



MI Transportation Plan Moving Michigan Forward

2005-2030 State Long-Range Transportation Plan



June 2007



TRANSPORTATION COMMISSION

Ted B. Wahby, Chair
Linda Miller Atkinson, Vice Chair
Maureen Miller Brosnan, Commissioner
James R. Rosendall, Commissioner
James S. Scalici, Commissioner
Frank E. Kelley, Commission Advisor



MDOT EXECUTIVE TEAM

Kirk T. Steudle, P.E., Director
Jacqueline G. Shinn, Chief Deputy Director
Leon E. Hank, Chief Administrative Officer
Larry E. Tibbits, Chief Operations Officer

SPONSORS

Susan P. Mortel, Director, Bureau of Transportation Planning
Rob Abent, Director, Bureau of Aeronautics & Freight Services
Sharon Edgar, Administrator, Bureau of Passenger Transportation Division
Tim Hoeffner, Administrator, Intermodal Policy Division
Denise B. Jackson, Administrator, Statewide Transportation Planning Division
William Tansil, Administrator, Asset Management Division
Dave Wresinski, Administrator, Project Planning Division

CORE TEAM MEMBERS

Susan A. Gorski, Project Manager
Tim Ryan, Deputy Project Manager

Niles Annelin	Andy Irwin	Ray Lenze	Ron Overton
Melinda Ball	Barbara Hicks	Zoe Lorca	Bob Parsons
Mark Bott	Dennis Kent	Dalrois McBurrows	Marsha Small
Cindy Durrenberger	Polly Kent	Pauline Misjak	Cyndi VonKlingler
Ron DeCook	Robert Kuehne	Connie Morrison	Matt Webb
Aarne Frobom	Jason Latham	Craig Newell	Brad Winkler

MDOT PUBLIC WEB PAGE

Deb Davis Ellen Martin Travis Rivera Rob Alber Yvonne Morrison

GRAPHIC DESIGN AND MAPPING SERVICES

Kim Henderson Randy Debler Kris Hart



JENNIFER M. GRANHOLM
GOVERNOR



STATE OF MICHIGAN
OFFICE OF THE GOVERNOR
LANSING

JOHN D. CHERRY, JR.
LT. GOVERNOR

June 15, 2007

Dear Friends:

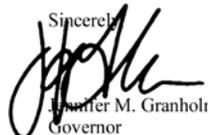
As Governor of the State of Michigan, I am pleased to present the *MI Transportation Plan: Moving Michigan Forward*, a plan to address Michigan's state transportation needs to the year 2030. Our transportation future is far too important to leave to chance.

The transportation system we create in the future will guide who and what we become as a state. It will influence the choices you and I make on a daily basis, and it will determine how we spend our scarce resources and our precious time. It will bolster markets, affect our environment, and shape the character and health of communities across Michigan.

MI Transportation Plan was created with your involvement. More than 3,000 of you told us in person what you wanted in a future transportation system and 2,600 of you participated through on-line Web questionnaires. We called another 3,300 households to get their reactions. An advisory group with some of Michigan's top economic minds, representing eight economic sectors, as well as representatives of 42 statewide stakeholder groups weighed in. Additional focus group meetings were held with local planning agencies, tribal governments, and traditionally underserved communities and organizations. *MI Transportation Plan* is truly Michigan's transportation plan.

The vision you helped to map is a transportation system that is purposeful, prioritized, coordinated, safe, advanced, integrated, and appropriate to the setting. The Michigan Department of Transportation will be open, flexible, and responsive to your needs in implementing this plan, and will utilize accountable, transparent decision-making processes.

I am proud of the quality of life we have created and vigorously defend in Michigan. I am confident that the actions called for by the *MI Transportation Plan* will preserve those qualities that are uniquely ours, enhance those that are common to personal and collective economic vitality, and affirm our standing as innovators in moving Michigan forward.

Sincerely,

Jennifer M. Granholm
Governor



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

June 5, 2007

Dear Michigan:

It is my pleasure to present to you Michigan's long-range transportation plan, *MI Transportation Plan: Moving Michigan Forward*.

This plan was two years in the making, and is based on guidance from all manner of transportation customers and interests. For those of you who attended a meeting, answered a phone survey, responded through our library kiosks, or found other ways to contribute, thank you. It was through those interactions that we discovered Michigan residents wanted more travel choices, and better access and connectivity between those choices.

We also discovered a significant gap exists between the public's expectations and the Michigan Department of Transportation's (MDOT's) ability to meet them. Transportation revenues, influenced by increasing gas prices, are not growing as rapidly as system costs. Projected future funding will not be sufficient to meet all our transportation needs. Integrating all modes of transportation, reducing congestion, leveraging technology, and preserving and improving the system equitably, in the face of limited revenues, will be a challenge for this decade and beyond.

Michigan's economy is at an historic shift, and this plan is designed to strengthen the link between transportation and the economy now and well into the future. It provides a comprehensive picture of the state of our transportation system, identifies disconnects between modes and services, and projects financial needs.

While there is uncertainty in the future, there are also exciting possibilities. Our success will greatly hinge on how well we move people around the state and how well we move products to the world. *MI Transportation Plan* outlines a strategy for stepping up to the challenges of the future – so that Michigan can be a leader in the global workplace of tomorrow.

MDOT strives to be responsive, and we welcome your comments on any transportation issue at any time. Please feel free to contact us with your thoughts and ideas for Michigan's transportation future.

Sincerely,


Kirk T. Steudle, P.E.
Director



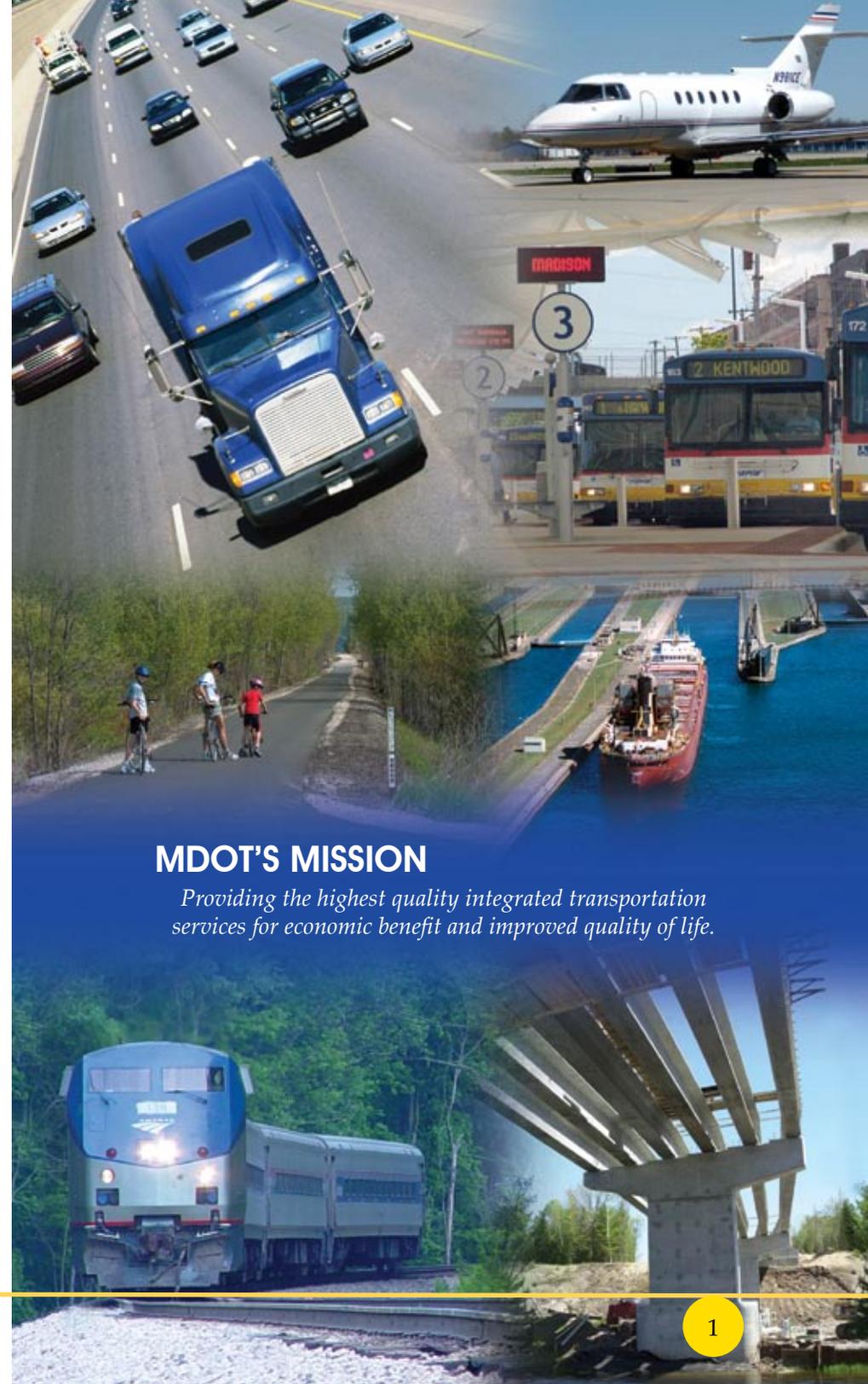
MOVING MICHIGAN FORWARD

Summary of the *MI Transportation Plan*

The *MI Transportation Plan* is a comprehensive analysis with a future-thinking approach intended to help address Michigan's state transportation needs to the year 2030. This summary shares the highlights of that intensive effort. For more information on any given topic, please go to the web page at www.michigan.gov/slrp.

MI Transportation Plan focuses on the important link between transportation and Michigan's economic vitality and quality of life. It presents options to achieve Michigan's goals for the future by providing an efficient, integrated transportation system.

Significant effort went into the development of the plan. Seventeen technical reports were created, representing hundreds of pages of data and analysis examining issues for every mode of transportation, as well as important related topics such as the environment, land use, and economy. Dozens of public meetings were held to obtain customer and stakeholder input. Surveys were conducted, and future trends were examined to better understand not just the state of transportation in Michigan today, but where transportation needs to go to support the Michigan of tomorrow.



MDOT'S MISSION

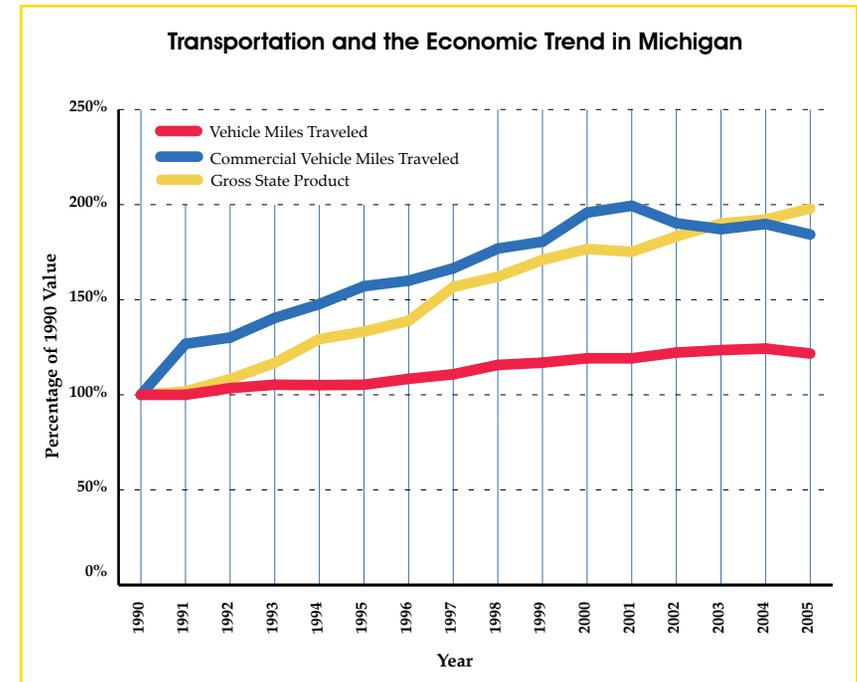
Providing the highest quality integrated transportation services for economic benefit and improved quality of life.

TRANSPORTATION AND THE ECONOMY

An efficient and well-maintained transportation system provides the backbone for all economic activity. Efficient transportation systems move goods and people throughout local, regional, national and international economies in a safe, timely and reliable manner. Transportation is closely tied to economic development and is a vital part of the nation's and Michigan's overall economic competitiveness. Investment in transportation can therefore result in economic benefits for Michigan and the nation.

Michigan's transportation system, including roads, transit, non-motorized facilities, aviation, marine, and inter-modal facilities, plays an integral role in supporting the state and region's economy and the quality of life for residents. Transportation investments are part of the state's overall economic development strategy. Both the United States Department of Transportation (U.S. DOT) and MDOT identify the link between transportation and the economy as their top priority. Information from the [MI Transportation Plan, Attitudes and Perceptions of Transportation in Michigan: A Survey of Michigan Adults](#), Economic Advisory Group, stakeholder, and public open house meetings show that Michiganders recognize this link. Michigan's residents and businesses identify the state's transportation infrastructure as a critical component of economic growth.

An efficient transportation system saves time and cost for individuals and business, and advances productivity and competitiveness, which promotes economic growth. The Gross State Product, or GSP, is the value of goods and services produced within a state's economy. Statistics indicate that the demand for transportation grows along with economic activities. The Research and Innovative Technology Administration (RITA) of the U.S. DOT reports that truck traffic has been growing at a faster rate than overall vehicle traffic. In Michigan, commercial vehicle miles traveled (VMT) grew at an even higher rate than the GSP. Economic growth is reflected in the GSP. The fact that commercial VMT grew



Source: MDOT-BTP, Statewide Model Unit

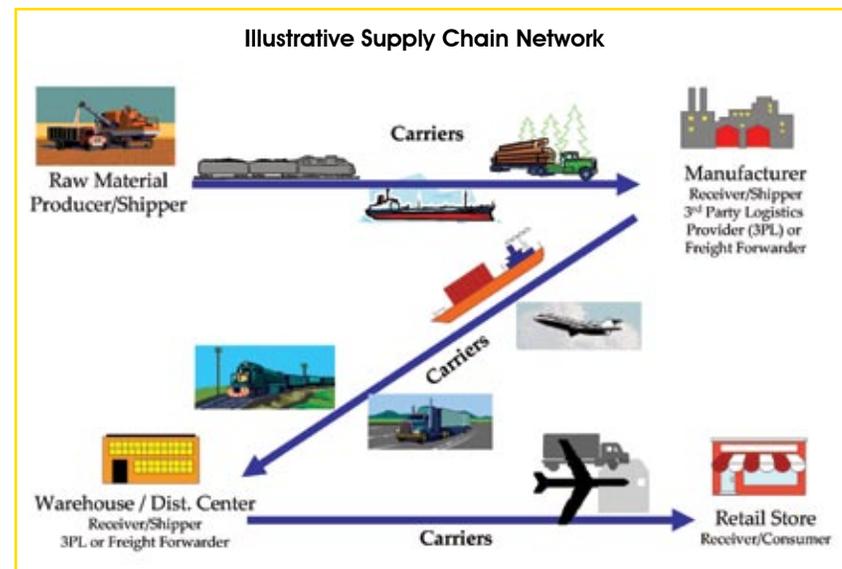
at an even higher rate than the GSP indicates that economic growth has been driven by transportation, especially commercial development.

In fact, transportation and the economy are linked together closer in Michigan than in many other states. The state's economy relies heavily on the transportation-intensive manufacturing industry. Manufacturing is dependent on transportation to receive raw materials and to deliver its products at the right place and right time. An efficient, timely, and dependable transportation system can lower cost, enhance competitiveness and support just-in-time inventory control systems for business.

In today's business environment, cost-effective, time sensitive transportation services are increasingly a strategy for competitive advantage in manufacturing and service-based industries. "Globalization" of the economy has grown at a rapid pace over the past several decades, and Michigan has been at the forefront of the industrial globalization trend. Michigan's manufacturers shop the world for components and subassemblies to manufacturing processes. Advances in technology and management practices also allow U.S. firms to develop strategies that enable customized products for mass market distribution. The movement of goods by truck, rail, air and water is vital to Michigan's economy, especially manufacturing and agriculture, two of Michigan's largest economic sectors. To retain current manufacturers and attract new manufacturers, transportation considerations become even more important for Michigan.

Transportation investment can be an engine to drive growth in emerging and developing industries. Tourism and other related service sectors may be expected to increasingly compete for transportation capacity and services.

Michigan's improving transportation system and other state assets, including a skilled labor force, its natural environment, and well-established manufacturing sector, will help the state overcome its economic challenges.



MICHIGAN'S TRANSPORTATION CHALLENGES

Several key trends were readily identified after extensive review and analysis of the data in the 17 technical reports. The highlights of these trends are described here, but more information is available in the [Key Findings](#) report, and the individual reports.

Michigan's population is aging. Over the next 30 years, the fastest growing segment of Michigan's population will be seniors. As the population ages, older adults and individuals with disabilities will increasingly depend upon transit services. In both urban and rural parts of the state, there is a significant need to enhance or expand transit service and facilities to meet this future demand. Many Michigan residents, with or without disabilities, depend on passenger transportation in order to pursue their education, to get

to work, to receive medical services, and to participate in other activities. Although none of us is getting any younger, it is also worth noting that many other states likely will have an even higher percentage of seniors than Michigan. In 30 years, Michigan may have a higher proportion of working age population than sunbelt states that typically attract retirees.

Michigan is the gateway to the global economy. Michigan has been an important freight gateway to the U.S. from Canada for many years, with some of the busiest border crossings in the world. Intermodal freight movements, with shipment of containerized goods by water, train and truck, are increasing. Cost-effective, time-sensitive transportation gives a competitive advantage to manufacturing and service-based industries. Michigan is in a unique position to expand and capitalize on its status as a global

Technical Reports

[Finance Technical Report](#)

[Transit Technical Report](#)

[Non-motorized Technical Report](#)

[Highway/Bridge Technical Report](#)

[Intercity Passenger Technical Report](#)

[Environmental Technical Report](#)

[MPO/RPA Technical Report](#)

[Executive Summary Integration Technical Report](#)

[Conditions and Performance Technical Report](#)

[Land use Technical Report](#)

[Aviation Technical Report](#)

[Freight Profile Technical Report](#)

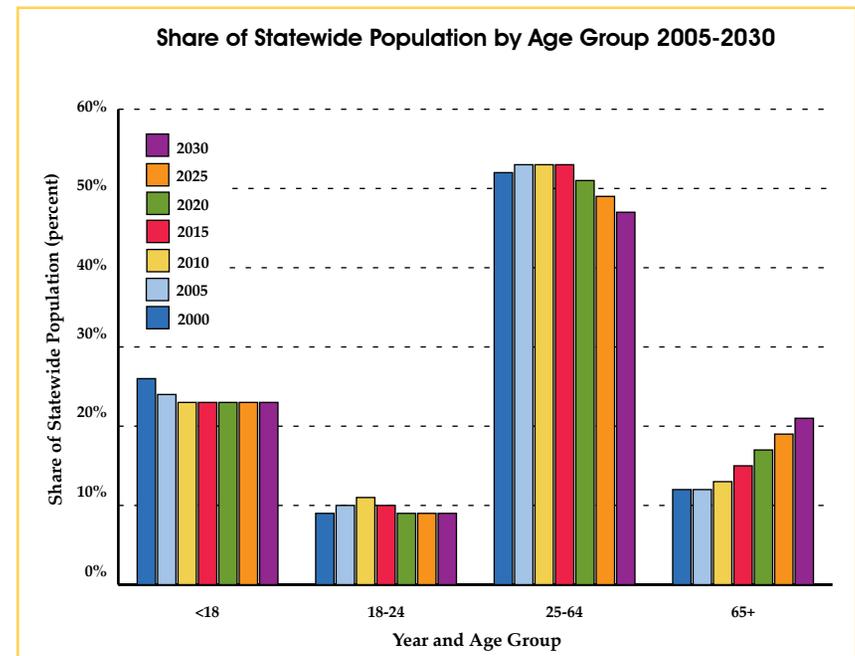
[Travel Characteristics Technical Report](#)

[Socioeconomics Technical Report](#)

[Security Technical Report](#)

[Highway Safety Technical Report](#)

[Goals, Objectives and Performance Measures Report](#)



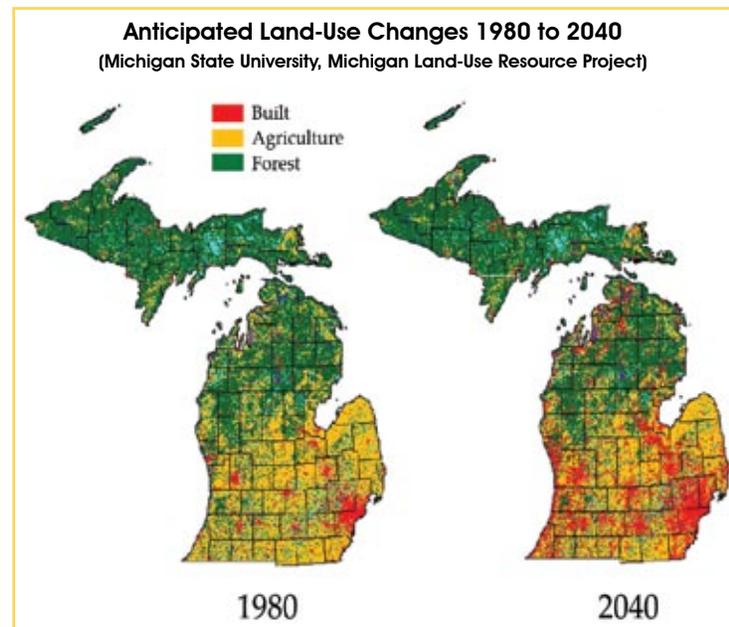
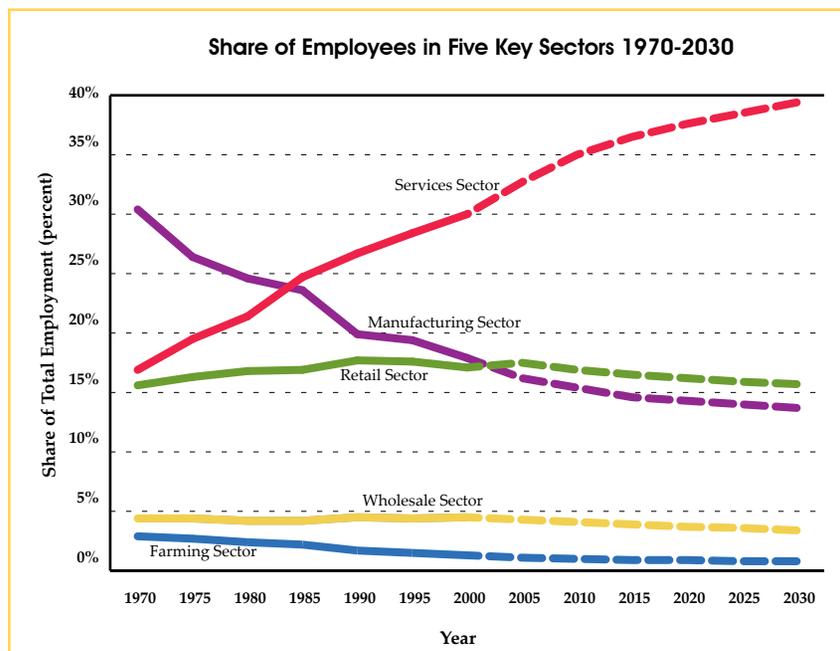
gateway. For that reason, the safe, reliable movement of freight on the state's key modal corridors is crucial to Michigan's future economic vitality.

Increased highway congestion poses a problem in some parts of the state. Congestion in Michigan is not as severe as in other parts of the country, but it is getting worse, and it interferes with timely travel on some of our busiest corridors. Some 28 percent of state trunkline miles are projected to be at or approaching congested conditions by 2030. They handle 55 percent of the vehicle miles of travel and 45 percent of the commercial vehicle miles traveled in Michigan.

Michigan needs to preserve, modernize and expand its transportation system and services in key areas. Taken together, Michigan's growing travel demands and aging infrastructure

present a significant challenge. Preservation of the existing transportation system and service is vital, and is a huge challenge in itself. More than just preserving what we have is clearly needed. The public seeks greater modal choice, better access, and connectivity with other modes. Truck traffic and global trade are increasing, making uncongested transportation corridors more important to the economy than ever. Modernization of the transportation system, integration with other modes, and expansion in targeted corridors will help keep Michigan moving forward economically.

Michigan is in a state of economic transition. Michigan is still the automotive capital of the world, but no one who lives here could deny the impact being felt across the state as automotive manufacturing operations downsize. Although many jobs are being created in new and growing industries, cutbacks in automotive production have impacted the entire state. Michigan is in the process of redefining itself, moving forward by cultivating new



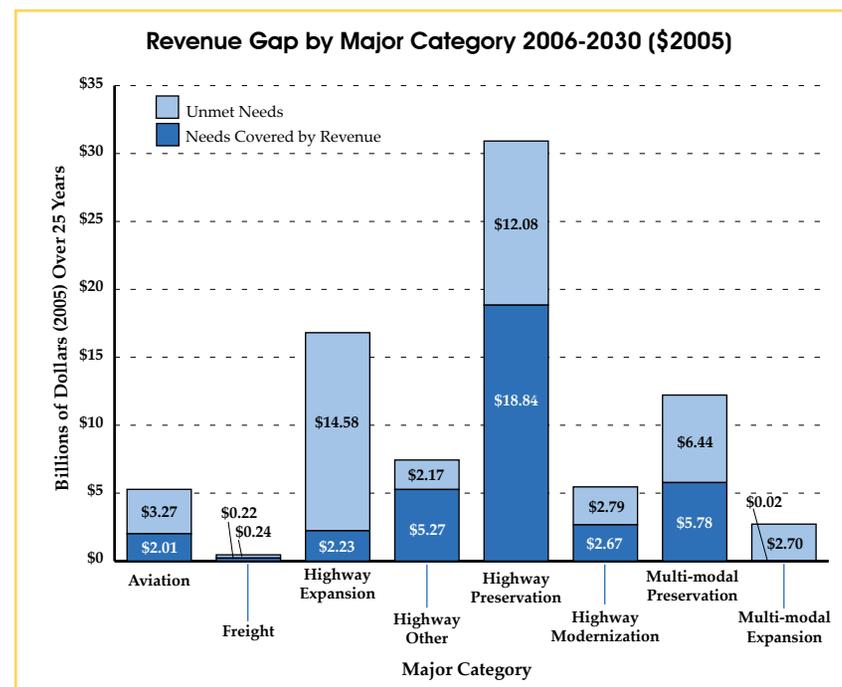
industries and new jobs. Michigan needs a transportation system in place to help support these new industries, while also preserving the system that has served our manufacturing sector so well for so long.

Land use change is an increasingly important issue. Michigan has nearly 37 million acres of land and over 10 million inhabitants. Urban sprawl is seen as having both positive and negative impacts. MDOT recognizes that land use patterns affect transportation choices and transportation opportunities impact land use decisions. Integrating land use into Michigan's long-range planning entails consistently identifying those situations where collaboration between land use authorities and other stakeholders may complement transportation improvements. When these situations are identified, decisions will be guided by the need to maximize safety, efficiency, and sustainability while providing reasonable access to support Michigan's economy.

There is a gap between public expectations and government's ability to deliver. Intensive public outreach was conducted as this plan was developed, and the message was very clear. The public wants greater transportation choices and greater access to transportation facilities. Limited resources and "smokestack" funding sources may limit the ability of transportation providers to integrate Michigan's transportation system as fully as desired.



Projected funding is not sufficient to sustain Michigan's transportation system, even at current levels of service. MDOT has made great strides in the past four years, improving its highways and bridges in order to meet the goal of 90 percent "good" by 2007 and 2008, respectively. At currently anticipated levels of funding, there will not be enough revenue to sustain pavements at 90 percent good over the long-term. In addition, because of the focus on pavement and bridges, needs in other areas, particularly in the non-highway modes, have received only enough attention or funding to address the most basic requirements. More revenue for transportation is clearly needed to sustain the progress we have made, modernize the system, and improve connectivity and integration with other modes.



Source: Wilbur Smith Associates

PREFERRED VISION FOR TRANSPORTATION

This plan grew out of work that began in 2003 with “The Transportation Summit: Connecting Michigan.” That effort involved hundreds of Michigan residents, dozens of action team meetings, public forums, and two large-scale summit meetings, held in December 2003 and 2004. The summit process resulted in the following long-range vision for transportation in Michigan:

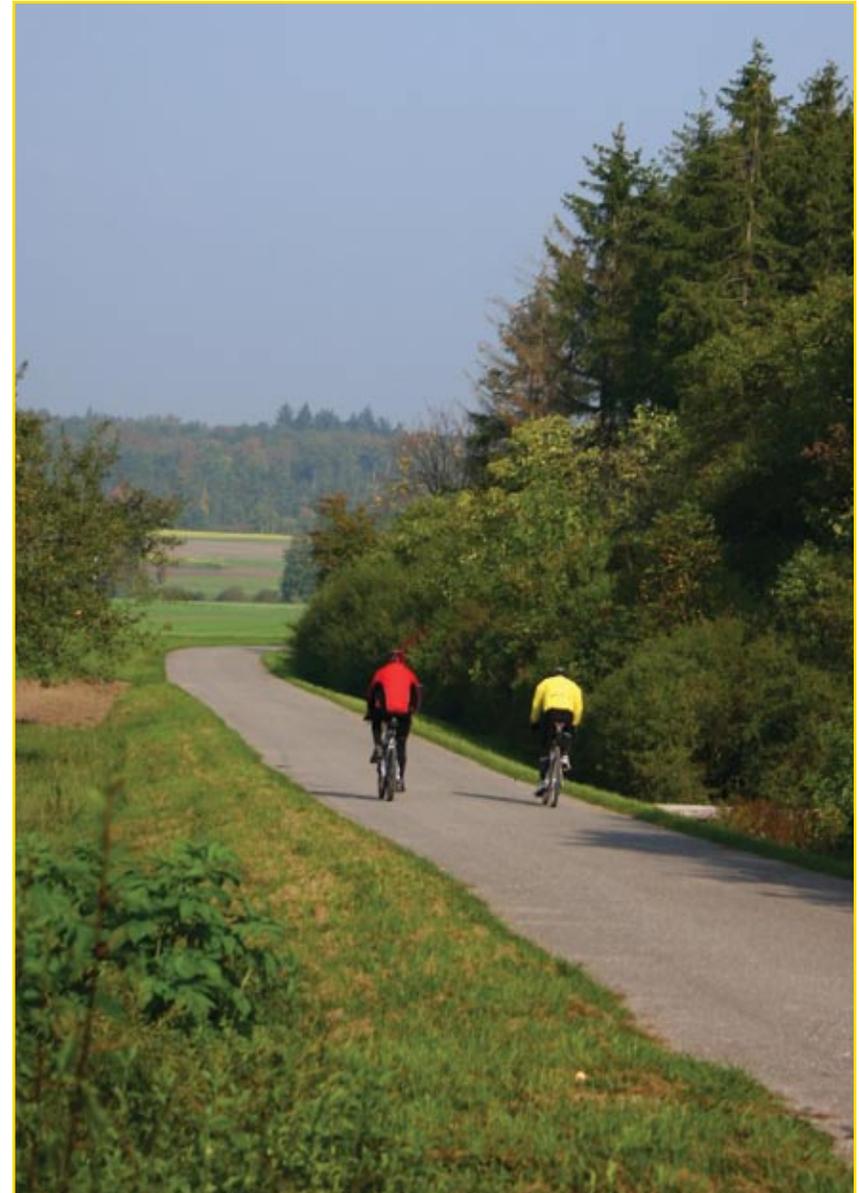
“Michigan will lead the 21st century transportation revolution as it led innovation in the 20th century. We will move people and goods with a safe, integrated, and efficient transportation system that embraces all modes, is equitably and adequately funded, and socially and environmentally responsible. Michigan’s transportation community will work together to ensure that resources are in place to deliver the system.”

To move Michigan forward, in the development of *MI Transportation Plan*, MDOT began with the conceptual vision developed at the Summit, then sought extensive advice from the public. The department held public meetings with stakeholders, the general public, and an Economic Advisory Group; conducted interviews with 2,200 households; and obtained another 2,600 responses through an on-line questionnaire. Government-to-Government consultations with Native American Tribes and other consultations also took place. Seventeen technical reports on the various modes, as well as related issues such as environmental regulation, land use policy, and the economic outlook, were developed and analyzed. Anticipated future trends and the public input were analyzed by MDOT management to develop the [Preferred Vision](#). The result is that Michigan’s future transportation system will be:

- **Purposeful:** Michigan’s 2030 integrated transportation system will be the foundation of the state’s economic vitality and will sustain quality of life for its residents.
- **Prioritized:** Capacity improvements will be needed, but the first priority will be physical or technological improvements to enhance efficiency, mobility and access.
- **Coordinated:** All transportation providers will work together to address the system’s needs holistically. All modes will be maintained, preserved, operated, and protected as one system, one of the state’s most important physical assets.
- **Safe:** Safety will be a primary goal. It will be addressed as each improvement is planned and implemented. Personal and system wide security will be enhanced, including border security.



- **Advanced:** MDOT will embrace technology and technological development. The department will use innovation in every aspect of what it builds, how it builds, and in every service that is provided.
- **Integrated Choices:** System integration will be achieved for both passenger and freight transportation through improvements in modal services and effective intermodal connections. The system will be responsive to the public's demand for more transit, bicycle and pedestrian choices. The need for freight and passenger movement will be balanced, and the system will accommodate both without compromising goals for safety or economic competitiveness.
- **Appropriate to the Setting:** Transportation will be integrated between modes, and also with land use, economic, and environmental systems. Transportation solutions will be regionally sensitive, sustainable, and energy efficient. Infrastructure improvements will be tailored to the community and natural setting and will be planned cooperatively so customers and partners are satisfied with the result.
- **Flexibly-Funded:** Transportation financing will be diversified to include new methods and techniques, but public funds will remain dedicated to transportation purposes. Funding will be flexible so that money can be allocated to meet the highest priority user needs.
- **Responsive:** MDOT will be an open and flexible organization, responsive to customer needs and with a transparent, accountable decision-making process. MDOT will be proactive, adaptable, and able to identify and respond to change as needed.



MICHIGAN'S TRANSPORTATION GOALS

After extensive public involvement and analysis to develop a more specific set of vision statements, four goals were identified to help make the Preferred Vision a reality. The [Goals, Objectives, and Performance Measures Report](#) provides a detailed discussion on the four goals and associated objectives.

Stewardship: Preserve transportation system investments, protect the environment, and utilize public resources in a responsible manner. This goal focuses on MDOT roles and responsibilities associated with being good stewards of Michigan's resources. The goal is based on a holistic view of resources, to include funding, physical transportation assets, the physical and human environment, and the Michigan economy. The objectives under the goal incorporate issues that were addressed in previous state long-range transportation plans: preservation, strengthening the state economy, transportation services coordination, environment and aesthetics, and land use coordination.

System Improvement: Modernize and enhance the transportation system to improve mobility and accessibility. This goal emphasizes the various areas where MDOT can either make direct investments or support and encourage investments by other entities to improve the efficiency and effectiveness of Michigan's transportation system. The objectives under this goal focus on improvements to modernize, expand, and connect the system to support economic growth and better facilitate the movement of goods, people, and services. The goal also identifies the importance of considering local values during the planning, design and implementation of system improvements.

Efficient and Effective Operations: Improve the efficiency and effectiveness of the transportation system and transportation services and expand MDOT's coordination and collaboration with partners. This goal reflects MDOT's desire to get the greatest possible performance from Michigan's existing transportation

assets and future system improvements. The goal also addresses the importance of operating a transportation system and providing services to ensure that citizens and stakeholders have reliable systems and modal choices. The objectives under this area focus on the application of technology, stronger coordination and cooperation with public and private sector partners, and improved intermodal transfers.

Safety and Security: Continue to improve transportation safety and ensure the security of the transportation system. This goal continues MDOT's long-standing commitment to build, maintain, and operate the safest transportation system possible. The objectives under this goal emphasize both traditional safety initiatives aimed at reducing fatalities, injuries and crashes, as well as efforts to address new transportation system security needs in the wake of 9/11 and increased concern about terrorism.



STRATEGIES TO ACHIEVE THE GOALS

Key strategies that will help Michigan achieve its transportation goals are:

Focus improvements on Corridors of Highest Significance:

There will never be sufficient funding to make every transportation improvement that is identified, however worthy. In order to be an appropriate steward of the public trust, and make the most effective use of limited transportation revenue, MDOT will focus on improvement to the condition and efficient operation of multi-modal corridors of highest significance to the Michigan economy.

Measure performance for all modes: MDOT's experience establishing and achieving its goals for highway pavement and bridge condition was very successful. A similar focus must be brought to bear on highway operations, safety, and the condition and performance of other modes, by establishing targets, measuring performance, and investing appropriately to achieve improvement.

Integrate the transportation system: The public has expressed its wish for more modal choices. In the years to come, as Michigan's population ages, single-occupancy vehicles may no longer be the most practical or preferable transportation option for many residents. Commercial traffic also increasingly uses more than one mode, and seamless connections are vital to keep the economy moving. Michigan must plan and invest now to ensure a greater array of well-connected transportation options.

Encourage Context Sensitive Solutions: MDOT will conduct dialogues with local governments, road commissions, industry groups, land use advocates, and state agencies early in a project's planning phase. These dialogues help ensure that bridges, interchanges, bike paths and other transportation projects "fit" into



their communities. To make effective decisions, transportation agencies need to consider community values while making sound design choices that follow federal standards and meet or exceed regulatory agency requirements. Stakeholder input is a key component for good transportation decision-making.

Avoid, Minimize or Mitigate for Adverse Impacts: MDOT works closely with federal, state and local agencies and the twelve federally-recognized Tribes throughout the corridor and project planning processes to ensure appropriate stewardship and preservation of Michigan's cultural and natural resources. In the

initial stages of corridor planning, MDOT will confer with these partner agencies and the federally-recognized Tribes to evaluate prospective projects for potential negative impacts to property owners, archaeological and historic resources, endangered species, farmlands, public recreational properties, air quality, floodplains, wetlands, land uses, contaminated sites, and noise levels, as required by the various federal, state and local laws, rules and regulations. The [*MI Transportation Plan, Environmental Technical*](#)

[*Report*](#) includes a list of partners who assist our efforts to protect Michigan's natural and cultural resources.

Identify appropriate funding: Current transportation revenue streams are not even sufficient over the next 30 years to sustain the good condition of highway pavement and bridges, let alone improve operations, integration among modes, or the performance of non-highway modes. Providing flexibility to invest in a range of mutually supporting and integrated modal programs will be the first step toward meeting the vision. The public supports new and innovative transportation funding solutions as necessary, but a new focus on operations and integrated transportation will help move Michigan closer to its goals regardless of the level of funding.

FOCUS ON CORRIDORS OF HIGHEST SIGNIFICANCE

In order to safely and efficiently support the movement of people, goods, and services, MDOT recognizes that passenger and freight travel must pass seamlessly along geographic corridors on multiple modes between locations or activity centers both within and outside Michigan.

For the *MI Transportation Plan*, we defined a transportation corridor as a geographic area between two points, linking multiple activity centers, and moving people and freight.

The Activity Center Approach is focused on identifying the places, from the perspective of the state of Michigan, where population, employment, tourism, transportation, and other economically important activities are concentrated. The approach begins with the premise that the Michigan transportation system, including roads, transit, non-motorized facilities, aviation, marine, and inter-modal facilities, exist to serve as the connecting linkages between these centers of economic activity. Identification and classification of activity centers and connecting transportation corridors was conducted.

Corridors are designated or named based on the primary origin/destination they serve; international, national, statewide, regional, and local. Corridor analysis examined existing transportation facilities and services (highways, ferries, ports, airports, transit, intercity bus, rail, etc.) in that corridor and discussed opportunities, barriers and gaps within the corridor.

The categories of corridors are defined as follows:

Corridors of Highest Significance: National/International and Statewide categories: An integrated, multi-modal system of transportation infrastructure along geographic corridors that provide a high level of support for the international, national, and state economies. These corridors connect activity centers within and outside Michigan and serve the movements of people, services, and goods vital to the economic prosperity of the state.

More than 92 percent of Michigan's population resides within a 20-mile geographic area along the corridors of national or statewide significance and more than 95 percent of Michigan's employment base is located within these corridors.

Regionally and Locally Significant Corridors: An integrated, multi-modal system of transportation infrastructure along geographic corridors that provide a high level of support for a specific sub-state region of Michigan's economy. These corridors connect to and augment the Corridors of Highest Significance and serve the movements of people and goods within or between activity centers.

Planning for and targeting investments towards Michigan's multi-modal Corridors of Highest Significance and developing strategies at the corridor level allows MDOT to focus on what is most crucial to supporting the economy of Michigan.

MDOT's 11 Corridors of National / International Significance are listed here from north to south:

Mackinaw City–St. Ignace / Wisconsin
Starts in St. Ignace and follows US-2 to M-35 in Escanaba; follows M-35 to Menominee; ends at Wisconsin border.

Sault Ste. Marie / Bay City
Starts at Canadian border in Sault Ste. Marie; follows I-75 and ends at Bay City.

Bay City–Midland–Saginaw / Flint / Detroit
Starts in Bay City and follows I-75 to Detroit.



Muskegon / Grand Rapids / Lansing / Detroit
Starts in Muskegon and follows I-96 through Grand Rapids, Lansing, Livonia and ends in Detroit.

Detroit / Chicago
Starts in Detroit and follows I-94 through Ann Arbor; ends at Indiana border.

Grand Rapids / Chicago
Starts in Grand Rapids and follows I-196 through Holland to I-94; follows I-94 and ends at Indiana border.

Port Huron / Detroit / Toledo
Starts at Canadian border in Port Huron; follows I-94 to I-75 in Detroit; follows I-75 and ends at Ohio border.

Port Huron / Lansing / Indianapolis
Starts at Canadian border in Port Huron; follows I-69 through Lansing; ends at Indiana border.

Port Huron / Chicago
Starts at Canadian border in Port Huron; follows I-69 through Lansing to I-94; follows I-94 and ends at Indiana border.

I-696
Starts at I-96 in Farmington Hills and follows I-696; ends at I-94.

I-275
Starts at I-96/I-696 interchange in Farmington Hills and follows I-275; ends at I-75.

MDOT's 11 Corridors of National / International Significance serve and provide access to 72 percent of Michigan's population and 83 percent of Michigan's employment.



For example, the Mackinaw City – St. Ignace/Wisconsin corridor provides facilities for all modes of travel including roadways, trails, rail, air, and water ports. This corridor serves a unique mix of year-round residents, seasonal tourists, freight from local mines and timber industries, and Canadian traffic passing through the region.

US-2, in this corridor, has become a growing international long-haul route for Canadian trucks traveling between Eastern Canada, Wisconsin, and Western Canada. US-2 also supports the movement of forestry products, paper products, and non-metallic minerals. Intercity bus serves locations in the corridor; however, it is dependent on state subsidy.

The Muskegon/Grand Rapids/Lansing/Detroit National/International Corridor of Highest Significance crosses the Lower Peninsula. This 191.2 mile corridor provides the primary east-west connection between Michigan's largest cities and through its most densely populated urban areas. It connects seven *MI Transportation Plan* activity centers and crosses or links to nine of the 19 *MI Transportation Plan* Corridors of Highest Significance. In comparison to the other 18 *MI Transportation Plan* Corridors of Highest Significance, this corridor ranks first in many of the characteristics used to define its value to Michigan. The corridor area includes a diversity of trade and technology jobs, it begins and ends within Michigan serving and supporting Michigan-based business and commercial travel. While other corridors may carry more traffic or higher dollar values of freight passing through Michigan, this corridor focuses on connecting Michigan activity centers.



The Detroit/Chicago National/International Corridor of Highest Significance travels east-west through the heavily populated part of southern Michigan. The corridor area includes the greatest diversity and concentration of trade and technology jobs in the state. In addition to supporting Michigan-based business and commercial travel, it supports the international transport of commodities

(border crossing data and issues are discussed in Chapter 7 of the [Corridors and International Borders Report](#).) The corridor connects Michigan residents, business and commerce to Chicago, the third largest city and metropolitan area in the U.S.

More than 35 universities and technology centers and major medical and life science research facilities are located within the corridor and the activity centers connected by this corridor. The corridor also provides some of Michigan's most important non-highway travel facilities including the Detroit Metropolitan Wayne County Airport (Michigan's largest commercial passenger and air cargo airport), the Willow Run Airport (a fast growing general aviation/air cargo airport), Michigan's principal Amtrak service route and major marine ports in Detroit and Benton Harbor.

It is a principal corridor for east-west freight movements both within Michigan and through Michigan between Chicago and the International Border Crossings. Travel is available on all modes in the corridor. The western part of the corridor supports a significant portion of Michigan's agricultural and fruit industry. The corridor accounts for 24.4 percent of the total statewide ton miles and 32.4 percent of the total statewide value miles of truck freight.

Detailed analysis can be found in the *Corridors and International Borders Report*, which summarizes the integrated, multi-modal journey of people, goods and services which occurs on a daily basis along the Corridors of Highest Significance within the state of Michigan. Please go to the web page at www.michigan.gov/slrp.

MDOT developed decision principles to guide the management, operation, and investment decisions for transportation facilities within these integrated, multi-modal corridors. Many of these principles can be applied outside the corridors as well. Decision principles and strategies for these corridors include:

- **Priority:** Give priority in project programming and funding to needed improvements to modal facilities along the Corridors of Highest Significance.
- **Coordination:** Continue to develop and facilitate partnerships to address transportation system deficiencies along these corridors.
- **Innovative Partnerships and Programs:** Continue to actively seek and support partnerships with businesses and other government agencies to identify and advance innovative, multi-modal programs, financing, and solutions that may improve safety, mobility, reliability, and economic competitiveness.
- **Asset Management:** Continue to preserve transportation assets through pursuit of the asset management process and engage other transportation providers as well to strategically manage the transportation system in a cost-effective and efficient manner.



- **Corridor Plans:** Develop corridor-based plans and strategies for portions of National Corridors of Highest Significance that have immediate or near-term system condition needs. Each corridor-specific plan will guide systematic implementation of improvements.
- **Corridor Completion:** Ensure that the entire corridor meets operational, safety, congestion, and design performance metrics and goals. Evaluate and make focused, multi-modal strategic recommendations targeted to the unique conditions and transportation needs of each corridor, economic sector, and sub-state region. Improve modal connectivity and create corridors of uniformly high transportation quality and acceptable performance.
- **System-wide Operational Focus:** Develop programs to maximize the efficiency and operation of the transportation system as a whole, recognizing unique regional needs and encouraging cooperation among all partners.
- **Reduce Delays:** Minimize disruption to mobility resulting from incidents and recurring congestion along Corridors of Highest Significance by developing and applying corridor-specific operational improvement strategies.
- **Minimize Construction Impacts:** MDOT will continue to apply innovative and specialized construction methods for all transportation facility construction projects in order to minimize, to the greatest extent possible, impacts, to the traveling public.

- **Leadership in Coordination:** MDOT will take a leadership role in transportation issues statewide by developing and facilitating partnerships to ensure transportation system deficiencies along these corridors are minimized. For example, if there is a gap in the transit system such as a need to connect a local transit provider with an intercity transit provider, MDOT will take a leadership role in bringing the local public transit provider, appropriate local government representatives, and private sector providers together to seek solutions.

- **System Management:** Continue to work with local governments to implement Access Management, Transportation Demand Management, and Transportation System Management programs. MDOT will also continue to partner with local officials to uphold access management principles in order to keep traffic flowing smoothly on state trunklines running through local jurisdictions.

- **Local-Access Interchanges:** Improvements to existing interchanges and construction of new interchanges present a special need for state and local coordination. Over the life of the *MI Transportation Plan*, MDOT will be focusing its limited resources on improving the operations of trunkline to trunkline interchanges. The limited number of trunkline local interchange improvement projects may be selected in response to traffic needs on a statewide priority basis but will require local coordination and a concurrent local commitment through right-of-way donation, project funding, and/or a concurrent local commitment to widen the local road as necessary.



- **Carpool or Park and Ride:** Continue to evaluate, construct or expand, as warranted, carpool or park and ride lots within the corridors.

- **Roadside Tourist Facilities:** Maintain roadside rest areas, welcome centers, and roadside parks as an amenity along corridors of highest significance and keep them in such a manner that Michigan residents can be proud of them.

- **Intelligent Transportation Systems (ITS):** Work to implement multi-modal ITS technology within all Corridors of Highest Significance to ensure the network of both freeway and non-freeway system elements work efficiently together.

- **Planning Funding:** Use federal funds to plan, implement and evaluate corridor strategies and innovative programs to address safety, access, choices, integration, or mobility on its Corridors of Highest Significance.

- **Innovative Financing:** MDOT will routinely identify and seek innovative funding and financing, such as public-private partnerships, for major projects along the Corridors of Highest Significance.

- **System Maintenance:** MDOT will continue its leadership role, in coordination with its transportation partners, to ensure that adequate maintenance levels are achieved statewide across all modes to protect the public's investment for the future.

MEASURE PERFORMANCE FOR ALL MODES

Michigan's future growth depends on the preservation, modernization, and efficient operation of its transportation system. To achieve the goals, it is important to monitor the performance of the transportation system. Setting [goals](#) for highway and bridge condition and then monitoring achievement of the goals helped MDOT make significant improvements in that area over the past several years.

Setting [performance measures](#) for other transportation infrastructure and services can broaden that effort. While MDOT does not own all of these assets, it has direct jurisdiction over some of the assets and provides funding to other government agencies, which have assets under their own jurisdictions.

Our multi-modal transportation system is crucial to our state economy and to our competitive position, and MDOT relies on its federal, local, and private sector partners to monitor changes it cannot directly control.

- **Overarching measures:** Performance measures in this category deal with economic impacts, safety, customer/stakeholder satisfaction, system integration, congestion and delay.
- **System Operational Performance:** The operational performance of the system pertains to the mobility and reliability provided by the system in all of its components to connect users with activities. The mobility available on the highway and transit components of Michigan's transportation system are two key aspects of operational performance.
- **Highway and Bridge measures:** These measures focus on highway and bridge condition, safety, congestion and delay, and access management.

- **Public Transportation measures:** Performance measures in this area pertain to transit fleet condition, transit safety, and transit system coverage.
- **Aviation measures:** These measures assess and monitor runway pavement condition, aviation security, and aviation system and operations improvements.
- **Bike/Pedestrian measures:** Measures here deal with bike/pedestrian safety, accessibility, and connectivity.

Additional performance measure goals for the Corridors of Highest Significance are:

- Modal Choice including access, system integration, and connectivity.
- Freight Adequacy.



INTEGRATE THE TRANSPORTATION SYSTEM

Integrating transportation is important because it spurs economic activity. Connectivity between modes allows for greater spontaneous economic activity, and reduces costs to business and commercial shippers. To better understand how to integrate transportation, the modal technical reports were analyzed for common issues and concerns.

Integrating transportation presents a challenge to transportation providers because of “smokestack” funding sources that are limited in their use. A better understanding of how improvements in one mode can also benefit other modes will allow MDOT to “leverage” its limited transportation funds and achieve the most benefit with taxpayer dollars. Toward this end, a set of decision principles were developed to help transportation decision-makers best invest scarce resources while making progress toward integration. Those decision principles are highlighted here:

- When improving a system component, consider and make allowances for improvements that may be needed in integrated components.
- Seek investments that remove barriers to connectivity or realize opportunities to improve connectivity and enhance integration for multiple components.



- Assess the complexity of user needs and activities when conducting corridor studies.
- Allow greater flexibility and innovation in funding for needs that are more complex.
- Assess how connections to and within complex activity centers can be improved for overall corridor performance.

- Recognize that investments in one mode on a complex corridor or in an activity center are likely to generate needs or benefits on other modes.
- Coordinate with partners and stakeholders to understand corridor complexity and maximize financial and performance leverage for other modes or jurisdictions.
- Consider linkages between land use and performance of system components.

Ultimately, Michigan will achieve a seamless, integrated system by making good choices one project at a time. The ultimate beneficiaries of an integrated system are Michigan’s people and businesses, who use transportation to achieve their human and economic potential with greater freedom from the barriers to safety, mobility, and sustainability.

INVESTING TO ACHIEVE THE VISION

Achieving the vision of the *MI Transportation Plan* requires investment levels that provide balanced transportation by investing in all transportation modes. MDOT will strategically invest in those elements that have the most potential to also address needs and enhance system integration and performance.

The *MI Transportation Plan* primary focus is on the parts of the transportation system that the Michigan Department of Transportation (MDOT): 1) has jurisdiction over, 2) provides funding for, or 3) regulates. The statewide long-term transportation needs for the department are split into eight categories:

- Aviation. Preservation and modest expansion of aviation facilities;
- Freight. Preservation and modest expansion of rail and marine freight facilities;

- Highway Expansion. New capacity on trunkline facilities;
- Highway Other. Miscellaneous capital improvements to trunkline facilities such as rest areas, electrical, drainage, etc.;
- Highway Preservation. Maintenance, rehabilitation, resurfacing, and replacement of pavements and bridges;
- Highway Modernization. Safety and operational improvements, such as ITS and signalization coordination;
- Multi-modal Preservation. On-going transit services, carpool, and bike/pedestrian facilities; and
- Multi-modal Expansion. Adding new capital to bus transit and rail passenger facilities, expanding transit and rail passenger service, carpool lots, and bike/pedestrian facilities.



MDOT compared [four potential funding scenarios](#) with identified needs for all modes in an effort to identify an approximate level of investment to achieve the vision.

“Business as Usual” assumes no additional revenue beyond existing anticipated revenues and historical funding trends, and an allocation of these funds among state programs in a way consistent with how revenues are allocated today.

“Change the Mix” also assumes no additional revenue beyond existing anticipated revenues and historical funding trends, but **“Change the Mix”** considers reducing highway preservation



Summary of Four Investment Packages (\$2005)					
High-Level Category	Needs	Business as Usual	Change the Mix	Move Ahead	Flexible New Revenues
Aviation	\$5.28B	\$2.01B	\$2.01B	\$2.01B	\$2.01B
Freight	\$0.46B	\$0.22B	\$0.22B	\$0.27B	\$0.27B
Highway Expansion	\$16.81B	\$2.23B	\$2.23B	\$2.23B	\$3.55B
Highway Other	\$7.30B	\$5.27B	\$5.27B	\$5.27B	\$5.27B
Highway Preservation	\$30.92B	\$18.84B	\$16.02B	\$20.70B	\$27.54B
Highway Modernization	\$5.45B	\$2.67B	\$3.61B	\$3.72B	\$4.33B
Multi-modal Preservation	\$12.21B	\$5.78B	\$7.66B	\$9.02B	\$9.73B
Multi-modal Expansion	\$2.72B	\$0.02B	\$0.02B	\$0.02B	\$0.02B
Total	\$81.15B	\$37.03B	\$37.03B	\$43.24B (\$6.21B)	\$52.71B (\$15.68B)

revenues to allocate more funds to multi-modal and modernization programs associated with the seamless and multi-modal system described by the preferred public vision.

“Move Ahead” illustration explores the implications of raising additional revenue beyond those associated with the base case revenues by 16 percent and investing the additional revenue into Multi-modal Preservation and Highway Modernization programs without taking projected revenues away from existing programs.

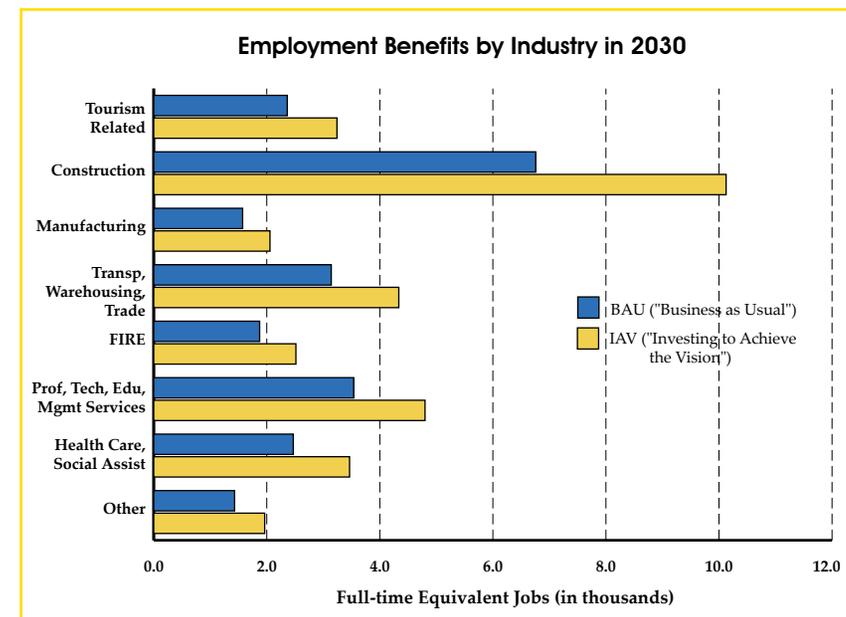
“Flexible New Revenue” illustration explores the implications of raising additional revenue through the **“Move Ahead”** scenario as well as dedicated new revenue sources to support system preservation, both consistent with the Preferred Vision of *MI Transportation Plan*. The **“Flexible New Revenue”** future entails increasing overall state transportation revenues by 42 percent over 25 years to preserve existing assets and to invest in Multi-modal Preservation and Highway Modernization programs. The **“Flexible New Revenue”** package accounts for \$15.68 billion in new revenue over the life of the plan and still represents a \$28 billion revenue gap.

“Investing to Achieve the Vision” while preserving Michigan’s highways and bridges, and moving forward with a seamless multi-modal system will require revenues beyond those currently expected. Building off the Flexible New Revenue scenario, with additional revenue for aviation and transit, will bring us closer to the vision. It will also call for greater flexibility in Michigan Public Act 51 of 1951, known as “Act 51,” to use and invest state transportation revenues in keeping with the goals of *MI Transportation Plan*.

“Investing to achieve the vision” (IAV) levels described here will provide balanced transportation by investing in all transportation modes. It will support system integration and efficiency by strategically investing in those elements that have the most potential to also address needs on other modes and enhance

Economic Benefits 2007-2030				
	Business as Usual (BAU)	Investing to Achieve Vision (IAV)	Diff. = IAV - BAU	% Increase IAV over BAU
Total Employment (in thousands permanent jobs)	30	43	13	43.3%
Gross State Product (in billion of 2005\$)	\$50.0	\$69.6	\$19.6	39.2%
Personal Income (in billion of 2005\$)	\$38.4	\$54.7	\$16.3	42.4%
Personal Travel Time Savings Benefits (in billions of 2005\$)	\$22.2	\$27.1	\$4.9	22.1%

system performance. Because there is a direct linkage between the performance of the state’s transportation system and its economic performance, the higher level of investment will give rise to greater economic returns for the state and its residents. The IAV program results in economic returns of nearly \$70 billion in Gross State Product (GSP), over \$80 Billion in personal income and travel time savings and more than 43,000 permanent full-time equivalent jobs. This translates into \$1.64 in economic benefits for Michigan residents for every one dollar invested in transportation¹. In comparison, the Business as Usual program gives rise to over \$60 billion in economic personal income and travel time savings impacts and nearly 30,000 permanent full-time equivalent jobs. The benefit estimates for both packages should be considered the lower bound of potential benefits because, due to data limitations,



¹The economic benefits used for this calculation include personal income and the value of personal time savings.



the analysis does not fully account for all of the benefits arising from the proposed transportation investments. Specifically, the analysis does not fully capture social and environmental benefits or the full value of logistics cost savings to Michigan businesses, both of which can be very significant. The complete analysis can be found in the *Methodologies of Estimating Economic Impacts* and [Economic Impact Analysis of the Michigan Transportation Investment Packages](#) reports.

New sources of revenue will need to be raised to support the vision of *MI Transportation Plan* in ways that are beneficial to the state’s economy in the long-term. Achieving the vision for transit in the state will require increasing financial support, since infrastructure needs and operating needs will continue to exceed the federal, state, and local funding currently available. Investing to achieve the vision requires revenues that can support the preservation

Impact on Highways and Bridges		
Performance Measure	Business as Usual	Investing to Achieve Vision (IAV)
Freeway % Good Pavement	75%	90%
Non-Freeway % Good Pavement	66%	77%
System-wide % Good Pavement	69%	82%
Freeway % Good Bridges	89%	99%
Non-Freeway % Good Bridges	77%	88%
% Uncongested Freeway	78%	81%
% Uncongested Non-Freeway	90%	92%

Source: Michigan Department of Transportation Road Quality Forecasting System, Bridge Condition Forecast System, and Statewide Travel Demand Model

and expansion of Michigan’s multi-modal infrastructure, as well as the modernization of Michigan’s road and bridge system. Such revenues can be raised in ways that enhance both economic vitality and transportation efficiency, and MDOT will pursue these alternatives, particularly with respect to public private partnerships (PPPs).

MDOT will partner and support regional efforts for public transportation. A strong federal, state, regional, and local partnership is critical to achieving the vision for public transit in Michigan. By investing to achieve the vision, MDOT will identify and advance innovative, multi-modal programs, financing, and solutions to improve safety, mobility, and economic competitiveness within the Corridors of Highest Significance.

High-level Category	Needs	IAV Investment
Aviation	\$5.28B	\$2.37B
Freight	\$0.46B	\$0.27B
Highway Expansion	\$16.81B	\$3.55B
Highway Other	\$7.30B	\$5.27B
Highway Preservation	\$30.92B	\$27.54B
Highway Modernization	\$5.45B	\$4.33B
Multi-modal Preservation	\$12.21B	\$9.73B
Multi-modal Expansion	\$2.72B	\$0.51B
Total	\$81.15B	53.57B

Source: Michigan Department of Transportation Road Quality Forecasting System, Bridge Condition Forecast System, and Statewide Travel Demand Model



USING THE CORRIDORS OF HIGHEST SIGNIFICANCE TO FOCUS INVESTMENT

MDOT has already begun to focus investment to rebuild and modernize transportation facilities within the [National Corridors of Highest Significance](#). Their importance also requires that we ensure the highest level of safety and security. Michigan's international border crossings with Canada are included in the corridors.

MDOT's most immediate focus for system improvement, efficient and effective operations, safety and security, and stewardship will be on the following projects. While these projects are crucial, they do not represent an exhaustive list of necessary capacity priorities through 2030. Nor does the list include the significant investment MDOT and local governments will make in maintaining and improving our existing roads, bridges, transit systems, airports, and other transportation system assets. Other capacity improvements consistent with the *MI Transportation Plan: Moving Michigan Forward* strategies are in various stages of development.

National/International Corridor Focus

Focus for the Detroit – Chicago Corridor includes:

I-94 from Michigan/Indiana state line to Port Huron: This corridor will require expansion to accommodate projected growth in traffic. Three lanes in each direction will be needed at a minimum. Three segments of I-94 have been studied recently and have received Federal Highway Administration approval to move forward.

- I-94 from I-96 to Conner in Wayne County was approved to receive capacity and operational improvements at interchanges. These improvements will be made when funding is available.
- I-94 between M-60 and Sargent Road in Jackson County will be widened as funds become available.

- I-94 segment in Kalamazoo between US-131 and Sprinkle Road will be widened to three lanes in each direction.
- **Detroit Intermodal Freight Terminal (DIFT):** The DIFT will develop a regional freight complex to serve shippers and industries in Southeastern Michigan and provide economic efficiencies. It will consolidate intermodal facilities of three class I railroads that are scattered over the region and expand capacity for freight.

There are several large airport projects being implemented along the Detroit – Chicago (I-94) corridor.

- **Southwest Michigan Regional Airport (Benton Harbor):** The primary runway is being extended to 6,000 feet and will address federal safety standards. This project will enable business jets to utilize the airport for nonstop direct flights to international locations such as Europe. The project is estimated to be completed the within five years at a total cost of about \$30 million. Existing industry in southwest Michigan will benefit as will the region in general from the airport's expanded capability.
- **Kalamazoo/Battle Creek International Airport (Kalamazoo):** The airport has plans to construct a new terminal building to provide space for additional airline service and to accommodate more efficient security screening of airline passengers. Total investment required is still being determined but is expected to be in the range of \$5-7 million.
- **W. K. Kellogg Airport (Battle Creek):** The airport is adding a parallel runway to support the mix of aircraft using the airport. While maintaining the long primary runway for military, corporate and general aviation aircraft, the parallel runway will serve the growing aviation education needs of

Western Michigan University. Total cost of this project will be approximately \$20 million.

- **Jackson County – Reynolds Field (Jackson):** The airport is constructing a new primary runway to replace the existing runway which cannot be upgraded to meet federal safety standards. Many businesses in the Jackson area utilize aircraft operating at this facility. The airport also has the potential to be a multi-modal asset as it is bordered on the north by I-94 and on the south by a rail line having Amtrak service. The total cost of the airport project should be \$12 – 15 million.

Midwest Regional Rail Initiative:

A \$7.7 billion system plan and 10-year improvement program have been developed for the nine-state, 3000-mile passenger rail system having Chicago as its hub and integrated with transit and non-motorized modes. The system is designed to provide frequent, dependable, and convenient service using modern equipment resulting in user, community, and station area benefits. Once funding becomes available, the system will be developed resulting in business and non-business travelers being transported primarily at distances up to 300 miles at speeds up to 110 mph. Implementation of this project will likely require new or additional sources of federal, state, and local funds.

Ann Arbor-Detroit-Pontiac Passenger Rail/Bus Rapid Transit Initiative: A number of studies of passenger rail and bus rapid transit alternatives in southeast Michigan have led to a pilot passenger rail service being designed for the Ann Arbor-Detroit-Pontiac corridor. Frequent, dependable, and convenient passenger

rail service, using modern equipment, integrated with local transit service will serve work and other trip purposes. If successful, the demonstration project will result in qualifying for funding under the federal New Starts Program. By 2030, this service could be expanded to include additional corridors and extended to points more distant from Detroit. Implementation of this project will likely require new or additional sources of federal, state, and local funds.

Grand Rapids/Chicago Corridor, I-96 and I-196: Plans are under way to modernize the I-196 corridor in Grand Rapids in conjunction with road and bridge rehabilitation work that will be undertaken over the next decade. These projects will bring bridges and roadway geometrics to current design standards, improve the I-96/I-196 junction area in Grand Rapids, and improve freeway mainline and interchanges in the Grand Rapids area. Long term plans for this corridor include the addition of a lane to meet anticipated roadway capacity needs. I-196 from Market Street to I-96, I-96 from Leonard to north of M-11 (28th St.) and a portion of M-37/M-44 (East Beltline) in the City of Grand Rapids and Grand Rapids Township.



Grand Rapids Area Bus Rapid Transit

Initiative: The Interurban Transit Partnership's (ITP/The Rapid) major public

transportation investment study proposes bus rapid transit on a 9.87-mile stretch of South Division Avenue from downtown Grand Rapids to 60th Street for federal New Starts funding. Ten transportation corridors and 12 modes such as express bus, light rail, and commuter rail have been analyzed in the study. As funding becomes available, and demand increases, the system could be expanded to include other corridors. Implementation of this project will likely require new or additional sources of federal, state, and local funds.

Capital City Airport (Lansing): The airport is in the midst of extending its primary runway to 8,500 feet to accommodate larger cargo aircraft well as to facilitate efficient airline service to distant national destinations. The total project cost should be approximately \$9 million.

Muskegon County Airport (Muskegon): The airport is lengthening its secondary runway to 6,500 feet to accommodate airline traffic in the winter months when the prevailing winds shift and to address federal safety requirements. This project has been ongoing for several years and should be completed within three years depending on available funding.

I-75 from Michigan/Ohio state line to Bay City: This corridor is experiencing growing traffic volumes which warrant a minimum of four lanes in each direction in urban areas and three lanes in each direction between the urban areas.

- I-75, between I-696 and M-59 in Oakland County will be widened to four lanes in each direction. Additionally, operational improvement will be made to numerous interchanges along this segment. These improvements will take place as funding becomes available.

Construction of a New Soo Lock: Congress authorized construction of a new large lock at Sault Ste. Marie in 1986. Federal law requires cost sharing by the eight Great Lakes states for construction of the new lock, so the Michigan legislature

established a dedicated reserve fund in 2001, with an “up-front” payment of \$4.7 million. Efforts continue to secure the remaining funding from Congress and other Great Lakes states. The new lock will replace two obsolete locks that were constructed during World War I and are now closed. It will be similar in size to the existing Poe Lock, the only lock capable of accommodating 1,000 foot long vessels and other large vessels which account for more than 60 percent of the U. S. Great Lakes’ fleet capacity.



Otsego County Airport (Gaylord): Recently completed construction of a new terminal facility, additional airport improvements are being made to facilitate attraction of a major cargo carrier.

Tulip City Airport (Holland): A new terminal is being proposed to accommodate the extensive charter and business traffic use of the airport.



Partnering Initiatives: Not every improvement to the transportation system relies solely on investment. MDOT is already involved in several major partnering initiatives, including partnership with the Department of Natural Resources to develop a state railways plan, with local road agencies to better manage and monitor the condition of our infrastructure, and with auto manufacturers and telecommunications companies to improve highway performance with vehicle-infrastructure integration.

Partnerships such as these have already improved the efficiency and reliability of a variety of transportation modes, and will continue to do so in the future.

Statewide Corridor Focus

US-127, St. Johns to Ithaca, Clinton and Gratiot Counties:

The department has been working toward converting this section of highway to a limited-access freeway. MDOT has acquired a portion of the necessary right-of-way for implementation of this improvement along the US-127 corridor. Long term plans call for construction of this segment of freeway to be underway within the next 20 years. When completed, the corridor connecting Jackson and Grayling will be a limited access highway along its entire length.

M-59 in Livingston, Oakland and Macomb Counties: The M-59 corridor has undergone rapid change in recent years due to continued urbanization and the associated increases in traffic. This corridor is now a heavily-used commuter route.

- Design work is underway for a future widening of M-59 from Crooks Road to Ryan Road in Oakland and Macomb counties. This project will also rehabilitate and widen several bridges and upgrade vertical clearances where needed.
- Design work and right-of-way acquisition are also under way for future widening of M-59 from Michigan Avenue in Howell easterly to Whitmore Lake Road in Livingston County. Construction to widen M-59 from I-96 to Michigan Avenue in Howell began in 2007.

US-23 from M-14 to I-96: A comprehensive study of the US-23 corridor between Ann Arbor and Brighton will examine existing conditions and future needs. Significant growth along

this corridor has driven traffic volumes up to the point where improvements are needed.

US-31 from M-45 to I-96/M-104: Increased traffic volumes and the need for an additional Grand River crossing has led to plans for a new 2-lane road between I-96/M-104 and M-45 near the 120th Avenue corridor and a new 2-lane bridge over the Grand River. This new route will provide an alternative for traffic wishing to avoid the City of Grand Haven and an alternative for river-crossings within this statewide corridor when the bascule bridge is inoperative. Improvements to the existing US-31 in Holland and Grand Haven will also be included with this project.



Regional Focus Group

M-24, between Brauer Road and I-69 in Lapeer County: Construction of a 4-lane boulevard is underway between Pratt Road and I-69 to improve safety and traffic flow in this busy commuter corridor. Subsequent improvements include the construction of a boulevard along the remaining segment from Brauer Road to Pratt Road.

M-15, I-75 to I-69 in Oakland and Genesee Counties: Corridor preservation activities and operational improvements are ongoing along this portion of Michigan's first Recreational Heritage Route and will continue until sufficient revenues become available to move forward with plans to widen this roadway. Environmental studies and documentation have been completed.

INTERNATIONAL BORDER CROSSINGS

MDOT is committed to improving Michigan's highway and rail border crossings and their related trade corridors. A five-year strategy to systematically repair and rebuild the U.S.-Canada border infrastructure and connecting Interstate freeway system has been developed and is being implemented. This consists of three key elements:

- Investments in border and corridor infrastructure.
- Enhanced coordination and cooperation with federal, state, provincial, regional, and local partners.
- Advocacy efforts for federal policies that address border and corridor infrastructure needs and improve the movement of people and goods across the U.S.-Canada border.

Detroit River International Crossing (DRIC): MDOT, in cooperation with its Canadian partners, is conducting an Environmental Impact Study for a new international border crossing in the Detroit River area. The purpose of the project is to provide for the safe, efficient, and secure movement of people and goods across the U.S.-Canada border to support the mobility needs of the economy and of national and civil defense. The study is expected to be complete in 2008 with a new crossing to be in place by 2013.

Blue Water Bridge Plaza: A study is underway to identify improvements to the plaza on the U.S. side of the Blue Water Bridge. This effort strives to improve border security, vehicle

inspection and toll collections, to meet the 20-30 year needs of bridge users, inspection agencies and other stakeholders.

International Bridge: MDOT will work with our Canadian partners to preserve the facility and address long-term needs.

Ambassador Bridge/Gateway Project, I-75 at Ambassador Bridge: This project will address long-term congestion mitigation issues and provide direct access improvements between the Ambassador Bridge and I-75 and I-96.



CONCLUSION

Fifty years ago this year, a bold and visionary Michigan completed construction of an innovative and hugely symbolic piece of infrastructure: the Mackinac Bridge. It physically linked Michigan's two peninsulas and for the first time, opened up whole new areas of the state to growth and development, and changed the lives of many Michigan residents. The bridge that linked our two pleasant peninsulas changed transportation in this state in a permanent way, and changed our perception of ourselves.

Fifty years ago last year, another set of visionaries initiated construction of a nation-wide set of interstate highways that made cross-country travel a commonplace occurrence today. These Interstates likewise opened new parts of the nation to economic opportunities that never would have existed without them. They changed this nation's entire understanding of itself and its capabilities.

Today, we have another vision to work toward, developed with the help of the people of Michigan. This plan proposes a level of investment, and a new focus on operation of a total transportation system that will have an impact as significant as the construction of the Mackinac Bridge.

The level of investment proposed in this plan will create jobs and attract new industries to Michigan. It will provide the growing elderly population with greater mobility and more options for

access to health care, community activities and community services, and allow us to attract and retain younger workers who seek a more active lifestyle, and more vibrant communities. It will sustain and strengthen Michigan's position as a global gateway in an economy increasingly dependent on global trade. It will encourage intermodalism, energy efficiency, and a greener Michigan. It will ensure the efficiency of key transportation corridors that are vital to the state's economic health.

There is a great deal of regional and metropolitan-level transportation planning occurring throughout Michigan today. The asset management process, via the Michigan Transportation

Asset Management Council, has proven to be particularly useful for enhancing the effectiveness of roadway management and for demonstrating the value of regional planning. Likewise, Metropolitan Planning Organization (MPO) and Regional Planning Agency (RPA) plans, processes, and Transportation Improvement Programs (TIPs) developed by MPOs can provide tools through which MDOT can ensure priorities articulated in *MI Transportation Plan* are implemented.

Michigan is at a crossroads. Bold action is required for the state to move forward. This plan, formulated with advice and input from all over the state, based on detailed technical analysis and projections, represents a significant, but necessary, shift in the way transportation moves forward in Michigan.



*Providing the highest quality integrated transportation services
for economic benefit and improved quality of life*



Michigan Department of Transportation

WilburSmith
ASSOCIATES