been developed for highways, bridges, trucks, the carpool parking lot program, ridesharing, non-motorized, local public transportation, regional rail transportation, intercity passenger bus, intercity passenger and freight rail transportation, air passenger and freight air transportation, and marine passenger and freight transportation.

Several of the highway strategies apply to more than one mode, or address issues beyond strictly infrastructure improvements. These include the following:

- Border Crossing and Trade Corridor Strategy
- Intelligent Transportation Systems Strategy
- Highway/Railroad Grade Crossing Elimination Strategy
- Customer Service Strategy
- Private Sector Partner Strategy
- Environmental Justice Strategy

As programs are developed and projects identified, individual strategies or combinations of them can be referred to for direction and guidance.

## ***Highway Strategies***

The highway strategies range from asset management to business plan objectives to environmental justice.

### ***Asset Management***

- *Strategy for Repairing and Rebuilding Roads.* Network management strategies are continually being refined to work toward achieving the overall statewide goal of having 95% of freeways and 85% of non-freeway trunkline in good condition by 2007. Because freeways carry the highest volumes of traffic and are instrumental in supporting commerce, MDOT will focus its investment in improving poor pavements on the freeway system. Road preservation programs will include a balanced mix of long-term reconstruction (20-30 years), rehabilitation (10-20 years), and capital preventive maintenance improvements (less than 10 years) based on an analysis using state-of-the-art forecasting tools unique to Michigan in its Pavement Management System. Emphasis will be given to capital preventive maintenance, where feasible, because extending pavement life by correcting minor deficiencies early in a pavement's life is more cost effective than waiting until a road needs rehabilitation or reconstruction.
- *Freeway Modernization Strategy.* The transportation industry is continually refining design standards and developing new technology for all types of facilities. MDOT's freeway modernization strategy is a continuing commitment to apply new design standards and technology when rebuilding freeway facilities or when designing new facilities. These standards

encompass a broad range of design elements including pavement type and thickness, structural elements of bridges, configuration of interchanges, distances between interchanges, and traffic volumes. It also includes the application of new technology such as weigh-in-motion programs for commercial traffic and Intelligent Transportation Systems (ITS) applications such as changeable message signs, video monitoring of freeways for incidents, and ramp metering to help maintain steady rates of traffic flow at interchanges.

- *Corridor Management Strategy.* MDOT's corridor management strategy strives to coordinate the construction of planned projects wherever feasible by staging and/or combining road repair, bridge work, safety projects and capacity improvements in order to accomplish a total transportation improvement while minimizing motorist inconvenience. This includes roadside developments such as rest areas, carpool parking lots, and welcome centers. Corridor plans will involve metropolitan planning organizations, regional planning agencies, and local governmental units in their development and implementation.
- *Access Management Strategy.* Access management is a process that provides or manages access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity needs and speed. MDOT strives to uphold access management principles through proactively working with local planning agencies to increase awareness of benefits to effective access management such as improved safety, improved air quality, more efficient traffic operations, improved access to properties, and an extended useful life of a roadway. MDOT is partnering with the Michigan Society of Planning Officials (MSPO) to conduct a series of workshops to educate local public officials and agencies on the benefits of managing access to the State and local road systems. MDOT's access management strategy is also implemented and enforced through the driveway permit application process. Capacity improvements will be predicated on local governmental units guaranteeing actions to control curb cuts through use of such features as service roads and common parking areas.
- *Interchange Strategy.* Improvements to existing interchanges and construction of new interchanges present a special need for state and local coordination. For example, MDOT may choose to widen an interchange in response to increasing traffic volumes. These projects are selected in response to traffic needs on a statewide priority basis and require local coordination and a concurrent local commitment to widen the local road as necessary.

Local authorities may choose to widen the local road at an interchange to attract development even though current traffic volumes do not warrant such enhancement. Such improvements may also require improvement to state highway interchange ramps. Interchange improvements prompted by local enhancements are the financial responsibility of local authorities. This type of project is not part of the MDOT project selection process, but does require coordination with MDOT.

The local agency and/or private sector developers are responsible for all costs associated with a new interchange necessitated by private sector development including grade separation structures, right-of-way improvements, and approach work. An exception to this policy is granted in cases where MDOT has determined that reduction in existing congestion at adjacent trunkline interchanges can be reasonably expected and where FHWA justification criteria warrant an

additional break in access. In such cases, MDOT may assume costs for structures and ramps only. The costs associated with local roadway work outside of bridge abutments, including right-of-way costs, remain the responsibility of the local road agency.

- *Border Crossing and Trade Corridor Strategy.* Adequate highway and rail border crossings and trade corridors are critical to support international trade, improve border security, and improve corridors of national significance. MDOT is committed to improve Michigan's highway and rail border crossings and their related trade corridors. The three Michigan gateways that support key trade flows are Detroit, Port Huron, and Sault Ste. Marie. A five-year strategy to systematically repair and rebuild the Michigan-Canada border infrastructure and connecting interstate freeway system has been developed and is being implemented.
- *Intelligent Transportation Systems Strategy.* MDOT is committed to continuing research, development and implementation of Intelligent Transportation Systems (ITS) in the State to improve the efficiency and safety of Michigan's transportation system. ITS refers to the application of advanced computer, electronic and telecommunication technologies to provide such benefits as real time reports on traffic congestion, incident detection and dispatch of emergency vehicles, improved safety at railroad grade crossings, and faster customs/immigration processing at border crossings.

Ongoing partnerships with the University of Michigan and Michigan State University support research and evaluation efforts to identify promising uses for ITS technology throughout the State. Deployment of ITS has been focused on the greater Detroit area, but is now being expanded to applications in additional Michigan urbanized areas and smaller communities. MDOT is currently developing a long term ITS Strategic Plan which will provide a vision for the next 15-20 years for the expanded use of existing ITS applications, development of architectural standards, and development of new applications.

- *Highway/Railroad Grade Crossing Hazard Elimination Strategy.* In the interest of safety and efficient railroad and highway operation, MDOT is committed to improving warning devices and closing or separating railroad/highway grade crossings, especially in the federally-designated Detroit-Chicago high speed rail corridor. This can be achieved, in part, by eliminating grade crossing hazards when making road improvements in the vicinity of railroads, developing intercity rail and bus terminals, and redeveloping downtown areas.

#### *Business Plan Objectives*

- *Customer Service Strategy.* There will continue to be a strategy to undertake construction projects in a manner which minimizes disruption of automobile and commercial traffic flow. Techniques to be employed include incentive contracts promoting early construction completion, nightwork to protect peak period flow to, from and within metropolitan areas, non-weekend work to keep at least two lanes open on weekends for those traveling to northern Michigan, and signing to alert motorists regarding when lanes are going to be closed.
- *Private Sector Partner Strategy.* MDOT is committed to effectively and equitably involving the private sector in its effort to preserve, improve, and expand Michigan's transportation system.

This includes (1) issuing bids early in the year, (2) evening out the construction program among eligible contractors, and (3) being open to cooperative efforts with private entities. The latter includes leveraging private dollars with public partners, encouraging private partners to locate where transportation facilities exist, and working with the construction industry to maximize the application of their skills.

- *Rural Elected Officials Involvement in Programming Transportation Improvements Strategy.* MDOT is committed to strategically involving rural elected officials in the transportation planning and programming process. Regarding local federal-aid, this is accomplished through meetings which include the county road commissions, city, village and township officials, county commissioners, local public transportation providers, and MDOT transportation service center staff. Local transportation projects are identified and prioritized. Counties submit their list of prioritized projects to multi-county rural task forces who, in turn, develop a prioritized list of projects which is submitted to MDOT for inclusion in the State Transportation Improvement Program (STIP).

Regarding state federal-aid, MDOT regions and their transportation service centers meet with local officials continuously regarding potential projects involving trunklines in their communities. If community concurrence is obtained, the trunkline project is included in the STIP.

#### *Environmental Justice*

- *Environmental Justice Strategy.* Federal Highway Administration Order 6640.23, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, establishes policies and procedures for the FHWA to use in complying with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (EO 12898). EO 12898 requires federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse effects, including the interrelated social and economic effects of their programs, policies, and activities on minority populations and low-income populations in the United States. Compliance with this FHWA Order is a key element in the environmental justice strategy adopted by FHWA to implement EO 12898, and can be achieved within the framework of existing laws, regulations, and guidance.

MDOT complies with this FHWA Order by identifying, addressing, and documenting environmental justice issues and concerns during the development of proposed transportation programs, policies, and projects. Continual efforts are made to identify potentially affected minority or low-income groups or individuals. If such groups or individuals are found, every effort is made to actively involve them in the public involvement program, policy, or project development processes, and to avoid or mitigate any potential disproportionately adverse impacts that may result from them.

#### *Bridge Strategy*

- *Bridge Preservation Strategy.* The overall goal of MDOT's bridge preservation program is to preserve the trunkline bridge network to insure safety and serviceability, while making the best use of available financial and human resources. Two specific objectives are set forth in the *Strategic Investment Plan for Trunkline Bridges*:

- To address 100% of the structures deemed to be of highest priority based on condition
- To improve the overall condition of the bridge network so that 95% of freeway structures and 85% of non-freeway structures on each network are in good condition by 2007

The *Strategic Investment Plan for Trunkline Bridges* proposes a statewide investment strategy which integrates rehabilitation, replacement, capital scheduled maintenance, and capital preventive maintenance projects into annual programs that will address 100% of the structures of critical concern and that will achieve the network condition goals most effectively. This integrated network management strategy expands the traditional rehabilitation or replacement of bridges on a “worst first” basis by placing a new emphasis on scheduled and preventive maintenance.

### ***Truck Strategies***

- *Truck-Related Highway Strategies.* Capacity improvements to reduce congestion, eliminate choke points, and modernize the highway system will improve conditions for trucks. New design standards including pavement type and thickness, structural elements of bridges, configuration of interchanges and distances between interchanges all address truck volumes, sizes and weights.
- *New Technologies.* Use of new technology such as weigh in motion and video monitoring of freeways for incidents should improve the free flow of trucks and eliminate bottlenecks.
- *State Trucking Laws.* Michigan continues to endorse the state truck weight laws currently in place. Michigan would not oppose a shift in federal truck size and weight laws that would bring the rest of the country closer to Michigan weight laws.

### ***Carpool Parking Lot Program Strategy***

The goal of the Michigan Carpool Parking Lot Program is to encourage and facilitate carpooling and vanpooling (ridesharing) in order to conserve energy, reduce congestion and parking demand, and realize the social, economic, and environmental benefits associated with reduced motor vehicle usage. Much can be done to achieve this goal through the provision and promotion of safe and convenient parking lots for ridesharing activities.

A program reengineering effort will strive to incorporate the carpool lot program into the highway project planning and development process. This strategy will move this traditionally reactive program to a proactive one where carpool parking lot facility needs are identified and coordinated with road and bridge projects, particularly in areas where congestion impacts the level of service.

### ***Ridesharing Strategies***

The goal of these strategies is to reduce energy consumption, traffic congestion, air pollution and parking problems, while making Michigan roadways safer by reducing the number of vehicles utilizing them.

- *Rideshare Awareness.* A statewide coordinated marketing effort will aim to raise awareness of ridesharing with emphasis on guaranteed ride home. Increased signage incorporating logos, toll free rideshare contact numbers, and websites will increase the number of inquiries by commuters.

## B-6

- *User Recruitment.* By utilizing an extensive promotion program, MDOT will continue to encourage LROs to actively recruit persons to use carpools and vanpools as an alternative transportation mode to the single occupant vehicle work commute trip.
- *Employer Participation.* Promotion of the Commuter Choice program, especially in urban areas, will allow for employers to become more involved in identifying the transportation needs of their workforce.

### ***Non-motorized Transportation Strategy***

The focus of a non-motorized transportation strategy necessarily involves working closely with local governments. MDOT is positioned to assist local units of government through its network of Transportation Service Centers, and through educational and empowerment programs offered through the non-motorized program in MDOT's central office. The strategy is to use existing MDOT organizational structure and business processes to provide assistance to communities in planning for and implementing non-motorized facilities and systems, and to accommodate non-motorized travel in its scoping, design, and funding of state highway projects. The tactics include educating MDOT professional staff in non-motorized transportation planning and facility design, and assisting/empowering communities to invest in projects which will encourage non-motorized travel as an alternative to auto use.

### ***Local Public Transportation Strategy***

The mission of local public transportation is to improve mobility and quality of life by providing efficient and responsive public transit that integrates into an overall transportation system. Federal Transit Administration planning emphasis areas, metropolitan planning factors, and MDOT statewide transit goals provide direction in achieving this mission. In that context, local public transportation will continue to focus on preserving and improving the transit linkage with jobs, education, shopping, and medical care. Efforts will continue to fill gaps where no local public transportation exists. When appropriate, transit systems will feed intercity bus and rail stations. Transit systems will continue to be eligible for funds for bus replacement, facilities, operating assistance, and vehicle maintenance.

### ***Regional Rail Transportation Strategy***

Regional rail contributes to meeting the increasing demand for transportation in the nation's larger metropolitan areas between population and employment centers within a region. Therefore, MDOT will support the periodic assessment of the potential for regional rail in Michigan's largest metropolitan areas. This generally means metropolitan areas of one-half million or more population. Assistance in implementing this passenger rail service will be available when demand and community support warrant.

### ***Intercity Passenger Bus Transportation Strategy***

Equal opportunity will be afforded to the intercity bus carriers regarding provision of intercounty and regional bus service. Emphasis will be given to integrating intercity bus services with intercity passenger rail service by feeding passenger rail stations and supplementing passenger rail service. State investments will be primarily in capital items such as intercity coaches and station improvements, especially those stations serving more than one mode.

## *Intercity Rail Transportation Strategies*

### *Passenger*

- *High Speed Rail Development Strategy.* The high speed rail development strategy is to incrementally develop the Detroit-Chicago Corridor and its branch lines. This includes a continuing commitment to implementing the incremental train control technology throughout the corridor which is essential to achieving train speeds up to 110 mph. Emphasis will also be given to working with local communities in improving passenger rail service, developing stations, and closing/separating grade crossings. Efforts will continue in working with neighboring states and Ontario to assure that the corridor is part of a developing regional system. In conjunction with the “Border Crossing and Trade Corridor Strategy,” every effort will be made to work with Ontario and Immigration & Naturalization Service to reduce passenger rail border crossing times. Sharing of passenger terminals by passenger rail, intercity bus, and local public transportation will continue to be promoted.
- *Intermodal Terminal Development Strategy.* There will be a continued MDOT commitment to develop and enhance intermodal passenger terminals in an effort to provide cost effective services and promote economic development. In several of Michigan’s metropolitan areas, intercity passenger rail, intercity bus, and local public transportation comprise the intermodal passenger terminals.

### *Freight*

The highway/railroad grade crossing hazard elimination strategy described in the *Highways Section* will continue to be a major contributor to safer railroad operations. This results from improving warning devices and closing or separating railroad/highway grade crossings. The reduced potential for collision with trucks transporting heavy loads and inflammable commodities is especially important to the railroads.

- *Intermodal Freight Terminals.* There will be a continued MDOT commitment to support the development and enhancement of intermodal freight terminals in an effort to provide cost effective services and promote economic development. Intermodal freight terminals may be divided into three categories: rail, marine, and air. Rail intermodal terminals accommodate the interchange of freight carried in containers and trailers between rail and trucks. Marine terminals accommodate primarily bulk materials interchanged between the waterways and the rail or highway systems. Airports accommodate the interchange of freight between air carriers and trucks. It is expected that major intermodal freight terminals located within one MDOT region will also serve shippers in adjoining MDOT regions.
- *Divestiture of State-Owned Lines.* MDOT will return state-owned rail lines (currently about 700 miles) to the private sector using a structured bidding process.

***Air Transportation Strategies***

*Passenger*

MDOT is committed to the appropriate development of public use airports that best respond to the system goals identified in the Michigan Airport System Plan. These goals relate to the aviation needs of business centers, tourism/convention centers, population centers, capacity, land area coverage, general population, and isolated areas of the state. Airports contributing to these critical aviation needs will be given primary consideration in the allocation of funds. This will continue to be achieved through a partnership comprised of local officials, MDOT, and the Federal Aviation Administration.

*Freight*

MDOT will continue to assist local communities in assuring that appropriate airports, as identified in the Michigan Airport System Plan, have adequate airside facilities to accommodate those aircraft used in processing of mail, package express, and air cargo. Also, efforts will continue to provide locations with efficient access to runways at airports key to these enterprises.

***Marine Transportation Strategies***

*Passenger*

MDOT encourages private ownership and operation of ferry services to Michigan's inhabited islands. Limited state assistance may be provided to ferry services that meet state mobility objectives when the market alone cannot support service. MDOT will apply for and use dedicated federal funds for construction of new ferries when appropriate and available.

*Freight*

MDOT will work with the federal government, local agencies, and industry to ensure that maintenance of public navigation channels will continue. Improvement projects will be undertaken when economically justified and funded by the appropriate federal and local agencies.

**Appendix C**

**2025 Long Range Transportation Plan  
for Washtenaw County  
Executive Summary**

**Approved by**

**Ann Arbor-Ypsilanti Urban Area Transportation Study  
Policy Committee  
March 15, 2000**

**Southeast Michigan Council of Governments  
General Assembly  
June 22, 2000**

**This page is intentionally blank.**

## Introduction

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA21) is the current federal legislation that governs transportation planning and provides the federal funds for transportation. TEA21 requires that the transportation plan cover at least a 20-year planning period. The plan is updated every three years because Washtenaw County and the entire Southeast Michigan area are a Maintenance Area for the ozone standard set by the U. S. Environmental Protection Agency. In addition to the 3-year update cycle, the plan is amended as priorities, available revenues, or transportation needs change.

The 2015 Long Range Transportation Plan for Washtenaw County was adopted in September 1993. It included capacity enhancing and safety improvements. The 2015 Plan was the first Plan that addressed transportation needs in a multi-modal, environmentally sound, and fiscally constrained improvement specific manner. The 2020 Plan was adopted in January 1997 addressing more deficiencies than the 2015 Plan. The 2020 Plan included capacity, safety, bridge and pavement deficiencies. The 2025 Plan identifies capacity deficiencies, segment and intersection safety deficiencies, functionally obsolete and structurally deficient bridge deficiencies, non-motorized deficiencies, and pavement deficiencies.

The 2025 Long Range Transportation Plan Update for Washtenaw County is the product of many agencies working together to provide a guide for future transportation improvements. Local road and planning agencies, the Southeast Michigan Council of Governments (SEMCOG), and the Michigan Department of Transportation (MDOT) were all active partners in the development of this plan.

Over the next 25 years, the transportation agencies in Washtenaw County are proposing 362 improvements at a total cost of over \$1.6 billion. It is important to note that the transportation agencies have also identified an additional 76 improvements at a total cost of over \$783 million for which funding is not available. These unfunded improvements are technically not part of the 2025 Plan but are included in the Plan documentation to highlight the unmet needs. The completed improvements from the first time period of the 2020 Plan also have been compiled and analyzed. During the first five years of the 2020 Plan, 85 transportation improvements were completed at a total cost of over \$92 million.

## General Background

For over 25 years, the federally mandated "continuing, coordinated and comprehensive" (3C) urban transportation planning process in Washtenaw County has occurred at two levels: the Ann Arbor-Ypsilanti Urban Area Transportation Study (UATS), comprised of those governmental units and related agencies within Washtenaw County; and the Southeast Michigan Council of Governments (SEMCOG), the Metropolitan Planning Organization (MPO) for the seven-county region of southeast Michigan. Because the 2025 Long Range Transportation Plan Update for Washtenaw County is incorporated into the Regional Transportation Plan both agencies are responsible for its completion.

## Plan Goals

The 2020 Long Range Transportation Plan for Washtenaw County was initiated with the development of Plan Goals and Objectives that were completed and adopted in conjunction with the SEMCOG and the MDOT. The 2025 Plan is an update of the 2020 Plan and the original goals were reaffirmed. The goals used by the local agencies as they evaluated the deficiencies and identified improvements were:

### **Goal 1: Promote a safe and secure transportation system.**

#### Objectives

- A. Reduce the number and severity of traffic crashes.
- B. Increase the safety and security of the transportation system and its users.
- C. Reduce conflicts between rail, auto, transit and non-motorized modes.

### **Goal 2: Provide accessibility and mobility for all people and goods.**

#### Objectives

- A. Reduce distance or time spent traveling.
- B. Increase the occupancy rate for all motorized modes.
- C. Reduce barriers to the use of the transportation system.
- D. Increase continuity of transportation service across the region with appropriate access to major land uses.
- E. Increase mode choices for the movement of goods and people.
- F. Improve the connections between modes.

**Goal 3: Invest strategically in transportation infrastructure to enhance the vitality of the community.**

Objectives

- A. Give priority to preservation and maintenance of the existing transportation system.
- B. Develop a financially responsible plan that allocates available resources.
- C. Preserve current and planned right-of-ways for transportation system improvements
- D. Develop transportation services that are consistent with regional and local land use plans as well as other development plans.
- E. Encourage creative public and private partnerships in transportation improvements.
- F. Provide a transportation system that encourages employment growth, economic productivity and international competitiveness of the region.

**Goal 4: Protect and enhance the environment.**

Objectives

- A. Reduce air, water and noise pollutant emissions and concentrations.
- B. Reduce energy consumption.
- C. Reduce the disruption or damage to wetlands and natural habitats.
- D. Increase the use of public transportation and ridesharing.
- E. Reduce the risks associated with the transportation of hazardous materials.
- F. Preserve and enhance the aesthetic natural and cultural qualities of the region.
- G. Encourage the development and use of non-motorized facilities and programs.
- H. Reduce negative effects of the transportation system on:
  - Households and neighborhoods; commercial and industrial facilities;
  - Prime agricultural, open space and recreational resources; and historic sites and districts.

## **Plan Improvements**

### Countywide Network

The computerized road network operated by UATS was expanded to include the entire County for use in modeling the congestion deficiencies and mapping the deficiencies and proposed transportation improvements. The 2020 network was constructed using a more geographically precise base and represents the county more accurately than the 2015 network. An update of the network and models used for the long range planning process was initiated but not completed for the 2025 Plan Update. Additional improvements will include a multi-modal model with a transit network and a non-motorized component. This effort should be completed in summer 2000.

### Travel Survey

The 2020 Plan also utilized the most recent origin and destination study completed for the Southeast Michigan region in 1994. The survey results allowed for more accurate estimation of the travel patterns of residents living in the County and the region. This is the first complete update of the travel data since the 1960's. The Washtenaw County model was also able to use the preliminary external survey data taken at the edge of the County to estimate the number of trips that travel through the County without stopping. The 2025 Plan continued to use the travel survey data and the resulting trip generation equations. These may be updated with the model improvements to be completed in summer 2000.

### Expanded Multimodalism

The 2025 Plan addresses more deficiencies and identifies more improvements than the 2015 and the 2020 Plan. The following types of deficiencies are identified and addressed with improvements in the 2025 Plan:

- Congestion
- Safety -- Intersections and segments
- Bridge -- Functionally obsolete and structurally deficient
- Transit -- Maintenance, operations and capital
- Pavement
- Non-motorized -- Bicycle and pedestrian

## **Significant Factors Impacting the Plan**

There were several factors that significantly impacted the Plan's development process as well as the final Plan document. These factors were:

- TEA21 requirements for Plan Adoption
- Urban Sprawl
- Lack of dedicated funding for transit outside the City of Ann Arbor
- Limited revenues

### TEA21 requirements for Plan Adoption

The Surface Transportation Equity Act for the 21<sup>st</sup> Century (TEA21) requires that air quality non-attainment and management areas develop a new 20-year transportation plan every three years. This short time frame makes it difficult to complete major plan improvements such as, the construction of a transit network, the implementation of a new travel model using the results of the travel survey, the inclusion of more types of plan deficiencies and the allowance of adequate time for public participation. This time constraint makes it necessary to implement these scheduled improvements over several completed plans.

### Urban Sprawl

The 1995 regional development forecast (RDF) shows higher gains than previously expected within the region and Washtenaw County. With development continuing in the urban townships surrounding the City of Ann Arbor, the demands on the transportation infrastructure also continue to increase. The development stimulates requests for increased road capacity, transit service and non-motorized paths that must compete for transportation dollars needed for operation and maintenance of the existing system. Land use plans and development proposals must consider the necessary transportation improvements that eventually accompany the planned growth. In late 1999, Ypsilanti Township completed an update of their land use and thoroughfare plan that evaluated the link between land use and transportation needs. Several other local governments are also reviewing their land use and its implications on transportation.

### Public Transit

The City of Ann Arbor has a dedicated millage to support the transit system within the City. This dedicated funding allows the Ann Arbor Transportation Authority (AATA) and UATS staff to plan for future improvements to the transit system within the City. The surrounding cities, townships and villages pay for transit service with annual service contracts paid out of their respective general funds. This limits the amount of long range planning outside the City of Ann Arbor that can include the expansion of transit service. The development of the transit model as part of the next plan will help provide insight into the future need for transit but will not be able to address the lack of dedicated funding.

### Limited Revenues

The state transportation user fee or gas tax was increased in July 1997. Even with the increase in funds provided by the state gas tax increase and TEA21 revenue increases, there are transportation needs that are not met. As each new fleet of automobiles is developed, the number of miles they can travel on one gallon of gas increases. This has limited the money available to provide improvements to the transportation system with the amount of money actually decreasing in some years. Revenues will need to be monitored closely to ensure that Michigan can continue to make the needed improvements to its transportation system.

## **Public Participation**

Public participation in the long-range transportation planning process was stressed in ISTEA and continues to be a priority in TEA-21. The Washtenaw County planning process provided varied opportunities for the public to review and comment on the plan. Information was provided to the newspaper, radio stations, public libraries, and local governmental offices. Both written and oral public comments were received during the public comment period.

### Public Notification

The public was notified of the availability of the draft plan and opportunities for public comment using several different methods: one article appeared in the October issue of the UATS quarterly newsletter, *The Vehicle*; one article appeared in the January issue of *The Vehicle*; two news articles appeared in the Ann Arbor News, one in December and one in January; and UATS staff notified, by mail, nearly 200 citizens, agencies, and other interested parties about the draft plan's availability and the public comment opportunities.

### Plan Review Opportunities

The draft plan was available for review and public comment beginning November 24, 1999. Copies of the draft plan, including comment forms, were distributed to 24 locations throughout the County and region with a majority being within the urbanized area of Washtenaw County. The locations where the plan was available for review are:

- Ann Arbor Public Library – Loving Branch
- Ann Arbor Public Library – Main Branch
- Ann Arbor Public Library – Northeast Branch
- Ann Arbor Public Library – West Branch
- City of Ann Arbor – City Hall
- Ann Arbor Transportation Authority (AATA)
- Ann Arbor-Ypsilanti Urban Area Transportation Study Committee (UATS)
- Ann Arbor Township Hall
- Village of Chelsea – Village Office
- Village of Dexter – Village Office
- Dexter District Library
- Village of Manchester – Village Office
- Michigan Department of Transportation - Brighton TSC
- Northfield Township Library
- Pittsfield Township Hall
- City of Saline – City Hall
- Saline District Library
- Scio Township Hall
- Southeast Michigan Council of Governments (SEMCOG)
- Superior Township Hall
- Washtenaw County Road Commission
- City of Ypsilanti – City Hall
- Ypsilanti District Library – Downtown Branch
- Ypsilanti Township - Civic Center

The draft plan booklets included a memo explaining the plan development and adoption process; the dates when public comment could be provided in person; scheduled adoption dates for the committees to consider the 2025 Plan; locations where the draft plan could be reviewed; a plan summary including Introduction, General Background, Plan Goals, and explanations of how the deficiencies were identified; maps of each of the deficiencies, including jurisdiction-specific maps; a listing of the unfunded transportation improvements; funding summaries of the proposed improvements; and analyses of completed improvements from the 2020 Plan.

To make it easier for the public to comment on the plan, a comment form was developed and included in the draft plan booklets. The form asked several questions regarding the plan and public comment process. There was also extra space so that the citizens could include additional comments. The form was pre-addressed to UATS, but required postage. A copy of the public comment form, as well as the comments received by UATS, is included in Appendix A.

### Public Comment Opportunities

In addition to the public comment forms included in the draft plan booklets, UATS hosted seven public meetings at various locations throughout the County. These meetings were in addition to the regularly scheduled meetings of the Technical Advisory Subcommittee and the Policy Committee. Meetings were scheduled both in the day and evening so that the public would have the flexibility to attend whatever was most convenient. Geographical equity was a major consideration in determining meeting locations. A list of the meeting dates, times, and locations are below:

<b>Meeting Date</b>	<b>Time</b>	<b>Meeting Location</b>
December 2, 1999 (Thursday)	2 PM	UATS office, Ann Arbor
December 6, 1999 (Monday)	7 PM	Sylvan Township Hall, Chelsea
December 7, 1999 (Tuesday)	2 PM	Edison Center, Ann Arbor
December 8, 1999 (Wednesday)	7 PM	Washtenaw ISD, Ann Arbor
December 9, 1999 (Thursday)	7 PM	Ypsilanti Township Civic Center, Ypsilanti
January 12, 2000 (Wednesday)	2 PM	UATS office, Ann Arbor
January 13, 2000 (Thursday)	7 PM	Pittsfield Township Hall, Pittsfield Township

UATS Staff also met with individual citizens on several occasions at the UATS office to discuss the plan. Citizens also called and e-mailed UATS regarding specific transportation improvements in the draft plan. Staff answered the citizens' questions and when necessary referred the citizen to a contact person at the agency responsible for the specific proposed improvement.

Comments provided to UATS through e-mail messages, comment forms, and the public meetings were summarized and provided to the Technical and Policy Committees prior to their February meetings. Agencies received a copy of the comments that were specific to one of their transportation improvements. In several instances, improvements were changed in some way to reflect the public comment. Copies of the public comments were also provided to SEMCOG for inclusion as part of their public comment period.

UATS received written comments from five different people. In addition to some improvement-specific questions, the citizens expressed concerns about road widening and its relationship to sprawl. Some of the other questions were about the process and criterion for determining the deficiencies, particularly congestion deficiencies. The comments and discussions that ensued at the various public meetings were mostly focused on particular transportation improvements that were either proposed in the plan or where the citizen felt a need was not met. A comment that was repeated at nearly all of the meetings was the lack of transportation improvements identified by the Michigan Department of Transportation (MDOT) in the later years of the plan. Additional improvements on the MDOT system were included prior to approval of the plan. A copy of the public comments received by UATS is included in Appendix A.

### Public Meeting Format

The public meetings were formatted to provide information about the planning process, about the UATS agency, and to allow time for questions and comments. Information about the plan was presented as large maps showing the identified deficiencies and proposed improvements; handouts detailing the deficiencies, proposed improvements, unfunded improvements and funding breakdowns by types of improvements and time period. A PowerPoint presentation was also developed to highlight the planning process and to demonstrate the deficiencies at selected locations where transportation improvements were proposed. The presentation included charts and photos of the deficiencies and proposed improvements.

The meeting usually started with introductions and the PowerPoint presentation. After the presentation, citizens were encouraged to ask questions either of UATS or representatives of the operating agencies present. Citizen comments were recorded by UATS staff and subsequently provided to the agency's Technical and Policy Committee representatives and SEMCOG.

## **Plan Development Process**

Transportation deficiencies were identified for congestion, safety, bridges, transit, pavement and non-motorized using the methods detailed below. Financial forecasts were developed at the regional level by SEMCOG staff and provided to UATS. UATS staff worked with the operating agencies using the deficiencies to develop proposed improvements. The proposed improvements were then divided into funded and unfunded categories within the limitations of the financial forecasts. The list of funded improvements was amended prior to final approval to reflect changes made based on the public comments.

A map of the funded improvements is included in this report on page 11. Charts depicting the improvements by number of improvements and cost of improvements are provided on pages 13 and 15. The lists of funded improvements begin on page 17. The unfunded improvements are included in Appendix B. Although a list of unfunded improvements has been included, it is not comprehensive because several of the agencies did not provide unfunded improvements even though needed improvements were identified by the deficiencies and through public comment. A description of how each type of the plan deficiencies was identified is included below.

### Congestion Deficiencies

The congestion deficiencies are identified by five-year periods using a computer model based on the recent regional travel survey and projected employment and household data. Once the future trips are assigned to the countywide network, the deficient congested facilities are defined using volume to capacity ratios (V/C) of 0.80 or more.

### Safety Deficiencies

Two types of safety deficiencies were addressed; intersections and segments. Safety deficient intersections are identified using traffic crash data from the years 1994, 1995, 1996, 1997 and 1998. The intersection deficiencies were ranked based on the combination of crash frequency and crash rate. Safety deficient segments are identified using traffic crash data from 1993, 1994 and 1995. The data was analyzed and locations are considered deficient if they exceeded the regional averages for frequency rates, casualty rates and crash rates for similar facilities throughout the region. The safety deficiencies segments are grouped into tiers of safety deficiencies according to the degree of deficiency.

### Bridge Deficiencies

Bridge deficiencies are identified using data from the Michigan Structure Inventory and Appraisal (MSIA) database created and maintained by the MDOT. A structurally deficient bridge is defined as needing extensive repair or replacement by the year identified. A functionally obsolete bridge is defined as needing some repair or upgrade by the year defined.

### Transit Deficiencies

Assessing current service, the federally recommended bus and facility replacement schedule and a limited expansion plan identifies transit deficiencies. Large buses are identified as needing replacement once they reach 12 years of use and small buses once they reach 5 years of use. Transfer and maintenance facilities need upgrading or replacement after 20 years of use.

### Pavement Deficiencies

Pavement deficiencies are determined on an individual agency basis using available pavement management systems. The City of Ann Arbor uses PAVER, a computerized program. The Washtenaw County Road Commission uses RoadSoft program to evaluate their pavements. The City of Ypsilanti, the City of Saline, and the Village of Dexter make periodic surveys of the pavements under their jurisdiction using staff or consultants. The Michigan Department of Transportation uses biennial surveys and sufficiency ratings to determine pavement deficiencies.

### Non-motorized Deficiencies

Non-motorized deficiencies were also identified using the methods currently available to each of the transportation agencies. The non-motorized deficiencies include bike and pedestrian facilities. Pedestrian deficiencies and improvements were generated from the City of Ann Arbor ADA Transition Plan and include those improvements in the Ann Arbor Capital Improvements Plan 1999-2005. The bike portion of the deficiencies was generated from the City of Ann Arbor Bicycle Plan, the Ypsilanti Township Bike Plan, the Washtenaw County Bicycle Plan and other sources.

## Next Steps

### Plan Implementation

The 2025 Transportation Plan for Washtenaw County will allow for the orderly development of transportation improvements within the limits of available funds. Improvements generated by the Long Range Plan process will be prioritized and programmed through the Washtenaw County Transportation Improvement Program (TIP). This includes all improvements that utilize federal funds and those that have a regional impact.

### Planning Process Improvement

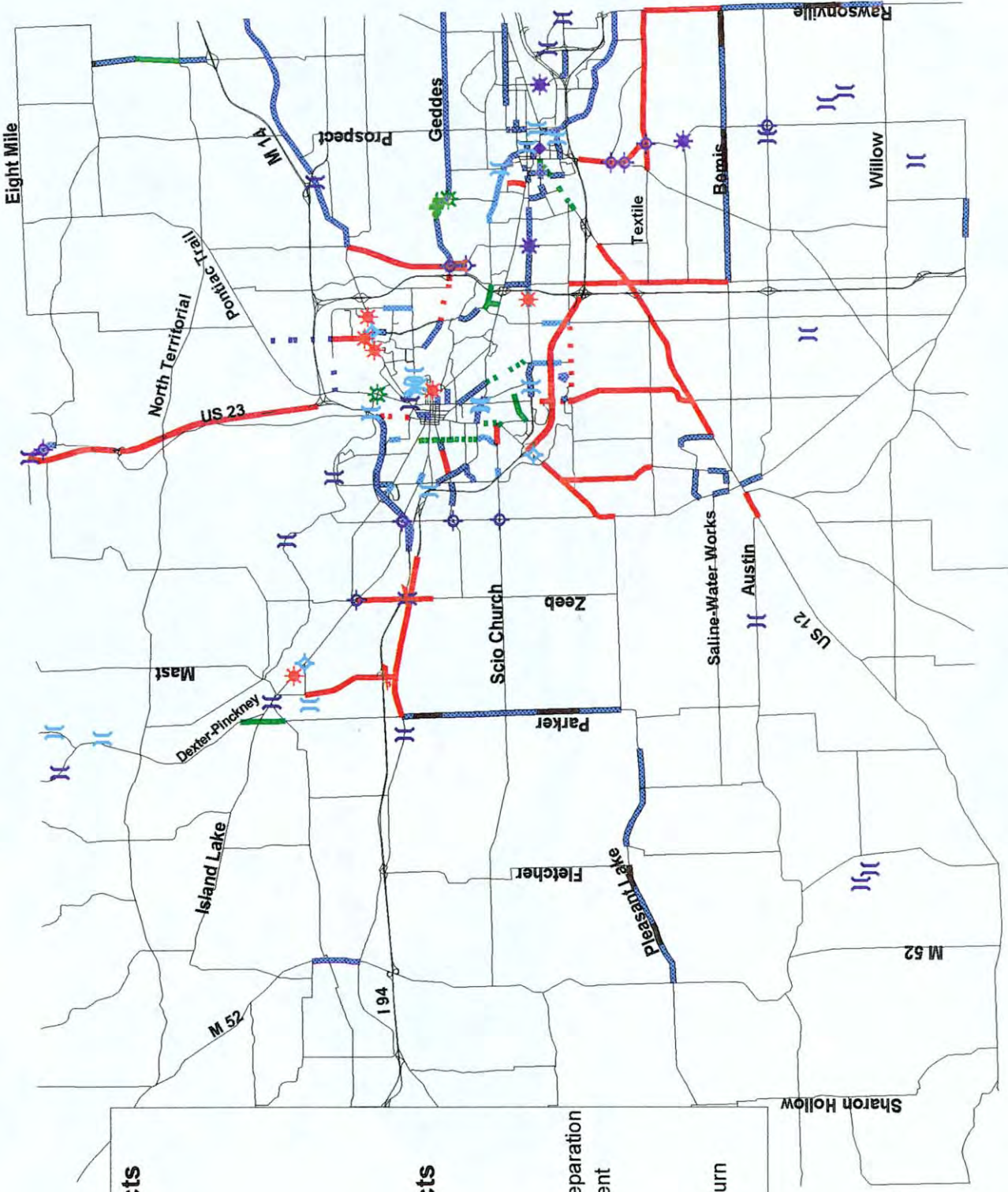
The transportation plan is an ongoing, continually evolving process. Work will begin immediately on the development of the next plan. The tools used to develop the deficiencies will be refined and further developed with the complete calibration of the road network, the addition of a transit network and the addition of a non-motorized component. Continued work with local communities will help them recognize the impact their land use development plans have on the future of our transportation system.

The next transportation plan will also address Environmental Justice and the impact of the plan on disadvantaged populations. The guidance on Environmental Justice arrived too late to be incorporated in the 2025 Plan Update at the Washtenaw County level.

Other improvements that will be attempted for the next Plan include the following: a more complete analysis of alternatives and expanded public participation process. UATS also hopes to reach disadvantaged groups through minority news media, present the plan on public access television and provide access to the Draft Plan through the Internet.

**This page is intentionally blank.**

# Draft 2025 Transportation Plan Projects

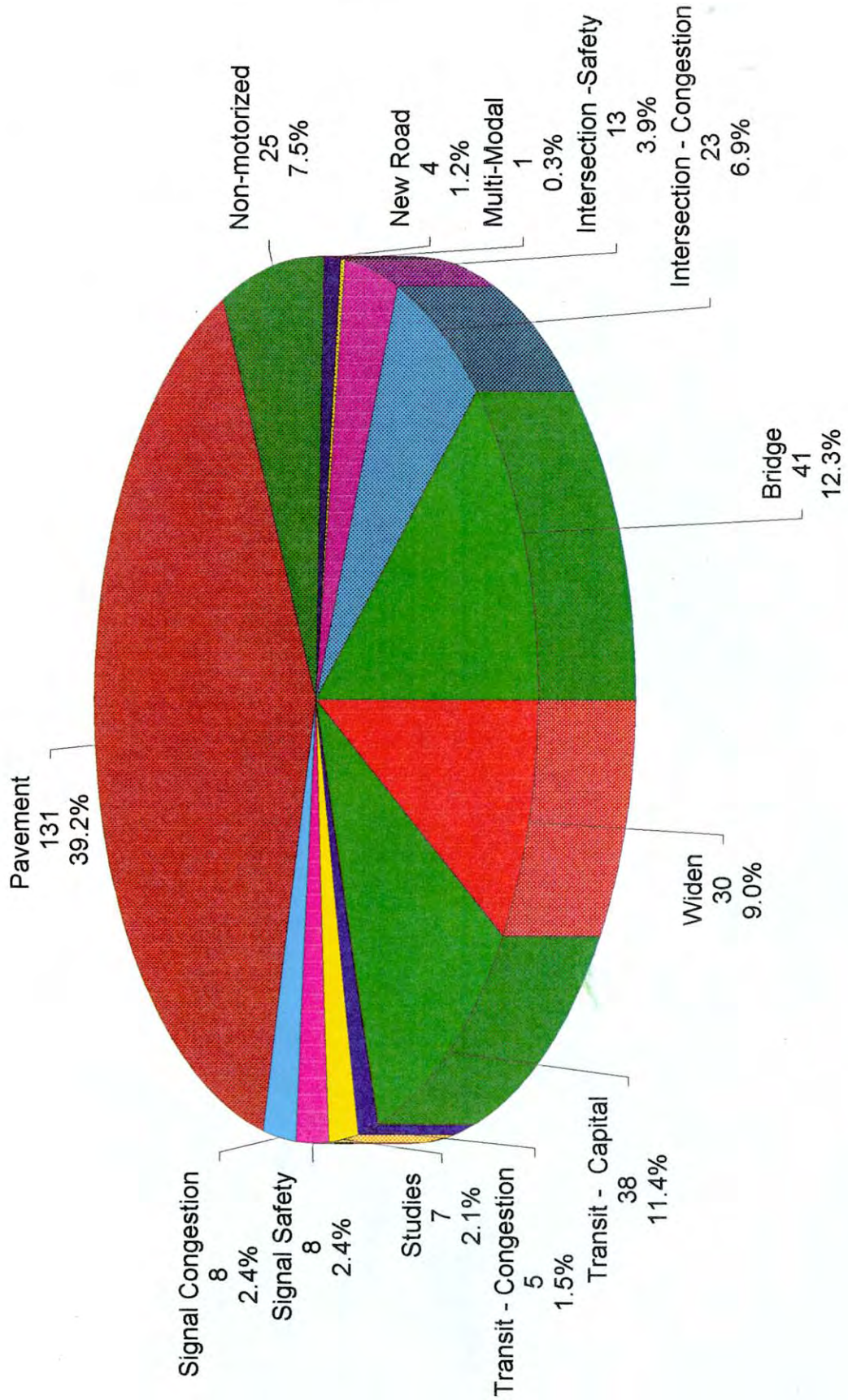


2025 Plan Projects	
	Corridor Study
	New Road
	Non-Motorized
	Pave Gravel Road
	Reconstruction
	Resurfacing
	Signal Interconnect
	Widen
	Other
2025 Plan Projects	
	Add Guardrail
	Add Turn Lanes
	Bridge Rehabilitation
	Bridge Replacement
	Bridge Widen, grade separation
	Intersection Improvement
	New On-ramp
	New Signal
	Non-Motorized Study
	Signal Improvement, Turn
	Signal Upgrade



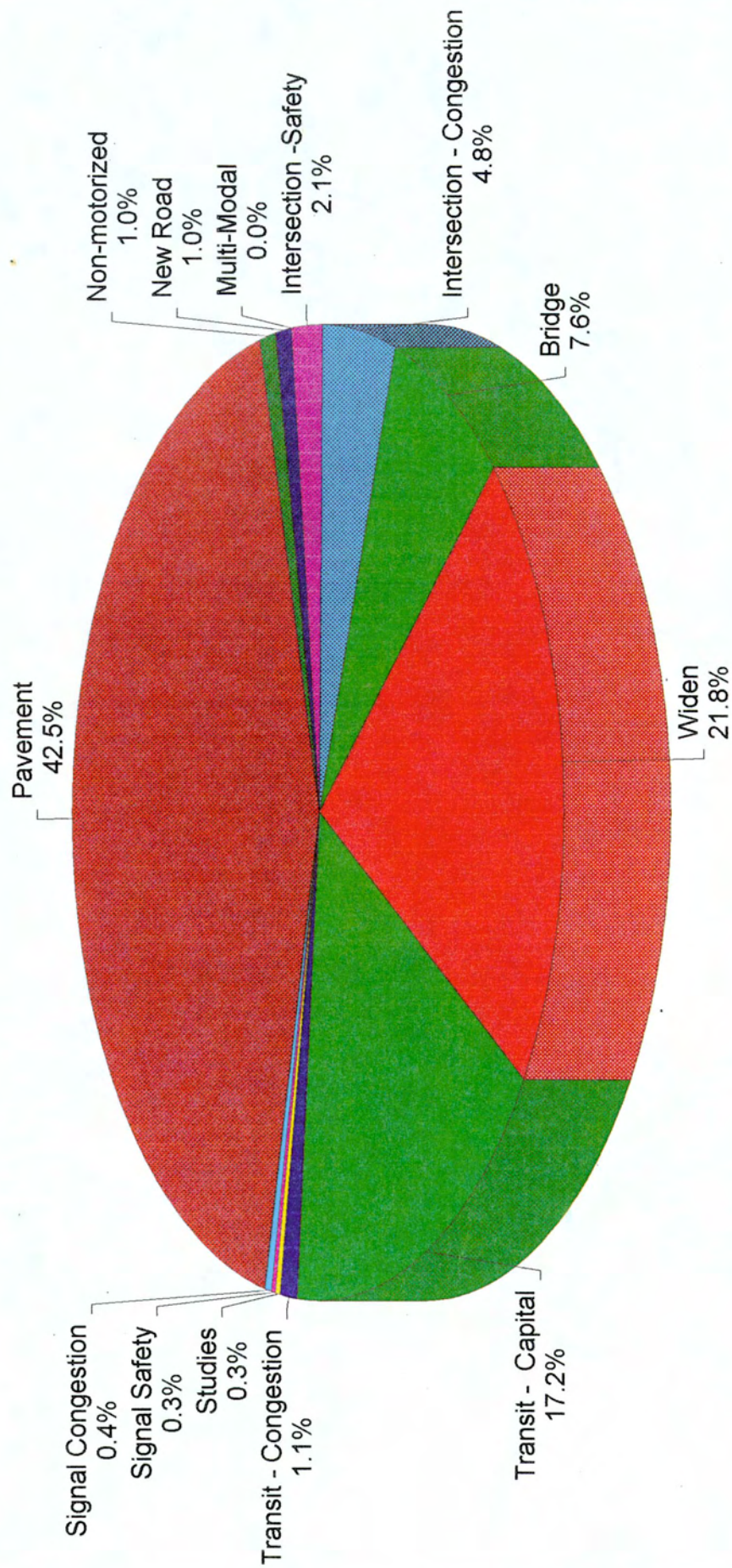
Annapolis Ypsilanti Urban Area  
 Transportation Study  
 10000 Annapolis Road  
 Annapolis, MD 21403-3610  
 (734) 994-3127

### Proposed Improvements By the Number of Improvements



Excludes the 12 Transit Operating Improvements

# Proposed Improvements By the Cost of the Improvements



Excludes the Transit Operating Improvements

The 2025 Transportation Plan for Washtenaw County is a vision of the county's transportation system through the year 2025. The transportation improvements in the first five years (2001-2005) of the Plan are considered firm commitments by the implementing Agencies. This means that the improvements in the first five years will be completed unless unforeseen circumstances prevent completion. The remaining years of the Plan are a vision of how the transportation system may develop based on the existing master and zoning plans of the cities, villages and townships of Washtenaw County and the current projections of available funds. The transportation improvements in the later years (2006-2025) represent current priorities for the future. The transportation plan is updated every three years and the priorities for the later years may change as conditions warrant.

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
1	Broadway	Depot St. & PCRR and over Huron River	Replace bridges	0.133	A	2001-2005	\$6,900	CRBRG	\$7,100	\$14,000	AAC
2	Brooks	Mixtwood to Sunset	Install non-motorized path	0.341	A	2001-2005			\$155	\$155	AAC
3	Catherine/Ann/Glen	Adjacent to U-M Medical Campus	Modifications to existing traffic circulation on city streets SW of medical campus	0	A	2001-2005			\$200	\$200	AAC
4	Citywide	City of Ann Arbor	Stop controlled intersections improvements	0	A	2001-2005			\$560	\$560	AAC
5	Citywide	City of Ann Arbor	Downtown and Corridor Safety Study	0	A	2001-2005			\$150	\$150	AAC
6	Citywide Transportation Plan Update	City of Ann Arbor	Macro-view master plan of the local Multi-Modal transportation issues	0	A	2001-2005			\$500	\$500	AAC
7	Dexter	Maple to Doty	Install non-motorized path	0.473	A	2001-2005			\$250	\$250	AAC
8	Dhu Varren	Omlesaad to Foxfire	Pave gravel road	0.23	A	2001-2005			\$400	\$400	AAC
9	Fifth Ave	Beakes to Huron	Resurface	0.331	A	2001-2005			\$157	\$157	AAC
10	Fourth Ave	Catherine to Huron	Resurface	0.133	A	2001-2005			\$84	\$84	AAC
11	Glendale	Jackson to Fair	Install non-motorized path	0.218	A	2001-2005			\$70	\$70	AAC
12	Green	Glazier Way to Baxter	Install non-motorized path	0.71	A	2001-2005			\$150	\$150	AAC
13	Huron Parkway	Plymouth to Baxter	Reconfigure boulevard islands due to Parke-Davis traffic	0.51	A	2001-2005			\$200	\$200	AAC
14	Huron Parkway	From 180 meters south of Huron River Dr, southerly 890 meters	Reconstruction	0.44	A	2001-2005	\$364	STPU	\$1,461	\$1,825	AAC
15	Ingalls	Kingsley to Huron	Resurface	0.256	A	2001-2005			\$119	\$119	AAC
16	Kingsley	State to Ingalls	Resurface	0.128	A	2001-2005			\$50	\$50	AAC
17	Liberty	Virginia to Seventh	Reconstruction	0.445	A	2001-2005	\$545	STPU	\$1,188	\$1,733	AAC
18	Liberty	Stadium to Virginia	Reconstruct and add center turn lane	0.568	A	2001-2005	\$354	STPU	\$912	\$1,266	AAC
19	Liberty	C L to 75' west of Maple	Reconstruction	0.57	A	2001-2005	\$500	STPU	\$300	\$800	AAC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
20	Maiden Lane	Plymouth to Wall	Install non-motorized path	0.142	A	2001-2005			\$93	\$93	AAC
21	Main	Stadium to Ann Arbor-Saline	Signal Interconnect	0.691	A	2001-2005			\$50	\$50	AAC
22	Maple	Miller to M-14	Reconstruction	0.426	A	2001-2005	\$500	STPU	\$500	\$1,000	AAC
23	Maple	Stadium Blvd to 200'S/Stadium	Resurface	0.04	A	2001-2005			\$20	\$20	AAC
24	Miller	Maple to M-14	Install non-motorized path	0.398	A	2001-2005			\$185	\$185	AAC
25	Nichols Arboretum Non-motorized linkage	Nichols Arboretum to Gallup Park	Construct non-motorized tunnel under railroad	0	A	2001-2005	\$225	STPE	\$225	\$450	AAC
26	Nixon	@ Huron Parkway	Install new signal	0	A	2001-2005			\$80	\$80	AAC
27	North University WB	State to Fletcher	Resurface	0.199	A	2001-2005			\$87	\$87	AAC
28	Oakbrook	Harbor House to Boardwalk	New Street	0.5	A	2001-2005			\$2,116	\$2,116	AAC
29	Packard	@ Turnberry	Install new signal	0	A	2001-2005			\$80	\$80	AAC
30	Packard	LaSalle to Cherrytree	Install non-motorized path	0.568	A	2001-2005			\$98	\$98	AAC
31	Packard	State to Sylvan	Reconstruction	0.365	A	2001-2005	\$640	STPU	\$610	\$1,250	AAC
32	Packard	Sylvan to Stadium	Reconstruction	0.559	A	2001-2005	\$880	STPU	\$820	\$1,700	AAC
33	Packard Rd	Eisenhower to Stadium	Signal Interconnect	1.46	A	2001-2005	\$223	CMAQ	\$0	\$223	AAC
34	Pauline	Maple to Stadium	Resurface	0.53	A	2001-2005			\$260	\$260	AAC
35	Phoenix Drive	Varsity to Varsity	Resurface	0.398	A	2001-2005			\$150	\$150	AAC
36	Platt	Lorraine to Ellsworth (I-94)	Install non-motorized path	0.417	A	2001-2005			\$120	\$120	AAC
37	Plymouth	@ Huron Parkway	Add right-turn lane on eastbound Plymouth	0.1	A	2001-2005	\$100	CMAQ	\$100	\$200	AAC
38	Plymouth	@ Commonwealth	Install new signal	0	A	2001-2005			\$80	\$80	AAC
39	Plymouth	@ Traverwood	Install new signal	0	A	2001-2005			\$80	\$80	AAC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
40	Research Park	State to Research Park	Resurface	0.95	A	2001-2005			\$370	\$370	AAC
41	S Main Street Non-motorized Path/Malletts Creek Drain Crossing	Over Malletts Creek	Construct non-motorized Crossing	0	A	2001-2005	\$96	STPE	\$24	\$120	AAC
42	Scio Church Road	Maple to Covington	Install non-motorized path	0.208	A	2001-2005	\$147	STPE	\$127	\$274	AAC
43	SCOOTs	City of Ann Arbor	Upgrade of master signal control system	0	A	2001-2005	\$1,600	CMAQ	\$0	\$1,600	AAC
44	Seventh	Stadium to Scio Church	Install non-motorized path	0.644	A	2001-2005			\$250	\$250	AAC
45	Seventh	Scio Church to Miller	Signal Interconnect	2.22	A	2001-2005	\$339	CMAQ	\$0	\$339	AAC
46	Sidewalk Ramps	City of Ann Arbor, DDA District	Curb Ramp Installation	0	A	2001-2005			\$114	\$114	AAC
47	South University	S State to Washtenaw Ave	Resurface	0.502	A	2001-2005			\$239	\$239	AAC
48	Stadium	Pauline to Liberty	Reconstruction	0.511	A	2001-2005	\$1,464	STPU	\$1,331	\$2,795	AAC
49	Stadium	Liberty to Abbott	Reconstruction	0.426	A	2001-2005	\$1,188	STPU	\$1,514	\$2,702	AAC
50	Stone School	Eisenhower to I-94	Install non-motorized path	0.464	A	2001-2005			\$75	\$75	AAC
51	Various Downtown Streets	Downtown Area	Reconstruction/Resurface downtown streets	7.5	A	2001-2005			\$3,000	\$3,000	AAC
52	Various Locations	City of Ann Arbor	Signal System	0	A	2001-2005			\$180	\$180	AAC
53	Various Streets	City of Ann Arbor	Reconstruction/Resurface local streets	37.5	A	2001-2005			\$13,964	\$13,964	AAC
54	Various Streets	City of Ann Arbor	Pavement Rehabilitation	50	A	2001-2005			\$1,250	\$1,250	AAC
55	Washtenaw	@ Palmer	Install new signal	0	A	2001-2005			\$90	\$90	AAC
56	AATA	Transit Centers	Facility Upgrade	0		2001-2005	\$400	5307	\$100	\$500	AATA
57	Contracted Service	AATA Service Area	Capital Cost of Contracting	0	A	2001-2005	\$800	5307	\$200	\$1,000	AATA

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
58	Downtown Trip Reduction Program	AATA Service Area	Trip Reduction for trips destined for Ann Arbor City DDA area	0	A	2001-2005	\$240	CMAQ	\$60	\$300	AATA
59	Facilities	AATA Service Area	Passenger Facilities	0	A	2001-2005	\$160	5307	\$40	\$200	AATA
60	New Service	Saline City and Ypsilanti Township	New routes to Saline and Ypsilanti Township	0	A	2001-2005	\$920	CMAQ	\$230	\$1,150	AATA
61	Operating Assistance	AATA Service Area	Transit Service	0	A	2001-2005	\$4,800	5307	\$97,697	\$102,497	AATA
62	Operations	AATA Service Area	Preventative Maintenance	0	A	2001-2005	\$2,000	5307	\$500	\$2,500	AATA
63	Operations	AATA Service Area	Operations Support Equipment & Vehicles	0	A	2001-2005	\$1,256	5307	\$314	\$1,570	AATA
64	Park and Ride	Main Street Corridor	Construct Park and Ride Lot(s)	0	A	2001-2005	\$900	5307	\$300	\$1,200	AATA
65	Planning	AATA Service Area	Planning	0	A	2001-2005	\$1,600	5307	\$400	\$2,000	AATA
66	Replace Buses	AATA Service Area	Purchase 14 Small Replacement Buses	0	A	2001-2005	\$2,520	5307	\$630	\$3,150	AATA
67	Replace Buses	AATA Service Area	Purchase 13 Large Replacement Buses	0	A	2001-2005	\$2,860	5307	\$715	\$3,575	AATA
68	Service Expansion	AATA Service Area	Purchase 1 Small Expansion Bus	0	A	2001-2005	\$220	5307	\$55	\$275	AATA
69	Service Expansion	AATA Service Area	Purchase 6 Large Expansion Buses	0	A	2001-2005	\$1,320	5307	\$330	\$1,650	AATA
70	University of Michigan Unlimited Access	AATA Service Area	Unlimited access to AATA service for University students, faculty and staff	0	A	2001-2005	\$530	CMAQ	\$270	\$800	AATA
71	Dexter-Ann Arbor	@ Dan Hoey Rd	Turn Lanes	0	A	2001-2005	\$100	CMAQ	\$25	\$125	DV
72	Forest St Curb & Gutter	Jeffords to Baker	Streetscape Improvements, Sidewalks, Street Lights	0.22	A	2001-2005	\$128	STPE	\$32	\$160	DV
73	Various Streets	Village wide	Resurface	0.5	A	2001-2005	\$96	STPU	\$104	\$200	DV
74	Village Wide	Village of Dexter	Non-motorized Path construction	3	A	2001-2005	\$240	STPE	\$60	\$300	DV
75	I-94	EB I-94BL Ramp Under Jackson Ave	Beam End Repair, Paint, Overlay	0	A	2001-2005	\$340	BHI	\$85	\$425	MDOT
76	I-94	@ Baker Road	New EB On Ramp + Interchange Improvements	0	A	2001-2005	\$6,800	IM	\$1,700	\$8,500	MDOT

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
77	I-94	@ Zeeb Road	New EB On Ramp + Interchange Improvements	0	A	2001-2005	\$7,840	IM	\$1,960	\$9,800	MDOT
78	M-14	I-94 to US-23BR	Rubblize & Resurface	3.87	A	2001-2005	\$3,183	NH	\$796	\$3,979	MDOT
79	M-52	Old US-12 to Sibley	Mill & Resurface	1.23		2001-2005	\$869	STP	\$193	\$1,062	MDOT
80	US-12	Saline to Munger	Widen/Interchange Upgrade	6.5	A	2001-2005	\$30,197	NH	\$12,804	\$43,001	MDOT
81	US-12	Austin to Saline River	Widen for Turn Lanes	0	A	2001-2005	\$2,000	CMAQ	\$500	\$2,500	MDOT
82	US-23	SB over Conrail & the Huron River	Beam Repair, Railing Replacement & Overlay	0	A	2001-2005	\$620	BHN	\$155	\$775	MDOT
83	US-23	Under Eight Mile Road	Replace Structure	0		2001-2005	\$2,000	BRN	\$500	\$2,500	MDOT
84	US-23	NB over Conrail & the Huron River	Beam Repair, Railing Replacement & Overlay	0	A	2001-2005	\$620	BHN	\$155	\$775	MDOT
85	Access Study	N Ann Arbor Area (M14)	Study (TEA-21 DEMO)	0	A	2001-2005	\$750	HPP	\$188	\$938	MDOT/AAC
86	Clark	Maple to Harris	Reconstruction	0.32	A	2001-2005			\$70	\$70	SC
87	Henry	Ann Arbor to Davenport	Reconstruction	0.28	A	2001-2005			\$100	\$100	SC
88	Industrial	Michigan to Woodland	Reconstruction	1	A	2001-2005			\$350	\$350	SC
89	Maple	Bemis to Woodland	Minor widen, improve intersections, signal upgrade	0.41	A	2001-2005	\$400	STPU	\$100	\$500	SC
90	Maple	Clark to Maplewood	Reconstruction	0.9	A	2001-2005			\$500	\$500	SC
91	Saline-Waterworks	Ann Arbor to Heritage	Reconstruct and drainage	0.5	A	2001-2005			\$120	\$120	SC
92	Various Local Streets	City of Saline	Rehabilitate local streets	2.5	A	2001-2005			\$350	\$350	SC
93	Woodland	Tefft Ct. to Textile	Reconstruction	0.61	A	2001-2005			\$300	\$300	SC
94	Ann Arbor-Saline	@ Waters/Lohr	Widen for dual turn lanes	0		2001-2005	\$424	CMAQ	\$266	\$690	WCRC
95	Bell	Over Huron River	Bridge Rehabilitation	0		2001-2005			\$300	\$300	WCRC
96	Bemis	Stony Creek to Whittaker	Reconstruct to 2 lanes	2.2	A	2001-2005			\$2,200	\$2,200	WCRC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
97	Bemis	Carpenter to Stony Creek	Reconstruct to 2 lanes	1.8	A	2001-2005			\$1,800	\$1,800	WCRC
98	Carpenter	US-12 to Ellsworth	Widen to 4 lanes with 5 lanes at intersections	1.5		2001-2005	\$2,265	STPU	\$735	\$3,000	WCRC
99	Dexter Ann Arbor	@ Wagner	Signal upgrade & turn lanes	0	A	2001-2005			\$500	\$500	WCRC
100	Dixboro	Huron River to Geddes	Widen to 4 lanes with 5 lanes at intersections	0.8	A	2001-2005	\$2,540	STPU	\$635	\$3,175	WCRC
101	Dixboro	@ Huron River Drive	Signal upgrade & turn lanes	0	A	2001-2005	\$560	CMAQ	\$460	\$1,020	WCRC
102	Dixboro	Over Huron River	Widen Bridge & Grade separate	0	A	2001-2005	\$4,750	CRBRG	\$250	\$5,000	WCRC
103	Dixboro	@ Geddes	Signal upgrade & turn lanes	0	A	2001-2005	\$504	CMAQ	\$336	\$840	WCRC
104	East Delhi	Over Huron River	Bridge Replacement	0	A	2001-2005	\$950	CRBRG	\$50	\$1,000	WCRC
105	Ford Boulevard	@ Russell	Signal upgrade	0		2001-2005	\$200	STPS	\$50	\$250	WCRC
106	Foster (Maple)	Over Huron River	Bridge Replacement	0	A	2001-2005	\$1,400	CRBRG	\$250	\$1,650	WCRC
107	Geddes	West of Superior	Culvert extension & guardrail	0.2	A	2001-2005	\$200	STPS	\$50	\$250	WCRC
108	Geddes	@ Superior	Intersection realignment	0	A	2001-2005	\$400	STPS	\$100	\$500	WCRC
109	Golfside	@ Packard	Signal upgrade	0	A	2001-2005	\$80	STPS	\$20	\$100	WCRC
110	Gotfredson	M-14 to Territorial & from 5 Mile to 6 Mile	Reconstruct to 2 lanes	1.81		2001-2005	\$1,000	EDFA	\$0	\$1,000	WCRC
111	Gotfredson	Territorial to 5 Mile	Construct new 2 lane road	1.12		2001-2005	\$1,600	EDFA	\$0	\$1,600	WCRC
112	Hitchingham	Bemis to Stony Creek	Reconstruct to 2 lanes	2.1	A	2001-2005			\$3,000	\$3,000	WCRC
113	Hitchingham	Over Buck Creek	Bridge Replacement	0		2001-2005	\$380	CRBRG	\$20	\$400	WCRC
114	Jackson Phase II	Honey Creek to Myrtle	Widen to 4 Lane Blvd	1	A	2001-2005	\$3,450	DEMO	\$2,550	\$6,000	WCRC
115	Judd Road/AARR	Over Ann Arbor Railroad	Bridge Replacement	0		2001-2005	\$600	CRBRG	\$180	\$780	WCRC
116	Main	@Barker	Signal upgrade and turn lanes	0		2001-2005			\$300	\$300	WCRC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
117	Main	E Shore to 8 Mile	Pavement Rehabilitation	0.8		2001-2005	\$720	STPR	\$180	\$900	WCRC
118	Main, Village of Dexter	Over Mill Creek	Widen and replace Bridge	0	A	2001-2005	\$1,140	CRBRG	\$60	\$1,200	WCRC
119	Merritt Road	@Whittaker Road	Signal upgrade	0	A	2001-2005			\$500	\$500	WCRC
120	Nixon	M-14 to Pontiac Trail	Pave gravel road	1.7		2001-2005	\$520	STPR	\$130	\$650	WCRC
121	Oakville Milan	Milan City to .5 E of Gooding	Reconstruct to 2 lanes	2		2001-2005	\$500	EDFD	\$1,500	\$2,000	WCRC
122	Packard	Golfside to Ypsilanti City	Pavement Rehabilitation	1	A	2001-2005	\$240	STPU	\$60	\$300	WCRC
123	Packard	Ann Arbor City to Golfside	Pavement Rehabilitation	1.1	A	2001-2005	\$264	STPU	\$66	\$330	WCRC
124	Pleasant Lake	M-52 to Fletcher	Pavement Rehabilitation	3.3		2001-2005	\$2,000	EDFD	\$400	\$2,400	WCRC
125	Plymouth	M-153 to Curtis	Pavement Rehabilitation	2.3		2001-2005	\$284	STPR	\$409	\$693	WCRC
126	Rawsonville	Talladay to Judd	Reconstruct road	1		2001-2005	\$400	STPR	\$100	\$500	WCRC
127	State	Morgan to Ellsworth	Widen to 5 lanes, Curb and gutter	1.1	A	2001-2005	\$2,000	EDFA	\$440	\$2,440	WCRC
128	Tyler	US-12 to Wiard	Pavement Rehabilitation	1	A	2001-2005			\$1,000	\$1,000	WCRC
129	Various Culverts	Various Locations County wide	Replace 20 Culverts	0		2001-2005			\$500	\$500	WCRC
130	Various Locations, Countywide	50 miles of County Roads	Pavement Rehabilitation	50		2001-2005			\$2,500	\$2,500	WCRC
131	Wagner	@ Liberty	Signal & turn lanes	0	A	2001-2005	\$400	STPU	\$300	\$700	WCRC
132	Wagner	@ Scio Church	Signal & turn lanes	0	A	2001-2005	\$500	CMAQ	\$345	\$845	WCRC
133	Whittaker	@Willis	Signal upgrade & turn lanes	0		2001-2005			\$500	\$500	WCRC
134	Whittaker	@Textile	Signal upgrade & turn lanes	0	A	2001-2005			\$500	\$500	WCRC
135	Whittaker	@Huron River Drive	Signal & turn lanes	0	A	2001-2005	\$43	CMAQ	\$10	\$53	WCRC
136	Wilbur	Over River Raisin	Bridge Replacement	0		2001-2005	\$760	CRBRG	\$40	\$800	WCRC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
137	Zeeb	Park to Jackson	Widen to 4 lanes with 5 lanes at the intersections	1	A	2001-2005			\$1,500	\$1,500	WCRC
138	Congress	Mansfield to Michigan	Pavement/curb rehab, improve Michigan intersection	0.78	A	2001-2005	\$120	STPU	\$30	\$150	YC
139	First	Michigan to Harriet	Pavement and curb rehabilitation	0.33	A	2001-2005	\$160	STPU	\$40	\$200	YC
140	Grove	Emerick to Michigan	Pavement/curb rehab, improve Emerick intersection	0.8	A	2001-2005	\$320	STPU	\$80	\$400	YC
141	Michigan Non-Motorized Link Study	US-12 at Huron River	Study to evaluate linkage between Riverside Pk and Water Street area across US 12	0	A	2001-2005	\$36	STPE	\$9	\$45	YC
142	Michigan Signal Interconnect	Hamilton to Hewitt	Signal interconnect	2.52	A	2001-2005	\$456	CMAQ	\$0	\$456	YC
143	N. Campus Corridor Non-Motorized Path	Hewitt to LeForge	Non-motorized path and scenic overlook	1.4	A	2001-2005	\$396	STPE	\$99	\$495	YC
144	Oakwood	EMU Oakwood Lot to Huron River Dr	Widen to 3 lanes. Left lane at Huron River Dr	0.46	A	2001-2005	\$400	STPU	\$100	\$500	YC
145	River Corridor Pathways	Riverside and Frog Island Parks	Non-motorized path redevelopment	1.04	A	2001-2005	\$60	STPE	\$15	\$75	YC
146	Riverside Plaza	Cross at Huron	Pedestrian plaza entry	0	A	2001-2005	\$180	STPE	\$45	\$225	YC
147	Spring Street Bridge	Over Huron River	Replace surface, railing repairs, misc. repairs.	0.04	A	2001-2005	\$160	STPU	\$40	\$200	YC
148	Summit	Michigan to Cross	Rehab, minor widening from Michigan to Sheridan	0.59	A	2001-2005	\$200	STPU	\$50	\$250	YC
149	Eisenhower	Over AA Railroad	Rehabilitate bridge	0.03	A	2006-2010			\$375	\$375	AAC
150	Eisenhower	Boardwalk to Stone School	Reconstruction	0.805	A	2006-2010	\$1,500	STPU	\$1,500	\$3,000	AAC
151	Fuller	Fuller Ct to Huron Pkwy	Resurface	0.67	A	2006-2010	\$400	STPU	\$400	\$800	AAC
152	Geddes	US-23 to Earhart	Signal Interconnect	0.313	A	2006-2010			\$100	\$100	AAC
153	Nixon	Dhu Varren to Huron Pkwy	Add Center Turn Lane	0.89	A	2006-2010	\$500	STPU	\$500	\$1,000	AAC
154	Pontiac Trail	@ Barton	Improve Intersection	0	A	2006-2010			\$250	\$250	AAC
155	Stadium	Main to White	Resurface	0.606	A	2006-2010	\$750	STPU	\$750	\$1,500	AAC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
156	Stadium	Over RR	Replace Bridge	0.02	A	2006-2010	\$1,350	CRBRG	\$900	\$2,250	AAC
157	Stadium	Over State Street	Replace Bridge	0.011	A	2006-2010	\$900	CRBRG	\$600	\$1,500	AAC
158	State	Eisenhower to Ellsworth	Corridor Study	0	A	2006-2010			\$100	\$100	AAC
159	Traver	Leslie to Placid Way	Pave Gravel Road	0.8	A	2006-2010			\$1,000	\$1,000	AAC
160	Treatment Plant	Over Huron River	Rehabilitate bridge	0	A	2006-2010			\$250	\$250	AAC
161	Various Downtown Streets	Downtown Area	Reconstruct/Resurface downtown streets	7.5	A	2006-2010			\$5,000	\$5,000	AAC
162	Various Local Streets	City of Ann Arbor	Reconstruction/Resurface local streets	37.5	A	2006-2010			\$20,000	\$20,000	AAC
163	Various Locations	City of Ann Arbor	Pavement Rehabilitation	50	A	2006-2010			\$1,250	\$1,250	AAC
164	Various Locations	City Wide	3 Intersection Improvement Projects for Congestion	0	A	2006-2010	\$1,000	CMAQ	\$0	\$1,000	AAC
165	Various Locations	City Wide	2 Miles of Major Road Reconstruction	2	A	2006-2010	\$2,901	STPU	\$3,000	\$5,901	AAC
166	Bus Replacements	AATA Service Area	Purchase 35 Large Replacement Buses	0	A	2006-2010	\$7,700	5307	\$1,925	\$9,625	AATA
167	Bus Replacements	AATA Service Area	Purchase 16 Small Replacement Buses	0	A	2006-2010	\$2,880	5307	\$720	\$3,600	AATA
168	Contracted Service	AATA Service Area	Capital Cost of Contracting	0	A	2006-2010	\$800	5307	\$200	\$1,000	AATA
169	Facilities	AATA Service Area	Passenger Facilities	0	A	2006-2010	\$480	5307	\$120	\$600	AATA
170	Operating Assistance	AATA Service Area	Transit Service	0	A	2006-2010	\$4,800	5307	\$105,366	\$110,166	AATA
171	Operations	AATA Service Area	Preventative Maintenance	0	A	2006-2010	\$2,000	5307	\$500	\$2,500	AATA
172	Operations and Support	AATA Service Area	Purchase Operation Support Equip & Vehicles	0	A	2006-2010	\$1,920	5307	\$480	\$2,400	AATA
173	Park and Ride	Various Locations	Construct Park and Ride Lot	0	A	2006-2010	\$1,600	5307	\$400	\$2,000	AATA
174	Planning	AATA Service Area	Planning	0	A	2006-2010	\$1,600	5307	\$400	\$2,000	AATA
175	Service Expansion	AATA Service Area	Purchase 4 Small Expansion Buses and 4 large buses	0	A	2006-2010	\$1,600	5307	\$400	\$2,000	AATA

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
176	Dexter-Ann Arbor Rd/Mill Creek M.S. Signal	Dexter-Ann Arbor Rd at Mill Creek M.S. and Meadow View Dr	Install Flashing Light at Crosswalk	0	A	2006-2010	\$18	STPS	\$4	\$22	DV
177	Various Locations	Village of Dexter	Resurface	0.5	A	2006-2010	\$90	STPU	\$110	\$200	DV
178	Various Paths	Village of Dexter	Install non-motorized paths	3	A	2006-2010	\$240	STPE	\$60	\$300	DV
179	US-23	W Junction M-14 to N Territorial	Reconstruct and widen from 2 to 3 lanes	4.6	A	2006-2010	\$29,400	NH	\$7,360	\$36,760	MDOT
180	Various locations	County wide	Signals, turn lanes, shoulders	0		2006-2010	\$6,469	STPS	\$1,617	\$8,086	MDOT
181	Various Locations	County wide	Pavement Rehabilitation	0		2006-2010	\$26,676	IM	\$6,669	\$33,345	MDOT
182	Various Locations	County wide	Reconstruct/Rehabilitate bridges	0		2006-2010	\$10,170	BHI/BHN/BRN	\$2,543	\$12,713	MDOT
183	Ann Arbor	Bennett to Tower	Reconstruction	0.5	A	2006-2010	\$427	STPU	\$103	\$530	SC
184	Ann Arbor	Michigan to Willis	Reconstruction	0.6	A	2006-2010			\$600	\$600	SC
185	Mills	Bennett to Michigan	Reconstruction	0.5	A	2006-2010			\$500	\$500	SC
186	Old Creek	Henry to Willis	Reconstruction	0.46	A	2006-2010			\$900	\$900	SC
187	Various Local Streets	City of Saline 2.5 miles	Rehabilitate local streets	2.5	A	2006-2010			\$500	\$500	SC
188	Various Streets	City of Saline 2.5 miles	Rehabilitate major streets	2.5	A	2006-2010	\$400	STPU	\$450	\$850	SC
189	Woodland	Ann Arbor to Maple	Reconstruction	0.72	A	2006-2010			\$1,000	\$1,000	SC
190	Ann Arbor-Saline	Maple to Oak Valley	Widen to 4 lanes with 5 lanes at the intersections	0.7	A	2006-2010			\$1,400	\$1,400	WCRC
191	Austin	Over Bauer Drain	Bridge Replacement	0		2006-2010	\$380	CRBRG	\$20	\$400	WCRC
192	Bemis	Whittaker to Rawsonville	Reconstruct to 2 lanes	2	A	2006-2010			\$2,000	\$2,000	WCRC
193	Carpenter	Packard to Washtenaw	Pavement Rehabilitation	1	A	2006-2010	\$1,760	STPU	\$440	\$2,200	WCRC
194	Dexter-Ann Arbor	@ Zeeb	Signal & turn lanes	0	A	2006-2010	\$400	CMAQ	\$255	\$655	WCRC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
195	Dexter-Pinckney	Over Portage Lake Canal	Bridge Replacement	0		2006-2010	\$420	CRBRG	\$115	\$535	WCRC
196	Geddes	Dixboro to County line	Pavement Rehabilitation	7	A	2006-2010	\$968	STPU	\$242	\$1,210	WCRC
197	Grove	McCartney to Rawsonville	Pavement Rehabilitation	1	A	2006-2010			\$300	\$300	WCRC
198	Grove	Ypsilanti City to McCartney	Pavement Rehabilitation	2.2	A	2006-2010			\$660	\$660	WCRC
199	Holmes	Ford Blvd to US-12BR	Pavement Rehabilitation	1.6	A	2006-2010	\$1,280	STPU	\$320	\$1,600	WCRC
200	Holmes	Ypsilanti City to Ford Blvd	Pavement Rehabilitation	1.2	A	2006-2010	\$960	STPU	\$240	\$1,200	WCRC
201	Jackson	Over Mill Creek	Bridge Replacement	0		2006-2010	\$255	CRBRG	\$127	\$382	WCRC
202	McGregor	Over Portage Lake Outlet	Bridge Rehabilitation	0		2006-2010			\$200	\$200	WCRC
203	Parker	Pleasant Lake to Scio Church Rd	Reconstruct to 2 lanes	3		2006-2010			\$6,000	\$6,000	WCRC
204	Parker	Scio Church to Jackson	Reconstruct to 2 lanes	2.5	A	2006-2010			\$5,000	\$5,000	WCRC
205	Pleasant Lake	Reno to Steinbach	Reconstruct to 2 lanes	2.6		2006-2010	\$2,100	EDFD	\$500	\$2,600	WCRC
206	Plymouth	Dixboro to M153	Pavement Rehabilitation	2.2	A	2006-2010	\$528	EDFF	\$132	\$660	WCRC
207	Plymouth	Curtis to Napier	Pavement Rehabilitation	2.3		2006-2010	\$550	STPR	\$138	\$688	WCRC
208	Plymouth	Over Fleming Creek	Bridge Replacement	0	A	2006-2010	\$400	CRBRG	\$120	\$520	WCRC
209	Rawsonville	Judd to Willis	Reconstruct to 2 lanes	1		2006-2010	\$800	STPR	\$200	\$1,000	WCRC
210	Rosebolt	Over Paint Creek	Bridge Replacement	0		2006-2010	\$380	CRBRG	\$20	\$400	WCRC
211	Shield	Over Mill Creek	Bridge Replacement	0	A	2006-2010	\$380	CRBRG	\$20	\$400	WCRC
212	State	Textile to Morgan	Widen to 5 lanes, Curb and gutter	1	A	2006-2010			\$2,000	\$2,000	WCRC
213	Talladay	Over Paint Creek	Bridge Replacement	0		2006-2010	\$380	CRBRG	\$20	\$400	WCRC
214	Tyler	Over Willow Run Drain	Bridge Replacement	0		2006-2010	\$250	CRBRG	\$25	\$275	WCRC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
215	Various Culverts in Washtenaw	Various Locations County wide	Replace 20 Culverts	0		2006-2010			\$500	\$500	WCRC
216	Various locations	County wide	Signal improvements	0	A	2006-2010	\$400	STPS	\$100	\$500	WCRC
217	Various Locations in Washtenaw	50 miles of County Roads	Pavement Rehabilitation	50		2006-2010			\$2,500	\$2,500	WCRC
218	Wallace	Over River Raisin	Bridge Replacement	0		2006-2010	\$500	CRBRG	\$500	\$1,000	WCRC
219	Whittaker	@ Stony Creek	Signal upgrade & turn lanes	0	A	2006-2010	\$400	CMAQ	\$280	\$680	WCRC
220	Wiard	Over Airport	Bridge Replacement	0	A	2006-2010	\$380	CRBRG	\$20	\$400	WCRC
221	Willis	Over Paint Creek	Bridge Replacement	0		2006-2010	\$380	CRBRG	\$20	\$400	WCRC
222	Forest	Prospect to Osband	Rehabilitate pavement.	0.25	A	2006-2010	\$160	STPU	\$40	\$200	YC
223	Harriet	Hamilton to Huron	Rehabilitate pavement.	0.17	A	2006-2010	\$80	STPU	\$20	\$100	YC
224	Holmes	River to Prospect	Pavement replacement and minor widening.	0.3	A	2006-2010	\$240	STPU	\$60	\$300	YC
225	Huron/Huron River Dr	Forest to W City Limit	Pavement and curb rehabilitation. Signal upgrade.	1.87	A	2006-2010	\$380	STPU	\$95	\$475	YC
226	Lowell	Huron River Dr to St. Johns	Rehabilitate pavement.	0.19	A	2006-2010	\$80	STPU	\$20	\$100	YC
227	Mansfield	Cross to S City Limit	Rehab. Add c&g from Sherman to S City limit.	0.43	A	2006-2010	\$240	STPU	\$60	\$300	YC
228	Washtenaw	Hamilton to Huron	Pavement and curb rehabilitation.	0.22	A	2006-2010	\$80	STPU	\$20	\$100	YC
229	Ellsworth	State to Platt	Corridor Study	0	A	2011-2015			\$200	\$200	AAC
230	Geddes	Huron Parkway to Dixboro	Corridor Study	0	A	2011-2015			\$100	\$100	AAC
231	Maiden Lane	Over the Huron River	Rehabilitate bridge	0.05	A	2011-2015			\$327	\$327	AAC
232	Nichols	Over Cons. RR	Rehabilitate bridge	0.028	A	2011-2015			\$350	\$350	AAC
233	Scio Church	Seventh to Main	Add Center Lane	0.568	A	2011-2015			\$500	\$500	AAC
234	Various Downtown Streets	Downtown Area	Reconstruction/Resurface downtown streets	7.5	A	2011-2015			\$5,000	\$5,000	AAC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
235	Various Local Streets	City of Ann Arbor	Reconstruction/Resurface local streets	37.5	A	2011-2015			\$20,000	\$20,000	AAC
236	Various Locations	City Wide	1 Intersection Improvement Projects for Safety	0	A	2011-2015	\$300	STPS	\$0	\$300	AAC
237	Various Locations	City Wide	3 Intersection Improvement Projects for Congestion	0	A	2011-2015	\$1,000	CMAQ	\$0	\$1,000	AAC
238	Various Locations	City Wide	3 Non-Motorized Improvement Projects	0	A	2011-2015	\$500	STPE	\$500	\$1,000	AAC
239	Various Locations	City Wide	4 Miles of Major Road Reconstruction	4	A	2011-2015	\$5,650	STPU	\$6,000	\$11,650	AAC
240	Various Streets	City of Ann Arbor	Pavement Rehabilitation	50	A	2011-2015			\$1,250	\$1,250	AAC
241	Bus Replacements	AATA Service Area	Purchase 16 Small Replacement Buses	0		2011-2015	\$2,880	5307	\$720	\$3,600	AATA
242	Bus Replacements	AATA Service Area	Purchase 21 Large Replacement Buses	0	A	2011-2015	\$4,620	5307	\$1,155	\$5,775	AATA
243	Contracted Service	AATA Service Area	Capital Cost of Contracting	0	A	2011-2015	\$800	5307	\$200	\$1,000	AATA
244	Facilities	AATA Service Area	Passenger Facilities	0	A	2011-2015	\$560	5307	\$140	\$700	AATA
245	Operating Assistance	AATA Service Area	Transit Service	0	A	2011-2015	\$4,800	5307	\$106,093	\$110,893	AATA
246	Operations	AATA Service Area	Preventative Maintenance	0	A	2011-2015	\$2,000	5307	\$500	\$2,500	AATA
247	Operations Support	AATA Service Area	Operations Support Equipment & Vehicles	0	A	2011-2015	\$1,920	5307	\$480	\$2,400	AATA
248	Park And Ride Lot	Various Locations	Construct Park and Ride Lot	0	A	2011-2015	\$1,200	5307	\$300	\$1,500	AATA
249	Planning	AATA Service Area	Planning	0	A	2011-2015	\$1,600	5307	\$400	\$2,000	AATA
250	Service Expansion	AATA Service Area	Purchase 8 Expansion Buses (4 Small and 4 Large)	0	A	2011-2015	\$1,600	5307	\$400	\$2,000	AATA
251	Non-motorized Paths Phase 4	Alpine St: Main to Fifth	Non-motorized Path design & construction	0.182	A	2011-2015	\$26	STPE	\$7	\$33	DV
252	Various Streets	Village wide	Resurface	3	A	2011-2015	\$84	STPU	\$112	\$196	DV
253	Various locations	County wide	Signals, turn lanes, shoulders	0		2011-2015	\$6,335	STPS	\$1,584	\$7,919	MDOT
254	Various Locations	County wide	Reconstruct/Rehabilitate bridges	0		2011-2015	\$20,340	BHI/BHN/BRN	\$5,085	\$25,425	MDOT

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
255	Various Locations	County wide	Pavement Rehabilitation	0		2011-2015	\$26,676	IM	\$6,669	\$33,345	MDOT
256	Various Local Streets	City of Saline	Rehabilitate local streets	2.5	A	2011-2015			\$500	\$500	SC
257	Various Streets	City of Saline	Rehabilitate major streets	2.5	A	2011-2015	\$400	STPU	\$410	\$810	SC
258	Carpenter	Textile Rd to US-12	Reconstruct to 5 lanes	0.5	A	2011-2015			\$1,000	\$1,000	WCRC
259	Jackson	Baker to Parker	Widen to 4 Lane Blvd	1	A	2011-2015			\$4,000	\$4,000	WCRC
260	Jackson Phase III	Honey Creek to Baker	Widen to 4 Lane Blvd	1.8	A	2011-2015	\$3,600	EDFA	\$3,600	\$7,200	WCRC
261	Parker	Dexter-Chelsea to Dexter-Pinckney	Construct 2 lane bypass	0.8	A	2011-2015			\$2,000	\$2,000	WCRC
262	Rawsonville	Willis to Bemis	Pavement Rehabilitation	1		2011-2015	\$1,800	EDFD	\$400	\$2,200	WCRC
263	Rawsonville	Bemis to Textile	Widen and reconstruct to 5 lanes	1.5	A	2011-2015	\$2,400	STPU	\$600	\$3,000	WCRC
264	State	Textile to US 12	Widen to 5 Lanes, curb and gutter	1.2	A	2011-2015			\$2,400	\$2,400	WCRC
265	Textile	Huron River Dr to Rawsonville	Pavement rehabilitation	1.5	A	2011-2015			\$1,500	\$1,500	WCRC
266	Various Bridges	County wide	Rehabilitate/Reconstruct 8 bridges	0	A	2011-2015	\$3,040	CRBRG	\$160	\$3,200	WCRC
267	Various locations	County wide	Signal & turn lanes	0	A	2011-2015	\$400	STPS	\$100	\$500	WCRC
268	Various Locations	100 miles of County Roads	Pavement Rehabilitation	100	A	2011-2015	\$1,400	STPR	\$3,600	\$5,000	WCRC
269	Various Locations	County wide	Widen, Rehab, Improve signals @ 20 intersections	0	A	2011-2015	\$2,000	CMAQ	\$8,000	\$10,000	WCRC
270	Various Locations	County wide	Reconstruct existing 2 lane roads	3		2011-2015			\$3,512	\$3,512	WCRC
271	Various Locations	County wide	Replace 20 Culverts	0		2011-2015			\$500	\$500	WCRC
272	Various Locations	County wide	Reconstruct existing 2 lane roads 0.5 MI/year	2.5	A	2011-2015			\$5,000	\$5,000	WCRC
273	Zeeb	Jackson to Dexter-Ann Arbor	Widen to 4 lanes with 5 lanes at the intersections	1.4	A	2011-2015			\$2,800	\$2,800	WCRC
274	College Place	Cross to Forest	Rehabilitate pavement	0.18	A	2011-2015	\$100	STPU	\$25	\$125	YC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
275	Congress	Oakwood to Summit	Rehabilitate pavement, Spot curb replacement	0.22	A	2011-2015	\$100	STPU	\$25	\$125	YC
276	Cross	Wallace to Washtenaw	Rehabilitate & Improve Washtenaw intersection	0.34	A	2011-2015	\$160	STPU	\$40	\$200	YC
277	LeForge Street Bridge	Over Huron River	Patch wearing surface, miscellaneous repairs	0.04	A	2011-2015	\$200	STPU	\$50	\$250	YC
278	Spring	Huron to Prospect	Rehabilitate pavement, Spot curb replacement	1.84	A	2011-2015	\$320	STPU	\$80	\$400	YC
279	Clark	Hogback to Huron Parkway	New construction	0.66	A	2016-2020			\$2,800	\$2,800	AAC
280	Fuller	EB over Huron River	Rehabilitate Bridge	0.03	A	2016-2020			\$150	\$150	AAC
281	Fuller	WB over Huron River	Rehabilitate Bridge	0.03	A	2016-2020			\$150	\$150	AAC
282	Main	RR Grade Crossing to M-14	Road Reconstruction & Boulevard Installation	0.559	A	2016-2020	\$1,500	STPU	\$1,500	\$3,000	AAC
283	Main	Depot to M-14	Corridor Study	0	A	2016-2020			\$300	\$300	AAC
284	Pittsfield	Washtenaw to Clark	New construction (2 lane road)	0.2	A	2016-2020			\$400	\$400	AAC
285	Various Downtown Streets	Downtown Area	Reconstruction/Resurface downtown streets	7.5	A	2016-2020			\$5,000	\$5,000	AAC
286	Various Local Streets	City of Ann Arbor	Reconstruction/Resurface local streets	37.5	A	2016-2020			\$20,000	\$20,000	AAC
287	Various Locations	City Wide	2 Intersection Improvement Projects for Congestion	0	A	2016-2020	\$900	CMAQ	\$0	\$900	AAC
288	Various Locations	City of Ann Arbor	Pavement Rehabilitation	50	A	2016-2020			\$1,250	\$1,250	AAC
289	Various Locations	City Wide	3 Non-Motorized Improvement Projects	0	A	2016-2020	\$500	STPE	\$500	\$1,000	AAC
290	Various Locations	City Wide	1 Intersection Improvement Project for Safety	0	A	2016-2020	\$200	STPS	\$0	\$200	AAC
291	Various Locations	City Wide	4 Miles of Major Road Reconstruction	4	A	2016-2020	\$5,245	STPU	\$6,000	\$11,245	AAC
292	Contracted Service	AATA Service Area	Capital Cost of Contracting	0	A	2016-2020	\$800	5307	\$200	\$1,000	AATA
293	Facilities	2700 S. Industrial Hwy	Renovate Operations/Maintenance Facility	0	A	2016-2020	\$1,600	5309	\$400	\$2,000	AATA
294	Facilities	AATA Service Area	Passenger Facilities	0	A	2016-2020	\$640	5307	\$160	\$800	AATA

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
295	Operating Assistance	AATA Service Area	Transit Service	0	A	2016-2020	\$4,800	5307	\$106,835	\$111,635	AATA
296	Operations	AATA Service Area	Preventative Maintenance	0	A	2016-2020	\$2,000	5307	\$500	\$2,500	AATA
297	Operations Support	AATA Service Area	Operations Support Equipment & Vehicles	0	A	2016-2020	\$1,920	5307	\$480	\$2,400	AATA
298	Planning	AATA Service Area	Planning	0	A	2016-2020	\$1,600	5307	\$400	\$2,000	AATA
299	Replace Buses	AATA Service Area	Purchase 16 Small Replacement Buses	0	A	2016-2020	\$2,880	5307	\$720	\$3,600	AATA
300	Replace Buses	AATA Service Area	Purchase 27 Large Replacement Buses	0	A	2016-2020	\$5,940	5307	\$1,485	\$7,425	AATA
301	Service Expansion	AATA Service Area	Purchase 10 Expansion Buses (6 Large and 4 Small)	0	A	2016-2020	\$2,040	5307	\$510	\$2,550	AATA
302	Non-motorized Paths Phase 5	Along Dexter-Ann Arbor & Dan Hoey	Non-motorized Path design & construction	0.157	A	2016-2020	\$100	STPE	\$25	\$125	DV
303	Various Streets	Village wide	Resurface 0.5 miles	0.5	A	2016-2020	\$78	STPU	\$85	\$163	DV
304	I-94	NW of Ann Arbor-Saline to east of US-23	Reconstruct and widen from 2 to 3 lanes including the Stone School bridge	4.5	A	2016-2020	\$59,760	NH	\$14,940	\$74,700	MDOT
305	Various locations	County wide	Signals, turn lanes, shoulders	0		2016-2020	\$7,600	STPS	\$1,900	\$9,500	MDOT
306	Various Locations	County wide	Pavement Rehabilitation	0		2016-2020	\$26,676	IM	\$6,669	\$33,345	MDOT
307	Various Local Streets	City of Saline	Rehabilitate local streets	2.5	A	2016-2020			\$455	\$455	SC
308	Various Streets	City of Saline	Rehabilitate major streets	2.5	A	2016-2020	\$400	STPU	\$410	\$810	SC
309	Ann Arbor-Saline	Pleasant Lake to Maple	Widen to 4 lanes with 5 lanes at the intersections	1.8	A	2016-2020	\$2,285	STPU	\$571	\$2,856	WCRC
310	Baker	I-94 to Dexter Village	Widen to 4 Lanes	2	A	2016-2020	\$3,100	EDFA	\$900	\$4,000	WCRC
311	Huron/Whittaker	Textile to I-94	Widen to 4 lanes with 5 lanes at the intersections	1.8	A	2016-2020			\$3,000	\$3,000	WCRC
312	Textile	Stony Creek to Whittaker	Pavement rehabilitation	0.7	A	2016-2020	\$560	STPU	\$140	\$700	WCRC
313	Various locations	County wide	Pavement Rehabilitation 100 miles	100	A	2016-2020			\$5,000	\$5,000	WCRC
314	Various locations	County wide	Widen, Rehab & Improve signals 20 Intersections	0	A	2016-2020	\$2,000	CMAQ	\$8,000	\$10,000	WCRC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
315	Various locations	County wide	Replace 20 Culverts	0		2016-2020			\$500	\$500	WCRC
316	Various locations	County wide	Rehabilitate/Reconstruct 8 bridges	0	A	2016-2020	\$3,040	CRBRG	\$160	\$3,200	WCRC
317	Various locations	County wide	Reconstruct existing 2 lane roads	2		2016-2020	\$1,600	EDFD	\$500	\$2,100	WCRC
318	Various locations	County wide	Reconstruct existing 2 lane roads 0.5 MI/year	2.5	A	2016-2020	\$1,300	STPR	\$3,200	\$4,500	WCRC
319	Various locations	County wide	Signal & turn lanes	0	A	2016-2020	\$400	STPS	\$100	\$500	WCRC
320	Cross	Huron River Dr to River	Resurface	0.18	A	2016-2020	\$120	STPU	\$30	\$150	YC
321	Cross Street Bridge	Over Huron River	Patch wearing surface, Miscellaneous repairs	0.05	A	2016-2020	\$160	STPU	\$40	\$200	YC
322	Prospect Street Bridge	Over Conrail Railroad	Replace wearing surface, railing repairs, misc	0.03	A	2016-2020	\$160	STPU	\$40	\$200	YC
323	South Congress	Mansfield to Congress	Rehabilitate pavement, Spot curb replacement	0.26	A	2016-2020	\$120	STPU	\$30	\$150	YC
324	Various Locations	City of Ypsilanti	Rehabilitate pavement, Spot curb replacement	0.3	A	2016-2020	\$250	STPU	\$65	\$315	YC
325	Broadway	Over Depot Street and the Huron River	Rehabilitate Bridge	0.13	A	2021-2025			\$150	\$150	AAC
326	Various Downtown Streets	Downtown Area	Reconstruction/Resurface downtown streets	7.5	A	2021-2025			\$5,000	\$5,000	AAC
327	Various Local Streets	City of Ann Arbor	Reconstruction/Resurface local streets	37.5	A	2021-2025			\$20,000	\$20,000	AAC
328	Various Locations	City Wide	3.5 Miles of Major Road Reconstruction	3.5	A	2021-2025	\$4,844	STPU	\$5,000	\$9,844	AAC
329	Various Locations	City Wide	1 Intersection Improvement Project for Safety	0	A	2021-2025	\$100	STPS	\$0	\$100	AAC
330	Various Locations	City Wide	3 Non-Motorized Improvement Projects	0	A	2021-2025	\$500	STPE	\$500	\$1,000	AAC
331	Various Locations	City Wide	2 Intersection Improvement Projects for Congestion	0	A	2021-2025	\$800	CMAQ	\$0	\$800	AAC
332	Various Locations	City of Ann Arbor	Pavement Rehabilitation	50	A	2021-2025			\$1,250	\$1,250	AAC
333	Contracted Service	AATA Service Area	Capital Cost of Contracting	0	A	2021-2025	\$800	5307	\$200	\$1,000	AATA
334	Facilities	AATA Service Area	Passenger Facilities	0	A	2021-2025	\$720	5307	\$180	\$900	AATA

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
335	Facilities	2700 S. Industrial Hwy	Renovate Operations / Maintenance Facility	0	A	2021-2025	\$4,800	5309	\$1,200	\$6,000	AATA
336	Operating Assistance	AATA Service Area	Transit Service	0	A	2021-2025	\$4,800	5307	\$107,592	\$112,392	AATA
337	Operations	AATA Service Area	Preventative Maintenance	0	A	2021-2025	\$2,000	5307	\$500	\$2,500	AATA
338	Operations Support	AATA Service Area	Operations Support Equipment & Vehicles	0	A	2021-2025	\$1,920	5307	\$480	\$2,400	AATA
339	Park And Ride	Various Locations	Construct Park and Ride Lot	0	A	2021-2025	\$1,600	5307	\$400	\$2,000	AATA
340	Planning	AATA Service Area	Planning	0	A	2021-2025	\$1,600	5307	\$400	\$2,000	AATA
341	Replace Buses	AATA Service Area	Purchase 27 Large Replacement Buses	0	A	2021-2025	\$5,940	5307	\$1,485	\$7,425	AATA
342	Replace Buses	AATA Service Area	Purchase 16 Small Replacement Buses	0	A	2021-2025	\$2,880	5307	\$720	\$3,600	AATA
343	Service Expansion	AATA Service Area	Purchase 10 Expansion Buses	0	A	2021-2025	\$2,200	5307	\$550	\$2,750	AATA
344	Non-motorized Paths Phase 6	Along Forest, Third & Edison St	Non-motorized Path design & construction	0.986	A	2021-2025	\$170	STPE	\$42	\$212	DV
345	Various Streets	Village wide	Resurface	3	A	2021-2025	\$72	STPU	\$67	\$139	DV
346	US-23	North Territorial to North County line	Reconstruct and widen from 2 to 3 lanes	3.73		2021-2025	\$32,000	NH	\$8,000	\$40,000	MDOT
347	Various locations	County wide	Signals, turn lanes, shoulders	0		2021-2025	\$7,600	STPS	\$1,900	\$9,500	MDOT
348	Various Locations	County wide	Pavement Rehabilitation	0		2021-2025	\$26,676	IM	\$6,669	\$33,345	MDOT
349	Various Locations	County wide	Reconstruct/Rehabilitate bridges	0		2021-2025	\$24,400	BHI/BHN/BRN	\$6,100	\$30,500	MDOT
350	Various Local Streets	City of Saline	Rehabilitate local streets	2.5	A	2021-2025			\$600	\$600	SC
351	Various Streets	City of Saline	Rehabilitate major streets	2.5	A	2021-2025	\$342	STPU	\$410	\$752	SC
352	Carpenter	Bemis to Textile	Widen to 4 lanes with 5 lanes at the intersections	2	A	2021-2025	\$2,947	STPU	\$737	\$3,684	WCRC
353	Dixboro	Geddes to Plymouth	Widen to 4 Lanes	2.7	A	2021-2025	\$2,700	EDFA	\$2,700	\$5,400	WCRC
354	Maple	City of Saline to Ann Arbor-Saline	Widen to 4 lanes with 5 lanes at the intersections	3.2	A	2021-2025	\$4,496	STPU	\$1,124	\$5,620	WCRC

2025 Washtenaw County Transportation Plan Funded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Federal Share (\$000s)	Federal Source	Non-Federal Share (\$000s)	Total Cost (\$000s)	Jurisdiction
355	Textile	Whittaker to Huron River Dr	Pavement Rehabilitation	2	A	2021-2025			\$2,000	\$2,000	WCRC
356	Various locations	County wide	Reconstruct existing 2 lane roads 0.5 MI/year	2.5	A	2021-2025	\$1,200	STPR	\$3,800	\$5,000	WCRC
357	Various locations	County wide	Pavement Rehabilitation 100 miles	100	A	2021-2025			\$5,000	\$5,000	WCRC
358	Various locations	County wide	Signal & turn lanes	0	A	2021-2025	\$400	STPS	\$100	\$500	WCRC
359	Various locations	County wide	Widen, Rehab, & improve signals 20 intersections	0	A	2021-2025	\$2,000	CMAQ	\$8,000	\$10,000	WCRC
360	Various locations	County wide	Rehabilitate/Reconstruct 8 bridges	0	A	2021-2025	\$3,040	CRBRG	\$600	\$3,640	WCRC
361	Various locations	County wide	Reconstruct existing 2 lane roads	2		2021-2025	\$1,400	EDFD	\$600	\$2,000	WCRC
362	Various Locations	City of Ypsilanti	Rehab 4 miles pavement, Spot curb replacement	4	A	2021-2025	\$810	STPU	\$200	\$1,010	YC
			2001-2025 Totals				\$637,260		\$973,637	\$1,610,897	

**This page is intentionally blank.**

2025 Washtenaw County Transportation Plan Unfunded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Total Cost (\$000s)	Jurisdiction
1	Alpine Alley Improvements	Alpine to Broad: Btwn Main & Fifth	Property Acquisition, New Pavement, Storm Sewer	0.05	A	2001-2005	\$375	DV
2	Ann Arbor St Alley Improvement	Ann Arbor St to Fifth: Btwn Central & Dover	New Pavement	0.06	A	2001-2005	\$10	DV
3	Barker Road	@ Main Street	Install signal and turn lanes	0		2001-2005	\$500	WCRC
4	Central St Alley Improvement	Central to Fifth: Btwn Central & Broad	New Pavement	0.08	A	2001-2005	\$10	DV
5	Dexter-Ann Arbor Rd	@ Dan Hoey	Traffic Signal	0	A	2001-2005	\$80	DV
7	DT Parking Lot Improvements Ph 1	Main Street Lot	Parking Surface/Pavement Improvements	0	A	2001-2005	\$15	DV
6	DT Parking Lot Improvements Ph 1	Broad Street Lot	Parking Surface/Pavement Improvements	0	A	2001-2005	\$5	DV
8	DT Parking Lot Improvements Ph 2	Broad Street Lot	Parking Surface/Pavement Improvements	0	A	2001-2005	\$220	DV
9	DT Parking Lot Improvements Ph 3	Main Street Lot	Parking Surface/Pavement Improvements	0	A	2001-2005	\$330	DV
10	DT Parking Lot Improvements Ph 4	Jeffords Street Lot	Driveway Realignment, Parking Surface/Pavement Improvements	0.04	A	2001-2005	\$10	DV
11	Fourth St Curb & Gutter	Fourth St: Central to Broad	New Curb & Gutter	0.08	A	2001-2005	\$36	DV
12	Hudson St Curb & Gutter	Hudson St: Ann Arbor to Fourth	New Curb & Gutter	0.06	A	2001-2005	\$28	DV
13	I-94	E jct of US-23 to east jct of US-12BR	Reconstruct and widen from 3 to 4 lanes	5.3	A	2001-2005	\$71,500	MDOT
14	I-94	E of Zeeb to NW of Ann Arbor-Saline	Reconstruct and widen from 2 to 3 lanes	4.2	A	2001-2005	\$87,500	MDOT
15	I-94	E jct of US-12BR to east county line	Reconstruct and widen from 3 to 4 lanes	2.3	A	2001-2005	\$65,500	MDOT
16	I-94	M-52 to W of Parker	Reconstruct and widen from 2 to 3 lanes	6.6		2001-2005	\$40,400	MDOT
17	Industrial Drive	Bemis to Willis	Construct new two lane road	1	A	2001-2005	\$1,500	WCRC
18	Joy Road	Webster Church to Whitmore Lake	Pave Gravel Road	3.5		2001-2005	\$3,500	WCRC
19	Kensington St Curb & Gutter	Kensington St: Grand to Wall Ct	New Curb & Gutter	0.1	A	2001-2005	\$81	DV
20	Library Alley Improvement	Fourth to Third: Btwn Central & Broad	New Pavement, Storm Sewer	0.08	A	2001-2005	\$20	DV

2025 Washtenaw County Transportation Plan Unfunded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Total Cost (\$000s)	Jurisdiction
21	M-52	I-94 to Pleasant Lake	Reconstruct	7.4	A	2001-2005	\$9,250	MDOT
22	Morgan Road	@ Carpenter	Install signal and turn lanes	0	A	2001-2005	\$500	WCRC
23	Morgan Road	Carpenter to US-12	Pave Gravel Road	0.6		2001-2005	\$1,200	WCRC
24	Platt Road	Ellsworth to US-12	Widen to 5 lanes	2.11	A	2001-2005	\$4,220	WCRC
25	North Territorial	@ Curtis	Install signal and turn lanes	0		2001-2005	\$500	WCRC
26	North Territorial	@ Whitmore Lake	Install signal and turn lanes	0		2001-2005	\$500	WCRC
27	North Territorial	@ Pontiac Trail	Install signal and turn lanes	0		2001-2005	\$600	WCRC
28	Rawsonville	@ Martz Road	Install signal and turn lanes	0	A	2001-2005	\$500	WCRC
29	Seven Mile Road	Seven Mile to Whitmore	Pave Gravel Road	1.2		2001-2005	\$1,500	WCRC
30	State Road	@ Textile	Install signal and turn lanes	0	A	2001-2005	\$600	WCRC
31	Textile	@ Bridge	Signal upgrade	0	A	2001-2005	\$200	WCRC
32	Textile Road	State to US-12	Pave Gravel Road	2	A	2001-2005	\$2,000	WCRC
33	UM Pedestrian Bridge	From UofM Life Sciences Complex to Medical Center Complex	Construct new non-motorized bridge over BL94 Huron/Washtenaw	0	A	2001-2005	\$3,000	AAC/UofM
34	US-23	S of Geddes to E jct of M-14	Reconstruct and widen from 2 to 3 lanes	3.8	A	2001-2005	\$35,500	MDOT
35	US-23	S of US-12 to N of I-94	Reconstruct and widen from 2 to 3 lanes	1.4	A	2001-2005	\$32,200	MDOT
36	US-23	N of I-94 jct to S of Geddes	Reconstruct and widen from 2 to 3 lanes	3.6	A	2001-2005	\$46,000	MDOT
37	Various Locations	City of Saline	Resurface streets	5	A	2001-2005	\$5,000	SC
38	Whittaker Road	Over Paint Creek	Replace bridge	0		2001-2005	\$400	WCRC
39	Willis Road	Ann Arbor to Woodhill	Reconstruct , pavement, curb and drainage		A	2001-2005	\$665	SC
40	Zeeb Road	Pleasant Lake to Waters	Pave Gravel Road	2		2001-2005	\$2,000	WCRC

2025 Washtenaw County Transportation Plan Unfunded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Total Cost (\$000s)	Jurisdiction
41	Ann Arbor-Saline	@ Textile	Install signal and turn lanes	0	A	2006-2010	\$500	WCRC
42	Bemis	@ Rawsonville	Install signal and turn lanes	0	A	2006-2010	\$500	WCRC
43	Carpenter Road	@ Bemis	Install signal and turn lanes	0	A	2006-2010	\$500	WCRC
44	Carpenter Road	@ Willis	Install signal and turn lanes	0		2006-2010	\$500	WCRC
45	Commuter Rail	Lansing to Detroit	New service	99		2006-2010	\$61,000	MDOT/AAC
46	Feldkamp	Over Saline River	Replace Bridge	0		2006-2010	\$400	WCRC
47	Fletcher Road	Scio Church to I-94	Pave Gravel Road	2.7		2006-2010	\$2,700	WCRC
48	Hitchingham	@ Stony Creek	Install signal and turn lanes	0	A	2006-2010	\$600	WCRC
49	Island Lake	Lima Center to Stofer	Pave Gravel Road	3		2006-2010	\$3,000	WCRC
50	Lima Center Road	Dexter-Chelsea to Island Lake	Pave Gravel Road	2.2		2006-2010	\$2,200	WCRC
51	Marshall Road	Over Mill Creek	Replace Bridge	0		2006-2010	\$400	WCRC
52	Parker Road	Over Mill Creek	Replace Bridge	0	A	2006-2010	\$400	WCRC
53	Pontiac Trail	@ Seven Mile	Install signal and turn lanes	0		2006-2010	\$500	WCRC
54	Ridge Road	Over North Macon Creek	Replace Bridge	0		2006-2010	\$400	WCRC
55	Textile	@ Huron River Dr	Signal upgrade	0	A	2006-2010	\$300	WCRC
56	Textile	@ Stony Creek	Install signal and turn lanes	0	A	2006-2010	\$600	WCRC
57	Various Locations	City of Saline	Resurface streets	5	A	2006-2010	\$5,000	SC
58	Whittaker	@ Merritt	Install signal and turn lanes	0	A	2006-2010	\$600	WCRC
59	Willow Road	Jordan to US-12	Pave Gravel Road	4.2		2006-2010	\$4,200	WCRC
60	Grass Lake	Sylvan to Jackson County line	Pave Gravel Road	3.4		2011-2015	\$3,400	WCRC

2025 Washtenaw County Transportation Plan Unfunded Projects

UATS Project Number	Project Name	Project Limits	Proposed Improvement	Length (miles)	Urbanized Area	Time Code	Total Cost (\$000s)	Jurisdiction
61	M-14	Main Street to W jct of M-14	Reconstruct and widen from 2 to 3 lanes with interchange improvements	1.5	A	2011-2015	\$53,800	MDOT
62	Merritt	Munger to Tuttle Hill	Resurfacing	4	A	2011-2015	\$4,000	WCRC
63	Platt Road	US-12 to Willis	Widen to five lanes	2.97		2011-2015	\$5,940	WCRC
64	Rawsonville	@ Martz	Install signal and turn lanes	0	A	2011-2015	\$600	WCRC
65	Stony Creek	@ Merritt	Install signal and turn lanes	0	A	2011-2015	\$600	WCRC
66	Sylvan Road	Grass Lake north 2.5 miles	Pave Gravel Road	2.5		2011-2015	\$2,500	WCRC
67	Various Locations	City of Saline	Resurface streets	5	A	2011-2015	\$5,000	SC
68	Island Drive	over Traver Creek	Rehabilitate bridge	0	A	2016-2020	\$75	AAC
69	Fuller Road	Over Norfolk & Southern Railroad	Rehabilitate bridge	0	A	2016-2020	\$400	AAC
70	M-14	E jct of US-23 to E of M-153	Rehabilitate pavement and widen from 2 to 3 lanes	3	A	2016-2020	\$23,000	MDOT
71	Various Locations	City of Saline	Resurface streets	5	A	2016-2020	\$5,000	SC
72	I-94	W County line to M-52	Reconstruct and widen from 2 to 3 lanes	5.6		2021-2025	\$32,400	MDOT
73	M-14	I-94 to Main Street	Rehabilitate pavement and widen from 2 to 3 lanes	3.5	A	2021-2025	\$59,800	MDOT
74	M-14	E of M-153 to East county line	Rehabilitate pavement and widen from 2 to 3 lanes	5.3		2021-2025	\$23,200	MDOT
75	US-23	South county line to s of US-12	Reconstruct and widen from 2 to 3 lanes	8.5		2021-2025	\$57,000	MDOT
76	Various Locations	City of Saline	Resurface streets	5	A	2021-2025	\$5,000	SC
			Total 2021-2025				\$177,400	
			Total Unfunded				\$783,970	

**Appendix D**

**2025 Transportation Plan for St. Clair County**

**(Available in Hard Copy Only)**