MDOT
Michigan Department of Transportation

FIVE-YEAR TRANSPORTATION PROGRAM

FINAL DRAFT
FY 2010-2014

MDOT
Michigan Department of Transportation

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MICHIGAN DEPARTMENT OF TRANSPORTATION

2010-2014 FIVE-YEAR TRANSPORTATION PROGRAM

VOLUME XII

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INTRODUCTION

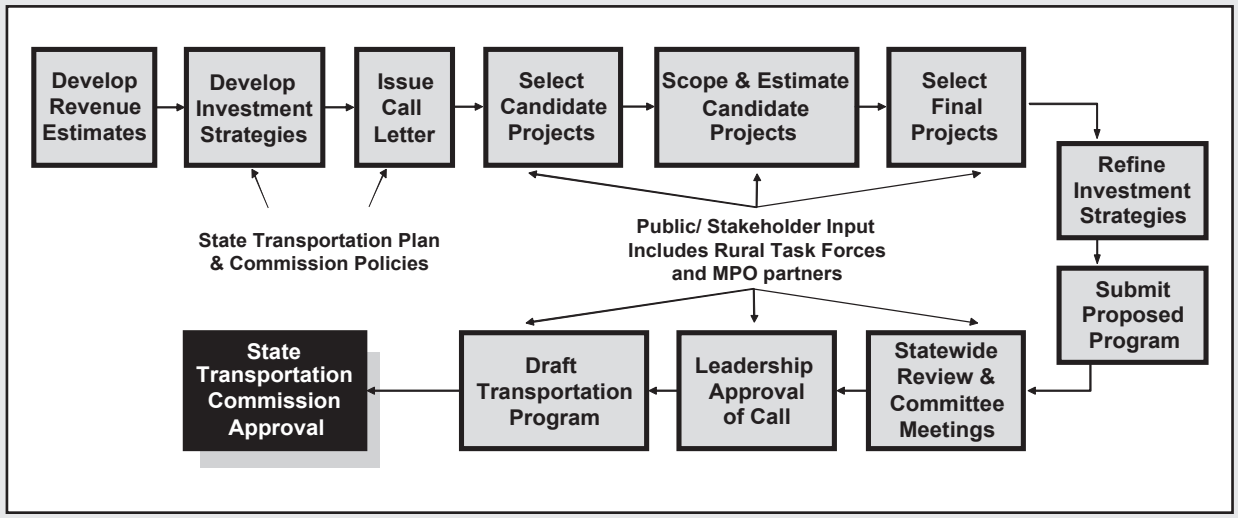
The Michigan Department of Transportation (MDOT) FY 2010-2014 Transportation Program is an integrated multi-modal program that continues to implement the goals and policies outlined by the State Transportation Commission (STC), emphasizing preservation of the transportation system and providing safe mobility to Michigan's citizens. The program focuses on making government effective, efficient, and inclusive; providing a safe and secure transportation system; protecting natural resources and air quality; improving land use practices; and providing economic development opportunities as set forth in Governor Jennifer M. Granholm's vision for improving our quality of life and growing Michigan's economy.

The Five-Year Transportation Program is an integrated program that includes highways, bridges, public transit, rail, aviation, marine, and non-motorized transportation. The Multi-Modal Program focuses largely on continued safe and secure operation of the existing transportation system through routine maintenance, capital replacement and rehabilitation, and preservation of existing service levels.

The highway portion is a rolling program; each year, a new fifth year is added and program/project adjustments are made to other years. This document only pertains to that portion of the programs that MDOT delivers, and does not account for those portions delivered locally with state and federal funds that are directly controlled by local agencies, such as transit agencies or county road commissions.

The Highway Program development process is a yearlong, multi-stage process as shown in the following flowchart.

Five-Year Transportation Program - Development Process



MDOT continues to emphasize and strengthen partnering efforts with transportation stakeholders and the general public throughout this program to maximize the resources we do have. MDOT will also continue to implement processes developed at workshops and stakeholder meetings to incorporate context sensitive solutions into transportation projects, and hold public input sessions on future Five-Year Transportation Programs. We also commit to improving our process of tracking public engagement at the regional level, to enhance local communication and follow-up with transportation industry partners and the general public.

Transportation plays a fundamental role in growing Michigan's economy and protecting quality of life in our communities. A safe, well-maintained, and efficient transportation system provides the backbone for all economic activity within the state. Without a comprehensive transportation system, Michigan's economy would be at a great competitive disadvantage and the quality of life within our communities would greatly deteriorate.

Michigan faces many challenges in delivering sustainable transportation infrastructure im provements and services over the next five years. The most significant challenge is declining state transportation revenue and uncertain federal funding levels. This Five-Year Program identifies strategies that efficiently utilize the state and federal funds that we expect to be available over the five-year time frame.

PUBLIC INVOLVEMENT

The public comment period for the Five-Year Transportation Program was November 30, 2009 through December 11, 2009. The preliminary draft was posted on MDOT's web site and constituents were asked to submit comments. Letters could also be sent to the department through regular mail if necessary. The department received a total of 75 comments from the public. Forty-nine of them focused specifically on MDOT projects and the remainder of the comments addressed critical issues and suggestions for improvements to our funding system as well as the need to address funding for continued research and intermodal programs.

During the comment period, there were also a number of newspaper articles across the state that focused on the proposed reduced program and the number of MDOT projects that could be delayed if the reduced program is implemented. The Michigan Infrastructure and Transportation Association was also quoted in many of the articles and they expressed their concerns about the transportation funding crisis in our state as well. Their concerns focused on several key issues including:

- The impacts on Michigan's ability to match federal aid beginning in FY 2011;
- The lack of state revenue for transportation is causing MDOT to reduce its program statewide;

- The pavement condition goals established by the State Transportation Commission will not be maintained in the future which will cause declines in the current infrastructure condition;
- Even though there is enough state revenue to match federal dollars in FY 2010, the current rate of state funding is still not enough to maintain infrastructure needs.

These issues are discussed in more detail in the supplemental document entitled 2010-2014 Five-Year Transportation Program Financial Crisis Key Messages.

TRANSPORTATION FUNDING CRISIS AND ECONOMIC IMPACTS

This Five-Year Transportation Program identifies the transportation funding crisis facing Michigan. Unless state revenue for transportation increases, Michigan will experience substantial decline in system condition, service level and reliability. All modes of transportation are being affected by declining revenues and decreased buying power. Strategies are being developed to lessen the impacts to our customers, suppliers and stakeholders. However, without significant additional revenue, the service quality and economic support that we have come to expect will be greatly impacted.

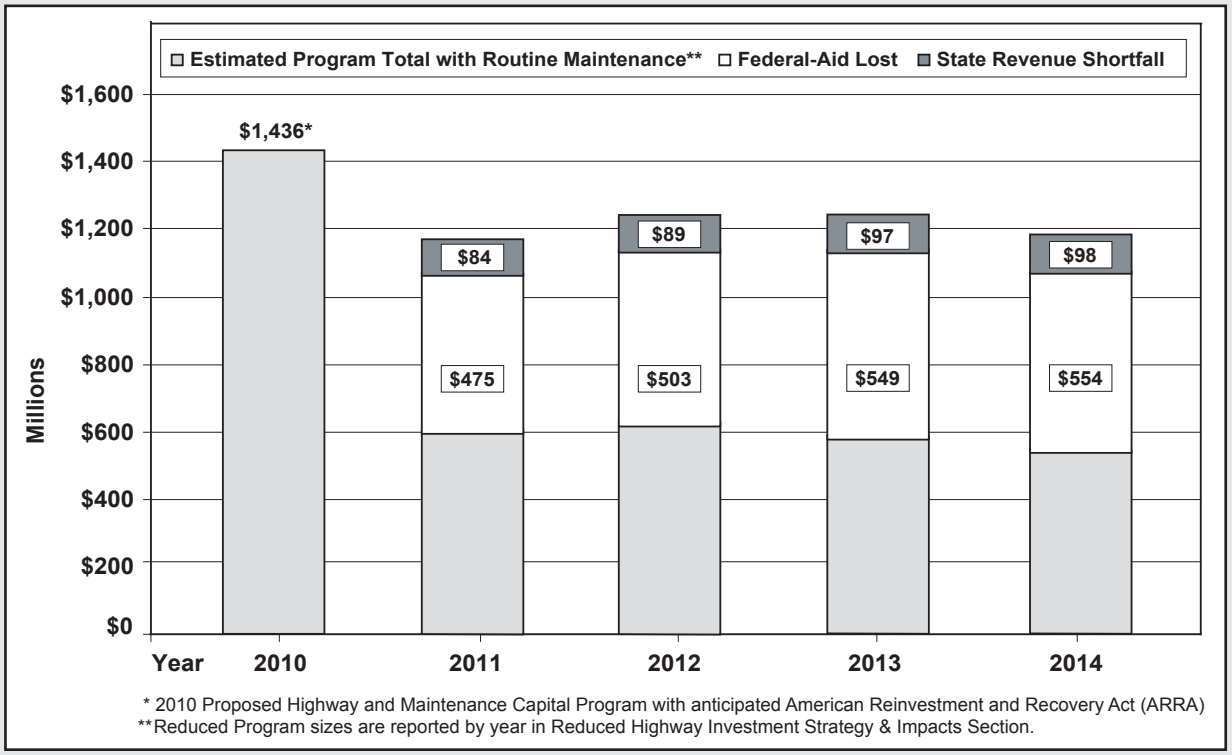
HIGHWAY PROGRAM AND THE FUNDING CRISIS

MDOT is in the midst of a fiscal crisis, generated largely by state revenue declines, but also uncertainty of funding at the federal level. The Highway Program funding crisis we now face is a result of many things, including volatile gas prices which have led many motorists to make permanent changes to their driving habits. Many are driving less, and buying more fuel efficient vehicles, leading to a $100 million decrease in gas tax revenue over the past five years, and this trend is expected to continue. Michigan's weak economy in recent years has also generated a reduced amount of vehicle registration revenues. In addition, skyrocketing business costs and the cost of raw materials like asphalt and steel are eroding the purchasing power of the funding we do have. Our transportation system is aging and is to the point where many of our roads and bridges need major reconstruction to provide the level of service the public expects.

MDOT is reaching a point of not being able to maintain its capital investments and the system reliability that Michigan's economy needs. If the state continues funding transportation at the current level, with a 19-cent per gallon gas tax and vehicle registration fees, in 2011, we will not be able to match all of the federal funding we are eligible to receive; and federal highway transportation funds could go to other states that can provide the required match.

MDOT Highway and Maintenance Program

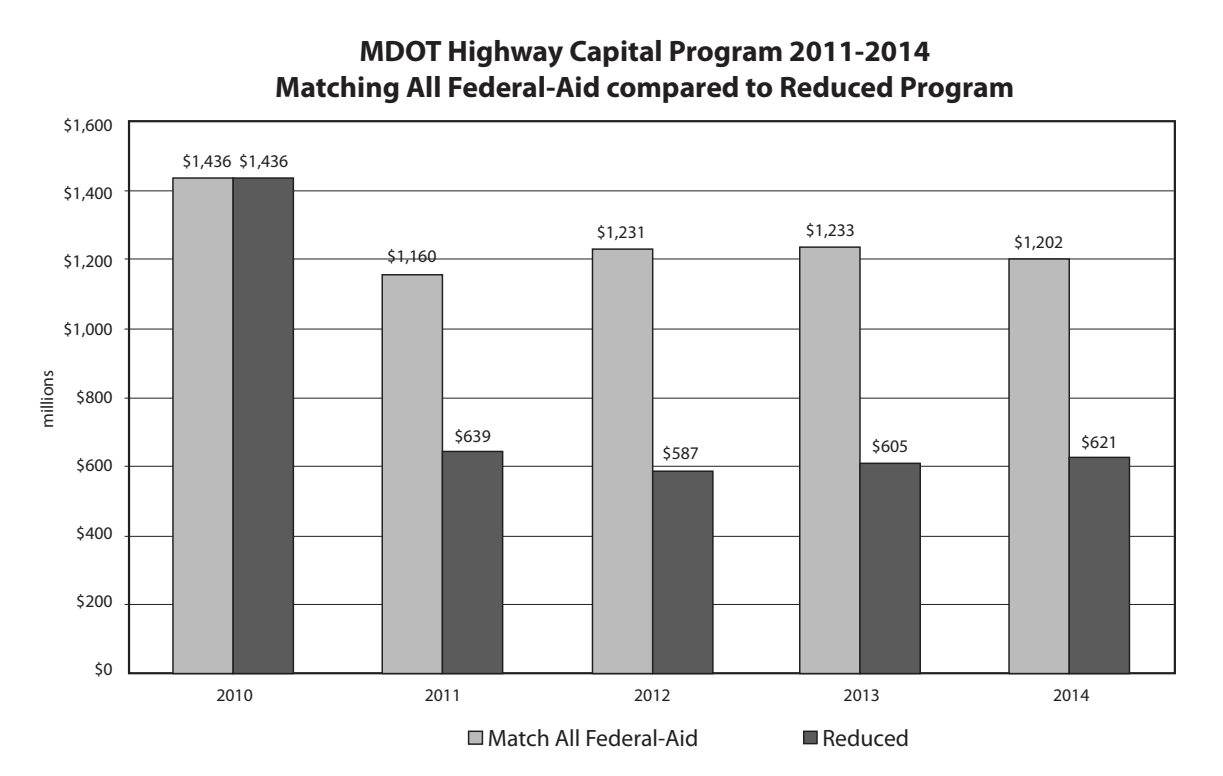
State Revenue Shortfall and Federal-Aid Lost



IMPACTS OF DECLINING STATE HIGHWAY REVENUE

In recent years, Michigan Transportation Fund (MTF) revenues have decreased due to declining state fuel tax and Michigan vehicle registration revenues. In addition, costs for raw materials such as asphalt and steel have been increasing. As a result, MDOT will not have enough state transportation funds to match available federal-aid dollars beginning in 2011. The graph shows the state revenue shortfalls anticipated. If additional state revenues are not realized, the department stands to lose nearly $2.1 billion in federal funding through 2014. The federal-aid lost depicts the associated federal aid that MDOT will lose based on the projected state revenue shortfalls.

This Five-Year Transportation Program document identifies two highway program investment strategies. The first assumes that MDOT can match all federal revenues available. The second reflects a reduced highway program investment assuming insufficient state revenues will be available to match all of the estimated available federal funds. The reduced program investment strategy to begin in FY 2011 was developed and approved by the State Transportation Commission (STC) in August 2009.



The graph above shows the significant drop in the highway capital program size, when comparing the two highway program investment strategies. The reduced program represents about a $600 million dollar reduction per year in the total program on average from 2011-2014. Individual program reductions range from 50 percent to 95 percent.

The reduced program strategy continues to focus on preservation as well as safety and operations, provides funding to all highway capital programs, and supports technology advances such as Intelligent Transportation Systems and Vehicle Infrastructure Integration. In addition, the strategy emphasizes maintaining project production schedules so program delivery can continue if additional revenues become available. Other guidelines for the reduced program include maintaining high priority projects on interstate and corridors of highest significance, leveraging local contributions, maintaining a geographic balance, and maintaining a mix of fix types.

The adjacent table is an overview of the highway program reductions that would be necessary if MDOT were unable to match the amount of federal-aid previously identified. Following State Transportation Commission guidelines, 87 percent of what remains in the program is preservation road and bridge or safety work, and no program was completely eliminated.

A similar crisis exists for our "multi-modal programs". These programs provide assistance for local and intercity bus service and airports, as well as passenger transportation and freight rail service. The programs receive funding through the Comprehensive Transportation Fund (CTF) and State Aeronautics Fund (SAF). These programs have all experienced reduced revenues for a number of years, and that trend is expected to only get worse.

For additional information on reducing MDOT's transportation programs due to the financial crisis and the associated highway program reduction impacts, please refer to the reduced highway investment strategy section later in this document.

Highway Program Investment Strategy

Annual Averages

Highway Program	Match All Federal-Aid	Reduced Program
	2010-2014	2011-2014
Repair & Rebuild Roads	$455 M	$164 M
Repair & Rebuild Bridges	$202 M	$68 M
Capacity Improvements New Roads	$55 M	$10 M
Safety & Operations	$76 M	$33 M
Congestion Mitigation & Air Quality	$40 M	$7 M
ITS	$13 M	$3 M
Other	$108 M	$39 M
Routine Maintenance	$304 M	$289 M
TOTAL	$1.253 B	$613 M

MULTI-MODAL PROGRAMS AND THE FUNDING CRISIS

A similar crisis exists for our multi-modal programs. These programs provide assistance for local and intercity bus service and airports, as well as passenger transportation and freight rail service. The programs receive funding through the Comprehensive Transportation Fund (CTF) and State Aeronautics Fund (SAF). These programs have all experienced reduced revenues for a number of years, and that trend is expected to only get worse.

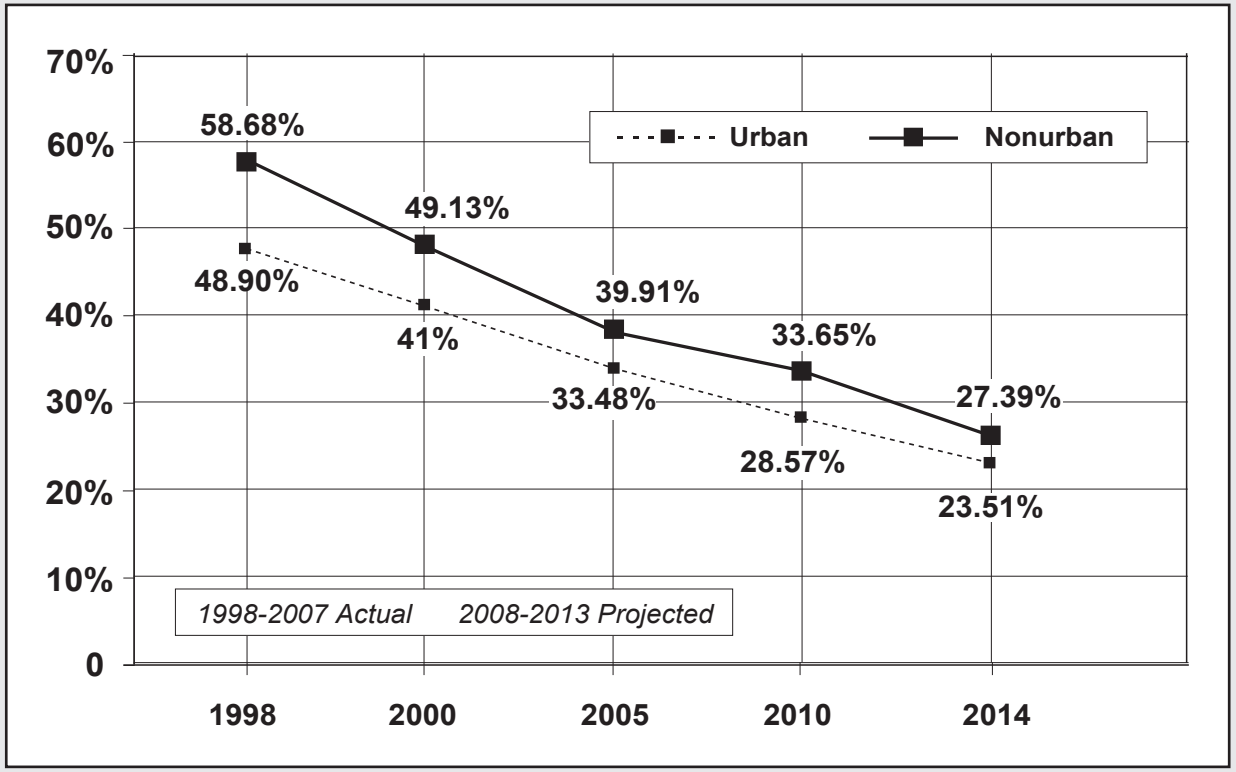
Impacts of Declining Passenger Transportation Revenue

While the Highway Program presents both a full and reduced program, the Passenger Transportation Program (a component of the Multi-Modal Program) represents continuation of an already reduced program. Revenue shortfalls have been plaguing this program for several fiscal years. The result has been a slow, steady decline in the program. Adjustments have been made annually so each component of the program fits the funds available. Additional program reductions may be needed – and will be made annually – if revenues do not support the already reduced program.

The Transportation Funding Task Force appointed by the Governor in response to the requirement of PA 221 of 2007, stated in their final report to the Governor that the state would need to invest over $500 million of state revenues each year in order to support a "good" level of passenger transportation services in Michigan. The program currently receives under $200 million, which is not enough to maintain the current level of service over the life of this plan. The current program, i.e., preservation of the existing system, and any expansion is dependent on additional revenues.

State funding in support of the passenger transportation system (local transit, intercity bus, and passenger rail) dropped five percent between FY 2009 and FY 2010, while at the same time the cost of maintaining the system has increased. For example, in 2000, local transit systems spent $18 million to fuel their buses, but by the end of 2008, they had spent nearly three times this amount on fuel - $48 million – to keep buses on the road. During this same time, the funding available to MDOT to support local transit operations has remained relatively static.
In 2000, state revenues covered 45 percent of the operating costs of local transit systems.
For 2010, the percentage dropped to 30 percent and by 2014, it could drop to below 24 percent; (see chart below). Passenger trains and intercity buses also are experiencing increased operating and capital costs.

State Share of Local Transit Operating Expenses



The capital costs of maintaining the passenger transportation system have also increased and while increased; federal funds have helped the state keep up with demand, revenues available to match federal funds have declined. Since the creation of the CTF, state revenues have been sufficient to match all available federal transit grants. In 2000, MDOT received a $17.4 million appropriation to match federal transit capital grants; but in the FY 2010 budget, the appropriation amount is down to $5.2 million. Because of the shortfall in CTF revenue in recent years, innovative financing tools and bonding have been used to fill the gap for matching dollars needed for available transit federal-aid. Although the use of these tools has created some economic benefit by providing match for federal-aid to Michigan, the use of toll credits has resulted in a loss of purchasing power for the federal funds - nearly $62.8 million to date. Current projections indicate that toll credits will be exhausted in the near future, at which point federal funds will be in jeopardy.

Local transit (operations and capital) will equal about 42 percent of the projected annual need just to maintain existing service levels. The economic impact of this decline will be that between 2010 and 2014, MDOT expects to see declines in the condition of the passenger transportation systems, both in terms of maintenance of the infrastructure and transportation services available to the public. The geographic location and magnitude of local transit services that will be lost will depend on the decisions made by individual operators in response to declining state assistance. Only 12 percent of the need will be met for intercity bus and 46 percent for passenger rail. The shortfall is even greater, when the need to expand and enhance the current system is taken into account.

The funding crisis for passenger transportation creates a crisis for those who are dependant on public transportation. Many individuals in the state depend on public transit for trips for health care, employment, shopping and social interaction. Lack of good options has a serious negative impact on their lives.

PASSENGER TRANSPORTATION ECONOMIC IMPACTS

According to various studies commissioned by the American Public Transportation Association (APTA) of America, every $10 million invested in transit capital by the public sector results in a $30 million gain in business sales. Every $10 million invested in transit operations results in $32 million in increase business sales. Studies commissioned by APTA indicate that for every $10 million invested in transit capital funding, 314 jobs are created; for every $10 million invested in transit operations, over 570 jobs are created.

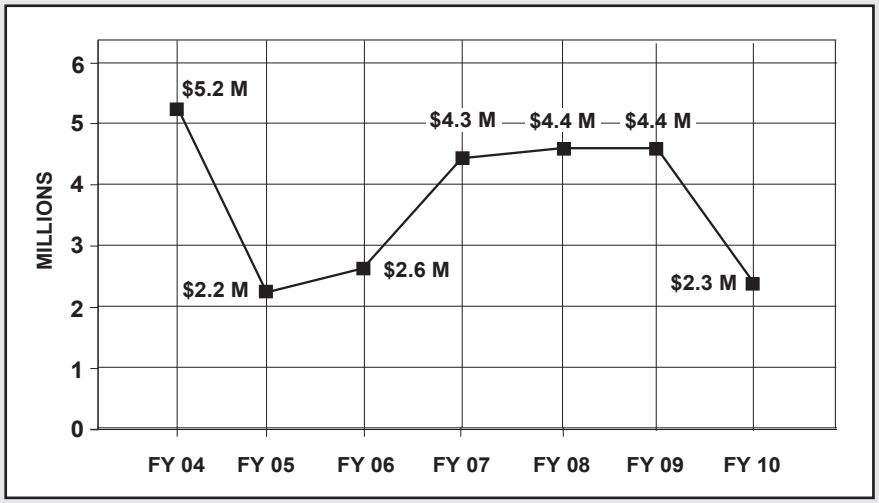
Based on these national studies, the local transit portion of the Five-Year Program, if fully funded, could result in approximately 8,850 jobs. If revenues continue to decline, these benefits will not be realized in our state. Access to comprehensive public transit is a key factor used by recent college graduates and young families when determining where to reside. The inability to provide this service will make Michigan less attractive to the new workforce, and therefore, impact a company's decision to locate in this state. Investment in passenger transportation is key to the economic recovery of Michigan.

Current revenue levels versus current needs for Michigan's public transit system are described in the Investment Strategy Section of this document.

IMPACTS OF DECLINING RAIL FREIGHT TRANSPORTATION REVENUE

The Rail Freight Transportation Program (a component of the Multi-Modal Program) also represents continuation of an already reduced program. As is the case for the Passenger Transportation Program, there have been on-going revenue shortfalls for several fiscal years.

Rail Freight - CTF Revenue



Annual program adjustments are made to fit the funds available. Additional program reductions may be needed – and will be made annually – if revenues do not support the already reduced program.

The Transportation Funding Task Force appointed by the Governor per PA 221 of 2007, stated in their final report that approximately $19 million was needed annually to support a "good" Rail Freight Program, approximately double than what is currently invested.

RAIL FREIGHT TRANSPORTATION ECONOMIC IMPACTS

Michigan's rail system has approximately 3600 miles of track, operated by approximately 27 railroads. It carries about 18 percent of all the state's commodity movements.
These commodities totaled over $278 billion in 2006. Rail is particularly important for the movement of heavy and bulky commodities and is preferred for the movement of hazardous materials. It is estimated that this system saves over $250 million of annual investment in the roadway system.

Bureau of Aeronautics and Freight Services rail program provides limited support to the private industry, focusing most of its efforts on safety and preservation. The 2010-2014 rail program has been scaled down to reflect the reductions already encountered. CTF reductions have particularly undermined preservation efforts on the state-owned rail system and the availability of loans through the Freight Economic Development Program.

AVIATION PROGRAMS AND THE FUNDING CRISIS

An airport is a significant economic engine for its region. Airports support a variety of aviation activities that employ thousands of persons and create millions of dollars in economic benefits. Businesses throughout the state also depend on airports for the movement of goods and personnel. Benefits associated with airports include direct and indirect jobs, wages, and expenditures. They also include economic ripple effects in the community, enhancing economic activity far from the airport itself.

Economic benefits also include expenditures made by those transient passengers who use the airport but spend their money throughout the region. Airports also create savings in time and money as a result of the travel efficiencies they create.

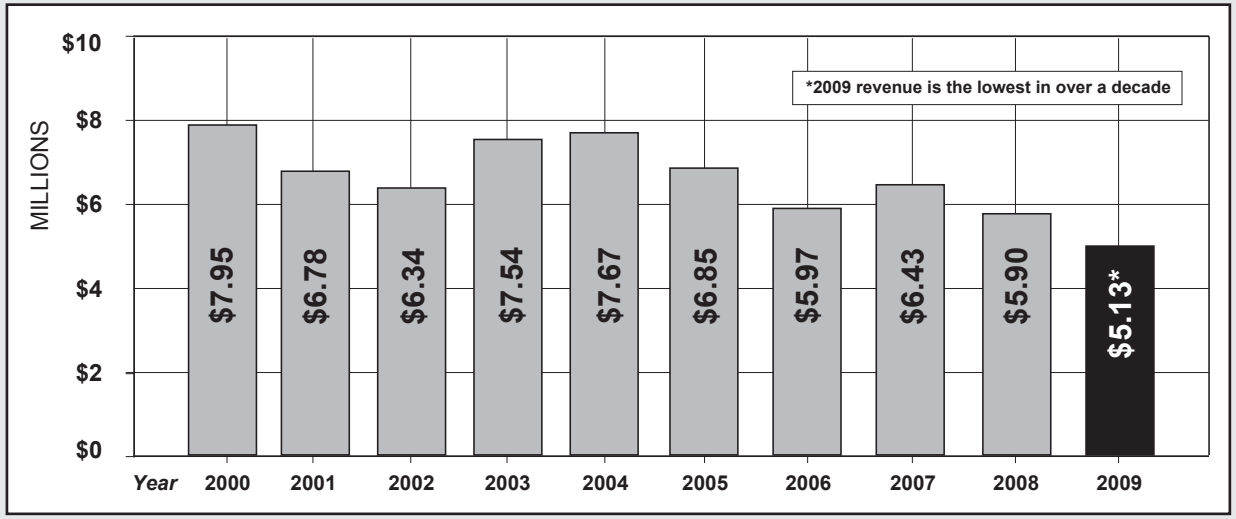
In addition, economic benefits also include the intangible effect an airport has on business decisions to locate or remain in a specific area. Finally, and somewhat less tangible, are "quality of life benefits" provided by an airport. Examples include: police and firefighting support, search and rescue, and recreation. The close proximity of reliable, efficient air service is cited by many as important when choosing where to reside. Therefore, keeping local airports open and near major population centers, is vital to Michigan's economic future as well.

If revenue shortfalls continue, many people could spend more time and money traveling further distances to airports outside their local communities.

As shown in the graph, even without adjusting for inflation, aviation fuel tax revenue is at its lowest level in over a decade. The tax rate for aviation fuel tax has never been adjusted since its inception in 1929. With continuing consolidation in the airline industry, volatile fuel prices, and increasingly fuel efficient aircraft, the decline in revenue will continue, which will impact the level of services the airline industry can provide to Michigan citizens.

In summary, MDOT's investments to maintain Michigan's complex infrastructure, public transportation and freight systems result in benefits both for Michigan's overall economy as well as transportation industry sectors, while providing a more desirable quality of life for residents and visitors. Therefore, continued investment in our state's transportation system is a necessity.

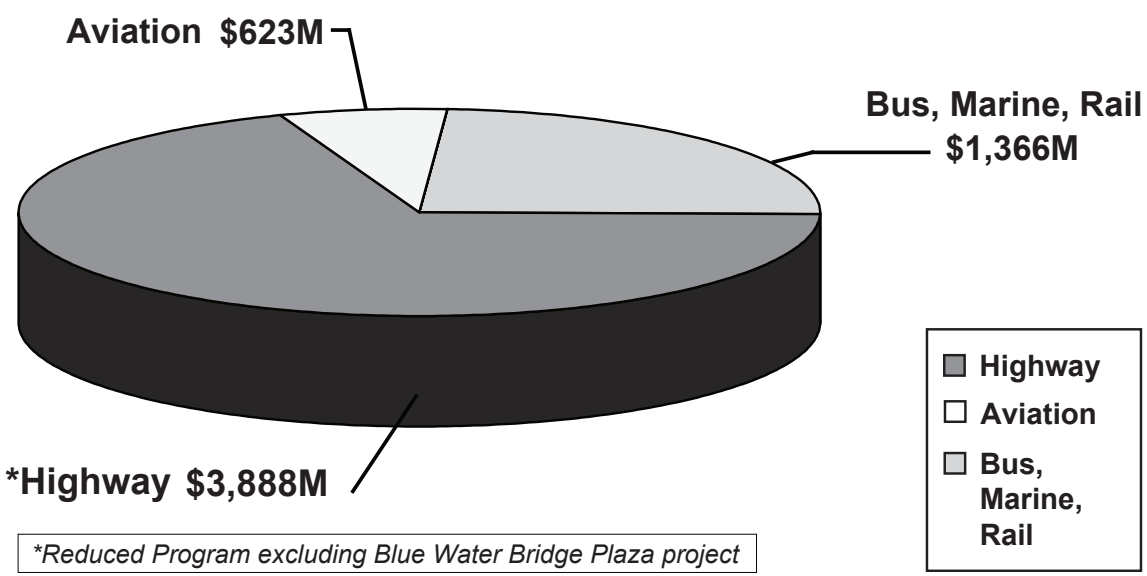
State Aviation Fuel Tax Revenue



FIVE-YEAR TRANSPORTATION PROGRAM OVERVIEW

This Five-Year Transportation Program invests nearly $5.88 billion in MDOT's transportation system. It includes five years of investments in the Highway Program from FY 2010-2014, and five years of investments in the aviation, bus, rail, and marine programs. Each year, an average of $124.5 million will be invested in the aviation program and $273 million will be invested in the bus, rail, and marine/port programs. An annual average of $777 million (without Blue Water Bridge investment) will be invested in the Reduced Highway Program over the 2010-2014 time frame, including routine maintenance. See the following pie chart:

MDOT'S Five-Year Transportation Program (Total = $5.88 Billion)



*Reduced Program excluding Blue Water Bridge Plaza project

Preservation of Michigan's existing transportation system and the safety of that system remain MDOT's highest priorities. This Five-Year Transportation Program will invest approximately $3.2 billion on system preservation through the repair and maintenance of Michigan's roads and bridges. In addition, more than half of the investment programmed for capacity improvements will go toward preserving existing roadway adjacent to those new lanes, thereby helping to grow Michigan's economy simultaneously through both preservation and capacity enhancement. The majority of the Multi-Modal Program will also focus on system preservation.

Investments in Michigan's transportation system will focus on a comprehensive safety program and increased emphasis on elderly mobility and expanded work zone safety efforts.

FEDERAL LEGISLATION

The federal Surface Transportation Program has been authorized and funded through legislation known as the Safe, Accountable, Flexible, Efficient Transportation Act: a Legacy for Users (SAFETEA-LU). SAFETEA-LU was enacted in August 2005 and expired at the end of fiscal year 2009. Congress did not have long-term authorizing legislation in place when SAFETEA-LU expired, and was forced to temporarily extend the provisions of SAFETEA-LU into fiscal year 2010 while they continue to work on a longer term bill.

Looking ahead toward the legislation that will replace SAFETEA-LU, several themes have emerged, which will likely shape of the content of the legislation that is ultimately enacted. These themes have appeared in reports and recommendations made by a number of congressionally-created blue-ribbon commissions, as well as influential groups such as the American Association of Highway Transportation Officials, and were evident in the authorizing legislation proposed in the U.S House of Representatives in the summer of 2009. These themes, or focus areas include:

- **Funding and Financing:** It is widely recognized that the current level of federal investment in our transportation infrastructure is woefully inadequate. Research shows that all levels of government need to more than double the investments in infrastructure just to maintain the current condition and performance of our existing system. Much more is required to actually improve our infrastructure.

  These estimates were affirmed in Michigan last year as the Transportation Funding Task Force examined the needs of the transportation infrastructure in Michigan and determined that doubling our level of investment will result in a "good" transportation system.

- **Performance Management and Accountability:** The lack of any real direction or goals in the federal program, has led to a growing sense that outcomes or results from spending federal funds could be improved if investments were better targeted to projects that had a higher demonstrated return on investment or more directly contributed to meeting national goals. MDOT has been managing its performance for more than a decade in pursuit of bridge and pavement condition goals, and we have recently broadened application of our per formance management efforts. The next federal surface transportation authorization legislation will likely institutionalize nationwide a process similar to what MDOT has, and continues to engage in.

- **Freight:** Forecasts show that by 2020, the volume of freight moving across our transportation system will be 70 percent higher than it was in 1998. Targeting federal resources at chokepoints and to projects that can increase throughput will help to ensure our system is able to meet future demands.

- **Congestion Relief:** The efficient movement of people and goods plays a key role in determining the level of individual and national productivity. Congestion, particularly in urban areas, has been robbing the nation of productive capacity and will likely be a significant focus in the next surface transportation authorization bill. There is growing recognition that encouraging the use of other modes can also help reduce highway congestion.

Federal revenue accounts for roughly half of the funding used to support Michigan's transportation program. The creation of any new programs and the changing federal priorities in the next surface transportation authorization legislation could present challenges to MDOT's efforts to maintain continuity in the transportation program. During FY 2010, MDOT staff will work to ensure that the next federal legislation continues to benefit the users of the Michigan transportation system.

Additionally, at the federal level, all surface transportation tax revenue that is the source of funding for the federal Highway Program is deposited into the highway account of the Highway Trust Fund. SAFETEA-LU increased funding for surface transportation programs without any substantial increases in revenue to support these higher funding levels. Congress financed the higher federal funding levels in SAFETEA-LU by spending down the balance in the highway account. High gas prices and the economic recession have conspired to reduce transportation tax revenue to the point where Congress had to transfer general fund money into the highway account to ensure that the funding promises of SAFETEA-LU could be fulfilled. Current federal transportation tax revenue is not sufficient to support the funding levels necessary to continue the federal program at SAFETEA-LU levels.

The highway account is projected to run out of cash during the spring or summer of 2010, necessitating action by Congress to identify additional funding for transportation, reduce federal transportation spending, or enact a long-term authorization bill that deals with the structural imbalance between revenue and funding levels. Depending on how Congress opts to deal with the highway account issue, their action could have a substantial impact on our road and bridge program investment levels in the Five-Year Program.

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

Overview

As a result of the recent economic downturn at the national level, the U.S. Congress initiated a plan known as The American Recovery and Reinvestment Act of 2009 (ARRA) in an attempt to stimulate the economy. This act was signed into law by President Barack Obama on February 17, 2009. Nationwide, ARRA included $48.1 billion in transportation funding.

ARRA transportation funding mirrored existing federal programs and ARRA projects must follow all federal project development rules and processes. For example, for road funding, ARRA projects must be located on the designated federal-aid highway system. MDOT's focus was primarily on the higher level road system. To qualify for ARRA, the type of work must be a capital project that is substantial enough to warrant federal investment.

As described in more detail below, for each of the ARRA transportation programs, the methods and schedule for allocation of ARRA differed from mode to mode and therefore the funds are reflected differently in MDOT's 2010-2014 Five-Year Transportation Program.

- For the Highway Program, ARRA funds are part of MDOT's FY 2009 and FY 2010 annual programs, therefore, the FY 2010 ARRA funds are reflected in this Five-Year Program ($148 million in state trunkline investment for FY 2010).
- For the passenger transportation and aviation programs, ARRA funds were included in MDOT's FY 2009 annual program (through a supplemental appropriation) and, are therefore, not included in this Five-Year Program.
- ARRA intercity passenger rail funding will be allocated via a competitive grant making process that is still being developed and, therefore, these potential ARRA funds are not yet reflected in this Five-Year Program.
- MDOT's Rail Freight Program did not benefit from ARRA

Highway Capital Program

The federal focus for ARRA project selection was on jobs creation and stimulating the economy by getting transportation projects underway quickly. In addition, Governor Granholm asked MDOT to look for eligible projects that would put unemployed people back to work, train people for jobs of the future, provide for investments in Michigan Cities of Promise, and increase transportation related investment in green technologies that will create jobs and energy savings.

In addition to the federal focus and the Governor's focus for the ARRA program, MDOT developed criteria for road projects. The criteria included federal eligibility, project readiness, geographic balance, a focus on preservation, located within a City of Promise or along one of the Corridors of Highest Significance, opportunities for multi-modal coordination, and the potential for economic development.

To make use of the $873 million available for road and bridge projects (which includes both state trunkline and local), MDOT developed a list of potential stimulus projects from various parts of the department through a call for projects. From this list, projects are being certified, obligated and let out for bids on an ongoing basis. As of October 30, 2009, 160 state trunkline jobs/phases have been obligated, totaling nearly $597 million. MDOT's ARRA accomplishments to date are described in more detail in the FY 2009 Accomplishments supplemental document, which includes a list of road and bridge projects by MDOT region that have been funded by ARRA.

Passenger Transportation Programs

The majority of ARRA funding for transit projects came to Michigan through existing formula programs and were available for urban and rural transit systems. Only the rural transit funds are apportioned to MDOT; urban transit funds are apportioned directly to transit agencies in each urbanized area. MDOT was the recipient of $25.8 million in rural transit ARRA funds. The funds were appropriated to MDOT in a FY 2009 supplemental appropriation, and therefore, are not included in this 2010-2014 Five-Year Program.

MDOT is using rural transit funds to improve the condition of the rural transit infrastructure. A significant portion of the funds will be used for bus replacement. Greening activities include energy audits of existing transit facilities (administrative/maintenance buildings), energy improvements at selected facilities based on audit results, and addition of hybrid buses to the rural transit fleet. MDOT's FY 2009 Accomplishments supplemental document includes additional details on how MDOT is spending ARRA transit funds.

For intercity passenger rail projects, MDOT is awaiting the results of the Federal Railroad Administration's (FRA) High-Speed Intercity Passenger Rail (HSIPR) Program for intercity passenger rail. Under this program, FRA will provide competitive grants to state departments of transportation for the repair, rehabilitation, upgrade, or purchase of railroad assets or infrastructure, equipment, grade crossings, environmental mitigation, communication, and signalization improvements.

MDOT has submitted applications to FRA to enhance the Chicago-Detroit/Pontiac high speed rail corridor, including $834 million in ready-to-go projects under "Track 1 Projects", and $994 million in corridor development under "Track 2 Projects." Final decisions are anticipated in early calendar year 2010.

Aviation Program

For the aviation program, all ARRA projects were selected by the Federal Aviation Administration (FAA). While MDOT identified possible aviation projects for ARRA funding based on a list of projects submitted by local airport sponsors in planning meetings, MDOT was not involved in final project selection. Over $30 million in FAA ARRA funds were approved for Michigan airport projects.

FY 2010 TIGER Grants

The American Recovery and Reinvestment Act of 2009 provided $1.5 billion nationally in discretionary grants for surface transportation projects across all modes. The U.S. Department of Transportation (USDOT) has named this the Transportation Investment Generating Economic Recovery (TIGER) Grant Program.

Like all ARRA programs, TIGER is focused on the near-term creation and retention of jobs, in particular those that are associated with transportation infrastructure projects. TIGER projects will be awarded through competitive grants for "shovel ready" transportation projects that are between $20 million and $300 million. To be awarded TIGER funding, projects must have a significant impact on the nation, a metropolitan area, or a region.

Projects eligible for TIGER Discretionary Grants include capital investments in: (1) highway or bridge projects;
(2) public transportation projects; (3) passenger and freight rail transportation projects; and
(4) port infrastructure investments, including projects that connect ports to other modes of transportation and improve the efficiency of freight movement.

The USDOT will evaluate TIGER Discretionary Grants on numerous selection criteria.
The primary selection criteria include the long-term outcomes of the project and the short term job and economic stimulus created by the project. Long-term outcomes include minimizing life cycle costs, economic competitiveness, improving the quality of living and working environments, improving energy efficiency, and safety improvement. Secondary selection criteria to be used by USDOT include the projects use of innovative strategies and projects "that demonstrate strong collaboration among a broad range of participants." Additional priority will be given to projects that will be completed within three years and to projects in which federal funding is required to complete the project financing.

Besides the ten applications that MDOT submitted, other agencies submitted 35 applications, totaling $733 million to the USDOT. The USDOT will announce the projects that received funding no later than February 2010. As a result, these potential ARRA funds are not yet reflected in this Five-Year Program. For a list of MDOT grant applications, please visit the federal website at: *www.dot.gov/recovery/ost*

SPECIAL BRIDGE INVESTMENTS

Blue Water Bridge Capital Investment

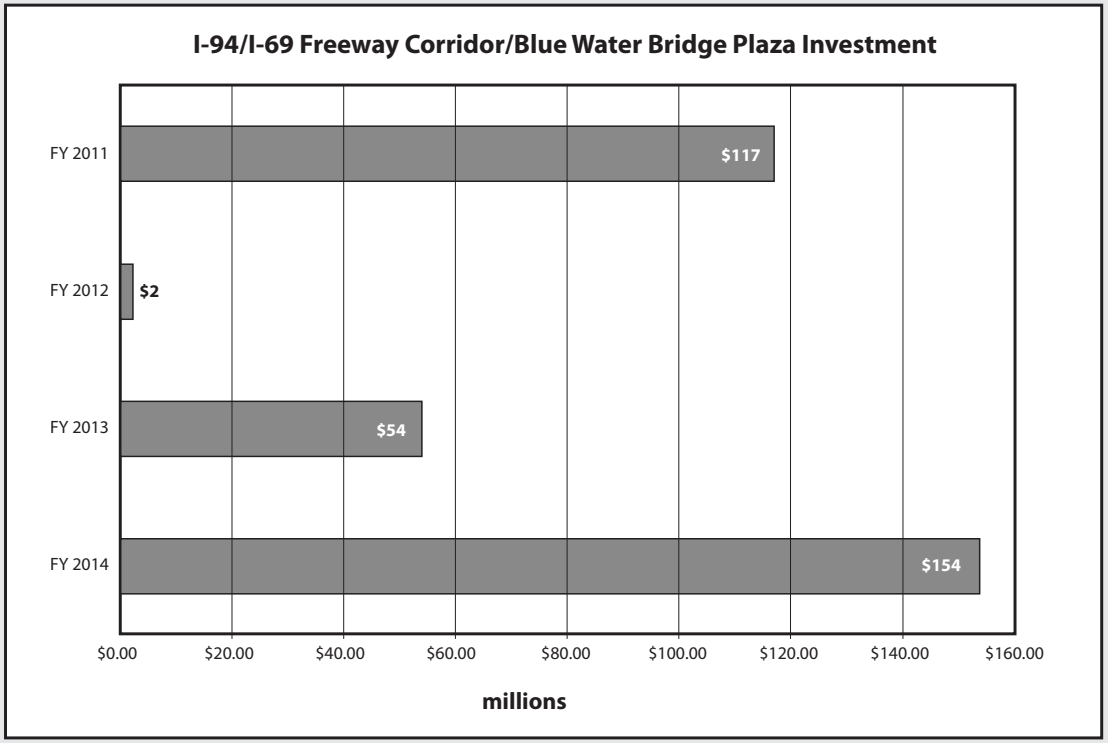
The Blue Water Bridge is a major international crossing over the St. Clair River at the southern end of Lake Huron. Located between Port Huron, Michigan and Point Edward, Ontario connecting both Interstate 94 and Interstate 69 with Highway 402, it is one of the most important links between the Midwest and Ontario. The Blue Water Bridge crossing consists of two unique spans, the original Blue Water Bridge, opened in 1938 and renovated in 1999, is a three-lane westbound bridge. The second Blue Water Bridge, which carries three lanes of eastbound traffic, is an impressive modern bridge opened in 1997.

The BWB Plaza Project consists of four major capital investment components: modernizing two miles of I-94/I-69 corridor leading up to the plaza, replacing and expanding the Black River Bridge, which is on the approaches to the BWB, relocating Pine Grove Avenue from its current alignment running under the plaza, and expanding the plaza to 56 acres in size while lowering the current elevated plaza to grade. The project will address border security, vehicle inspection, and toll collection needs at this international border crossing.

The $583 million that is needed to complete the BWB Plaza Project will be financed with a combination of available federal earmarks from SAFETEA-LU and the sale of bonds backed by toll revenue from the BWB and GSA lease revenue.

This BWB investment is "revenue neutral" to the Five Year Program. No federal aid highway program funding or state transportation revenue has been dedicated to this project at this time. The Blue Water Bridge (BWB) Plaza Project investment is for an expansion being undertaken by MDOT, Federal Highway Administration, General Services Administration (GSA), and U.S. Customs and Border Protection to provide safe, efficient and secure movement of people and goods across the Canadian-U.S. border into the Port Huron area.

The project has been split into three separate construction contracts. The design phase of the project began in 2009. All design work for the project will be completed by 2013. Right-of-way acquisition has commenced and is scheduled for completion in 2014. Construction is expected to begin for replacing the Black River Bridge and modernizing I-94/69 in 2011. Construction on the plaza expansion is scheduled to begin in 2014 and be completed by 2017.

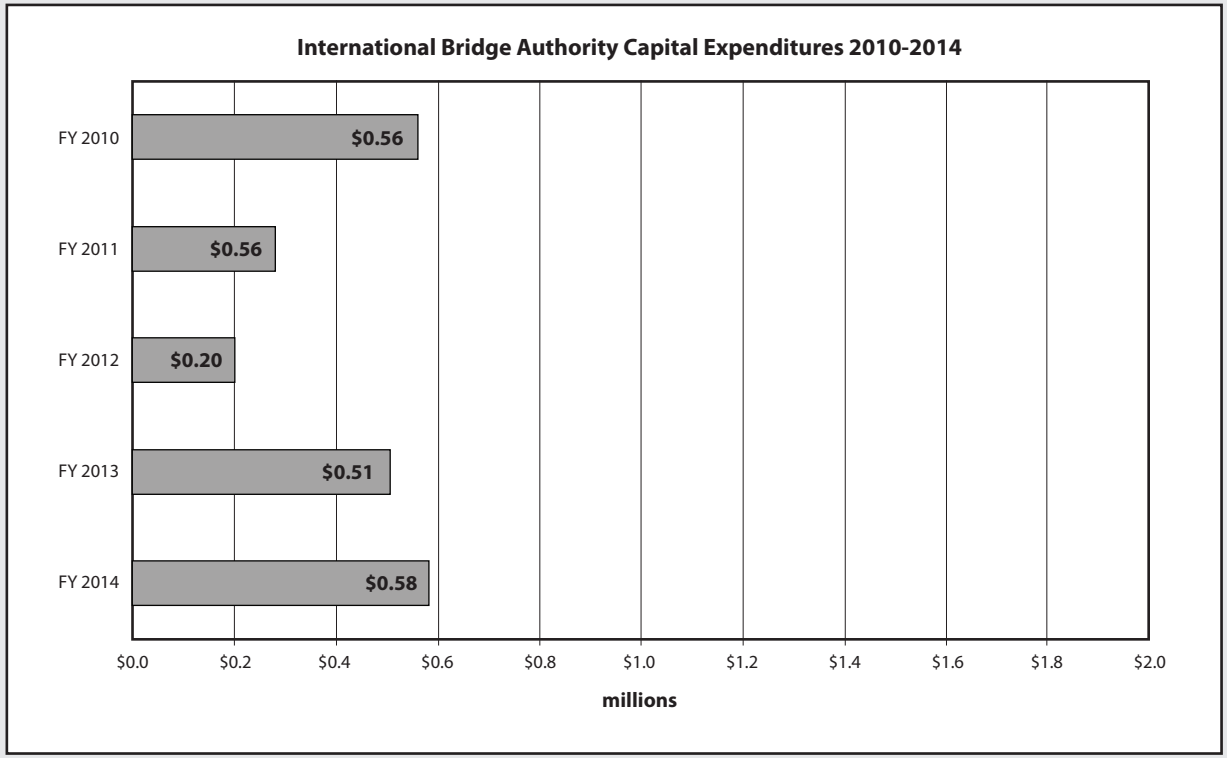


International Bridge Investment

The International Bridge at Sault Ste. Marie is the only vehicular crossing between Ontario and Michigan within a 600 mile distance. The bridge connects two cities, Sault Ste. Marie, Ontario with Sault Ste. Marie, Michigan. Today, the communities served by the bridge boast populations of 14,000 for the City of Sault Ste. Marie, Michigan, and 80,000 for the City of Sault Ste. Marie, Ontario.

The International Bridge Authority (IBA) was created by the State of Michigan in 1935 and given approval for an international crossing by an Information Act of Congress in 1940, with subsequent Acts extending the deadline. In 1955, the Canadian Parliament created the St. Mary's River Bridge Company (SMRBC) and granted it rights to construct an international crossing. The day-to-day operational responsibility for the bridge is assigned to the Sault Ste. Marie Bridge Authority (SSMBA). Joint owners are the Michigan Department of Transportation and the St. Mary's River Bridge Company.

At this time, the capital plan as presented in the SSMBA five year business plan is proposed only, and includes an estimated multi-year $10.5 million toll plaza facility improvement capital expenditure. To date, the SSMBA Board of Directors has only approved the toll plaza facility design improvement costs in the International Bridge five year capital improvement program as shown in adjacent graph.



REVENUE ASSUMPTIONS AND INVESTMENT STRATEGIES

Highway Program Revenue Assumptions

The FY 2010 to FY 2014 federal-aid revenue estimate is based on the 2009 FHWA Notice of Apportionment assuming a 92 percent obligation ceiling. The 2009 level of funding is assumed to remain flat for two years (2010–2011) and then increase at an annual average compounded rate of 3.2 percent in 2012-2014. It is projected that $4.1 billion in federal-aid obligation authority (includes $148 million for ARRA) will be made available to the Highway Capital Program for this Five-Year Transportation Program.

The state revenue estimate is based on MDOT's share of the FY 2009 Michigan Transportation Fund (MTF) as estimated by the Department of Treasury, Economic and Revenue Forecasting Division. Future year state revenue is forecasted using a long-range forecasting model managed by MDOT's Statewide Transportation Planning Division. It is estimated that $1.77 billion in state revenue will be available for MDOT's Capital and Maintenance Program (approximately a one percent increase each year). Starting in FY 2011, this estimate includes state transportation revenues from the State Trunkline Fund (STF), and includes bond proceeds to be used to support the program, including routine maintenance and debt service payments.

Assuming the department would be able to match all federal funds available during the 2010-2014 time frame (which is not possible without an increase to state revenues), total revenues assumed available for the 2010-2014 Highway Program are approximately $5.96 billion. Anticipated investments for the 2010-2014 "match all federal-aid" Highway Program are approximately $6.26 billion (not including Blue Water Bridge Plaza (BWB) investment). At this time, the projected Highway Program investments exceed anticipated federal and state revenue by approximately $300 million.

Because of the uncertainty in future transportation revenues due to issues surrounding the federal Highway Trust Fund, reauthorization of the federal highway bill, and state transportation revenues, the revenue gap is not being addressed at this time. The department will continue to monitor revenue and program investments, and make adjustments as needed to ensure fiscal constraint.

Match All Federal-Aid Highway Program Investment Strategy

Our investment strategy is a key component of the cooperative planning process and provides the public with a longer term perspective regarding the transportation program.

New technology makes it possible to combine long-term goals with current condition data to generate a Five-Year Program, as well as integrate the data to coordinate road and bridge improvements and achieve new investment efficiencies.

This Five-Year Transportation Program document identifies two Highway Program investment strategies. The first assumes that MDOT can match all federal revenues available. The second reflects a reduced Highway Program investment (see following section) assuming insufficient state revenues will be available to match all of the estimated available federal funds. The highway revenue forecast indicates that MDOT will not be able to match all available federal funds beginning in FY 2011.

MDOT FY 2010-2014 Highway Program investments total approximately $6.26 billion (not including BWB investment), including pre-construction phases (project scoping, environmental clearance, design, right-of-way acquisition) and construction projects. This estimated investment level assumes that MDOT will have sufficient state revenue to match all available federal-aid over the five-year time frame.

This Highway Program investment will provide Michigan travelers with an average of approximately 135 miles of improved roads in each of the next five years, as well as repairs to an average of more than 150 bridges per year.

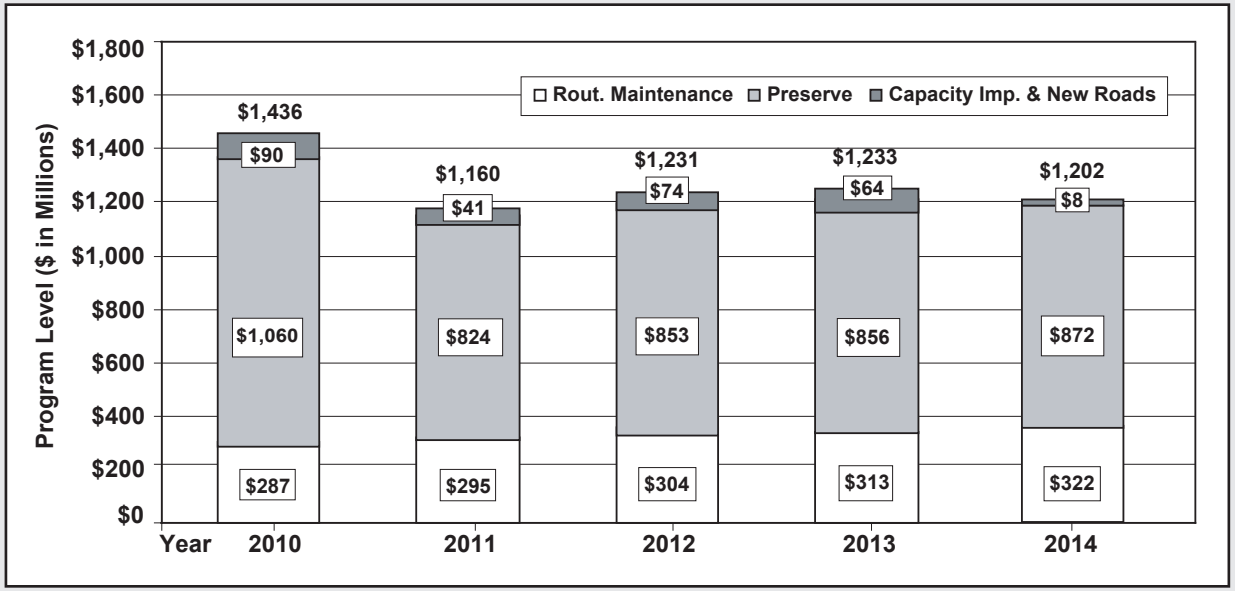
We will also manage our road system by extending the life of approximately 1,600 miles of pavement each year through the Capital Preventive Maintenance (CPM) program. The following charts depict MDOT's FY 2010-2014 Highway Program investment strategy (assuming the ability to match all available federal-aid).

MATCH ALL FEDERAL-AID HIGHWAY PROGRAM INVESTMENT STRATEGY
FY 2010-2014

	Annual Average	5 Year Total
REPAIR AND MAINTAIN ROADS AND BRIDGES		
REPAIR AND REBUILD ROADS		
Preserve Rehabilitation and Reconstruction	$362 million	$1,810 million
Capital Preventive Maintenance	$93 million	$462 million
TOTAL REPAIR AND REBUILD ROADS	**$455 million**	**$2,272 million**
REPAIR AND REBUILD BRIDGES		
Preserve Rehabilitation and Reconstruction	$135 million	$676 million
Capital and Scheduled Preventive Maintenance	$31 million	$153 million
Big Bridge	$27 million	$133 million
Special Needs	$6 million	$29 million
Blue Water Bridge	$4 million	$19 million
TOTAL REPAIR AND REBUILD BRIDGES	**$202 million**	**$1,008 million**
ROUTINE MAINTENANCE	**$304 million**	**$1,521 million**
TOTAL REPAIR AND MAINTAIN ROADS & BRIDGES	**$960 million**	**$4,802 million**
CAPACITY IMPROVEMENT (CI) AND NEW ROADS (NR)		
Capacity Improvements	$19 million	$96 million
New Road Construction	$36 million	$180 million
TOTAL CI & NR	**$55 million**	**$276 million**
SAFETY & SYSTEM OPERATIONS PROGRAM		
Safety Programs	$19 million	$96 million
Safety Installations	$42 million	$211 million
Signs	$14 million	$69 million
Markings	$14 million	$70 million
Signals	$11 million	$12 million
Guardrail	$2 million	$11 million
Congestion Mitigation Air Quality (CMAQ)	$40 million	$201 million
Intelligent Transportation Systems (ITS)	$13 million	$64 million
Operations	$15 million	$73 million
TOTAL SAFETY & SYSTEMS OPERATIONS PROGRAM	**$129 million**	**$643 million**
OTHER		
Federally Funded Programs	$67 million	$334 million
Non-Federally Funded Programs	$41 million	$206 million
TOTAL OTHER	**$108 million**	**$542 million**
TOTAL FIVE-YEAR TRUNKLINE PROGRAM	**$1,253 million**	**$6,262 million**

The $6.26 billion total reflects investments for the major program categories of preservation, capacity improvement and new roads, and routine maintenance. The following graph illustrates the annual Highway Program investments by these program categories over the five-year time frame. The annual investments range from $1.44 billion in FY 2010 to $1.23 billion in 2012.

Highway Program Investment - By Program Category



Annual Routine Maintenance Comparison

2010 - 2014	$304,000,000 (annual average)
2009	$285,000,000
1997	$176,000,000

Annual Road & Bridge Investments

Including Routine Maintenance

2010 - 2014	$1,253,000,000 (annual average)
2009	$1,265,000,000
1997	$890,000,000

REDUCED HIGHWAY PROGRAM INVESTMENT STRATEGY

In August 2009, the State Transportation Commission (STC) agreed to a strategy for reducing the 2010-2014 Five-Year Transportation Program. The Highway Program in the prior chapter will move forward if state revenues are made available. If additional state revenue is not realized, MDOT will modify its investment strategy beginning in 2011 and the remaining years of the Five-Year Program consistent with the strategy approved by the STC.

This section outlines the strategy that will be utilized to reduce the Highway Program by an annual average of $600 million per year over the 2011-2014 time period. The STC direction is to continue a preservation and safety focus, while not completely eliminating completely any one program. The resulting reduced Highway Program will orient 87 percent of the available funding (approximately $260 million, without routine maintenance) to the pavement preservation, bridges, and safety categories.

On the following page, the overall investment strategy is provided for the reduced Highway Program. The table provides a five-year total and a five-year annual average for FY 2010-2014. The listed proposed reduction impacts to the individual programs were applied to FY 2011-2014.

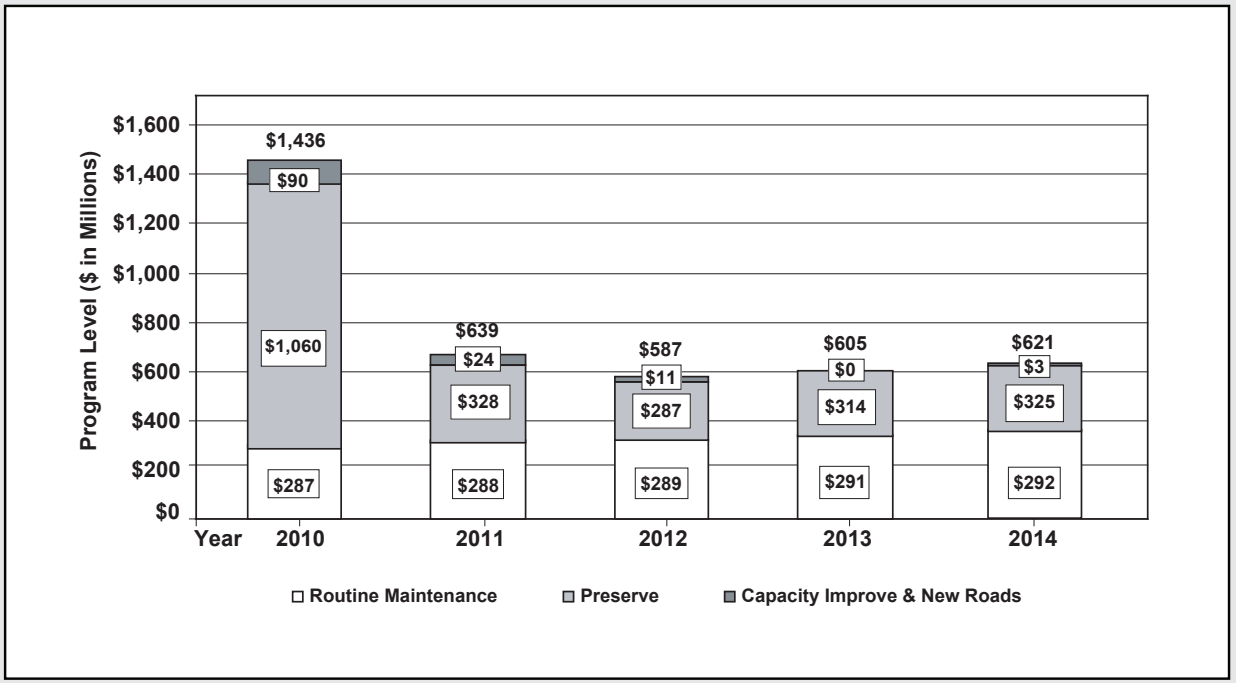
REDUCED HIGHWAY PROGRAM INVESTMENT STRATEGY
FY 2010-2014

	5 Year Annual Average	5 Year Total	4 Year Annual Average
REPAIR AND MAINTAIN ROADS AND BRIDGES			
REPAIR AND REBUILD ROADS	2010 - 2014	2010 - 2014	2010 - 2014
Rehabilitation and Reconstruction	$190 .4	$952.0	$122.2
Capital Preventive Maintenance	$52.2	$260.9	$41.7
TOTAL REPAIR AND REBUILD ROADS	**$242.6**	**$1,212.9**	**$163.9**
REPAIR AND REBUILD BRIDGES			
Rehabilitation and Reconstruction	$30.3	$332.6	$66.5
Capital and Scheduled Preventive Maintenance	$3.4	$43 .3	$8.7
Big Bridge	$25.5	$110 .0	$22.0
Special Needs	$5.9	$30 .0	$66.5
Blue Water Bridge - Appropriated Capital Outlay Projects	$3.0	$19 .0	$3.8
TOTAL REPAIR AND REBUILD BRIDGES	**$107**	**$534.9**	**$68**
ROUTINE MAINTENANCE	**$289.4**	**$1,446.9**	**$290.1**
TOTAL REPAIR AND MAINTAIN ROADS & BRIDGES	**$638.9**	**$3,194.7**	**$522.0**
CAPACITY IMPROVEMENT (CI) AND NEW ROADS (NR)			
Capacity Improvements	$15.0	$74.8	$4.3
New Road Construction	$10.4	$52 .2	$5.1
TOTAL CAPACITY IMPROVEMENT & NEW ROADS	**$25.4**	**$127.1**	**$9.4**
SAFETY & SYSTEM OPERATIONS PROGRAM			
Safety Programs	$11.9	$59.7	$9.5
Safety Installations	$29.7	$148 .3	$23.0
Signs	$9.3	$46 .3	$8.0
Markings	$10.0	$50 .0	$9.0
Signals	$8.2	$41 .0	$6.0
Guardrail	$2.2	$11 .0	$0.0
Congestion Mitigation Air Quality (CMAQ)	$12.1	$60.7	$7.0
Intelligent Transportation Systems (ITS)	$4.7	$23 .3	$3.0
Operations	$1.9	$9.5	$0.1
TOTAL SAFETY & SYSTEMS OPERATIONS PROGRAM	**$60.3**	**$301.5**	**$42.6**
OTHER			
Federally Funded Programs	$31 .3	$156 .3	$22.9
Non-Federally Funded Programs	$21.6	$108 .2	$16.2
TOTAL OTHER	**$52.9**	**$264.5**	**$39.1**
TOTAL FIVE-YEAR REDUCED TRUNKLINE PROGRAM	**$777.6**	**$3,887.9**	**$613.0**

The FY 2010-2014 Five-Year Transportation Program estimated investments for the reduced highway program total $3.9 billion. This total reflects investments for the major program categories of preservation, capacity improvement and new roads, and routine maintenance. The following graph illustrates the annual Highway Program investments by these program categories over the five-year time frame. The annual investments range from $1.44 billion in FY 2010 to $587 million in 2012.

MDOT Highway Program Investment for Reduced Program

By Program Category



IMPACTS OF IMPLEMENTING THE REDUCED HIGHWAY PROGRAM

MDOT's FY 2010-2014 reduced Highway Program investments would total approximately $3.9 billion, including pre-construction phases (project scoping, environmental clearance, design, right-of-way acquisition) and construction projects. If implemented, this investment strategy would delay over 375 miles of pavement improvements or over 100 projects, an approximately a 60 percent decrease compared to the current Road Rehabilitation and Reconstruction Program. The number of bridges planned for work within the Five-Year Transportation Program would be reduced by approximately 575 bridge projects, a more than 65 percent decrease compared to the current program. The Safety Program impact will be fewer projects to address fatalities and severe injuries, which impacts MDOT's effort of reaching the goals as outlined in the state Strategic Highway Safety Plan. The reduction in funding to the Roadsides Program would effectively eliminate MDOT's ability to deliver any rest area reconstruction/ rehabilitation projects and would seriously impact preservation of the existing system. Approximately 45 miles of non-motorized facilities and 10 miles of roadway streetscape implemented by the Enhancement Program would also be jeopardized.

The Highway Program project list at the back of this document contains highlighted projects that would be impacted (either delayed or removed from the 2010-2014 program) if this strategy were to be implemented.

The following paragraphs provide more detail regarding the impacts of implementing the reduced Highway Program investment strategy by program category.

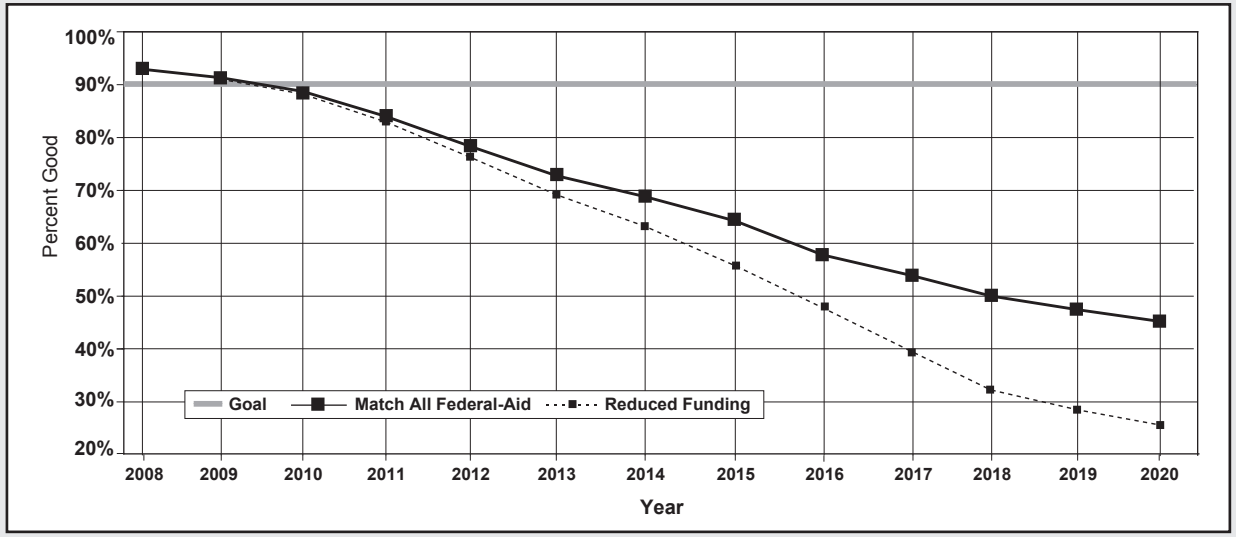
Pavement Program

Annual investments in the pavement preservation programs (Road Rehabilitation and Reconstruction and Capital Preventive Maintenance) total over $400 million per year under the "match all federal-aid" program. That amount is reduced to approximately $160 million annually from 2011 to 2014, a 60 percent reduction. The impact on the Road Rehabilitation and Reconstruction Program will result in over 100 projects either being delayed within the four-year time period (2011-2014) or removed from this Five-Year Program. In this reduced program, over 375 miles of rehabilitation or reconstruction repairs will be delayed or removed. The impact on the Capital Preventive Maintenance Program will result in nearly 800 miles of the 1,400 miles of preventive maintenance repairs annually being removed or delayed from the 2011-2014 time frame.

These reductions to the pavement preservation program will substantially impact the progress made in improving system condition. MDOT's asset management approach toward sustaining system condition uses corridor strategies to more efficiently coordinate construction activities.

Due to the reductions for the 2011-2014 time period, road conditions are expected to decline from 91 percent good in 2008 to 63 percent good in 2014. The graph depicts the comparison between the current program and the reduced program pavement condition.

Pavement Condition Forecast Comparison Match All Federal-Aid vs. Reduced Funding Strategies



Bridges

If additional funding is not made available, the Bridge Program would be reduced by $476 million from 2011-2014. The majority of this reduction would come from the Bridge Replacement and Rehabilitation Program being reduced by $376 million, resulting in approximately 290 bridges not receiving needed repairs. The highlighted project lists shown at the end of this document illustrate some of the impacts of this reduction. In addition, the Bridge Preventive Maintenance Program would be reduced by $100 million, resulting in approximately 285 bridges not being maintained, making them more susceptible to becoming structural deficient. This results in a total reduction of 575 bridge projects, which is almost a 65 percent decrease in bridge projects in the Five-Year Transportation Program.

A reduction in funding of this magnitude would be devastating to the Bridge Program. Instead of making continued progress toward bridge condition goals, MDOT's bridge condition would begin to deteriorate at a rapid rate. However, the greatest concern is the alarming number of serious and critical bridges that could potentially be closed in the next five years if bridge funding is reduced. Under the reduced scenario, there are 49 bridges that are serious and critical that would not be included in the Five-Year Program. As illustrated in the chart below, under the reduced investment level, bridge condition declines to about 88 percent good/fair by 2014 and further declines to 84 percent by 2018.

Capacity Improvement/New Roads (CI/NR)

The CI/NR Program projects represent an investment of $55 million per year over the five years of the plan. Under the reduced scenario, funding would be reduced to $10 million on average per year, beginning in 2011. With this reduction, the following project commitments will be removed from the program:

- **M-231 –** Construction of new road from Grand River to I-96, Ottawa County
- **M-231 –** New structure over Leonard Street, Ottawa County
- **M-231 –** Replace and widen structure under 112th Avenue, Ottawa County
- **M-231 –** Construct two-lane roadway from M-45 to the Grand River, Ottawa County
- **I-96 –** Construct two new structures over M-231 ramp, Ottawa County
- **I-96 –** Replace structures with fill over abandoned GTW Railroad, east of Spring Lake
- **US-31 –** Reconstruct and widen from Lakewood Boulevard to Quincy Street, City of Holland
- **US-31 –** Reconstruct and widen from Franklin Street to Jackson Street, in City of Grand Haven

The following is what would be funded over the 2011-2014 time frame under the reduced investment strategy:

- $12 million for construction phase activities for the M-231 corridor in Ottawa County. This will likely include the initiation of bridge construction over the Grand River in 2011.
- $9 million for construction phase activities for the US-131, Constantine bypass. This will construct the new bridge over the St. Joseph River, in St. Joseph County in 2013.
- $5 million will be used for pre-construction phase activities for the Detroit River International Crossing (DRIC), project, Wayne County in 2012 and 2014.

The projects related to the Blue Water Bridge Plaza Project are not included in the reduced amounts because they are anticipated to be funded with a mixture of toll revenues, Transportation Infrastructure Finance and Innovation Act (TIFIA) loans, and other sources.

SAFETY PROGRAM

MDOT's Safety Program is focused on improving traffic control devices and driver information systems in an effort to improve driver safety. While this purpose does not change, the decrease in funding will impact each category of the FY 2011-2014 safety template – signing, pavement marking, traffic signals, and safety programs. The proposed reduction for FY 2011-2014 is from $58 million to $32.5 million. The result will be fewer projects to address fatalities and severe injuries that are occurring annually on our roadway system, which affects MDOT's effort of reaching the goals as outlined in the state Strategic Highway Safety Plan. The purpose of each safety category and the impacts of this decrease in funding are:

Signing

The average roadway should undergo a complete sign update approximately every 15 years. Beginning in FY 2011, the signing category will be reduced from $14 million to $8 million annually. The impact will be fewer projects on the freeway system and no projects scheduled for the non-freeway system. If this reduced funding level is continued, the replacement cycle, overall, will increase from 15 to 25 years.

Pavement Marking

Beginning in FY 2011, the pavement marking category of MDOT's Safety Program will be reduced from $14 million to $9 million annually. The impact will be the limited placement of non-freeway rumbles, no edge lines on roadways with average daily traffic of 6,000 or less, reducing edge line width from six inches, to four inches, gore markings from 12 inches to eight inches and no special markings being replaced in 2011. Markings would be placed only where federally mandated.

Traffic Signals

The traffic signal category will be reduced from $11 million to $6 million annually starting in FY 2011. The impact will be fewer corridor modernization projects and a reduction in the retiming effort. Current funding levels are $1 million for signal retiming and $10 million for new installations and modernizations. If this reduced funding level is continued, the replacement cycle, overall, will increase from 25 to over 50 years and the retiming cycle from 10 to 15 years.

Safety Programs (Road Construction Improvements)

The projects in this category are developed in response to analyses of traffic crashes and crash patterns. The safety programs category will be reduced from $19 million to $9.5 million annually beginning in FY 2011. The "match all federal-aid" Safety Program consisted of 16 projects. As a result of reduced funding, five projects would be delayed. In addition, the Safety Work Authorization Program, which provides funding for low cost safety improvements that can be implemented by state forces or contract agencies, would be eliminated.

Trunkline Railroad Crossings

The purpose of the Trunkline Railroad Safety Program is to finance safety measures necessary for the at-grade trunkline crossings to improve the surface condition and to upgrade warning devices. This program allows needed crossing improvements to take place much sooner than having to wait many years for the railroad to do this work at their own cost.

A reduced program would only allow MDOT to perform appropriate remediation on a severely limited number of locations statewide (two to four annually) as opposed to 15 or 20 in a normal year. The ability to undertake railroad corridor sign or warning safety device modernization initiatives would be eliminated with reduced funding. Also, reduced funding results in less effective maintenance fixes for railroad crossings as opposed to much longer term permanent solutions (less than two-year vs. 20 year service life).

Performing maintenance repairs as opposed to full replacement would greatly diminish the ride-ability of crossings statewide, most of which are currently rated from a poor to failed condition.

Finally, a reduced railroad safety budget would result in less road or bridge projects, as funding for crossing work within these work limits would have to be taken from those programs instead of the federal or state railroad safety account.

Replacement of Existing Freeway Lighting Program

The purpose of the Freeway Lighting Rehabilitation Program is to identify and prioritize freeway lighting in need of rehabilitation. A "match all federal-aid" program allows for the replacement of at least four miles of freeway lighting annually, which is not associated with road or bridge projects. With a reduced program from $8 million to $1 million annually, freeway lighting will only be replaced when lighting is associated with a road or bridge project.

Pump Station Capital Rehabilitation Program

Storm water pump stations are a little noticed yet critical component of the highway infrastructure system. MDOT owns and operates 169 pump stations, of which 118 (70 percent) are within Wayne County. The Metro Region administers the Pump Station program statewide due to the large number of sites within Wayne County. The maintenance and modernization of pump stations is critical to MDOT's responsibility for providing a safe and efficient transportation system.

As currently programmed, the pump station template for FY 2010–2014 is $4 million per year. This amount allows MDOT to rehabilitate approximately three pump stations per year. MDOT currently has three pump stations under design for letting in FY 2010. For fiscal years 2011 through 2014, 12 pump stations are programmed for rehabilitation, with 11 in Metro Region and one in Bay Region. Funding has been obligated to complete design of all pump stations currently in the program.

The potential program reduction in available funding beginning in FY 2011 will greatly impact the ability of MDOT to effectively upgrade its pump stations. Under the reduced funding scenario, MDOT will have $500,000 per year to apply toward pump station rehabilitation projects. Due to the cost of individual pump station rehabilitation, under this scenario it will be necessary to combine funding for fiscal years 2011 and 2012 to complete a single pump station rehabilitation project in FY 2012. Likewise, it will be necessary to combine fiscal years 2013 and 2014 funding to complete an additional pump station project in FY 2014. Metro Region will work closely with Lansing Central Maintenance to determine which pump stations will be rehabilitated under this scenario.

ROADSIDES PROGRAM

The proposed FY 2011-2014 roadside template reduction from $10 million to $0.5 million per fiscal year, will severely impact the department's ability to address the network of safety rest area needs, including American's with Disabilities (ADA) compliance, aging, inefficient buildings, failing sanitary systems, and inadequate or substandard parking facilities.

Many of these facilities far exceed both their original design life and the economic benefit of continued maintenance. Failure to address these needs as part of our integrated systems approach will impact the more than 40 million annual users and negatively affect Michigan's travel and tourism industry.

A 95 percent reduction in roadsides funding would effectively eliminate MDOT's ability to deliver any rest area reconstruction/rehabilitation projects and would seriously impact preservation of the existing system, resulting in increased facility replacement costs in the future. If the program is reduced to $0.5 million only one rest area reconstruction project will be designed per fiscal year. MDOT will be unable to meet the goal of having 80 percent of its rest areas in "good" condition by 2012.

Many sites have water and sanitary systems that cannot meet current usage demand and pose a potential risk to the health, safety, and welfare of our natural resources; and increase the likelihood of closing facilities due to substandard, overloaded systems. Reduced funding will further erode MDOT's ability to address these high maintenance, deficient utility systems and could result in Michigan Department of Environmental Quality fines or being forced to close some of the most heavily used facilities.

CARPOOL PARKING LOTS

The Carpool Parking Lot Program would experience a 50 percent reduction in annual funding starting in FY 2011 from $2 million to $1 million per year under the reduced investment strategy. As a result, all capacity improvements to existing lots and scheduled construction of new lots would be cancelled. It is anticipated that committed preservation projects will continue on schedule and without scope reduction.
The program will be able to support minimal costs associated with continuing partnerships and/or leases where warranted. A small amount of funds for emergency repairs will continue to be set aside.

SAFE ROUTES TO SCHOOL

With a reduction to the FY 2011-2014 programs from $3 million to $1 million per year, MDOT would not be able to provide funding for direct assistance programs for eligible schools to conduct community needs assessments to make walking and biking safer for children. In addition, critical non-infrastructure activities, such as educational and outreach activities to modify attitudes and behaviors about walking and biking to school, would not be possible with such limited funding. Finally, approximately 20 fewer schools would receive MDOT support to provide safer routes to school for Michigan's children.

ENHANCEMENT PROGRAM

The reduced program will cut the Transportation Enhancement (TE) program from $12 million to $1 million per year. The popularity of the TE continues to grow with requests far outweighing available funding.

Local agencies across the state are looking for ways to make their communities better places to live, work, and do business by enhancing their quality of life, increasing walkability, promoting tourism, and supporting economic development. MDOT regions and local agencies partner to make these enhancements possible and pair them with anticipated road projects. With the reduction identified to begin in FY 2011, approximately 35 fewer communities along state trunklines would reap the benefits afforded by TE projects.

Approximately 45 fewer miles of non-motorized facilities and 10 fewer miles of roadway streetscape implemented by MDOT would be jeopardized. The result would be a lessened quality of life and reduced walkability in some Michigan communities, fewer mobility options at some locations, and reduced support for tourism and economic development opportunities at a time when Michigan needs it most.

Pedestrian and bicycle transportation are on the rise due to increased fuel costs. Injury and fatality statistics are humbling reminders of the importance to design and build safe facilities for multiple modes of transportation and of the importance of education and enforcement. It may be surprising to some that in Michigan, one pedestrian is injured every three hours and 59 minutes and one bicyclist is injured every five hours and 13 minutes.

In addition, in 2006, 17.9 percent of the 1,002 traffic fatalities in Michigan were bicyclists or pedestrians, whereas nationally, 11.6 percent of the 42,642 traffic fatalities were bicyclists or pedestrians. A reduced program would severely jeopardize MDOT's ability to provide safer pedestrian and bicycle facilities.

CONGESTION MITIGATION AND AIR QUALITY (CMAQ)

The reduced program will cut the CMAQ program from $40 million to $7 million. Sustaining the state's operation and maintenance activities of the Michigan Intelligent Transportation Systems (MITS) Center requires a minimum of $9 million, leaving at least a $2 million shortfall. Funding for the MICHIVAN Program will not be available to vanpoolers and transit riders. The loss or reduction of this program will increase emissions from traffic due to the change in characteristic travel demands for large metropolitan areas.

CMAQ funded projects provide significant benefits to non-attainment areas like metropolitan Detroit and metropolitan Grand Rapids. The emissions benefits of the CMAQ Program have helped Michigan avoid costly implementation measures such as fuel recovery systems at gasoline stations or mandatory motor vehicle inspections. With the reduced CMAQ Program starting in 2011, the state will be at an increased risk of implementing costly prescriptive measures that will be needed to attain the National Ambient Air Quality Standards. In a worst case scenario, designation to more severe classifications of non-attainment (known as bumping-up) or the imposition of federal sanctions on transportation funding could occur.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PROGRAM

The reduced Highway Program investment strategy would reduce the annual budget for the ITS Program from $13 million per year to $3 million per year. The costs for operations, most field maintenance activities, and the Detroit area Freeway Courtesy Patrol are anticipated to remain funded by CMAQ operations funding. Therefore, no reductions are anticipated in the operations of the existing system.

The ITS Program at the current investment level was developed with the intent of deploying a statewide infrastructure that can detect and respond to incidents, provide significant motorist and traveler information, and provide weather information to aid motorists and maintenance personnel. The reduced investment would eliminate the entire capital program at MDOT for ITS deployment activities. There would only be a minimum amount for data collection and maintenance activities.

TRAINING

The training program has allowed for federally mandated certification training (concrete, density, aggregate, bituminous, soil erosion and sedimentation control, bridge inspector training); mandatory safety training (CPR, hazardous materials, confined space, radiation safety), field manager training, and construction project training.

Under the reduced investment strategy, funding for training would be decreased by 85 percent, going from $7 million to $1 million annually. The reduced strategy eliminates funding for road construction workforce development and job corps programs, industry peer meetings, technical seminars and workshops to keep employees up to date on industry standards and safety issues, development classes for engineers and technicians, and specialized training offered by outside sources.

WETLAND MITIGATION PROGRAM

The proposed funding reduction from $2 million to $500,000 beginning in FY 2011 will have a negative impact on the department's ability to construct cost effective, successful wetland mitigation. State and federal laws require MDOT to mitigate for unavoidable impacts to wetland resources. The program reduction will force MDOT to suspend its wetland banking program, resulting in costly site-specific construction of wetlands. In addition, wetland needs over the $500,000 target will have to come out of road and bridge project funds in order to prevent delays.

NOISE ABATEMENT

The Type II Noise Abatement Program reduction investment strategy reduces funding by 50 percent from $1 million to $0.5 million per year as projected in the fiscal years 2011 through 2014. Funding reductions for the Type II Program would result in fewer resources available for reconstruction and rehabilitation. In addition, quantities of deteriorated or damaged soundwall sections requiring replacement due to safety concerns are anticipated to increase as the system ages.

Using the $17.4 million soundwall rehabilitation cost estimate to rehabilitate 56 miles of soundwall statewide, and a $0.5 million budget targeted annually, the rehabilitation schedule would require 60 years for MDOT's entire soundwall system. It is likely that the soundwall system would deteriorate rapidly during the extended rehabilitation period, requiring substantially more funds for reconstruction.

HIGHWAY ECONOMIC IMPACTS

It has been well documented that an efficient highway system in good condition plays an integral role in supporting the state economy. Highway infrastructure investments are part of the state's overall economic development strategy. In order to assess the economic impacts of the fiscal year 2010-2014 "match all federal-aid" and reduced Highway Programs, the Michigan Benefits Estimation System for Transportation Tool (MI BEST Tool) was utilized.

The MI BEST Tool is designed to estimate economic impacts for transportation investments like the Five-Year Transportation Program or an individual transportation project. The economic model chosen to use for this analysis is the Regional Economic Models, Incorporated Policy Insight, version 2.1.5b. The preliminary spending impacts reflect statewide spending totals. The impacts reported the charts include both the direct impacts and indirect impacts.

Employment Impacts of the Match All Federal-Aid 2010-2014 Highway Program

The tables and charts below show the employment impact of the 2010-2014 Highway Program for the State of Michigan. The "match all federal-aid" Highway Program is forecasted to support 17,500 jobs in Michigan in 2010. The effect of employment is impacted by reduced spending levels as a result of a decline in revenue beginning in FY 2011.

1. Preliminary analysis reflects investments on the Blue Water Bridge Corridor during the FY 2010 – 2014 time frame.

Employment impacts of the Match All Federal-Aid 2010-2014 Highway Program

	2010	2011	2012	2013	2014
Investment (current million $)	$1.436	$1.277	$1.233	$1.287	$1.355
Employment Impact (job)	17,500	15,520	14,600	14,730	15,030

Employment Impacts of the reduced 2010-2014 Highway Program

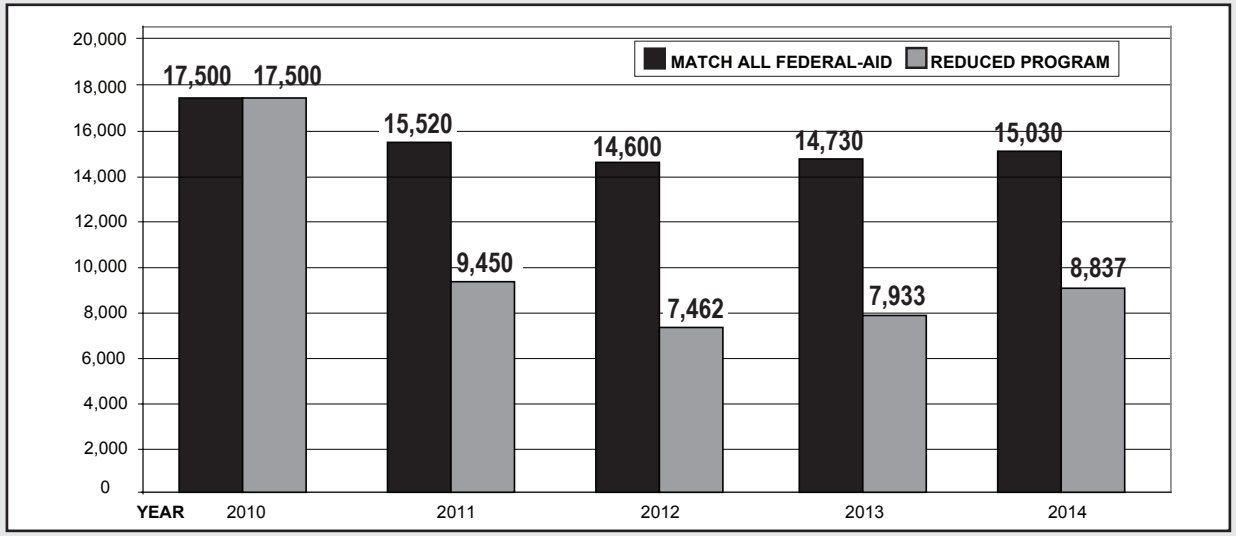
Under the reduced program, employment benefits are the same as the "Match All Federal-Aid" program in 2009 and 2010, because the spending in 2009 and 2010 remains the same. The reduced-funding employment effects then fall off dramatically in 2011. By 2014, the program supports only 8,837 jobs in the state.

Calculated employment impacts of the Reduced 2010-2014 Highway Program

	2010	2011	2012	2013	2014
Investment (current million $)	$1.436	$756	$590	$659	$776
Calculated Employment (job)	17,500	9,450	7,462	7,933	8,837

Effect on Employment of the Five-Year Highway Program

2010-2014 (Match All Federal-Aid and Reduced Program)[1]



Passenger and Rail Freight Transportation Revenue Assumptions

Federal Revenue Issues

The federal revenues that support the Passenger Transportation Program differ from mode to mode. For the local transit portion of the Passenger Transportation Program, federal funds include both annual apportionments and congressional earmarks to MDOT and to rural transit agencies for which MDOT must be the funding recipient. Congressional earmarks add to the total size of the program, and as such, the program size can vary significantly year to year. SAFETEA-LU expired at the end of FY 2009; however, Congress passed a one-month continuing resolution and will need to pass additional continuing resolutions until a new program can be enacted. Therefore, for this Five-Year Program, federal revenues are estimated to be a continuation of FY 2009 federal apportionments, with no increases projected over the 2010-2014 period. Since it is not possible to predict the results of reauthorization or annual earmarking, the best available estimate is to assume a continuation of prior year levels. Dedicated federal aid and MTF funds that support motorist safety at railroad crossings on local roads, included as part of the Rail Freight Program, are expected to continue at current levels during this five-year period. Other than very infrequent earmarks, no federal funding is anticipated for other rail freight programs.

Passenger Transportation Programs

Federal funding for the marine passenger portion of the program is intermittent, based on congressional earmarks and special projects. For the purpose of this program, no federal funding was included in the marine passenger program.

The Passenger Rail Investment and Improvement Act (PRIIA) of 2008 was signed into law on October 16, 2008. This act provides the mechanism for future federal funding of passenger rail programs on a competitive basis. In addition, grants for competitive High Speed Intercity Passenger Rail ARRA funds from Federal Rail Administration will be administered through these funding categories. Federal revenue was included for the passenger rail program to account for this new federal program that will allow MDOT to compete for federal grants during this five-year period.

Unlike the Highway Program, the full Passenger Transportation Program is much larger than the portion reflected in MDOT's Five-Year Transportation Program. Over 80 percent of the federal transit revenues go directly to transit agencies and are not reflected in MDOT's program; thus, when state funds are not available to match federal funds, the full impact is not detailed in the program. The impact is largely on the local programs that are dependent on state revenues to access federal funds. The magnitude and direct link between a shortfall in state revenues and loss of federal funds may not be reflected in this program, but it must be clearly understood that the impacts are significant.

State Revenue Issues

Passenger transportation and freight rail service programs also receive funding through the Comprehensive Transportation Fund (CTF) and State Aeronautics Fund (SAF). A portion of the CTF is funded from the Michigan Transportation Fund (MTF) which is funded by receipts from the state gas tax. Therefore, the revenue declines that befall the MTF are also felt by the CTF. The CTF is also funded from auto related sales tax and that portion of funding has not only declined, but has also been subject to diversion to general fund programs.

The state revenues that support the passenger transportation and rail freight programs that are part of the CTF, are not constitutionally protected and are subject to re-direction or reversal back to the general fund via legislative action each fiscal year. Appropriation levels vary significantly from year to year.

This Five-Year Program is based on continuation (i.e., no growth) of the FY 2010 CTF appropriation levels. The FY 2010 CTF; program did not include any diversions of sales tax revenues away from the CTF, however, gas tax revenues declined in FY 2009, which resulted in a reduced program for FY 2010 and a rebound is not anticipated. If CTF revenues continue to decline, MDOT will not be able to fully implement the planned FY 2010-2014 program.

[2] *An important reminder, most federal transit funds are awarded directly to local transit providers and are not included in MDOT's Five-Year Program.*

Rail Freight Program

The Rail Freight Program reflects the reductions already faced and expected to continue during this five-year period. CTF reductions have created a backlog of capital projects on state-owned lines and limited MDOT's ability to address new business opportunities or emergency situations. In an effort to address a portion of the general fund shortfall, MDOT also will not administer its Michigan Rail Loan Assistance Program during this period.

The suspension of this program will particularly affect smaller, short-line railroads, for which capital assistance can be critical to address emergency situations as necessary to maintain service. In addition to the CTF cuts, safety efforts have been reduced through stagnant revenue and rising project costs.

The Local Grade Crossing Program, which supports motorist safety at railroad/roadway grade crossings rather than rail freight, receives dedicated federal funding through SAFETEA-LU. Even though SAFETEA-LU expired at the end of FY 2009, these revenues are anticipated to continue at current levels during this five-year period. Other than very infrequent earmarks, no federal funding is anticipated for other rail freight programs.

Aviation Program Revenue Assumptions

Michigan's aviation fuel excise tax is the primary funding source for the State Aeronautics Fund (SAF). Over the last decade, aviation fuel tax revenues have continued to decline. Projections through the end of FY 2009 indicate revenues of slightly more than $4.9 million. This is a reduction of 15-20 percent from FY 2008 and the lowest level in a decade, even before inflationary adjustments. When adjusted for inflation, the projected aviation fuel tax revenues are less than half that available in FY 1998.

Fuel tax revenues are not expected to improve in FY 2010, as both general aviation and commercial airline activity have dropped significantly as a result of recessionary challenges. Across the airline industry, recent schedule cutbacks of approximately 15 percent will continue to result in lower fuel tax revenues for the SAF.

While bond revenue, under the Aviation Safety and Protection Program, is no longer available, the SAF continues to receive $6 million annually from the Wayne County parking tax. However, this revenue is initially used for debt service on those bonds which will leave a net amount of only $2,527,631 for the SAF. This is a reduction of $41,469 for FY 2010.

Beginning in FY 2010, federal funding for the Airport Improvement Program is expected to increase from previous years if H.R. 915, the FAA Reauthorization Act of 2009, becomes law. H.R. 915 provides a total of $16.2 billion in funding, nationwide, over the next four years.

While this is generally a positive development, other provisions of the proposed legislation may endanger Michigan's ability to match that federal funding. Specifically, under H.R. 915, the federal/state/local match would change from the current ratio of 95/2.5/2.5 to 90/5/5. This would double the amount of state revenue required to match federal funding and may result in an inability of Michigan to match all available federal funding as early as 2011.

MULTI-MODAL PROGRAM INVESTMENT STRATEGIES

MDOT's FY 2010-2014 Multi-Modal Program includes three main areas: Passenger Transportation, Rail Freight and Ports, and Aviation.

Passenger Transportation

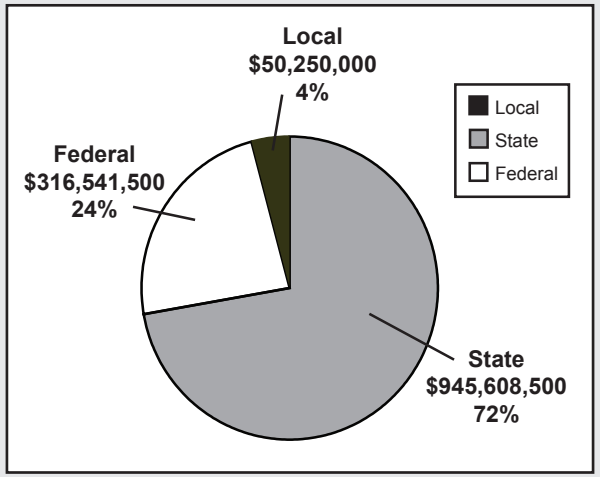
MDOT's Passenger Transportation Program includes local transit, intercity bus, passenger rail, and marine passenger. The program provides for capital and operating assistance, technical support, and compliance monitoring of Michigan's local transit, intercity bus, rail passenger, and public marine passenger sectors of the transportation system. It also includes safety oversight of intercity bus, charter bus, and limousine operators, as well as fixed guideway systems, which at this time is limited to the Detroit People Mover.

The total Passenger Transportation Program for FY 2010 to FY 2014 is approximately $1.31 billion, with an average annual investment of $262.5 million. This program is comprised of a combination of annual appropriations from the state's Comprehensive Transportation Fund (CTF), federal funds from the transit portions of the federal transportation program, and other revenues. CTF revenues provide for the largest portion of the revenue and local transit makes up the largest portion of the program. The investment of CTF revenues is determined by the detailed requirements set forth in Act 51 of 1951, as well as the annual appropriations process. Act 51 requires the majority of CTF revenues to be used for local transit.

In addition, most of the federal revenues MDOT receives are for local transit.

As in prior five-year programs, MDOT will continue its partnership role by providing financial and technical assistance to public, private, and non-profit transit providers. In each year of the Five-Year Program, MDOT will issue approximately $200 million in operating, capital, and special project contracts to support over 130 local transit providers. State and federal funds issued by MDOT will be focused on continued safe and secure operation of the existing transportation system through routine maintenance, capital replacement/rehabilitation, and preservation of existing service levels. Compliance monitoring of funding recipients will remain a significant activity for MDOT staff.

Passenger Transportation Five-Year Program by Revenue Source



Reductions to the Passenger Transportation Program

As noted in the introduction, the Five-Year Passenger Transportation Program already represents a reduced program. Costs are increasing and revenues are not keeping pace. In prior years, diversion of sales tax revenues from the CTF to the general fund has exacerbated the problem, and in more recent years, reduced contributions of gas tax revenues from the Michigan Transportation Fund (MTF) to the CTF are clouding the revenue forecast. The Five-Year Passenger Program is based on a "no growth" revenue assumption, which may be optimistic given the financial challenges the state's revenue sources are facing. As has been done annually since the early 2000s, MDOT will need to adjust its Five-Year Transportation Program over time to fit the revenue available.

The impacts of a reduced Passenger Transportation Program are already being felt. For example, local bus systems are feeling the pain of the increased fuel costs. In 2000, Michigan transit systems spent $18 million to fuel their buses, but by the end of 2008, they will have spent nearly three times this amount on fuel - $48 million – to keep buses on the road. During this same time, the funding available to MDOT to support local transit operations has remained relatively static. In 2000, state revenues covered 45 percent of the operating costs of local transit systems. In 2008, that percentage dropped to 31 percent and by 2014 it could drop to below 24 percent. Passenger trains and intercity buses also run on diesel fuel and their fuel costs are increasing. In FY 2009, the projected cost to the state of maintaining passenger rail contracts exceed the funds available to MDOT.

[3] *Please note the Five-Year Passenger Transportation Program revenues are not broken down by mode because the revenues can vary from year to year based on the appropriations process. Generally, 90 percent of the revenue will be allocated to support local transit, about three percent will support intercity bus, and three percent will support intercity passenger rail. These percentages match the allocations for FY 2010.*

The capital costs of maintaining the passenger transportation system have also increased and while increased federal funds have helped the state keep up with demand, revenues available to match federal funds have declined. In 2000, MDOT received a $17.4 million appropriation to match federal transit capital grants, but in the FY 2010 budget the appropriation amount is down to $5.2 million. Since FY 2005, toll revenue credits have been used to fill the gap. Toll revenue credits are a federal tool that stand in the place of match and allow transit agencies to access federal funds. However, in comparison to hard (cash) match, they reduce the total purchasing power of federal funds. Since FY 2005, nearly $63 million in purchasing power has been lost as a result of the use of toll revenue credits to match federal transit funds. Furthermore, toll credits may not be available for the entire five-year period.

As funding support for the Passenger Transportation Program has declined, some programs such as studies to promote regional transportation coordination have been eliminated. Funding for intercity terminals dropped from $2.8 million in 2004 to $150,000 in FY 2010. This funding decrease was required so that available funds could be re-directed to maintenance of essential transit services.

With funding levels barely keeping up with system preservation needs, there are no revenues to support expansion of the system. Plans for rapid transit projects in Grand Rapids and Detroit, regional rail service between Ann Arbor and Detroit, and new rail stations in Dearborn, Detroit, and other communities are awaiting state funding commitments.

As a result, between 2010 and 2014, MDOT expects to see declines in the condition of passenger transportation systems, both in terms of maintenance of the infrastructure and transportation services available to the public. The geographic location and magnitude of local transit services that will be lost will depend on the decisions made by individual operators in response to declining state assistance. The location and magnitude of intercity passenger services that will be lost depends on the level of service MDOT is able to procure from year to year within its available resources.

At current revenue levels, declines in the passenger transportation system are expected over the next five-year period. A full Passenger Transportation Program, one that provides for adequate revenues to preserve the existing services and infrastructure, is dependent on additional revenues.

Local Transit

For local transit, the Five-Year Program will focus on the preservation of existing transit services in all 83 Michigan counties via operating and capital assistance. Through this assistance, over 80 percent of Michigan's population is provided access to some form of local transit service. The majority of state operating assistance is provided as a percentage of eligible costs, with the maximum state share established in Act 51. The majority of state capital assistance is provided as match to federal capital grants for routine bus replacement, facility renovation, and equipment upgrades.

As discussed in the Funding Crisis section of this report, state revenues will fall short of a full program, i.e., the average annual need to preserve existing local transit services and infrastructure.

Unless transit systems are able to raise local funds to compensate for declining state revenues, local transit systems will have to reduce services over the next five years. Over 100 million rides were provided by these services in FY 2008. Local decisions will determine where the services will be lost. In addition, Michigan may start losing federal transit funds due to a shortfall in state matching funds. Over the life of this Five-Year Program, an average of $112 million a year in routine federal transit funds could be in jeopardy.

Intercity Passenger Services

Under this Five-Year Program, MDOT will continue to use state and federal (intercity bus only) funds to contract with intercity carriers to provide route service that would not otherwise exist, i.e., would not be provided by the carrier absent a state subsidy. MDOT will also use state and/or federal funds to enhance the intercity passenger infrastructure, such as funding for construction of intercity passenger terminals, motor coaches, and track and technology improvements. These investments help enhance the transportation experience for intercity passengers and help reduce costs for the carriers.

State revenues will also fall short of a full program intercity passenger service, i.e., the average annual need to preserve existing intercity passenger services and infrastructure. It is uncertain if MDOT will be able to maintain current contracts for intercity bus and passenger rail services. Services at risk include: 1) five intercity bus routes that connect Michigan's upper and northern Lower Peninsula to southern Michigan and national network, and serve 105 Michigan communities; 2) two passenger rail trains that serve 22 Michigan communities and connect Michigan to the national rail network. Decisions on where and when to cut services will be made annually as costs are compared to available revenues.

Rail Freight Investments

Under this five-year program, MDOT will continue to focus its efforts on safety and preservation. It is expected to invest $42.3 million (not including the expenditure authority above expected revenue) through the following program areas:

- Capital Development Program

  MDOT expects to complete a multi-year track rehabilitation project on the state-owned line between Cadillac and Yuma, repair two truss bridges (one in Wexford County and the other in Shiawassee County), undertake an annual vegetation control program and, as necessary, complete culvert and crossing repairs. Additional projects will be undertaken as funding allows, but the specifics are unknown at this time.

- Freight Economic Development Program

  Through this program, MDOT provides assistance to rail users in the development and/or expansion of businesses and industries. As an application-based program, specific projects and/or funding recipients are unknown at this time.

- Local Grade Crossing Program

  MDOT anticipates funding 40-50 safety enhancement projects annually at railroad grade crossings on roads under county, city or village jurisdiction. Projects are selected after an annual prioritization process that takes into account up-to-date exposure and crash data and after Diagnostic Study Team Reviews are conducted at the crossings and, therefore, cannot be determined in advance.

  The Department will also provide funding assistance for crossing elimination projects following either a local government's decision to close a road at a crossing or a railroad's decision to realign track to bypass a roadway.

Water-borne Freight Transportation

For each of the next five years, MDOT anticipates providing $468,200 in legislatively-appropriated funding to the Detroit-Wayne County Port Authority, based on the FY 2010 appropriation. Combined with matching funds from the City of Detroit and Wayne County, these dollars assist in the Port Authority's operating costs and marketing activities.

Aviation Investments

MDOT anticipates continued budget challenges for its aeronautics program in FY 2010.
The anticipated Aviation Capital Program for FY 2010 is $123.55 million a 26 percent reduction from FY 2009. State funding of Airport Capital programs will be appropriated at $2,527,600. This represents a 33.3 percent drop over FY 2009 and an 87 percent drop over the past five years. State funding will be used almost exclusively to match available federal dollars. Statewide programs funded with State Aeronautics Funds (SAF) were eliminated or suspended in FY 2009. These programs include Statewide Pavement Maintenance, Statewide Paint Marking, the All Weather Access Program, and the Air Service Program. Suspended programs will likely remain so without an unexpected increase in SAF revenue during FY 2010.

The 2010 MDOT budget includes $123.55 million in combined federal, state, and local funding for airport capital improvement. If the federal Airport Improvement Program (AIP) is reauthorized at or above 2009 funding levels, this $123.55 million can be obtained for use at Michigan's airports but would be reduced if federal authorization is lower. It is possible for AIP to be funded at a higher level and MDOT could have to ask the Michigan Legislature to increase the state appropriation.

MDOT's FY 2010 Aeronautics Program provides for capital assistance with federal, state, and local funds for airports in Michigan. In addition, the program provides for technical support and safety oversight for airports, pilots, and flight instructors. The focus is largely on continued safe and secure operation of the existing airport system through capital replacement/rehabilitation and preservation of existing service levels.

Through our partnerships with the Federal Aviation Administration, airport sponsors, Michigan Association of Airport Executives, and the Michigan Business Aviation Association, MDOT has promoted and implemented operational efficiencies of the airport system and its infrastructure.

MDOT's approach to Michigan's aviation system differs significantly from the road and bridge sectors covered by MDOT's FY 2010 Highway Capital and Maintenance Program for two main reasons. First, the infrastructure is generally owned, managed, and operated by entities other than MDOT. In addition, state and federal funding for these sectors are more prescribed than highway funding. Therefore, MDOT's program supports investment and operating decisions made by local and private entities within the prescribed parameters of state and federal law. However, MDOT does provide asset management programs such as the Michigan Airport System Plan, Approach Protection Plan, Michigan Airport Pavement Management System, and the Tall Structures Program.

Airport Improvement Program (Capital Outlay and Maintenance Program)

The FY 2010 AIP provides funding for approximately 236 public use airports for capital improvement projects and pavement maintenance. Of the 236 eligible airports, 94 receive federal entitlement funding as part of the National Plan of Integrated Airport Systems. As the majority of Michigan's public use airports that receive federal entitlement funds are owned and operated by local governments, projects using these funds are selected by the airports, not MDOT. MDOT can and does provide supplemental funding for many projects and makes the decision on which projects receive these supplemental funds. The Federal Aviation Administration (FAA) also provides supplemental funding for projects at airports they select. All project funding decisions using supplemental dollars are selected on the basis of the Michigan Airport System Plan as approved by the Michigan Aeronautics Commission or published FAA priorities, as appropriate.

Air Service Program

The Michigan Air Service Program is designed to attract and maintain quality air service, for Michigan's 17 airports with scheduled air service. MDOT specialists work directly with the airlines and Michigan airports to increase, recruit, and maintain levels of air service throughout the state.

This program provides funding to small airports with commercial air service as many of these airports do not have sufficient funds available for air service development projects. A local match is required for all projects funded under this program. There are three categories of projects that may be undertaken at eligible air carrier airports.

- **Capital Improvement & Equipment -** Projects improve airport facilities to support air service and economic development. The program allows airports another funding mechanism for projects currently not undertaken through other existing federal and state improvement programs due to fund limitations and program guidelines. Examples of projects include terminal improvements and security equipment.
- **Carrier Recruitment & Retention -** Projects involve studies helping to identify and document community air service needs, and if warranted, state and local commitments to share financial risks in order to preserve or increase scheduled air service.
- **Airport Awareness -** Projects promote increased public awareness of services and facilities and focus upon increased involvement with community organizations and local businesses to develop a better understanding of the airport's role in supporting economic growth and job retention.

All Weather Airport Access Program

The All Weather Airport Access Program enables airports to be accessible to pilots during inclement weather conditions. This includes 39 Automated Weather Observing Systems (AWOS), which provide pilots with continuous weather information via radio, telephone, and computer. Additionally, this program includes pilot information systems at 52 Michigan airports which allow pilots to check weather conditions at airports throughout the United States.

This program supplements federal navigational aids and weather reporting to provide statewide capability for enroute all weather navigation. The program also provides for safe, all weather approaches and departures at airports not served by FAA systems, and enhances pilot communications with air traffic control. Airport sponsors share costs of equipment and operations.

- AWOS provide real-time, accurate, and current weather information for pilots and the aviation community, and also benefit the local community by providing the same information to other users, such as road commissions, schools, and the agricultural industry. This data is used for flight planning and is available by computer nationally and via radio broadcast to airborne pilots in the vicinity of the airport where the AWOS is located.
- Ground communication outlets provide pilots a direct communications link to air traffic facilities to indicate their arrival at their destination and to obtain necessary flight instructions without leaving the cockpit of their aircraft.
- Instrument approaches provide increased access to airports during inclement weather conditions through three-dimensional precision and two-dimensional non-precision approaches using global positioning satellite technologies.

Both the Air Service and All Weather Airport Access Programs are supported by the State Aeronautics Fund.

Summary

For FY 2010 to FY 2014, MDOT estimates it will invest an average of approximately $398 million per year (a reduction of $52 million from FY 2009) in state, federal and local funds for the full Multi-Modal Program.

Successful implementation of the program is dependent on the annual appropriations process and the efforts of airport authorities, transit agencies, private non-profit transportation providers, rail freight carriers, Michigan governments and businesses, intercity passenger carriers, and others.

MDOT's Multi-Modal Investment Strategy

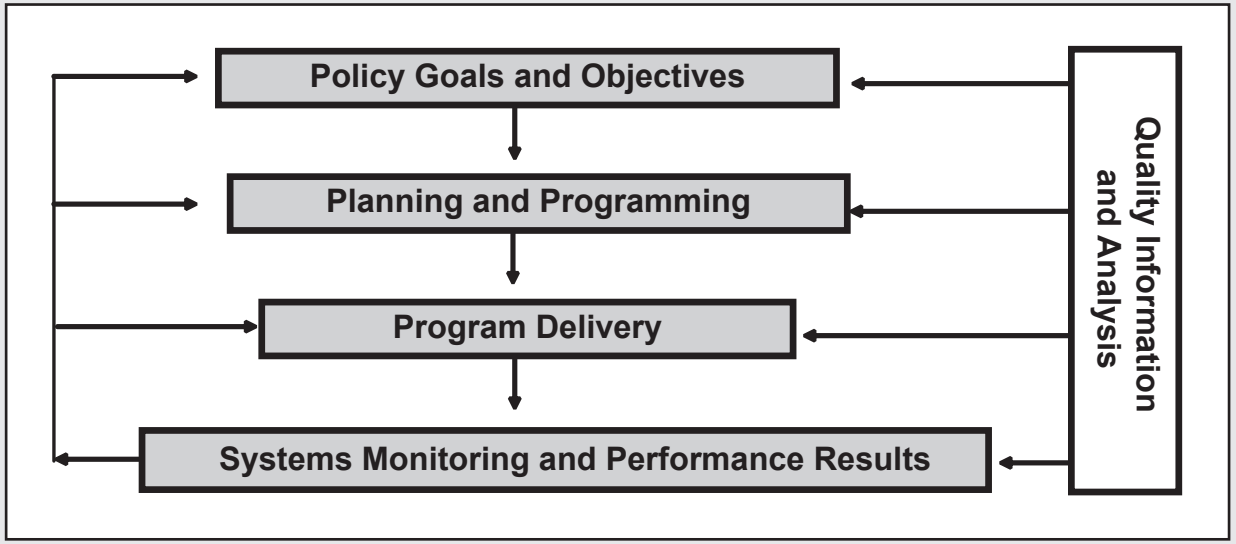
(Subject to appropriation of state, federal and local funds)

	Annual Average	Five-Year Total
AVIATION		
Aviation Improvement Program*	$123.55 million	$ 617.8 million
Air Service Program	$0.46 million	$2.3 million
All Weather Airport Access Program	$0.53 million	$2.7 million
PASSENGER TRANSPORTATION (Local Transit, Intercity Bus, Passenger Rail)	$262.5 million	$1,313 million
RAIL FREIGHT and PORTS	$10.73 million**	$53.65 million
TOTAL	**$397.77 million**	**$1,989 million**

* Includes planned investments for primary airports and general aviation airports. Other statewide improvement programs are not funded at this time.

** Rail Freight – Includes $2 million of expenditure authority from the rail freight fund, and $100,000 of federal expenditure authority. The estimates for the rail freight fund and federal funds are often overstated to account for potential revenue.

Asset Management Concept



ASSET MANAGEMENT PRACTICE

Highways

Asset management provides a solid foundation that allows transportation professionals to monitor the transportation system and optimize the preservation, improvement, and timely replacement of assets through cost-effective management, programming, and resource allocation decisions. Asset management is a continuous process enabling transportation professionals to evaluate various scenarios, determine trade-offs between different actions, and select the best method for achieving specified goals and objectives.

The Five-Year Transportation Program is developed based on implementation of the goals and policies outlined by the State Transportation Commission (STC), emphasizing an asset management approach to preserving the transportation system and providing safe mobility to travelers. Transportation asset management is a strategic approach to maximizing the benefits from resources used to manage the transportation infrastructure. It involves collecting data for the physical inventory of our surface transportation system and managing current conditions based on strategic goals and sound investments. The following flowchart highlights the important characteristics of transportation asset management.

Pavement Condition

MDOT has made substantial progress since the adoption of our pavement condition goal of having 95 percent of the freeways and 85 percent of the non-freeways in good condition by 2007. In addition to federal and state transportation revenue, bond initiative investments (Preserve First, Jobs Today and State Economic Stimulus) and investments from the American Recovery and Reinvestment Act (ARRA) for FY 2009, have allowed improvement in the condition of state roads and bridges to protect the investments of Michigan taxpayers and meet the pavement goals established by the State Transportation Commission.

The road and bridge preservation projects included in the Five-Year Program are prioritized based on approved asset management strategies, with a specific focus on doing the right repair at the right time to extend the life of our roads and bridges and to keep them in good condition. Our programs include a combination of long-term fixes (reconstruction), intermediate fixes (resurfacing/rehabilitation), an aggressive capital preventive maintenance (CPM) program, and routine maintenance of the system.

The following graph shows the progress made in improving the state trunkline combined pavement condition (freeway and non-freeway) since the implementation of our pavement condition goals nearly ten years ago. In 1996, the combined pavement condition was at approximately 64 percent good. In 2009, the combined pavement condition improved to approximately 91 percent good – an increase of 27 percent.

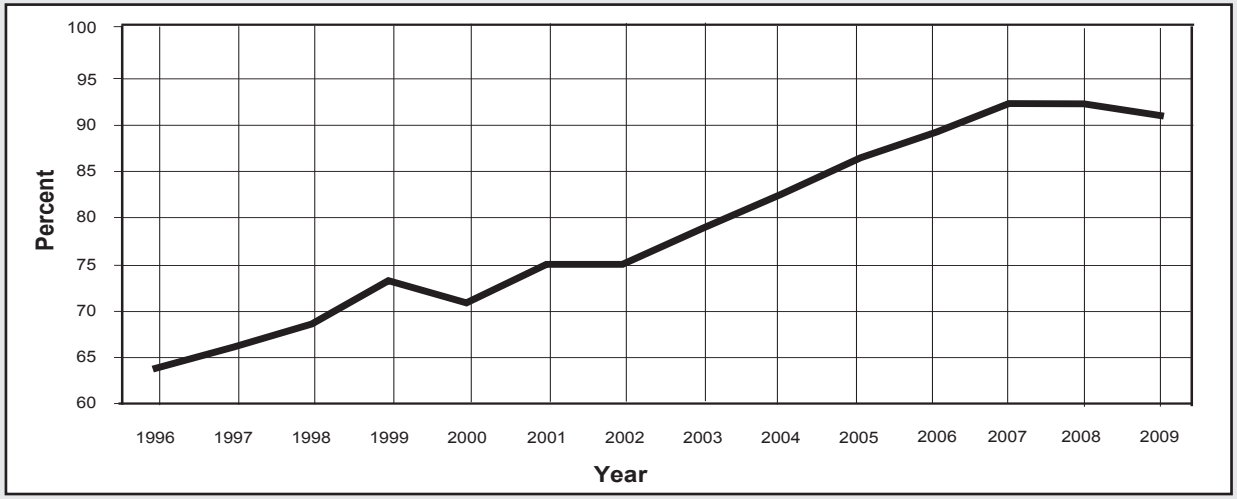
The Road Quality Forecasting System (RQFS) is a strategy analysis tool used by MDOT to project results of pavement rehabilitation policies and proposed projects. Working from current pavement condition, age, and type, and factoring in aging and fix strategies, RQFS estimates future condition of the state trunkline system.

Remaining Service Life (RSL) is defined as the estimated remaining time in years until a pavement's most cost-effective treatment is either reconstruction or major rehabilitation. Pavements with an RSL of two years or less are considered to be in the "poor" pavement category.

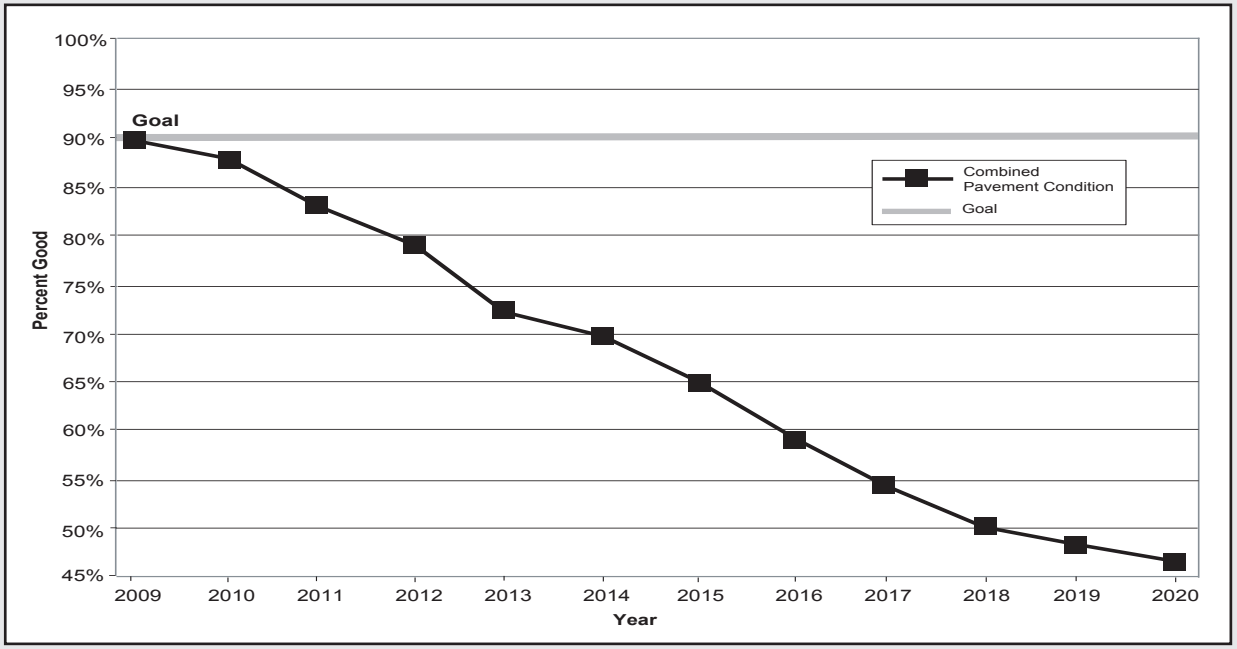
Based upon the strategies and projects contained in this 2010-2014 Five-Year Transportation Program (including the Economic Stimulus initiative), we have used the RQFS tool to forecast future pavement condition.

The following graph shows the RQFS forecast, based on investment levels anticipated, that projects statewide combined pavement condition will begin to decline after FY 2009 to approximately 88 percent good in FY 2010, to 70 percent by 2014, and further declines to approximately 45 percent good by 2020.

Pavement Condition of State Trunkline (Percent Good Condition)



Combined Statewide RQFS Pavement Condition Forecast 2009-2014



Bridge Condition

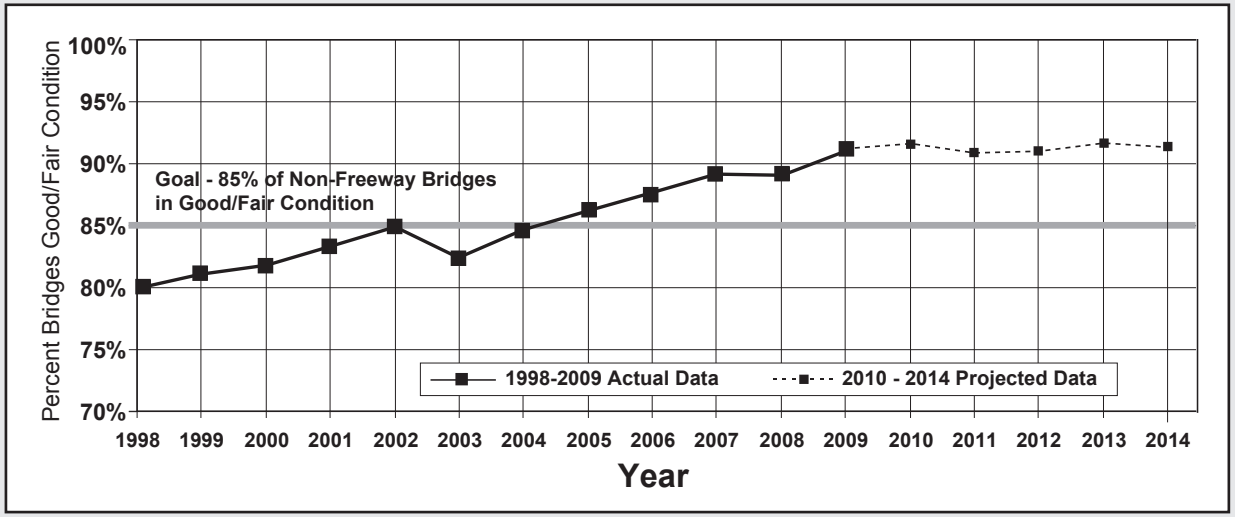
MDOT's Bridge Management System (BMS) is an important part of our overall asset management process. BMS is a strategic approach to linking data, strategies, programs, and projects into a systematic process to ensure achievement of desired results.

An important BMS tool used by MDOT to develop preservation policies is the Bridge Condition Forecasting System (BCFS). Working from current bridge condition, bridge deterioration rate, project cost, expected inflation, and fix strategies, BCFS estimates the future condition of the state trunkline bridge system.

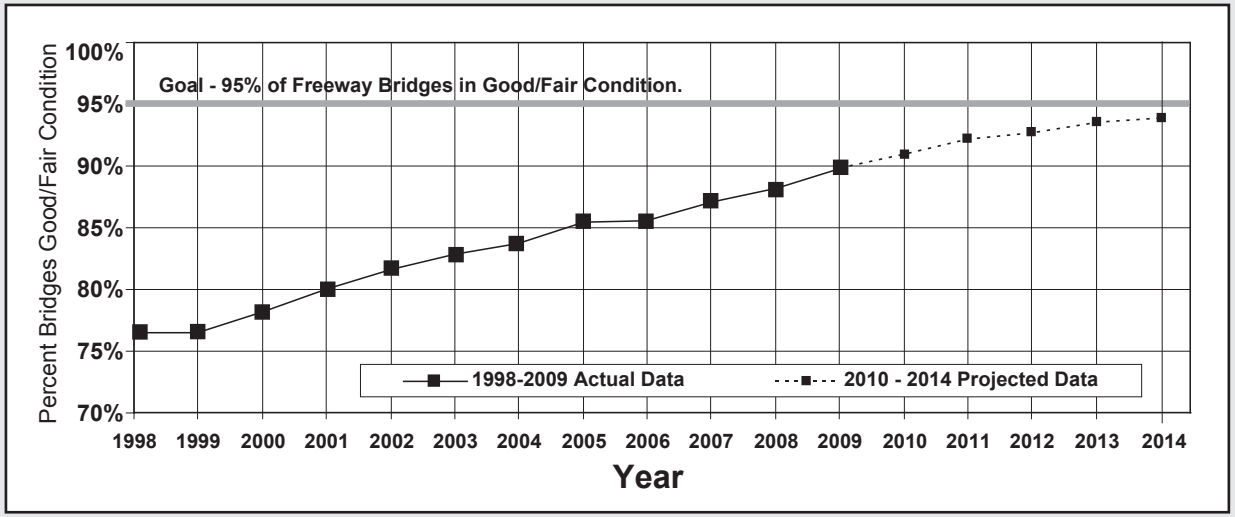
As shown in the charts below, we have met and are projecting to sustain the non-freeway bridge goal of 85 percent good.

We are also making steady progress toward our freeway bridge goal, but projections indicate that we will fall short of achieving the freeway bridge goal of 95 percent good. Projections show that we will reach a freeway bridge condition of approximately 93 percent good by 2014.

Statewide Non-Freeway Bridge Condition



Statewide Freeway Bridge Condition



MULTI-MODAL PROGRAMS

Passenger Transportation

The Passenger Transportation Five-Year Program is focused almost entirely on preservation of the existing public transportation system. MDOT program investments will focus on the following stewardship objectives:

- Ensure the rural transit fleet and the specialized transit fleet are in good condition.
- Preserve existing intercity passenger rail transportation services.
- Preserve existing intercity bus passenger transportation services.
- Preserve existing transit services in all 83 Michigan counties.

However, as indicated under the Investment Strategies section, program revenues are expected to fall short of meeting these stewardship objectives. As a result, passenger program objectives will not be met during this Five-Year Program.

Local Transit

Between 2010 and 2014, as the graphic below indicates, MDOT may not be able to meet these stewardship objectives and expects to see declines in the condition of passenger transportation systems, both in terms of maintenance of the infrastructure and transportation services available to the public.

Passenger Trains and Intercity Buses

The graphic below shows how MDOT will not met its objectives for intercity passenger services. Passenger trains and intercity buses also run on diesel fuel and their fuel costs are increasing. Between FY 2008 and FY 2009, the cost of maintaining the passenger rail contract with Amtrak increased. While Amtrak's request for FY 2010 is not yet known, it will certainly exceed the funds available to MDOT. As a result, MDOT will be negotiating a partial year contract with Amtrak for FY 2010.

For both passenger rail and intercity bus, state funding for infrastructure improvements have been significantly cut in recent years to re-direct available revenues to maintenance of services. For example, the funds available for intercity terminals has dropped from $2.8 million in 2004 to $150,000 in 2010 and this trend is likely to continue.

Program Objectives vs. Reality Local Transit

Local Transit

- Objective: Preservation of existing transit services in all 83 Michigan counties via operating and capital assistance
- ***Reality:***
  - ***State share of operating expenses will decline***
  - ***Expect loss of service - local decisions will determine where***
- Objective: Match all available federal funds
- ***Reality:***
  - ***Toll credits and remaining bond revenues will be exhausted in FY 2010***
  - ***$112 million a year in routine federal funds in jeopardy***

80% of Michigan's population has access to local transit

Program Objectives vs. Reality Intercity Passenger

Intercity Passenger

- Objective: Maintain contracts with intercity carriers
- ***Reality: Insufficient revenues to meet contractor costs***
- Objective: Match any available federal funds
- ***Reality: No state revenues***
- Objective: Maintain infrastructure
- ***Reality: Minor repairs***

Two passenger rail trains serve 22 Michigan communities

Five intercity bus routes serve 87 Michigan communities

Rail Freight Program

MDOT manages approximately 530 miles of state-owned rail lines, operated by four railroad companies. The Capital Development Program provides on-going property management and infrastructure rehabilitation in an effort to maintain the safety of the lines and the existing level of service to the shippers, ultimately making the lines viable again in the private sector.

Going forward, the Capital Development Program will continue to annually provide for vegetation control and, as necessary, bridge, culvert and crossing repairs on the state-owned rail lines. In addition, the program will complete the work associated with a major rehabilitation project that was started in FY 2009 on approximately twenty-five miles of track between Cadillac and Yuma, as well as repairs to two truss bridges. The scope of the program's efforts will be determined in part by the number of projects funded by the Freight Economic Development Program, which shares the funding source.

Aviation Programs

MDOT's approach to Michigan's aviation system differs significantly from the road and bridge sectors covered by MDOT's Highway Capital and Maintenance Program for two main reasons. First, the aviation infrastructure is owned, managed, and operated by entities other than MDOT. In addition, state and federal funding for these sectors are more prescribed than highway funding. Therefore, MDOT's program supports investment and operating decisions made by local and private entities within the prescribed parameters of state and federal law. However, MDOT does provide asset management programs such as the Approach Protection Plan, Pavement Condition Index, and Tall Structures Program.

The All Weather Airport Access Program enables airports to be accessible to pilots during inclement weather conditions. This includes 38 Automated Weather Observing Systems (AWOS) that provide pilots with continuous weather information via radio, telephone and computer.

Additionally, this program includes pilot information systems at 54 Michigan airports which allow pilots to check weather conditions at any airport in the United States. This program also has been supported by the SAF within the aeronautics' operating budget, and local cost sharing of equipment and maintenance costs is required. At the present time, all potential new sites for this program are subject to federal fund availability and are funded solely under the AIP for equipment and installation. Operating costs require local cost sharing.
MDOT anticipates continued budget challenges for its Aeronautics Program in FY 2010.

Unfortunately, the future also remains uncertain for a number of essential state/local programs. Many of these programs shown in the chart above have already been curtailed or eliminated as a result of our transportation funding crisis. As an example, the Air Service Program has traditionally received up to $1.5 million annually. However, funding for this essential program at a time when it is greatly needed, will be unavailable for future years if revenues are not increased.

SAFETY AND SECURITY STRATEGIES

HIGHWAY SAFETY PROGRAM

MDOT's comprehensive Safety Program focused on improving traffic control devices and driver information systems in an effort to improve driver safety. As part of MDOT's FY 2008 Safety Program, $91.3 million was committed to the design, construction, and placement of signs, pavement markings, median protection, traffic signals, and other safety improvement projects. An additional $1 million Safety Belt Performance Grant was used toward non-traditional safety initiatives.

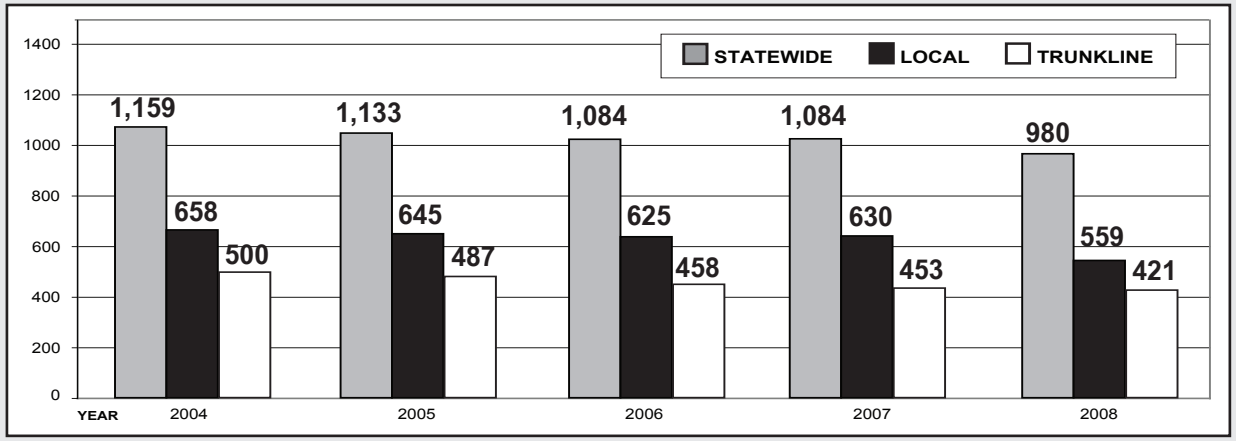
Accomplishments in FY 2009 included adding 150 million feet of pavement markings statewide and replacing special markings at school, pedestrian, railroad crossing, and intersection approaches in approximately 40 of Michigan's counties. MDOT also upgraded signs on 594 miles of non freeway facilities and 80 miles of freeway. An additional 202 miles of emergency route signing was installed to assist motorists. The department installed one new traffic signal, one new warning sign beacon, and two new school devices. The department also upgraded/modernized 143 traffic signals and overhead beacons, 12 school devices, and seven traffic sign beacons, removed two signals and eight other devices, and upgraded 556 signal locations to LED lights. Through the use of signal funding, 314 additional traffic signals on state trunkline were retimed. In an effort to address lane departure crashes, 1,580 miles of centerline and 575 miles of shoulder rumble strips were constructed on non freeways, and 142 miles of cable median barrier and 60 miles of guardrail were placed along state trunkline. Twenty eight safety improvement projects were constructed in response to traffic crash analysis. As a result of these projects, MDOT estimates a reduction of 63 severe injuries and 16 fatalities.

Beyond construction projects, the Safety Program allocated funding toward non traditional safety initiatives. Such initiatives included:

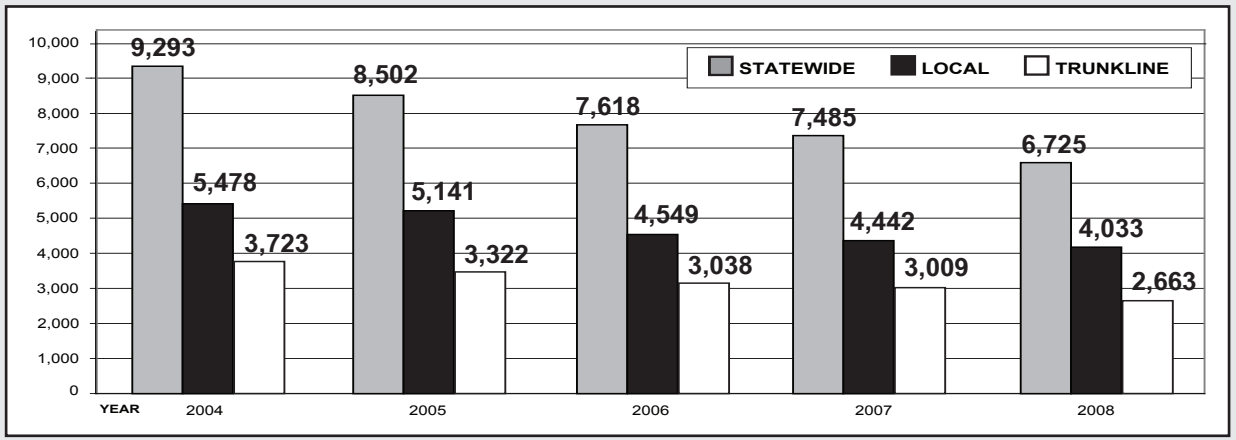
- Implementation of the traffic incident management (TIM) plan of providing portable changeable message boards (PCMB) in key locations throughout the state.
- A pilot project to promote the use of photogrammetry, an innovative technology developed for crash reconstruction and forensic measurement to improve on-site traffic incident management.
- Promote local agency attendance at the Annual Traffic and Safety Summit through scholarships.
- Improve the mapping of crash data and the crash locating process.
- Engage universities in providing safety data support, technical development, and enhancement of additional safety tools and general support of GIS based safety analysis to improve local road analysis techniques.

The charts below illustrate our progress toward achieving our safety goals as a result of a "match all federal-aid" program.

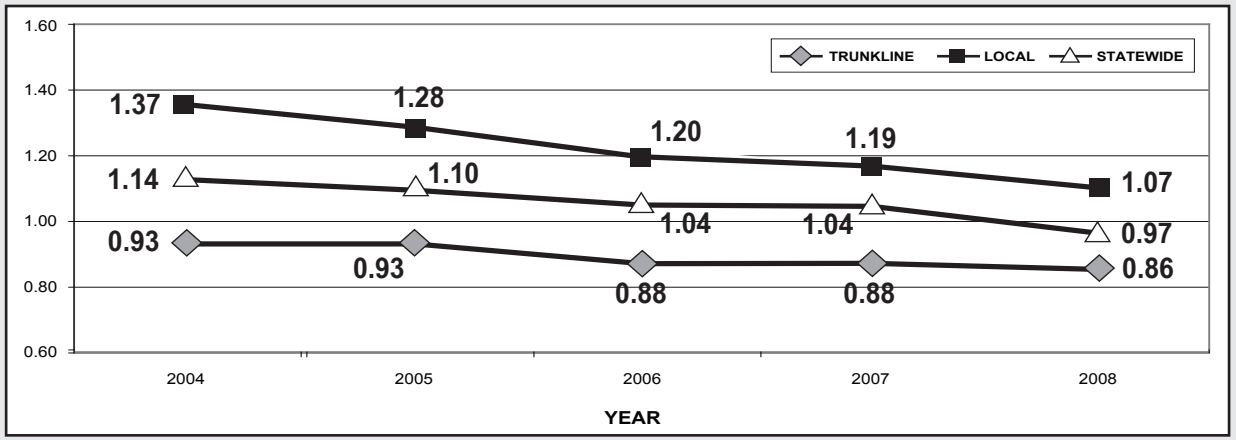
Michigan Fatalities by Road Class



Michigan Serious Injuries by Road Class



Michigan Fatality Rate by Road Class



Statewide lane departure related crashes account for approximately 50 percent of all fatalities. The primary objective for the lane departure focus area of the State Highway Safety Plan is to identify cost effective strategies that help reduce unintentional lane departures, as well as alert the driver should a departure occur. The secondary objective is to assist the driver in returning to the travel lane safely and minimize the consequences of departure by creating clear zones along the roadside. In 2008, MDOT began a three year funding effort of placing non freeway shoulder and centerline rumble strips on rural, 55 mph roadways, and cable median barrier on critical divided highway corridors experiencing a higher than expected history of crossover crashes. 2010 will be the last year of this concentrated effort.

We can project from national crash reduction studies that implementation of the non-freeway rumble strip initiative in Michigan will result in an annual reduction of 337 crashes, saving 16 lives and 62 incapacitating injuries each year. Cable median barrier is expected to provide a 95 percent reduction in lane cross median crashes. It is anticipated this safety initiative will reduce 13 fatalities and 51 serious injuries per year on Michigan's freeways.

Beyond the system wide safety improvements noted, above the safety projects scheduled for 2010 will address 33 severe injuries and five fatalities. MDOT will also upgrade signs on 547 miles of non freeway facilities and 35 miles of freeway and upgraded/modernized 150 traffic signals.

For 2010, guidance will be developed for signing on interchange crossroads to direct the motorist into the correct lane. Because there are a number of different ramp configurations that are commonly used at interchanges with conventional roads, drivers on the conventional road cannot reliably predict whether they will be required to turn left or right in order to enter the correct ramp to access the freeway or expressway in the desired direction of travel. Another initiative is the placement of reflective sheeting on sign posts for all curve related signing on trunkline routes as part of the annual signing contracts. The purpose of the reflective sheeting on the sign post is to provide additional delineation to a driver and draw a driver's attention to the hazard (curve).

MDOT anticipates that the program will remain fully funded in 2010. However, if the revenue forecasts for state revenue are made a reality, then the program will need to be adjusted in 2011 as discussed in the Investment Strategy Section.

Work Zone Safety and Mobility

For decades, work zone safety did not directly include or discuss mobility of the customer. Work zones were designed to fit the needs of construction, and in many instances, direct consideration for the motorist or non-motorized traffic was not included. Focus on work zones during this time period were on the strict following of how work was designed and performed based on the previous project in the same location, which often resulted in the same traffic issues.

Increasing volumes and congestion have forced the old processes out of the system, making way for the current focus on work zone safety and mobility, which includes all stakeholders on both sides of the barrel.

To promote the mobility of the work zone, MDOT's efforts are to post speed limits appropriate for the conditions of the work zone, and only reduce speeds when it should apply. During these reduction periods, motorists are advised to "Look, Locate, and Lower" their speed when traveling through work zones. This continues the increased emphasis in worker awareness when approaching work areas where workers are present. Project designs are also including the use of innovative approaches to provide real time motorist information, additional lanes open to traffic, or work during off peak; all designed to provide mobility.

These same strategies also provide a direct positive impact to work zone safety. The proper posting of speed limits decrease the motorist exposure to speed differential crashes; and emphasis on providing work zone information to the motorist provide the opportunity for the motorist to adjust to approaching conditions or to have an opportunity to seek an alternate route. Additionally, all crashes in work zones are monitored annually to determine future corrective strategies to further reduce crashes in work zones.

These strategies have become an integral and high priority element of every project from planning through design and construction and include the safety and mobility of all motorists, bicyclists, pedestrians (including those with disabilities), and workers.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) AND INTELLIDRIVE℠ PLANNED PROGRAM

The ITS Program encompasses the application of technology to improve the efficiency and safety of our transportation system.
ITS applications use information, communication, and sensor technology with the goal to achieve improved levels of safety and performance on all transportation modes. Funding for the FY 2010 ITS Program is estimated to be approximately $11.7 million. IntelliDrive is the new name given to the Vehicle Infrastructure Integration (VII) Program by the U.S. DOT and refers to a suite of technologies and applications that aim to use wireless technologies between cars and the road to improve safety and mobility on our roadways.

Using the tools provided by ITS, MDOT provides traveler information and motorist assistance, which results in better route selection by motorists, less delay due to reduced crash clearance times, safer roads, and other significant benefits. The traffic management centers in Detroit and Grand Rapids and the motorist assistance program in southeast Michigan, are on the front lines to deliver these benefits to the motoring public.

The Michigan Intelligent Transportation System (MITS) Center in Detroit provides 24/7/365 coverage for nearly 300 miles of freeway in Wayne, Oakland, and Macomb Counties. The Michigan State Police Second District Regional Dispatch is co-located with the MITS Center, providing an ideal arrangement for information sharing and incident management opportunities.

The MITS Center serves three major functions: traffic information management, traffic incident management, and Freeway Courtesy Patrol (FCP). Traffic information management involves incidents, special events, and construction. Information is provided to the motorist via the MDOT Web site, dynamic message signs, and through coordination with TV and radio media. Traffic incident management includes collaboration with a variety of other agencies, including first responders.

The 2010 program is focused on the completion of a regional traveler information system in the Grand Rapids area and the development of a new system along the I-94 corridor in Kalamazoo and Battle Creek and surrounding the I-94 & I-69 interchange in Calhoun County. This also includes the deployment of a traveler information system in the Clare area to support the existing systems in Saginaw, Flint, and Grayling. The 2010 program also lays out a vision for deploying ITS throughout the state by preparing significant designs to be constructed in 2011 and beyond.

In FY 2010, MDOT has planned the following IntelliDrive[SM] and connected vehicle tasks and programs:

- Develop a connected vehicle simulator that can be used to develop, test, and showcase different connected vehicle technologies.
- Support the Automotive Electronics Connectivity Consortium (AECC) connected car demonstration by working with the aftermarket suppliers and universities in Michigan.
- Implement a plan to standardize and modernize the existing IntelliDriveSM deployments throughout the state.
- Begin plans to host a third international connected vehicle summit to update the participants on the status of our various programs and begin the process of standardizing data across multiple test facilities.
- Continue our cooperative development with our partners in Sweden and Taiwan on a variety of connected vehicle-related projects.

The budget for the FY 2010 ITS Program will be approximately $11.5 million. This budget amount does not include the costs for operations and maintenance of the existing MITS or Grand Region infrastructure, nor does it include the costs to operate the FCP Program. Funding from other federal and state sources support these components of the ITS Program.

The core ITS Program reflected in the 2010-2014 MDOT investment strategy focuses on five components:

- Incident management
- Incident response
- Traveler information
- Weather information systems
- Advanced technology for operations

The first five components are planned to be implemented through the traditional ITS Program and infrastructure, including close circuit television (CCTV) cameras, vehicle detection, dynamic message signs (DMS) and environmental sensing stations (ESS) coupled with road-weather information systems (RWIS). This traditional infrastructure requires a significant investment in communications infrastructure to ensure that the data and video images collected in the field can be readily used and viewed in a traditional traffic operations center, such as the MITS Center in Detroit or the West Michigan Traffic Management Center (WMTMC) in Grand Rapids. This type of communications infrastructure is required for these systems to operate effectively, yet often consume 50 percent or more of the overall project budget.

The following capital projects are planned in 2011:

- Construct Phase 2 of the "Triangle" project to provide traveler information, incident management, and route guidance to motorists using the congested I-75 corridor between Detroit and Grayling and along US-127 between Lansing and Grayling. Project is currently in preliminary planning stages.
- Deploy the first phase of the North Region RWIS deployment. Project is currently in final planning stages.
- Real-time data collection (link speed and travel time) along 600 miles of MDOT roadway facilities.
- Real-time data collection (link speed and travel time) along 1,700 miles of MDOT roadway facilities. (This effort continues through the entire Five-Year Program).
- ITS planning/design.
- Connected vehicle planning/implementation.
- System maintenance
- System operations

The following capital projects are planned in 2012:

- Deploy traditional ITS along the I-75 corridor in Monroe County to connect the Toledo, Ohio ITS Program to the Metro Detroit ITS Program.
- Deploy traditional ITS along the I-75 corridor between Grayling and Mackinac Bridge.
- Deploy Phase III of the Superior Region RWIS program, completing the network of up to 20 ESS throughout the Upper Peninsula.
- Upgrade ITS in Metro Region from technology deployed as part of the 1995 deployment to current standards to take advantage of advances and efficiencies available with current technologies.
- Real-time data collection (link speed and travel time) along 1,200 miles of MDOT roadway facilities.
- ITS planning/design.
- Connected vehicle planning/implementation.
- System maintenance
- System operations

The following capital projects are planned in 2013:

- Upgrade ITS in Metro Region from technology deployed as part of the 1995 deployment to current standards to take advantage of advances and efficiencies available with current technologies.
- Upgrade DMS in Grand Region from mechanical DMS to LED to reduce maintenance costs and power consumption and to take advantage of advances and efficiencies available with current DMS technologies.
- Expand ITS in Southwest Region along the I-94 corridor.
- Construct Phase II of the "Triangle" project to provide traveler information, incident management, and route guidance to motorists using the congested I-75 corridor between Detroit and Grayling and along US-127 between Lansing and Grayling. Project is currently in preliminary planning stages.
- ITS planning/design.
- Connected vehicle planning/implementation.
- System maintenance
- System operations

The following capital projects are planned in 2014:

- Expand ITS deployment in the Grand Rapids area to continue to integrate traffic signals and incident management programs throughout the region.
- Upgrade ITS in Metro Region from technology deployed as part of the 1995 deployment to current standards to take advantage of advances and efficiencies available with current technologies.
- Deploy Phase 1 of the Southwest Region RWIS program, completing the network of up to 20 ESS throughout the region.
- Deploy Phase IV of the Superior Region RWIS program, completing the network with up to 20 additional ESS throughout the region.
- ITS planning/design.
- Connected vehicle planning/implementation.
- System maintenance
- System operations

The 2010-2014 program also includes funding for design and planning efforts, as well as an annual budget to continue procuring travel time and speed data. This data would help MDOT reduce its reliance on expensive field devices that would need to be installed in non-urban areas. These detectors are expensive to deploy, operate, and maintain. Other states have benefited from contracting the collection of this information in real time through alternative sources.

The final component of the MDOT ITS Program is our use of new and innovative technologies. An allotment is provided each year to deploy and maintain devices that will be used as part of the MDOT and U.S. DOT IntelliDrive℠ (formerly known as Vehicle Infrastructure Integration (VII)) test beds in southeast Michigan. This deployment is being used to support industry in research and development initiatives and to improve safety and mobility. These technologies help MDOT evaluate new and improved operational methods.

MULTI-MODAL SAFETY STRATEGIES

Passenger Transportation

The Passenger Transportation Five-Year Program will improve the safety and security of the transportation system by providing for routine replacement of local transit vehicles and intercity bus motor coaches, routine maintenance of passenger facilities, and transit and marine passenger equipment upgrades. Within the local transit area, specific investment decisions, such as the number of vehicles that will be replaced and the types of improvements that will be made to passenger facilities, are made at the local level on an annual basis. Therefore, MDOT cannot predict the local transit safety and security accomplishments that will result from the Five-Year Program.

Also, as noted above, program revenues are expected to fall short of meeting routine infrastructure needs. This means the passenger transportation infrastructure will not be replaced in a timely manner. Without timely replacement and upgrades of transit vehicles, intercity motor coaches, train cars, passenger boarding areas, and information technologies, safety and security are compromised.

In addition, MDOT staff will continue to carry out the following safety programs:

- **State Safety Oversight for Rail Fixed Guideway Systems:** MDOT is the designated state agency to provide state safety oversight for rail fixed guideway systems in Michigan. Currently, the Detroit People Mover is the only system in Michigan where state oversight is required by the Federal Transit Administration. State oversight will continue to ensure compliance with 49 CFR Part 659.
- **For-hire Passenger Carriers:** MDOT will continue to carry out its responsibilities for safety oversight of for-hire passenger carriers under Act 271 of 1990 and Act 432 of 1982. MDOT is directly responsible for: (1) issuing authority (business licenses) to operate; (2) monitoring insurance compliance, and (3) physically inspecting motor buses or safety certifying limousines. MDOT's motor coach inspection program is one of 28 state programs that meet or exceed federal motor carrier passenger standards.
- **Rail Freight Program:** As part of an effort to enhance motorist safety at railroad grade crossings throughout the state, MDOT facilitates a number of Diagnostic Study Team Reviews/ Formal Investigations annually. These meetings bring together representatives of railroads, road authorities and other parties to assess safety conditions at existing or proposed public at-grade crossings and determine if enhancements are needed. MDOT issues regulatory orders as appropriate. It is anticipated that this program will continue during the 2010-2014 Five-Year Transportation Program timeframe.

Through its Local Grade Crossing Program, MDOT funds certain safety enhancements at the approximately 4,500 at-grade railroad crossings on roads under the jurisdiction of counties, cities and villages. On an annual basis, the department's Local Grade Crossing Program evaluates crossings to determine those which should be reviewed for potential safety enhancements. Diagnostic Study Team Reviews are then conducted to determine what, if any, enhancements are needed. The program can fund the resulting installation of active warning devices or other safety enhancements. That process will continue during this five-year period. It is not possible to identify specific project locations at this time.

We anticipate being able to undertake approximately 50 projects in FY 2010. MDOT will assess this program in the future to determine how and if this program will be adjusted in 2011 based on current revenue projections.

Aviation

MDOT's FY 2010-2014 Aeronautics Program provides for capital assistance with federal, state, and local funds for airports in Michigan. In addition, the program provides for technical support and safety oversight for airports, pilots, and flight instructors.

The focus is largely on continued safe and secure operation of the existing airport system through capital replacement/rehabilitation, and preservation of existing service levels. Through partnerships with the FAA, airport sponsors, Michigan Association of Airport Executives, and the Michigan Business Aviation Association, MDOT promotes and implements operational efficiencies of the airport system and its infrastructure.

Safety is priority one in aviation programs, and is carried out by both federal and state program policies and guidelines. Major projects involving runway rehabilitation and extension, removal of obstructions, and the Tall Structure Program are examples of activities directed toward enhancing safety.

In addition, the Aeronautics Program supplements federal navigational aids and weather reporting to provide statewide capability for enroute all weather navigation at and above 1,000 feet above the ground. The program also provides for safe, all weather approaches and departures at airports not served by FAA systems, and enhances pilot communications with air traffic. Security improvements at airports are also high priorities; fencing installations and rehabilitation of existing or construction of new terminals are designed with security goals in mind.

SAFE ROUTES TO SCHOOL PROGRAM

The federal Safe Routes to School (SRTS) Program, established in 2005, provides funding for projects and activities that enable and encourage children in kindergarten through eighth grades to walk or bicycle to school. This program is administered by MDOT's Office of Economic Development.

Walking and biking to and from school is an easy way for children to get the regular physical activity they need for good health and establish the habit of regular exercise for a lifetime. The initiative helps reduce congestion and air pollution, unites neighborhoods, and contributes to students' readiness to learn in school. National statistics from 1969 showed that half of all students walked or bicycled to school. Today, fewer than 15 percent of all school trips are made by walking or biking. Instead, more than half of all children arrive at school in private automobiles.

In FY 2008, 51 schools were awarded SRTS funds totaling $10.3 million. Funds will provide improved sidewalks, marked crosswalks, signage and signals, bike racks, crossing guard equipment, educational materials and events, pedometers, prizes, and incentives to encourage walking and biking. The emphasis of planning activities this year has been to deliver the SRTS Program to urban under-served populations. The Governor's Cities of Promise designation provided a focus and opportunities for synergy to the effort. A network of partners from state and local government, have been working closely with schools in Cities of Promise to facilitate the SRTS planning process. As a result, 27 schools in the Cities of Promise are implementing SRTS action plans and receiving SRTS awards.

To be eligible for funding, school communities must complete a school-based planning process by which they assess the safety of the routes to their schools and the local attitudes and behaviors related to walking and biking to school. The planning process culminates in the creation of a comprehensive SRTS action plan addressing the particular needs of individual schools. Of Michigan's 4,300 elementary and middle schools, 416 (9.7 percent) have registered to complete the SRTS planning process and 823 people have been trained to carry out this process.

Looking forward, in 2010, the program will implement a quarterly schedule for SRTS grant application review and funding award announcements.

Congressional authorization with regard to fund availability and the potential for changes in program scope are key factors. MDOT will continue to emphasize that Michigan's SRTS planning process is the key benefit available from the program. This process allows MDOT to provide technical support to all eligible schools and continue to foster and improve our relationships with key stakeholders, including non-profit organizations, foundations, and neighborhood groups, which are vital to the success of the program.

INFRASTRUCTURE SECURITY AND BORDERS

MDOT's comprehensive infrastructure security plan is a compilation of several security plans. This past year, a new set of critical infrastructure protection plans for key assets was created. Interdependencies between transportation disciplines were evaluated as well.

The 2010-2014 security report focuses on our successes and challenges in meeting these plans to balance security and mobility, given our investment and policy strategies. Why is this important? Recent events, such as the raising of the alert status from yellow to orange in the aviation sector, force us to measure our effectiveness through understanding our assets, evaluating our needs, setting our goals, and taking action to accomplish these projects. This is followed by reassessing our needs.

MDOT's homeland security efforts incorporate coordination, interoperability, and solutions to protect and maintain a secure transportation infrastructure while deterring threats. We have verified our protective actions and physical improvements as well as our future plans for protection through site specific plans and inspections by federal and state security specialists.

An important factor is the coordination with law enforcement (local, federal, and state), local emergency response, and federal agencies. These agencies provide our department with information in identifying and correcting communication barriers. MDOT has developed specific actions that are taken at MDOT-owned border bridges in response to the Department of Homeland security (DHS) terrorist threat level.

The ground work for successful security relationships between transportation, emergency management, and Homeland security agencies include:

1. Recognition of the vital need for transportation during incidents
2. Responsiveness to surface transportation, including highway asset protection
3. More resources and people devoted to transportation agencies for preparing and testing programs

MDOT is diligently working toward these by developing strong partnerships with other state agencies, as well as federal agencies at the statewide level. With multimodal responsibilities, our department relies on flexibility to manage these key assets.

The Homeland Protection Board has oversight regarding all homeland security issues in the state. MDOT Director Kirk Steudle is a member of the multi-sector board. Michigan also has a statewide homeland security strategy. *MDOT has been successful in adding a specific goal to protect and enhance transportation capabilities in preventing, planning for, responding to, and recovery from a terrorist event.

Through this board, and in support of the strategy, MDOT has received roughly $2 million, just under six percent, of $35 million in grant dollars allocated for state use. These grants are awarded through a funding committee (created to include state agencies such as MDOT) that recommends projects to the board.

Infrastructure Protection

The next step in the protection of the infrastructure is to have the surrounding area protected as well. The Buffer Zone Protection Plans through local law enforcement and local emergency managers are designed to coordinate those efforts.

The infrastructure investments in countermeasures are directed at deterrence and detection; those for retrofitting and intrusion devices are designed for protection. The breakdown by program is as follows:

Countermeasures for deterrence and detection:

- Additional lighting
- Increased patrol during heightened awareness
- Detection system

Retro-fitting and intrusion devices for protection:

- Physical barriers for standoff
  - o Fencing
  - o Concrete barrier
- Electronic barriers
  - o Cameras
  - o Sensors

The details of the use of these measures are not being released in full, but MDOT has used our homeland security dollars to provide for countermeasures such as:

Night-shadow binoculars and night-vision goggles, body harnesses, rescue devices, portable light towers, generators, escape hoods, detection systems, retrofitting protection devices, physical barriers for standoff, fencing, concrete barrier (much of the fencing and barrier wall was not funded through DHS, but through MDOT's operational budget), intrusion devices, camera surveillance systems, and sensor devices.

Communication

The communication function in emergency management has two primary functions:

- Giving the public accurate, timely, and useful information.
- Providing instructions throughout the emergency period, and operational information to staff.

Infrastructure investments for communicating with our local, state, and federal partners for the coordination with law enforcement agencies at all levels, as well as local emergency response and other state and federal agencies, begins with interoperable communication systems and training. Additionally, messages to improve mobility during an incident need to be provided to the public. The breakdown of the communication system by program is as follows:

- Communication
  - o Interoperable radios
  - o Increased training for Web-based incident management
- Intelligent Transportation Systems (ITS)
  - o Enhanced and expanded ITS system
  - o Border-related intelligent transportation systems
  - o Incident management for traffic flow
  - o Portable changeable message signs

As with the countermeasures, the details of the use of these measures are not being released in full, but MDOT has used Homeland security dollars and our operational funding to provide for communication systems such as:

Interoperable radios (161 radios purchased with Homeland security funding), repeaters, mobile telecommunication devices, Web-based software for incident and resource management, training for the use of communication systems, camera surveillance systems, sensor devises, and portable changeable message signs (16 purchased with homeland security funding).

Security-Enhanced Design

MDOT considers new options for transportation design, which will bring all types of security enhancements and plans for future needs. Having planners and designers partner together with security specialists will strengthen our final product. Our primary design projects, such as the Blue Water Bridge Plaza, will have new integrated security measures.

Transportation design includes considerations for other functions in the department. MDOT has a primary role in hazardous materials routing. In Michigan, MDOT is the designated routing agency and the Michigan State Police is the enforcement agency.

The Federal Highway Administration document entitled "Highway Routing of Hazardous Materials – Guidelines for Applying Criteria" is MDOT's tool in determining new routing restrictions or designations. This document outlines the steps and procedures that are to be followed to establish the non-radioactive hazardous material routes.

Border crossings are unique and need emergency response coordination as well as environmental protective measures for these types of routes. Currently, Michigan has nine restricted routes.

The infrastructure investments for design considerations are integrating counter measures and communications into a specific project. These programs require planning, research, and dissemination of the information to the decision makers. The breakdown by program is as follows:

- Border specific concerns
- Environmental considerations
- Re-Design
  - o Hazardous materials routing
- Design Considerations
  - o Need for hardening options
  - o Border-related expansions
  - o Consideration for security layout

National Infrastructure Protection Plan (NIPP)

As part of the work for the Homeland Protection Board, Michigan looked closely at the National Infrastructure Protection Plan (NIPP) and development of the 2006 national funding process, which includes program and capability enhancement plans, investment strategies, and the application process.

The NIPP provides the coordinated approach that will be used to establish national priorities, goals, and requirements for critical infrastructure and key resources (CI/KR) protection so that federal funding and resources are applied in the most effective manner to reduce vulnerability, deter threats, and minimize the consequences of attacks and other incidents. It establishes the over-arching concepts relevant to all CI/KR sectors identified in Homeland security Presidential Directive-7 (HSPD-7), and addresses the physical, cyber, and human considerations required for effective implementation of comprehensive programs. The plan specifies the key initiatives, milestones, and metrics required to achieve the nation's CI/KR protection mission.

It sets forth a comprehensive risk management framework and clearly defined roles and responsibilities for the DHS, Federal Sector-Specific Agencies (SSAs), and other federal, state, local, tribal, and private sector security partners.

National Incident Management System and National Response Plan

MDOT's comprehensive infrastructure security plan is one component of the Michigan Emergency Management Plan (MEMP). The MEMP provides an accurate and up-to-date depiction of Michigan's emergency management / homeland security system and is consistent with and supports the National Incident Management System (NIMS) and National Response Plan (NRP) – two key federal documents that lay out the architecture of the federal disaster response and Homeland security system under the DHS. The federal government is updating the NRP, including a broader spectrum of activities under the proposed National Response Framework (NPF).

Border Crossing Security

Michigan's border crossings and international trade corridors are critical to the well-being of the local, state, and national economies and, are therefore, critical to national security.

When considering the flow of border crossing traffic, and more specifically, truck traffic, MDOT can show the importance of Michigan's transportation system and its relationship to the truck flow to the rest of the country, as well as internationally. When a crisis occurs, delays and immobility can occur. During the hours and days after September 11, 2001, the backup at the borders approached 30 hours in some locations. We have made improvements to our critical infrastructure by investing in measures that will assist in maintaining or improving traffic flow across borders while increasing security measures.

It is Michigan's vision to establish and maintain a transportation border infrastructure network that allows for the seamless movement of people, goods, and services in a cost-efficient, timely, and safe and secure manner. MDOT continues to improve the protection, collaboration, and coordination with homeland security agencies in the development, construction, and operation of border facilities.

MDOT shares ownership of two of the three bridge border crossings (International and Blue Water bridges) with Canadian partners. The Ambassador Bridge is privately owned. There is also one vehicular tunnel crossing (Detroit Windsor Tunnel), two rail tunnels, one rail bridge, two passenger ferry crossings, and one truck ferry crossing.

MDOT completed a second round of security assessments for the International Bridge, the Mackinac Bridge, and the Blue Water Bridge with partners from the federal government. Members of the federal team included military and economic specialists. These bridges are critical to the state's economy and to national security. Each of the bridges received high marks from the team.

MDOT's original assessments from 2002, defined a strong path to follow and the federal team validated and verified the results. The Mackinac Bridge overall implementation of the assessment plan is one of the strongest in the nation and a model for other bridges. In addition, action plans* taken at these MDOT-owned bridges have been developed to respond to the DHS terrorist threat level.

*For security reasons, details of the strategies and plans are not being released to the public.

SYSTEM IMPROVEMENTS

STATEWIDE CORRIDOR STRATEGIES

MDOT develops, schedules, and implements system improvements based upon corridor strategies developed as part of the state long-range planning process and available funds. The department's preservation commitments will continue to challenge its ability to fund corridor expansions until additional funding sources or partnerships are identified. MDOT uses a number of factors to determine investment priorities, including whether a corridor serves statewide or national/international transportation needs.

The current state long-range plan—MI Transportation Plan—identified 11 corridors serving national and international needs. Strategies focus on improving all modes, of transportation within each national/international corridor, providing better connections between modes and preserving and modernizing infrastructure components, providing options for personal mobility, providing for efficient movement of commodities and managing traffic in work zones to improve safety and reduce travel delays. Specific strategies for highways identified for each corridor in MI Transportation Plan include:

- Apply asset management principles
- Continue to strive to maintain good pavement conditions
- Bring bridges and roadway geometrics to current design standards
- Seek opportunities and implement low-cost operational improvements to increase roadway corridor mobility
- Work with local governments to implement access management on strategic sections of regional and local roadways.

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. The overall program is based on achieving pavement condition goals within annual investment targets, but the projects reflect each region's careful efforts to coordinate road and bridge work, preserve the existing system, address access and safety needs, and make the most effective use of anticipated revenue. These strategies recognize the variability in each region as to the type and age of facilities as well as the type of travel, weather, soils, etc.

Maintaining customer mobility during construction and maintenance operations is a key consideration in region project development and delivery strategies at the network, corridor, and project level.

Through regional cooperation with our local partners, MDOT regions strive to deliver improved roads and bridges to the traveling public statewide. Region and Transportation Service Center staff will continue to work proactively with local units of government to identify ways, such as access management, to improve operational efficiency and safety, and to get the most out of the current surface transportation system.

Border Crossings Corridor Strategy

The world's largest bilateral trade relationship exists between the United States and Canada. Michigan's international border crossings are vital links for international commerce and are critical to the well-being of local, state, and national economies.

Approximately 28 percent of surface trade between the United States and Canada passes through the Detroit River area. This commerce depends not only on reliable transportation links but multiple links as well. Major disruptions at either the Ambassador Bridge or Detroit-Windsor Tunnel have significant economic effects.

It is essential to have redundancy, when both the United States and Canada are so economically dependent upon these key links. This trade is integral to the manufacturing base of the region. Manufacturing accounts for almost 20 percent of employment in Ontario and in the five-state region of Michigan, Illinois, Indiana, Ohio, and Wisconsin. An economic study indicated that without improvements to the crossing system in the Detroit River area, 71,000 fewer jobs would be created in the United States and 27,000 fewer jobs would be created in Canada by 2035.

State long-range planning analysis revealed that up to 43 percent of all US/Canadian trade moves through international crossing facilities in Port Huron and Detroit. Improving connections from border crossings to U.S. Customs facilities, freight handling facilities, and rail and freeway corridors remains a priority for Michigan. The border crossings and customs facilities also support mobility for national and civil defense, and also play a vital national security role.

During this five-year time frame, planned expansion of the Blue Water Bridge Plaza and improvements to plaza access in St. Clair County will improve efficiency, security, and safety for vehicles crossing at Port Huron going into Canada. Design and right-of-way acquisition has commenced. Design is scheduled to be complete in 2013. All right-of-way acquisition is scheduled for completion by 2014. Construction is planned for 2011 for the I-94/69 freeway corridor leading to the plaza. Construction for the relocation of Pine Grove Avenue and all utilities is planned for 2013. Construction on lowering the existing plaza and the expansion is scheduled to begin in 2014.

Passenger Transportation

The Passenger Transportation Five-Year Program is focused entirely on preservation of the existing system. Expansion of the system is not provided for in the program. System improvement objectives will be addressed to the degree possible, through enhanced intermodal connectivity, reduced travel time, and regional coordination. The Five-Year Program will include maintenance of passenger terminals/stations that enhance intermodal connectivity, including providing state match to federal grants used by local transit agencies for local intermodal passenger facilities. However, as noted above, program revenues are expected to fall short of meeting passenger transportation infrastructure needs, which means other than projects that are proceeding with remaining CTF bond revenues, investments will likely be limited to routine maintenance and repair of existing facilities. New passenger facilities will be possible only to the degree federal funds are awarded for these types of projects and state funds are available to provide the match.

System improvements will also be pursued with prior year funds and federal grants (if awarded) for infrastructure improvements that will benefit on-time performance for passenger rail. In addition, MDOT staff will work with Amtrak and other state transportation departments (DOTs) to develop specifications for new train equipment. MDOT will also continue to work with other state DOTs in the midwest to advance a proposal for enhanced passenger rail service (including connecting bus service) throughout the midwest region. Funding for implementation of the midwest regional rail proposal is not included in the Five-Year Program.

To the degree possible, the Passenger Transportation Program will support strategies for corridors of highest significance. However, the largest portion of the Passenger Transportation Program supports local transit in accordance with funding formulas established in state and federal law. Since these funding formulas are not corridor-based, MDOT has little ability to focus program revenues on specific corridors.

The intercity passenger programs, which are a much smaller portion of the Passenger Transportation Program, are more corridor-based. Within the intercity bus programs, MDOT investments will continue to focus on transportation corridors (and activity centers) that have been abandoned by the private sector because the route was unprofitable. Since investments are made to "fill gaps" in the system, they may not focus on the most significant transportation corridors within the state, which may already be served by the private sector.

The Five-Year Passenger Rail Program will focus on transportation corridors that already support passenger rail service (i.e., existing passenger rail corridors), since funds are not available to make improvements or purchase service along new corridors.

MDOT staff will continue to provide planning, technical, and policy support for development for regional rail service between Detroit and Ann Arbor, which is of particular importance since it is located within the Detroit/Chicago federally designated high speed rail corridor and a national/international corridor of significance as identified in the MI Transportation Plan. However, the Five-Year Program does not provide funding for this service. MDOT will also facilitate local efforts to add commuter rail service between Ann Arbor and Livingston County and light rail along the Woodward Avenue corridor, although there is no funding for these expansion projects in the Five-Year Program.

Rail Freight

The Five-Year Rail Freight Transportation Program is entirely based on the preservation of the existing state-owned railroad system and the basic continuation of programs to support economic development and motorist safety at grade crossings. Revenue is expected to remain constant, at best, and costs will continue to escalate.

The department will take all appropriate steps to maximize the effectiveness of its investments. Railroads operating on state-owned lines may be expected to shoulder an increasing responsibility for maintenance and minor improvements. The Freight Economic Development Program may be forced to deny worthwhile applications for assistance and/or require greater proportional participation from the applicants themselves. Fewer safety improvement projects at grade crossings will be undertaken.

ROAD AND BRIDGE PROJECT LISTS BY REGION

To accomplish statewide long-range strategies, each of MDOT's seven regions has developed appropriate action strategies to identify and implement the projects necessary to achieve statewide goals. The overall program is based on achieving condition goals within annual investment targets, but the projects reflect each region's careful efforts to coordinate road and bridge work, preserve the existing system, address access and safety needs, and make the most effective use of anticipated revenue. These strategies recognize the variability in each region as to the type and age of facilities, as well as the type of travel, weather, soils, etc.

Maintaining customer mobility during construction and maintenance operations is a key consideration in region project development and delivery strategies at the network, corridor, and project level. Through regional cooperation with our local partners, MDOT regions strive to deliver improved roads and bridges to the traveling public statewide. The narratives on the following pages describe important activities planned for the next five years. The pages that follow provide additional details about Michigan's highway system and the strategies underlying the project selection process for the various programs described in the Five-Year Transportation Program.

Please note the regions are listed in alphabetical order. Each region section contains the following:

- **Region Introduction**
- **Road and Bridge Program**
  This section highlights planned investments for road and bridge repairs over the next five years. Please note: Road and Bridge Program investment levels represent the construction phase of road and bridge preservation projects and capacity improvements and new roads projects where applicable.
- **Project Lists**

The project list contained at the end of each region's narrative contains road and bridge rehabilitation and reconstruction projects. The lists are organized first by project type, then by county, then by route.

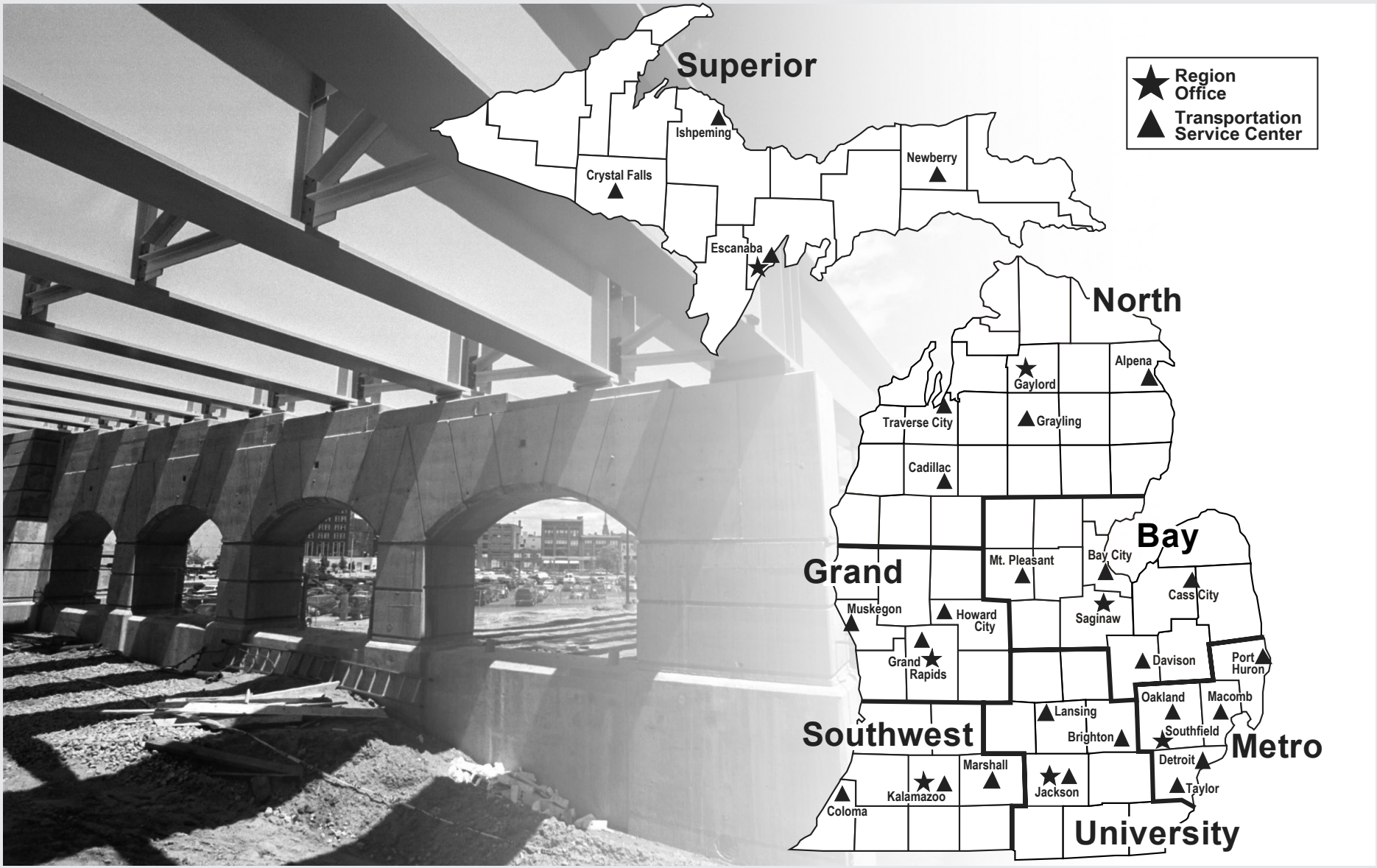
There are several abbreviations and acronyms contained in the project list. The following list explains what they stand for:

- The "DIR" column just after the route name will have one types of notations associated with certain projects. These are the projects that are funded with Federal Economic Stimulus (FES) dollars from the American Recovery and Reinvestment Act of 2009. Projects that will be delayed or removed from the program as a result of declining revenue are highlighted in each Region's project list.

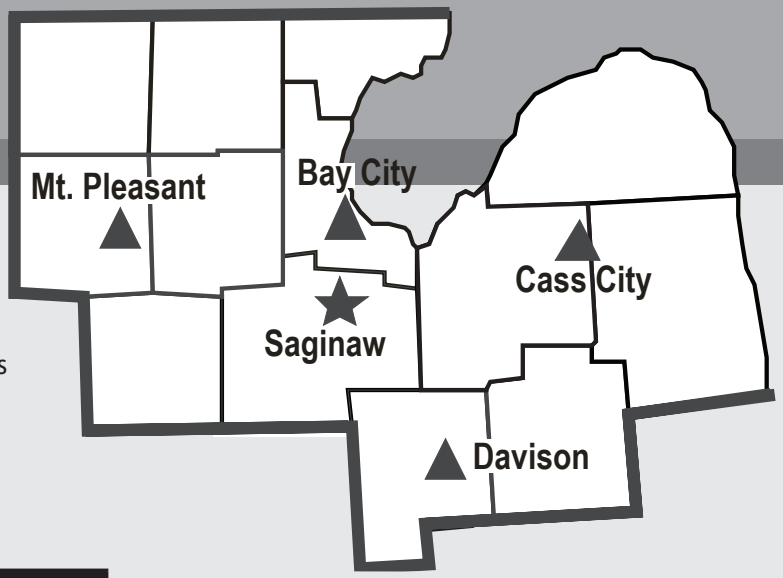
Each project phase of work being funded is shown in the appropriate region tables in the appropriate year. The phases for highway projects have been abbreviated, but are explained below.

- **EPE –** Early Preliminary Engineering (refers to the study and assessment phase of a project)
- **PE –** Preliminary Engineering (refers to the design phase of a project)
- **SUB –** A sub-phase of preliminary engineering for bridges
- **ROW –** Right-of-way (refers to the real estate purchase phase of the project)
- **CON –** Construction (refers to the actual building phase of the project)

MDOT REGIONS AND TRANSPORTATION SERVICE CENTERS



BAY REGION



The Bay Region includes 13 counties in the Saginaw Bay area. They are: Arenac, Bay, Clare, Genesee, Gladwin, Gratiot, Huron, Isabella, Lapeer, Midland, Saginaw, Sanilac, and Tuscola. Major state trunklines include: I-75, I-69, US-127, US-23, and US-10. The Bay Region's top priority is to serve the Flint, Saginaw, Bay City, and Midland industrial centers with national and statewide corridors for the movement of people and goods to enhance international trade, as well as interstate and intrastate tourism. Other important priorities to the Bay Region include providing a seamless transportation system to the region's agricultural industry. By doing so, the region's status is preserved as a leading producer of sugar beets and worldwide exporter of beans.

Five-Year Road and Bridge Program

The road and bridge preservation projects identified in this 2010 to 2014 Five-Year Transportation Program for the Bay Region total approximately $407 million. Investment is allocated in the following manner:

Bay Region	Total 2010-2014
Road Preservation	$247 million
Bridge Preservation	$78 million
Road and Bridge CPM	$82 million
Total 2010-2014	**$407 million**

(Amounts are rounded to the nearest million dollars)

Capital Preventive Maintenance (CPM) projects are planned for a significant number of pavements and structures that do not require extensive repairs during this Five-Year Transportation Program period. CPM projects are short-term fixes, adding from five to 10 years of life to a pavement or maintaining the existing structure condition.

Bay Region	Route Miles of Road	Number of Bridges and Culverts
Total in Region	1,509	1,028
Scheduled Work	100	59
Percentage of Region	7%	6%

The 2010-2014 program for road preservation work includes approximately 100 miles (seven percent) of the Bay Region's 1,509 route miles of state trunkline. The 2010-2014 program for bridge preservation work will address 59 (six percent) of the Region's 1,028 bridges and culverts.

There are also a number of programs that are selected based on statewide priorities or where project identification is completed throughout the year. These investments are not reflected above, but are included in the statewide investment strategy. Below is a brief description of major preservation projects that are currently planned for the 2010-2014 program.

2010

I-75 Freeway: Squaconning Creek to Hotchkiss Road - Bay County, will be reconstructed with median widening and the structures at Squaconning Creek will be replaced. This project is being funded with ARRA funds.

I-475 Freeway: South Junction of I-75 Freeway to I-69 Freeway – Genesee County, will be reconstructed and receive concrete repairs north of Bristol Road along with bridge work on Hill, Maple and Bristol Road. This project is being funded with ARRA funds.

I-75 Freeway from the north of Crane Road to south of Squaconning Creek - Saginaw & Bay Counties, 2.7 miles of freeway is scheduled for reconstruction during 2010.

I-675 Freeway: I-75 south junction to the I-75 north junction through the City of Saginaw and in Saginaw County, work will include concrete pavement repairs to the mainline and interchange ramps, paving, multiple bridge rehabilitation, deck replacement on the Henry Marsh Bridge over the Saginaw River, and freeway lighting and sign replacement. The southbound lanes were completed in 2009 and northbound lanes and structures will be worked on during the 2010 construction season.

Veteran's Memorial Parkway over I-675 in the City of Saginaw, the deck of this structure over I-675 will be replaced in 2010.

US-10 Freeway: from M-18 to the Sanford Lake Bridge (7.0 miles), Midland County, will have major rehabilitation work in 2010.

2011

I-75 Freeway: 13 Bridges in Genesee County, will include work ranging from deck patching to overlays. This work will be done in 2011.

I-475 Freeway: 19 Bridges in Genesee County, work in 2011 will include pin and hanger replacement, overlays and deck replacements.

2012/13

I-75 Freeway: Janes Road north to the north junction of I-675 – Saginaw County, is scheduled for 4.5 miles of pavement reconstruction and pavement repairs in conjunction with scheduled repairs on the Zilwaukee Bridge. This project is scheduled to begin in 2012 with work on the southbound lanes and completion with the northbound lanes by the end of the 2013 construction season.

CAPACITY IMPROVEMENTS AND NEW ROADS

M-84 from South of Delta Road to Euclid Avenue in Bay County: Construction of this project will complete the 7.5 mile widening of M-84 from Bueker Drive in Saginaw County, to Euclid Avenue (M-13) in Bay County. The section from south of Delta Road to Euclid Avenue was funded by the American Recovery and Reinvestment Act. Construction of this project will begin in 2010. Two structure replacement projects included in the plans, the bridge at Squaconning Creek and the culvert at Dutch Creek, will be funded with the remaining balance of a TEA-21 earmark.

US-127, St. Johns to Ithaca, Clinton and Gratiot Counties: Federal Highway Administration (FHWA) approved the re-evaluation of the Environmental Impact Statement for this project in September 2009. A SAFETEA-LU earmark will allow partial right-of-way acquisition. Funding to complete right-of-way acquisition and construction of this project has not been identified.

I-675 @ Warren Avenue in the City of Saginaw: The construction of this project will include the addition of a new northbound off-ramp from I-675 to Warren Avenue and a new southbound on-ramp from Warren Avenue to I-675, the removal of two existing ramps, northbound "on" and southbound "off" at 5th Avenue, and the widening of four existing bridges carrying northbound and southbound I-675 over 5th and 6th Avenues. The environmental clearance for this project was received in December 2008. The design is anticipated to begin in late 2009. Construction will begin in 2011.

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

BAY Bridge - Big Bridge Program

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
SAGINAW	I-75		I-75 NB OVER SAGINAW RIVER, M-13, GTW RAILROAD	MISCELLANEOUS BRIDGE CPM	0.001			CON		
SAGINAW	I-75		I-75 SB OVER SAGINAW RIVER, M-13, GTW RAILROAD	MISCELLANEOUS BRIDGE CPM	0.001			CON		
SAGINAW	I-75		I-75 SB RAMP OVER LAND FOR RAISED RAMP	MISCELLANEOUS BRIDGE CPM	0.001			CON		
					0.001					

BAY Bridge - Replacement and Rehabilitation

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ARENAC	I-75		STERLING ROAD OVER I-75	OVERLAY - DEEP	0.410			CON		
ARENAC	I-75		US-23 RAMP F OVER I-75	OVERLAY - DEEP	0.310			CON		
BAY	I-75	FES	I-75 NB OVER SQUACONNING CREEK	DECK REPLACEMENT	0.001	CON				
BAY	I-75	FES	I-75 SB OVER SQUACONNING CREEK	DECK REPLACEMENT	0.001	CON				
BAY	I-75		LINWOOD ROAD OVER I-75	OVERLAY - DEEP	0.344	CON				
BAY	I-75		CODY ESTEY ROAD OVER I-75	OVERLAY - DEEP	0.664	CON				
BAY	I-75		I-75 OVER GOETZ DRAIN	CULVERT REPLACEMENT	0.792	CON				
BAY	M-13 (S River Rd)		M-13 OVER CHEBOYGANING CREEK	BRIDGE REPLACEMENT	0.000		CON			
BAY	M-13		M-13 OVER JOHNSONS CREEK	BRIDGE REPLACEMENT	0.000			CON		
BAY	M-84		M-84 OVER SQUACONNING CREEK	BRIDGE REPLACEMENT	0.509	CON				
BAY	M-84	FES	M-84 OVER DUTCH CREEK	CULVERT REPLACEMENT	0.509	CON				
CLARE	US-27		US-127 NB OVER US-127 BUSINESS ROUTE	OVERLAY - DEEP	0.470			CON		
CLARE	US-27		US-127 SB OVER US-127 BUSINESS ROUTE	OVERLAY - DEEP	0.470			CON		
GENESEE	I-475		I-475 SB OVER CLIO ROAD	OVERLAY - DEEP	1.258	CON				
GENESEE	I-475		I-475 RAMP TO I-75 OVER I-475 RAMP B AND I-75	OVERLAY - DEEP	1.258	CON				
GENESEE	I-475		JENNINGS ROAD OVER I-475	OVERLAY - DEEP	1.258	CON				
GENESEE	I-475		LEFT TURN LN (S OF HEMPHILL) OVER I-475, IN FLINT	OVERLAY - DEEP	1.258	CON				
GENESEE	I-475		I-475 NB OVER CLIO ROAD	OVERLAY - DEEP	1.258	CON				
GENESEE	I-475		I-475 RAMP B OVER I-475, IN FLINT	OVERLAY - DEEP	1.258	CON				
GENESEE	I-475		14TH STREET OVER I-475, IN FLINT	OVERLAY - DEEP	0.040	CON				
GENESEE	I-475		I-475 OVER SAGINAW STREET	OVERLAY - SHALLOW	0.488	CON				
GENESEE	I-475		I-475 RAMP TO I-75 OVER I-475 RAMP B AND I-75	OVERLAY - DEEP	0.488	CON				
GENESEE	I-475		LEFT TURN LN (N OF HEMPHILL) OVER I-475, IN FLINT	OVERLAY - DEEP	0.488	CON				
GENESEE	I-475		SECOND STREET OVER I-475 IN FLINT	SUBSTRUCTURE REPLACEMENT	0.075	CON				
GENESEE	I-69		I-69 OVER M-54 (DORT HIGHWAY)	SUBSTRUCTURE REPAIR	0.048				CON	
GENESEE	I-75		I-75 OVER SWARTZ CREEK	OVERLAY - DEEP	3.439	CON				
GENESEE	I-75		MILLER ROAD OVER I-75	OVERLAY - DEEP	3.439	CON				
GENESEE	I-75		I-75 US-23 OVER FLINT RIVER	OVERLAY - DEEP	3.439	CON				
GENESEE	I-75		ARLENE DRIVE OVER I-75	OVERLAY - DEEP	3.439	CON				

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

BAY Bridge - Replacement and Rehabilitation (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
GENESEE	I-75		BEECHER ROAD OVER I-75	OVERLAY - DEEP	3.439	CON				
GENESEE	I-75		I-75 SB OVER FLUSHING ROAD	OVERLAY - SHALLOW	3.439	CON				
GENESEE	I-75		I-75 NB OVER FLUSHING ROAD	OVERLAY - SHALLOW	2.501	CON				
GENESEE	I-75		PASADENA AVENUE OVER I-75	SUPERSTRUCTURE REPAIR	2.501	CON				
GENESEE	M-21 (Corunna Road)		M-21 OVER MISTEQUAY CREEK	BRIDGE REPLACEMENT	0.000		CON			
GRATIOT	M-57		M-57 OVER BEAR CREEK	BRIDGE REPLACEMENT	0.813		CON			
HURON	M-142		M-142 OVER NETTLE RUN	CULVERT REPLACEMENT	0.000			CON		
HURON	M-142		M-142 OVER PIGEON RIVER	BRIDGE REPLACEMENT	0.000			CON		
HURON	M-25		M-25 OVER WHITE RIVER	SUPERSTRUCTURE REPLACEMENT	1.014		CON			
HURON	M-46		M-25 OVER HARBOR BEACH CREEK	BRIDGE REPLACEMENT	0.000			CON		
LAPEER	M-24 (South Lapeer Road)		M-24 OVER FARMERS CREEK	CULVERT REPLACEMENT	0.000			CON		
LAPEER	M-24		M-24 OVER CR RAILROAD (ABANDONED)	BRIDGE REPLACEMENT	0.602			CON		
LAPEER	M-24		M-24 OVER PLUM CREEK	BRIDGE REPLACEMENT	1.044			CON		
MIDLAND	US-10		WEST RIVER ROAD OVER US-10	DECK REPLACEMENT	0.260				CON	
SAGINAW	I-675		VETERANS MEMORIAL HIGHWAY OVER I-675 NB	DECK REPLACEMENT	0.188	CON				
SAGINAW	I-675		VETERANS MEMORIAL HIGHWAY OVER I-675 SB	DECK REPLACEMENT	0.188	CON				
SAGINAW	I-75		JANES ROAD OVER I-75	DECK REPLACEMENT	0.397			CON		
SAGINAW	I-75		WADSWORTH ROAD OVER I-75	DECK REPLACEMENT	0.397			CON		
SAGINAW	M-13		M-13 OVER NO NAME DRAIN	BRIDGE REPLACEMENT	0.289		CON			
TUSCOLA	M-15		M-15 OVER CASS RIVER	BRIDGE REPLACEMENT	0.098				CON	
TUSCOLA	M-25		M-25 OVER QUANICASSEE RIVER	BRIDGE REPLACEMENT	0.755				CON	
TUSCOLA	M-46		M-46 OVER SUCKER CREEK	BRIDGE REPLACEMENT	0.000			CON		
					16.809					

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

BAY Repair and Rebuild Roads

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
BAY	I-75		CRANE ROAD TO SOUTH OF SQUACONNING CREEK	RECONSTRUCTION	2.745	CON				
BAY	I-75	FES	SQUACONNING CREEK TO HOTCHKISS ROAD	RECONSTRUCTION	1.250	CON				
BAY	I-75	FES	M-84 OVER I-75 NB	REPLACE BRIDGE, ADD LANES	1.250	CON				
BAY	I-75	FES	M-84 OVER I-75 SB	REPLACE BRIDGE, ADD LANES	1.250	CON				
BAY	I-75		LINWOOD RD TO PINCONNING RD	RESTORATION AND REHABILITATION	9.954		CON			
BAY	M-13/M-84 (Salzburg Avenue)		EUCLID TO LAFAYETTE BASCULE BRIDGE, BAY CITY	RECONSTRUCTION	0.770				CON	
BAY	N M 47/W US 10 RAMP		US-10 & M-47	RECONSTRUCTION	0.116				CON	
CLARE	M-115 (Ludington Drive)		SUPERIOR STREET TO CUNNINGHAM AVENUE	RESURFACE	4.349	CON				
CLARE	US-127 BR/M-61 (Clare Avenue)		COUNTY FARM ROAD SOUTHEASTERLY TO M-61 EAST	RESURFACE	2.720		CON			
GENESEE	I-475	FES	I-75 S JUNCTION TO I-69	RECONSTRUCTION	6.601	CON				
GENESEE	I-475	FES	HILL RD OVER I-475	OVERLAY - DEEP	6.601	CON				
GENESEE	I-475	FES	I-475 SB OVER MAPLE RD	SUPERSTRUCTURE REPAIR	6.601	CON				
GENESEE	I-475	FES	BRISTOL RD(OLDM121 OVER I-475	OVERLAY - DEEP	6.601	CON				
GENESEE	I-475	FES	I-475 NB OVER MAPLE RD	SUPERSTRUCTURE REPAIR	6.601	CON				
GENESEE	M-57 (Vienna Road)		BRENT RUN CREEK TO LINDEN ROAD	RESURFACE	4.137			CON		
HURON	M-53 (West Huron Avenue)		OUTER DRIVE TO M-142, BAD AXE	RECONSTRUCTION	0.779				CON	
ISABELLA	US-10 BR (Pere Marquette Road)		SUNSET AVENUE EASTERLY TO US-10 RAMPS.	RESURFACE	1.995					CON
LAPEER	M-24		I-69 TO NEPESSING STREET, LAPEER	RECONSTRUCTION	2.311				CON	
MIDLAND	US-10		M-18 TO THE SANFORD LAKE BRIDGE	RESTORATION AND REHABILITATION	6.950	CON				
MIDLAND	US-10		MIDLAND/ISABELLA COUNTY LINE EASTERLY TO M-18	RESTORATION AND REHABILITATION	6.840				CON	
SAGINAW	I-75		JANES TO I-675 NORTH JUNCTION	RECONSTRUCTION	4.515			CON		
SAGINAW	I-75		DIXIE HIGHWAY TO HESS	MAJOR WIDENING	3.770					CON
TUSCOLA	M-25		BAY/TUSCOLA COUNTY LINE TO DICKERSON ROAD	RESURFACE	5.434				CON	
TUSCOLA	M-25		DICKERSON ROAD TO RINGLE ROAD	RESURFACE	4.587					CON
					70.865					

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvement

BAY I-675 Access Improvements at Warren Avenue, Saginaw

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
SAGINAW	I-675		AT WARREN AVENUE	NEW INTERCHANGE-EXISTING ROUTE	0.550		CON			
SAGINAW	I-675		AT WARREN AVENUE	NEW INTERCHANGE-EXISTING ROUTE		ROW	ROW	ROW	ROW	ROW
SAGINAW	I-675		AT WARREN AVENUE	NEW INTERCHANGE-EXISTING ROUTE		PE	PE			
SAGINAW	I-675 (I-675)		AT WARREN AVENUE	INTERCHANGE RECONSTRUCT	0.240		CON	CON		
SAGINAW	I-675 (I-675)		AT WARREN AVENUE	INTERCHANGE RECONSTRUCT		PE	PE			
SAGINAW	I-675 (I-675)		AT WARREN AVENUE	INTERCHANGE RECONSTRUCT		SUB	SUB			

BAY M-84, from South of Kochville Road to M-13 (Euclid Avenue), Bay County

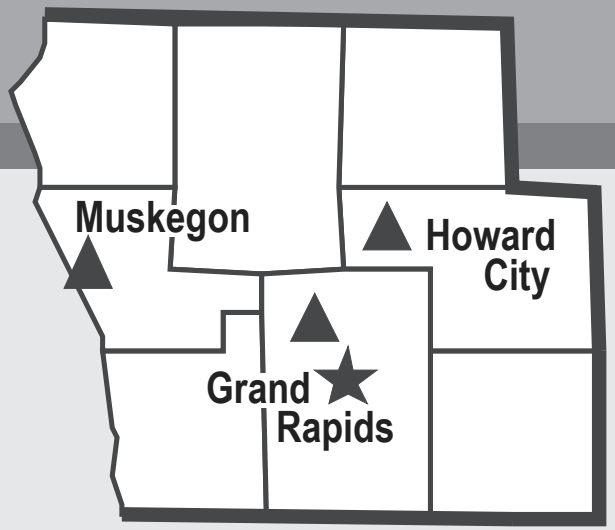
COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
BAY	M-84	FES	FROM SOUTH OF DELTA ROAD TO EUCLID AVENUE	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M	3.430	CON	CON	CON	CON	CON

BAY US-127, I-69 to Ithaca

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
GRATIOT	US-127		GRATIOT COUNTY LINE NORTHERLY TO BAGLEY ROAD	NEW ROUTES		ROW	ROW	ROW	ROW	ROW
					4.220					

** Projects that may be delayed due to the reduced highway investment strategy.*

GRAND REGION



The Grand Region serves eight counties in west Michigan. These include Ionia, Kent, Mecosta, Montcalm, Muskegon, Newaygo, Oceana, and Ottawa Counties. Located within the Grand Region are the metropolitan areas of Grand Rapids, Holland, and Muskegon, which make up one of the largest economies in the upper midwest. Major economic sectors in the Grand Region include manufacturing, retail, health care, agriculture, and tourism. Major state trunklines include: I-96, I-196, US-31, US-131, and the M-6 freeway.

Five-Year Road and Bridge Program

The road and bridge preservation projects identified in this 2010 to 2014 Five-Year Transportation Program for the Grand Region total approximately $262 million. Investment is allocated in the following manner:

Grand Region	Total 2010-2014
Road Preservation	$142 million
Bridge Preservation	$49 million
Road and Bridge CPM	$71 million
Total 2010-2014	**$262 million**

(Amounts are rounded to the nearest million dollars (Road Preservation includes Roadside Facilities)

Capital Preventive Maintenance (CPM) projects are planned for a significant number of pavements and structures that do not require extensive repairs during this Five-Year Transportation Program period. CPM projects are short-term fixes, adding from five to 10 years of life to a pavement or maintaining the existing structure condition.

Grand Region	Route Miles of Road	Number of Bridges and Structures
Total in Region	937	767
Scheduled Work	94	35
Percentage of Region	10%	5%

The 2010-2014 program for road preservation work reflects approximately 94 (ten percent) of the Grand Region's more than 937 route miles of state trunklines during the next five years. The 2010-2014 program for bridge preservation work will address 35 (five percent) of the region's 767 trunkline bridges and structures.

There are also a number of programs that are selected based on statewide priorities or where project identification is completed throughout the year. These investments are not reflected above, but are included in the statewide investment strategy. Below is a brief description of major preservation projects that are currently planned for the 2010-2014 program.

2010

The following projects listed below are funded with **ARRA** dollars and will be constructed in FY 2010.

Reconstruction and widening will begin on **the I-196 eastbound lanes from Grand River to Fuller Avenue as well as the westbound lanes from Monroe Avenue to Fuller Avenue in downtown Grand Rapids.** Planned improvements include an additional through lane in both directions and weave/merge lanes between interchanges to improve freeway operations and safety. As part of the 2010 work, I-196 bridge replacements are planned for the Coit, Lafayette, and Eastern Avenue structures. These projects will include aesthetic and sidewalk enhancements through local stakeholder partnerships. Improved freeway lighting will also be installed as part of this project.

M-11 (28th Street): Pavement rehabilitation and sidewalk replacement/expansion, in cooperation with the City of Grand Rapids, between Division Avenue and Kalamazoo Avenue.

US-31 Improvements: New cable median barrier will be added from I-96 to Marquette Avenue in Muskegon County to improve freeway safety.

In Ottawa County: I-96 over M-11 westbound is scheduled for substructure repairs and painting. M-121 (Chicago Drive) from 40th Avenue to Rush Creek in Hudsonville will be rehabilitated with joint repairs and resurfacing. M-104 will also be resurfaced from 144th east to I-96.

M-57 over the White Pine Trail: This bridge will have major rehabilitation work done, including: deck overlay, joint replacement, pin and hanger replacement, and painting.

Other road and bridge projects planned for 2010 are listed below. These projects will be funded with regular federal and state dollars.

M-21 Bridge Improvements: Bridge deck and beam replacements are planned for two structures over the Flat River within the City of Lowell along M-21.

M-20 (Schrader Creek): Alternative evaluation will continue and design engineering will begin in order to provide plans to correct flooding at Schrader Creek. Construction will depend on future funding levels statewide.

M-21 Bridge in Kent County: The M-21 Bridge over the Grand River in Ada will be replaced, and a non-motorized facility added to the new bridge with federal enhancement funds, in partnership with Ada Township. Work will begin on this project in 2010 with the majority of construction taking place in 2011.

M-21 in Ionia County: The segments from M-66 (Dexter Street) to Lovell Street and from the East Kent County line to Hawley Road will be rehabilitated, continuing the projects started in 2009.

2011

US-131 Freeway Grand Rapids Area: This important urban corridor is scheduled for improvements, including major bridge work scheduled for 2011 on the Franklin, Hall, Burton, 32nd and 36th Street bridges. Freeway lighting improvements will also take place from I-196 north to Ann Street.

I-196 Freeway Bridge Replacement: Building on the 2010 reconstruction work along this corridor, the bridge over I-196 at Diamond Avenue will be replaced. This project is being funded with ARRA funds.

M-66 in the City of Ionia: Work continues on M-66 in Ionia County. One half mile of M-66 from the Grand Rapids Eastern Railroad Crossing north to M-21 will be reconstructed in 2011.

US-31 in Oceana County: Six miles of US-31 from Polk Road to Monroe Road will be reconstructed, including substructure repairs at the Monroe Road Bridge.

M-121 (Chicago Drive) in Ottawa County: The segment from 40th to 80th Avenue will be rehabilitated in 2011 and the project will be funded using 2010 dollars, continuing the 2010 project started in Hudsonville in 2010.

2012

Montcalm County US-131 Corridor Projects: Starting from Cannonsville Road and heading north to M-46 approximately five miles will be reconstructed, drainage improved, guardrail replaced and ramps extended in 2012. Major deck rehabilitation for US-131 over Tamarack Creek bridges will also be constructed in 2012.

US-131 Freeway Grand Rapids Area: The 100th Street Bridge over US-131 in southern Kent County will be repaired in 2012 with structure repairs and deck patching. Major rehabilitation, deck overlay, and railing replacement is scheduled for the CSX Railroad bridge, located immediately south of Wealthy Street in downtown Grand Rapids. Substructure repairs and railing replacement are also planned for the 6th Street Bridge, north of I-196, in Grand Rapids.

2013

M-21 Bridge Project: In 2013: The beams and deck of the Grand Rapids Eastern Railroad Bridge, one mile east of I-96 in Kent County, will be replaced.

US-31 in Ottawa County: The section from Lakewood Boulevard north to Quincy Street is scheduled for reconstruction in 2013.

M-11 in Kent County: M-11 (28th Street) is scheduled to be resurfaced from M-37 (East Beltline) east to Patterson Avenue and reconstructed from Patterson Avenue to I-96.

2014

US-131 in Mecosta County: Six miles of US-131, beginning at the Montcalm/Mecosta county line, will be resurfaced in 2014.

US-31 in Grand Haven: Approximately one mile of this four lane boulevard roadway, from Slayton Street north to the South Channel Bridge, is scheduled to be reconstructed in 2014.

I-96 Bridge Project in Kent County: The M-50 Bridge, in southeastern Kent County, is scheduled for replacement in 2014.

CAPACITY IMPROVEMENTS AND NEW ROADS

M-231 over the Grand River in Ottawa County: Design of a new highway segment between M-45 and I-96, as well as design of operational improvements on existing US-31 in Holland and Grand Haven, will commence in 2010 following Federal Highway Administration approval of the Final Environmental Impact Statement. Approval is anticipated in late 2009 or the early part of 2010. Funding constraints have limited the initial construction to the building of the bridge approaches and substructure for the new Grand River crossing. Funding of the remainder of the project will be included in a future Five-Year Plan. The new bridge will be located east of the City of Grand Haven and construction is scheduled to commence in late 2010.

I-196/I-96 Corridor Improvement in Kent County: Design work for the reconstruction of I-196 from US-131 east to Fuller Avenue is under way. This design also includes the option of adding an additional through lane, per the Environmental Assessment, pending the identification of additional funds. Design work is also underway for I-196 between Fuller Avenue and I-96. A portion of the project on I-196 from US-131 to Fuller was funded through the American Recovery and Reinvestment Act. The project will be constructed incrementally as funding becomes available.

I-96/US-31 @ Sternberg Road in Muskegon County: Studies of feasible alternatives will continue. MDOT is continuing to work with local and federal officials to identify improvement opportunities in the vicinity of US-31/I-96 and Sternberg Road in Muskegon County. Transportation system improvement plans are also being coordinated with development plans by the Little River Band of Ottawa Indians.

I-196 @ Baldwin Street in the City of Grand Rapids: Construction of two bridges and reconstruction and widening of portions of Baldwin Street began in 2007. Interchange construction and the reconstruction and widening of two bridges on I-196 began in April 2008. The westbound off ramp is open to traffic. The eastbound I-196 bridges over Buck Creek and the CSX railroad are being completely replaced and a new structure will be constructed to carry traffic from Baldwin Street to eastbound I-196. A new weave/merge lane will be constructed on eastbound I-196 between the new Baldwin Street ramp and M-11. New retaining walls also will be constructed along with the repair of the 36th Street bridge. The entire project will be complete in late 2009.

US-131 at 44th Street in the City of Grand Rapids: Construction began in April 2009. The widening of the 44th Street Bridge is expected to be completed at the end of 2009. This interchange will be transformed from a diamond interchange to a single point urban interchange in conjunction with a local project that will add turn lanes to improve operations.

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

GRAND Bridge - Replacement and Rehabilitation

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
IONIA	I-96		I-96 EB OVER CSX RAILROAD (ABANDONED)	BRIDGE REMOVAL	0.028			CON		
IONIA	I-96		I-96 WB OVER CSX RAILROAD (ABANDONED)	BRIDGE REMOVAL	0.028			CON		
IONIA	I-96		I-96 OVER PORTLAND TRAIL	NEW STRC-EXTG RTE	0.028			CON		
KENT	I-196 (Gerald R Ford Freeway)	FES	DIAMOND AVENUE OVER I-196	BRIDGE REPLACEMENT	0.001	CON				
KENT	I-296/US-131 NB (US-131 NB)		I-296 NB (US-131 NB) OVER 6TH AVENUE	SUBSTRUCTURE REPAIR	0.000			CON		
KENT	I-96		I-96 EB OVER M-11	OVERLAY - DEEP	0.000	CON				
KENT	I-96		I-96 WB OVER M-11	OVERLAY - DEEP	0.000	CON				
KENT	I-96 (I-96)		LEONARD STREET OVER I-96	SUBSTRUCTURE REPAIR	0.000			CON		
KENT	I-96 (I-96 WB)		I-96 WB OVER GTW RAILROAD	SUPERSTRUCTURE REPAIR	0.000	CON				
KENT	I-96 (I-96)		WHITNEYVILLE AVENUE OVER I-96	OVERLAY - DEEP	0.000		CON			
KENT	I-96 (I-96)		M-50 OVER I-96	BRIDGE REPLACEMENT	0.000					CON
KENT	M-21		M-21 OVER FLAT RIVER	SUPERSTRUCTURE REPLACEMENT	0.000	CON				
KENT	M-21		M-21 OVER FLAT RIVER	SUPERSTRUCTURE REPLACEMENT	0.000	CON				
KENT	M-21		M-21 OVER GRAND RIVER	BRIDGE REPLACEMENT	0.000	CON				
KENT	M-21		M-21 OVER GTW RAILROAD	SUPERSTRUCTURE REPLACEMENT	0.087				CON	
KENT	US-131		I-196 BS (FRANKLIN) OVER CSX RR & US-131, I-196 BS	DECK REPLACEMENT	0.000		CON			
KENT	US-131		BURTON STREET OVER US-131	DECK REPLACEMENT	0.000		CON			
KENT	US-131		HALL STREET OVER US-131 AND CENTURY AVENUE	DECK REPLACEMENT	0.000		CON			
KENT	US-131		36TH STREET OVER US-131	BRIDGE REPLACEMENT	0.000		CON			
KENT	US-131		US-131 OVER CSX RAILROAD	OVERLAY - DEEP	0.231			CON		
KENT	US-131		32ND STREET OVER US-131	MISCELLANEOUS REPLACE	0.000	CON				
KENT	US-131 (US-131 NB and SB)		100TH STREET OVER US-131	SUBSTRUCTURE REPAIR	0.000			CON		
MONTCALM	M-57 (M-57)		M-57 OVER BUTTERNUT CREEK	CULVERT REPLACEMENT	0.000					CON
MONTCALM	US-131		US-131 NB OVER TAMARACK CREEK	DECK REPLACEMENT	0.687			CON		
MONTCALM	US-131 (US-131 SB)		US-131 SB & M-46 SB OVER TAMARACK CREEK	OVERLAY - DEEP	0.000			CON		
MUSKEGON	US-31 BR		US-31 BR WB OVER SOUTH BRANCH MUSKEGON RIVER	OVERLAY - DEEP	0.000	CON				
MUSKEGON	US-31 BR		US-31 BR EB OVER SOUTH BRANCH MUSKEGON RIVER	OVERLAY - DEEP	0.000	CON				
MUSKEGON	US-31 BR		US-31 BR EB OVER MUSKEGON RIVER	BRIDGE REPLACEMENT	0.000	CON				
MUSKEGON	US-31 NB (US-31 NB)		US-31 NB OVER MID MICHIGAN RAILROAD	SUBSTRUCTURE REPAIR	0.000			CON		
MUSKEGON	US-31BR (Colby Street)		US-31 BR OVER CSX RAILROAD (ABANDONDED)	SUPERSTRUCTURE REPLACEMENT	0.000		CON			
OCEANA	US-31 (US-31 NB)		US-31 NB OVER US-31 BUSINESS ROUTE (MONROE ROAD)	SUBSTRUCTURE REPAIR	0.000		CON			
OCEANA	US-31 (US-31 NB and SB)		WEBSTER ROAD OVER US-31	MISCELLANEOUS REHABILITATION	0.000			CON		
OTTAWA	I-96 (I-96 WB)		I-96 WB OVER M-104	OVERLAY - DEEP	0.000			CON		
OTTAWA	US-31 (US-31)		TAFT ROAD OVER US-31	OVERLAY - SHALLOW	0.000			CON		
					1.034					

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

GRAND Repair and Rebuild Roads

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
IONIA	I-96 EB		AT THE SARANAC REST AREA #532	ROADSIDE FACILITIES - IMPROVE	0.540			CON		
IONIA	M-21 (BLUE WATER HIGHWAY)		KENT COUNTY LINE EAST TO PINCKNEY ROAD	RESURFACE	2.648	CON				
IONIA	M-21 (Blue Water Highway)		PINCKNEY ROAD EAST TO HAWLEY HIGHWAY	RESURFACE	2.345	CON				
IONIA	M-21 (BLUE WATER HIGHWAY)		DETMERS ROAD EAST TO LINCOLN AVENUE	RESURFACE	3.174		CON			
IONIA	M-21 (Lincoln Avenue)		M-66 (DEXTER STREET) EAST TO LOVELL STREET	RESURFACE	1.338	CON				
IONIA	M-66 (Dexter Street)		SOUTH OF GRE RR NORTH TO M-21	RECONSTRUCTION	0.520		CON			
IONIA	M-91		M-44 TO ELLIS ROAD	RESTORATION AND REHABILITATION	1.195		CON			
KENT	M-11 (28TH STREET)	FES	DIVISION AVENUE EAST TO KALAMAZOO AVENUE	RESURFACE	1.849	CON				
KENT	M-11 (28th Street)		M-37 EAST TO I-96 (GAP PATTERSON AVE)	RESTORATION AND REHABILITATION	2.335				CON	
KENT	M-44 CONN (Plainfield Avenue)		I-96 TO AIRWAY ST	RESURFACE	2.656				CON	
KENT	M-44 CONN (Plainfield Avenue)		AIRWAY ST TO M-44	RESURFACE	1.529					CON
MECOSTA	US-131		S MECOSTA CO LINE TO 6 MILE RD	RESTORATION AND REHABILITATION	6.061					CON
MECOSTA	US-131 OLD (Northland Drive)		19 MILE TO MECOSTA/OSCEOLA COUNTY LINE	RESURFACE	5.040			CON		
MONTCALM	M-66 (Sheridan Road)		M-57 TO SHERIDAN NORTH VILLAGE LIMITIS	RESURFACE	2.553				CON	
MONTCALM	M-91 (Greenville Road)		ELLIS ROAD TO SNOWS LAKE ROAD	RESURFACE	2.163		CON			
MONTCALM	US-131 (US-131)		PIERSON ROAD NORTH TO CUTLER ROAD	MISCELLANEOUS	9.733		CON			
MONTCALM	US-131 NB (US 131 NB)		NORTH OF CANNONSVILLE RD TO SOUTH OF M-46	RESTORATION AND REHABILITATION	5.448			CON		
MONTCALM	US-131 SB (US-131 SB)		NORTH OF CANNONSVILLE ROAD TO SOUTH OF M-46	RESTORATION AND REHABILITATION	5.390			CON		
MUSKEGON	US-31 BR (Colby Street)		HALL STREET TO DIVISION STREET	RECONSTRUCTION	0.758		CON			
MUSKEGON	US-31 BR (Whitehall Road)		STANTON BLVD TO US-31	RESURFACE	2.047				CON	
NEWAYGO	M-82 (48th Street)		M-120 EAST TO INDUSTRIAL DRIVE	RESURFACE	3.144					CON
OCEANA	US-31		POLK RD TO N BRANCH OF PNTWTR RVR	RECONSTRUCTION	5.889		CON			
OCEANA	US-31		S OF POLK RD TO N BRANCH OF PNTWTR RVR	MISCELLANEOUS	2.211	CON				
OCEANA	US-31 BR (Polk Road)		US-31 TO JOHNSON ST (HART)	RESTORATION AND REHABILITATION	2.349			CON		
OCEANA	US-31 BR (6th Street)		50' EAST OF WYTHE STREET	RESTORATION AND REHABILITATION	0.000	CON				
OCEANA	US-31 NB		AT THE ROTHBURY REST AREA #529	ROADSIDE FACILITIES - IMPROVE	0.647				CON	
OTTAWA	I-196 EB		AT THE ZEELAND REST AREA #528	ROADSIDE FACILITIES - IMPROVE	0.000		CON			
OTTAWA	M-104 (Cleveland Rd)		124TH TO I-96	MAJOR WIDENING	1.374			CON		
OTTAWA	M-121 (Chicago Drive)	FES	40TH AVE EAST TO RUSH CREEK	RESURFACE	2.012	CON				
OTTAWA	M-121 (Chicago Drive)		80TH AVENUE TO 40TH AVENUE	RESURFACE	5.916	CON				
OTTAWA	M-121 (Chicago Drive)		M-121 EB OVER MACATAWA RIVER	OVERLAY - DEEP	5.916	CON				
OTTAWA	M-121 (Chicago Drive)		MAIN ST (ZEELAND) EAST TO 80TH AVE	RESTORATION AND REHABILITATION	1.169	CON				
OTTAWA	US-31 (US-31)		LAKEWOOD BLVD TO QUINCY ST	RECONSTRUCTION	2.787				CON	
OTTAWA	US-31 (Beacon Boulevard)		SLAYTON STREET TO SOUTH CHANNEL BRIDGE	RECONSTRUCTION	0.816					CON
					87.636					

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvement

GRAND — I-196 at Baldwin Road Intersection

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
KENT	I-196 (Gerald R Ford Freeway)		AT CHICAGO DRIVE INTERCHANGE	INTERCHANGE REDESIGN & UPGRADING	2.066	CON				
KENT	I-196		EB AND WB OVER CSX RAILROAD	INTERCHANGE REDESIGN & UPGRADING	0.000	CON				

GRAND — US-131 at 44th Street, City of Wyoming

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
KENT	US-131		UNDER 44TH STREET	REPLACE BRIDGE, ADD LANES	0.000	CON				

GRAND — US-31, Holland to Grand Haven

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
OTTAWA	US-31		LAKEWOOD BLVD NORTH TO QUINCY ST	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M	2.787				CON	CON
OTTAWA	US-31		LAKEWOOD BLVD NORTH TO QUINCY ST	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M		PE	PE	PE	PE	
OTTAWA	US-31 (Beacon Boulevard)		FRANKLIN STREET NORTH TO JACKSON STREET	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M	0.600					CON
					5.453					

2010-2014 ROAD & BRIDGE PROGRAM
New Roads

GRAND — US-31, Holland to Grand Haven

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
OTTAWA	REGIONWIDE (US-31 Bypass)		M-45 NORTH TO I-96/M-104	NEW ROUTES		EPE	EPE	EPE	EPE	
OTTAWA	REGIONWIDE (US-31 Bypass)		M-45 NORTH TO I-96/M-104	NEW ROUTES		PE	PE	PE	PE	PE
OTTAWA	M-231 (US-31 Bypass)		M-45 NORTH TO I-96/M-104	NEW ROUTES		ROW	ROW	ROW	ROW	ROW
OTTAWA	M-231		FROM M-45 TO THE GRAND RIVER	NEW ROUTES	4.500				CON	CON
OTTAWA	M-231		FROM M-45 TO THE GRAND RIVER	NEW ROUTES		PE	PE	PE	PE	
OTTAWA	M-231		M-231(NEW ROUTE) OVER THE GRAND RIVER	NEW STRUCTURE ON NEW ROUTE	0.001	CON	CON	CON	CON	CON
OTTAWA	M-231		M-231(NEW ROUTE) OVER THE GRAND RIVER	NEW STRUCTURE ON NEW ROUTE	0.001		CON	CON		
OTTAWA	M-231		FROM THE GRAND RIVER TO I-96	NEW ROUTES	2.501			CON	CON	CON
OTTAWA	M-231		FROM THE GRAND RIVER TO I-96	NEW ROUTES		PE	PE	PE		
OTTAWA	I-96		OVER ABANDONED GTW RAILROAD	BRIDGE REMOVAL	1.393			CON	CON	
OTTAWA	I-96		OVER ABANDONED GTW RAILROAD	BRIDGE REMOVAL		PE	PE	PE		
OTTAWA	M-231		OVER LEONARD STREET	NEW STRUCTURE ON NEW ROUTE	0.018			CON	CON	CON
OTTAWA	I-96		OVER M-231 RAMP	NEW STRC-EXTG RTE	0.000			CON	CON	CON
OTTAWA	I-96		UNDER 112TH AVE	REPLACE BRIDGE, ADD LANES	0.000			CON	CON	CON
					8.414					

** Projects that may be delayed due to the reduced highway investment strategy.*

METRO REGION

The Metro Region serves four counties in southeastern Michigan: Wayne, Oakland, Macomb, and St. Clair. These four counties encompass 161 cities and townships that are served by state trunklines. The Metro Region has the largest population concentration in the state and the oldest and busiest freeways. Forty-three percent of the vehicle miles traveled on Michigan's freeway system are in this region. While there are slowing trends in land development due to economic conditions, there are some signs of redevelopment in urban centers throughout the Metro Region. This includes increasing densities of land use adjacent to existing trunkline right-of-way.

Five-Year Road and Bridge Program

The road and bridge preservation projects identified in this 2010 to 2014 Five-Year Transportation Program for the Metro Region total approximately $996 million. Investment is allocated in the following manner:

Metro Region	Total 2010-2014
Road Preservation	$605 million
Bridge Preservation	$248 million
Road and Bridge CPM	$143 million
Total 2010-2014	**$996 million**

(Amounts are rounded to the nearest million dollars)

Capital Preventive Maintenance (CPM) projects are planned for a significant number of pavements and structures that do not require extensive repairs during this Five-Year Transportation Program period. CPM projects are short-term fixes, adding from five to ten years of life to a pavement or maintaining the existing structure condition.

Metro Region	Route Miles of Road	Number of Bridges and Structures
Total in Region	866	1,546
Scheduled Work	107	110
Percentage of Region	12%	7%

The 2010-2014 program for road preservation work reflects approximately 107 (12 percent) of the Metro Region's more than 866 route miles of state trunklines during the next five years. The 2010-2014 program for bridge preservation work will address 110 (seven percent) of the region's 1,546 trunkline bridges and structures.

There are also a number of programs that are selected based on statewide priorities or where project identification is completed throughout the year. These investments are not reflected above, but are included in the statewide investment strategy. Below is a brief description of major preservation projects that are currently planned for the 2010-2014 program.

2010

M-39 (Southfield Road) from Porter Avenue to Pinecrest Drive in the cities of Lincoln Park and Allen Park, Wayne County. M-39 will be reconstructed within this area.

I-696 at I-94, in the cities of Roseville and St. Clair Shores, Macomb County. This interchange will be reconstructed and includes bridge rehabilitations.

M-8 (Davison Freeway) from Oakland Avenue to Conant Avenue in the cities of Highland Park and Detroit, Wayne County. M-8 will be improved with the realignment of an existing curve and a resurfaced roadway with portions being reconstructed as a part of the ARRA program. The bridges will also be rehabilitated as a part of this project.

M-85 (Fort Street) from Oakwood Boulevard to Schafer Highway in the City of Detroit, Wayne County. This portion of roadway will be reconstructed and the historic viaduct bridge will be replaced.

I-96 from M-8 (Davison Freeway) to Underwood Avenue in the City of Detroit, Wayne County. The bridges in this corridor will be rehabilitated.

I-94 over the Belle River in the City of Adair, St. Clair County. The bridges will be replaced.

I-94 from St. Clair Highway to Allington Street in Casco, Columbus and St. Clair Townships, St. Clair County. This section of I-94 will be reconstructed and the bridges will be rehabilitated.

US-12 (Michigan Avenue) from Livernois Avenue to Rosa Parks Boulevard in the City of Detroit, Wayne County. The roadway will be rehabilitated as a part of the ARRA program.

M-59 from Widetrack to Opdyke Road, in the City of Pontiac, Oakland County. This project will rehabilitate the road and bridges within the corridor as a part of the ARRA program.

US-24 (Telegraph Road) from 12 Mile Road to Long Lake Road in the Cities of Southfield, Bingham Farms, Franklin, and Bloomfield Township, Oakland County. US-24 will be reconstructed within these communities and include signal upgrades and safety improvements at 12 Mile Road.

US-24 (Telegraph Road) from Square Lake Road to Old Telegraph Road in Bloomfield Township, Oakland County. US-24 will be patched and reconstructed.

I-275/I-94 interchange, in the City of Romulus, Wayne County. This interchange will be improved with both road and bridge rehabilitations.

2011

M-39 (Southfield Freeway) from I-94 to M-10 (Lodge Freeway) - in the Cities of Allen Park, Dearborn Heights, Dearborn, Detroit, and Southfield, in Wayne and Oakland Counties. This project will improve the corridor with road rehabilitation, reconstruction and resurfacing, and the bridges will be rehabilitated.

I-696 from Van Dyke Avenue to Groesbeck Highway in the Cities of Warren, Centerline, and Roseville, Macomb County. The bridges in this corridor will be rehabilitated and some of the bridge decks will be replaced.

I-96 at Kent Lake, Huron River, Milford Road and the GTW RR, in Lyon Township, Oakland County. This project will include bridge repairs and replacements.

M-59 from Opdyke Road to Crooks Road, in the Cities Auburn Hills and Rochester Hills, Oakland County. This project will rehabilitate the road and bridges within the corridor.

M-3 (Gratiot Avenue) from Cass Avenue to Sandpiper Drive, Macomb County. The bridges will be replaced.

2012

I-94 from Belleville Road to I-275, in Van Buren Township and the City of Romulus, Wayne County. The bridges in this area will be rehabilitated.

M-53 from 34 Mile Road to North Macomb County Line in Bruce Township, Macomb County. M-53 will be reconstructed with some minor widening.

I-75/Dix Toledo interchange in Brownstown Township, Wayne County. The interchange will be improved and reconstructed.

US-24 (Telegraph Road) from Vreeland Road to West Road in Brownstown Township, Wayne County. US-24 will be reconstructed.

I-94/West Grand Boulevard interchange, City of Detroit, Wayne County. The interchange will be improved and reconstructed to improve safety.

I-94/I-69 interchange, in Port Huron Township, St. Clair County. The roadway will be reconstructed and the bridges will be replaced.

M-102 (8 Mile Road) from M-5 (Grand River Avenue) to the Rouge River, Cities of Southfield and Detroit, and Redford Township, Wayne and Oakland Counties. This project will include rehabilitation of the roadway and the bridges over the River.

2013

I-275 from I-94 to I-96, in Canton and Plymouth Townships, Wayne County. This corridor will be improved with road rehabilitations and bridge rehabilitations that extend to 9 Mile Road.

I-94 from M-29 (23 Mile Road) to the North Macomb County Line, in Chesterfield and Lennox Townships, Macomb County. I-94 will be resurfaced and the bridge will be rehabilitated.

Old M-14 (Plymouth Road) from Newburgh Road to Farmington Road in the City of Livonia, Wayne County. Old M-14 will be rehabilitated in this area.

M-85 (Fort Street) from Sibley Road to Goddard Road, in the Cities of Riverview, Wyandotte, Southgate, and Lincoln Park, Wayne County. M-85 will be reconstructed in this area and bridges over the Sexton-Kilfoil drain will be replaced.

M-150 (Rochester Road) from 2nd Street to University Road in the City of Rochester Hills, Oakland County. This section of M-150 will be reconstructed.

M-97 (Groesbeck Highway) from Hayes Avenue to 14 Mile Road in the cities of Warren, Roseville, and Fraser, Macomb County. M-97 will be reconstructed.

2014

I-96 from Middlebelt Road to US-24 (Telegraph Road), in the City of Livonia and Redford Township, Wayne County. This corridor will be improved with road reconstruction and bridge rehabilitations.

I-94 from Stephens Road to Masonic Boulevard, in the Cities of Eastpointe, St. Clair Shores, and Roseville, Macomb County. This project will rehabilitate the roadway.

US-24 (Dixie Highway) from US-24 (Telegraph Road) to I-75, in Waterford, Independence and Springfield Townships, Oakland County. This project will rehabilitate this section of road and replace the bridge over the Clinton River.

M-3 (Gratiot Avenue) from 11 Mile Road to 14 Mile Road in the City of Roseville, Macomb County. M-3 will be rehabilitated.

M-102 (Eight Mile Road) from Rouge River to M-39 in the Cities of Detroit and Southfield, Wayne and Oakland Counties. The roadway will be rehabilitated and the bridge over Plum Creek will be replaced.

Old M-59 from Adams Road to Dequindre Road in the City of Rochester Hills, Oakland County. The roadway will be rehabilitated.

I-96 from Newburgh Road to Middlebelt Road, in the City of Livonia, Wayne County. The roadway will be reconstructed and the bridges will be rehabilitated.

CAPACITY IMPROVEMENTS AND NEW ROADS

M-59 at Crooks Road interchange in Oakland County. MDOT is conducting a re-evaluation of the Environmental Assessment to address proposed design modifications to the project. The proposed project will reconstruct the M-59/Crooks Road interchange in the City of Rochester Hills. A single span bridge and two new loop entrance ramps will be constructed along with the total reconstruction of the existing entrance and exit ramps. Design will be completed for an October 2010 letting, and construction in the 2011 season.

M-59, Crooks Road to Ryan Road in Oakland County. This project will widen M-59 from east of Crooks Road west to Ryan Road (5.88 miles) from two lanes to three lanes in each direction within the median. Funding for construction of this project is included by the American Recovery and Reinvestment Act of 2009. It is currently under construction and will be completed in 2011.

I-75 Ambassador Bridge-Gateway Project in the City of Detroit. This project addresses long-term congestion issues and provides direct access between the Ambassador Bridge and I-75 and I-96. It will reconstruct the existing ramps, reconstruct I-75 from south of West Grand Boulevard to Michigan Avenue, and also reconstruct portions of Fort Street (M-85). New ramps will also be constructed connecting the United States Customs Secondary Truck Inspection Facility to I-75 and I-96. Construction will be completed in 2010.

Blue Water Bridge Plaza, St Clair County. This project will modernize two miles of the I-94/69 freeway corridor, replace the Black River bridge, relocate the International Welcome Center, and expand the plaza. The project will address border security, vehicle inspection, and toll collection needs at this international border crossing.

The project has been split into three separate construction contracts. The design phase of the project began in 2009. All design work for the project will be completed by 2013. Right-of-way acquisition has commenced and is scheduled for completion in 2014. Construction is expected to begin for replacing the Black River bridge and modernizing I-94/69 in 2011. Construction on the plaza expansion is scheduled to begin in 2014 and be completed by 2017.

Detroit River International Crossing (DRIC). The project is a U.S./Canadian, I-75 to Highway 401, end to end connection consisting of five primary elements: a new Detroit River crossing (Bridge); the associated inspection areas on each side of the river for the respective border services agencies of the U.S and Canada (Plazas); and, connecting links to I 75 in Detroit and Highway 401 in Windsor (Connecting Link [Canada] or Interchange [US]).The Final Environmental Impact Statement has been completed and preliminary design activities will commence in 2010.

Detroit Intermodal Freight Terminal (DIFT). The completion of early preliminary engineering and the Environmental Impact Statement for facility expansion is expected in early 2010. The design phase will begin in 2010. The purpose of the DIFT project is to support the economic competitiveness of southeastern Michigan and the state by improving freight transportation opportunities and efficiencies for business, industry, and the military. The goal is to ensure that southeast Michigan has sufficient capacity to provide for existing and future intermodal demand.

I-94 from I-96 to Connor Avenue in Wayne County. The project will reconstruct and widen 6.7 miles of the I-94 mainline freeway, reconstruct 67 bridges over I-94, and reconstruct and modernize two freeway-to-freeway interchanges with I-75 and M-10. This section of roadway will be widened to eight lanes. Continuous service drives will be constructed along the entire project, which will improve surface network mobility and access. An engineering report will be completed in 2010.

M-85 Fort Street Bridge replacement in the City of Detroit. This project will replace the Bascule Bridge on M-85 at Oakwood Boulevard over the Rouge River. A Re-evaluation of the Environmental Assessment is being conducted and design is scheduled for 2011 and construction is scheduled for 2013.

I-75, 8 Mile to M-59 in Oakland County. The selected alternative includes the addition of one lane in each direction, for a total of eight lanes, between M-102 (8 Mile Road) to south of M-59. The additional lane will be designated a high occupancy vehicle lane during the peak hours and a general-purpose lane during the remaining hours. The engineering reports will be completed in 2010.

M-53 at 18 ½ Mile Road in Macomb County. Interchange construction was completed in 2005. The remaining project is a noise wall to be built by MDOT, and landscaping by the City of Sterling Heights. This project was let for construction in October 2009.

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

METRO Bridge - Big Bridge Program

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	I-75		I-75 OVER ROUGE RIVER ,DEARBORN STREET & RR	SUBSTRUCTURE PATCHING	0.080	CON				
WAYNE	I-75		I-75 SB ON RAMP OVER ROUGE RIVER & PLEASANT STREET	SUBSTRUCTURE REPAIR	0.080	CON				
WAYNE	M-85		M-85 OVER ROUGE RIVER	BRIDGE REMOVAL	0.001				CON	
WAYNE	M-85		M-85 OVER ROUGE RIVER	BRIDGE REPLACEMENT	0.001				CON	
					0.081					

METRO Bridge - Replacement and Rehabilitation

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
MACOMB	I-696 (W P Reuther Freeway)		I-696 RAMP E TO N OVER I-94, 11 MILE ROAD & RAMPS	DECK REPLACEMENT	0.001	CON				
MACOMB	I-696 (W P Reuther Freeway)		11 MILE ROAD OVER I-94	DECK REPLACEMENT	0.001	CON				
MACOMB	I-696		LEFT TURN LANE OVER I-696	DECK REPLACEMENT	0.308	CON				
MACOMB	I-696		M-97 GROESBECK HIGHWAY OVER I-696	DECK REPLACEMENT	0.308	CON				
MACOMB	I-696		SCHOENHERR ROAD OVER I-696	OVERLAY - DEEP	0.092	CON				
MACOMB	I-696		SCHOENHERR LEFT TURN OVER I-696	OVERLAY - DEEP	0.092	CON				
MACOMB	I-696		VAN DYKE AVENUE (M-53) OVER I-696	DECK REPLACEMENT	0.074	CON				
MACOMB	I-696		LEFT TURN LANE OVER I-696	DECK REPLACEMENT	0.074	CON				
MACOMB	I-696		U-TURN AND LEFT TURN OVER I-696	DECK REPLACEMENT	0.085	CON				
MACOMB	I-696		HOOVER ROAD OVER I-696	DECK REPLACEMENT	0.085	CON				
MACOMB	M-3 (Gratiot avenue)		M-3 SB OVER CLINTON RIVER	BRIDGE REPLACEMENT	0.000	CON				
MACOMB	M-3 (Gratiot avenue)		M-3 NB OVER CLINTON RIVER	BRIDGE REPLACEMENT	0.000	CON				
OAKLAND	I-96		I-96 EB OVER GTW RAILROAD (ABANDONED)	BRIDGE REMOVAL	0.001		CON			
OAKLAND	I-96		I-96 WB OVER GTW RAILROAD (ABANDONED)	BRIDGE REMOVAL	0.001		CON			
OAKLAND	I-96		I-96 EB & WB OVER PATHWAY ABANDONED GTW RAILROAD	BRIDGE REPLACEMENT	0.001		CON			
OAKLAND	I-96		I-96 OVER KENT LAKE ROAD	DECK REPLACEMENT	0.000		CON			
OAKLAND	I-96		I-96 OVER HURON RIVER	SUPERSTRUCTURE REPAIR	0.000		CON			
OAKLAND	I-96		I-96 EB OVER MILFORD ROAD	DECK REPLACEMENT	0.030		CON			
OAKLAND	I-96		I-96 WB OVER MILFORD ROAD	DECK REPLACEMENT	0.030		CON			
OAKLAND	M-59		M-59 EB OVER GTW RAILROAD	OVERLAY - DEEP	0.794		CON			
OAKLAND	M-59		M-59 WB OVER GTW RAILROAD	OVERLAY - DEEP	0.794		CON			
OAKLAND	M-59		CROOKS ROAD OVER M-59	BRIDGE REPLACEMENT	0.359		CON			
OAKLAND	TROWBRIDGE ROAD		TROWBRIDGE ROAD OVER GTW RAILROAD	SUPERSTRUCTURE REPAIR	0.010				CON	
OAKLAND	US-24		US-24 OVER CLINTON RIVER	BRIDGE REPLACEMENT	0.000				CON	

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

METRO Bridge - Replacement and Rehabilitation (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ST. CLAIR	I-69		MICHIGAN ROAD OVER I-69	BRIDGE REPLACEMENT	0.485			CON		
ST. CLAIR	I-69		MICHIGAN ROAD OVER I-69 WB	BRIDGE REPLACEMENT	0.485			CON		
ST. CLAIR	I-69		MICHIGAN ROAD OVER I-94	BRIDGE REPLACEMENT	0.485			CON		
ST. CLAIR	I-69		RAMP D I-94 EB TO M-21 OVER I-69 EB	BRIDGE REPLACEMENT	0.485			CON		
ST. CLAIR	I-69		RANGE ROAD OVER I-69	OVERLAY - DEEP	0.327		CON			
ST. CLAIR	I-94		I-69 EB OVER I-94	BRIDGE REPLACEMENT	0.000			CON		
ST. CLAIR	I-94		I-69 WB OVER I-94	BRIDGE REPLACEMENT	0.000			CON		
ST. CLAIR	I-94		I-94 EB OVER LAPEER ROAD	BRIDGE REPLACEMENT	0.000			CON		
ST. CLAIR	I-94		I-94 WB OVER LAPEER ROAD	BRIDGE REPLACEMENT	0.000			CON		
ST. CLAIR	I-BL-94		M-25 OVER CSX & GTW RAILROAD:S	BRIDGE REMOVAL	0.134	CON				
ST. CLAIR	I-BL-94		M-25 OVER BIKE PATH	BRIDGE REPLACEMENT	0.134	CON				
WAYNE	I-275		HANNAN ROAD OVER I-275	SUBSTRUCTURE REPAIR	1.133			CON		
WAYNE	I-275		I-275 SB OVER MIDDLE ROUGE RIVER	OVERLAY - DEEP	1.133			CON		
WAYNE	I-275		I-275 NB OVER MIDDLE ROUGE RIVER	OVERLAY - DEEP	1.133			CON		
WAYNE	I-275		WARREN ROAD OVER I-275	OVERLAY - SHALLOW	1.133			CON		
WAYNE	I-275		PLYMOUTH ROAD OVER I-275	DECK REPLACEMENT	1.133			CON		
WAYNE	I-275		I-275 SB OVER LOWER ROUGE RIVER	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		I-275 NB OVER LOWER ROUGE RIVER	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		I-275 RAMP OVER MCCLAUGHREY DRAIN	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		I-275 SB OVER MCCLAUGHREY DRAIN	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		I-275 NB OVER MCCLAUGHREY DRAIN	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		I-275 RAMP OVER MCCLAUGHERY DRAIN	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		TYLER ROAD OVER I-275	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		ANN ARBOR TRAIL OVER I-275	OVERLAY - DEEP	2.574			CON		
WAYNE	I-275		HURON RIVER DR OVER I-275	DECK REPLACEMENT	1.057	CON				
WAYNE	I-275		I-94 WB COLLECTOR OVER I-275	DECK REPLACEMENT	1.057	CON				
WAYNE	I-275		I-94 WB COLLECTOR OVER I-275 SB TO I-94 EB RAMP	DECK REPLACEMENT	1.057	CON				
WAYNE	I-275		I-275 TO I-94 RAMP OVER I-275	SUBSTRUCTURE REPAIR	1.057	CON				
WAYNE	I-275		I-94 WB OVER I-275 SB TO I-94 EB RAMP	DECK REPLACEMENT	0.001		CON			
WAYNE	I-275		I-94 EB OVER I-275	SUBSTRUCTURE REPAIR	0.185		CON			
WAYNE	I-275		I-275 SB OVER EAST HINES DRIVE	OVERLAY - DEEP	0.007			CON		
WAYNE	I-275		I-275 NB OVER EAST HINES DRIVE	OVERLAY - DEEP	0.007			CON		
WAYNE	I-75		I-75 NB CONNECTOR OVER I-75	BRIDGE REPLACEMENT	0.149		CON			
WAYNE	I-75		I-75 CONNECTOR SB OVER I-75	BRIDGE REPLACEMENT	0.149		CON			
WAYNE	I-94		SB WEST GRAND BOULEVARD OVER I-94	BRIDGE REPLACEMENT	0.000			CON		
WAYNE	I-94		I-94 TO WEST GRAND BOULEVARD OVER OPEN AREA	BRIDGE REPLACEMENT	0.000			CON		
WAYNE	I-94		NB WEST GRAND BOULEVARD OVER I-94	BRIDGE REPLACEMENT	0.000			CON		

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

METRO Bridge - Replacement and Rehabilitation (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	I-94		TRUMBULL AVENUE OVER I-94	OVERLAY - SHALLOW	0.000			CON		
WAYNE	I-94		I-94 EB RAMP TO M-10 OVER M-10 SB AND I-94 WB	OVERLAY - SHALLOW	0.000			CON		
WAYNE	I-94		CSX RAILROAD OVER I-94	SUBSTRUCTURE REPAIR	0.000			CON		
WAYNE	I-94		CONRAIL OVER I-94	SUBSTRUCTURE REPAIR	0.000			CON		
WAYNE	I-94		GTW & CONRAIL OVER I-94	PAINTING COMPLETE	0.000			CON		
WAYNE	I-94		WEST GRAND BOULEVARD U-TURN OVER OPEN AREA	BRIDGE REPLACEMENT	0.001			CON		
WAYNE	I-94		M-3 (GRATIOT) OVER I-94	BRIDGE REPLACEMENT	0.001		CON			
WAYNE	M-102		M-102 RAMP OVER M-10 RAMP	DECK REPLACEMENT	0.100	CON				
WAYNE	M-39		JOY ROAD OVER M-39	SUPERSTRUCTURE REPLACEMENT	0.140	CON				
WAYNE	M-39		WEST CHICAGO ROAD OVER M-39	DECK REPLACEMENT	0.140	CON				
WAYNE	M-39		PLYMOUTH ROAD OVER M-39	DECK REPLACEMENT	0.140	CON				
WAYNE	M-39		FENKELL AVENUE OVER M-39	DECK REPLACEMENT	0.140	CON				
WAYNE	M-39		6 MILE ROAD OVER M-39	DECK REPLACEMENT	0.140	CON				
WAYNE	M-39		7 MILE ROAD OVER M-39	DECK REPLACEMENT	0.140	CON				
WAYNE	M-39		FITZPATRICK ROAD OVER M-39	DECK REPLACEMENT	0.646	CON				
WAYNE	M-39		FULLERTON AVENUE OVER M-39	DECK REPLACEMENT	0.646	CON				
WAYNE	M-39		LYNDON AVENUE OVER M-39	SUPERSTRUCTURE REPLACEMENT	0.646	CON				
WAYNE	M-39		CURTIS AVENUE OVER M-39	SUPERSTRUCTURE REPLACEMENT	0.646	CON				
WAYNE	M-39		PEMBROKE AVENUE OVER M-39	SUPERSTRUCTURE REPLACEMENT	0.646	CON				
WAYNE	M-39		SCHOOLCRAFT AVENUE OVER M-39	DECK REPLACEMENT	0.318	CON				
WAYNE	M-39		PURITAN AVENUE OVER M-39	DECK REPLACEMENT	0.318	CON				
WAYNE	M-39		M-102 LEFT TURN RAMP OVER M-39	DECK REPLACEMENT	0.318	CON				
WAYNE	M-39		M-102 EB OVER M-39	DECK REPLACEMENT	0.318	CON				
WAYNE	M-39		SAWYER AVENUE WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.542		CON			
WAYNE	M-39		CATHEDRAL AVENUE WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.542		CON			
WAYNE	M-39		GLENDALE WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.542		CON			
WAYNE	M-39		CSX RAILROAD OVER M-39	PAINTING COMPLETE	1.542		CON			
WAYNE	M-39		TOURNIER AVENUE WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.542		CON			
WAYNE	M-39		VASSAR AVENUE WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.542		CON			
WAYNE	M-39		OUTER DRIVE OVER M-39	SUPERSTRUCTURE REPAIR	0.014	CON				
WAYNE	M-39		M-102 WB OVER M-39	DECK REPLACEMENT	0.014	CON				
WAYNE	M-39		OUTER DRIVE EB OVER M-39	SUPERSTRUCTURE REPAIR	1.029	CON				
WAYNE	M-39		OUTER DRIVE WB OVER M-39	SUPERSTRUCTURE REPAIR	1.029	CON				
WAYNE	M-39		FERN AVENUE OVER M-39	SUPERSTRUCTURE REPAIR	1.029	CON				
WAYNE	M-39		OAKWOOD BOULEVARD OVER M-39	SUPERSTRUCTURE REPAIR	1.029	CON				
WAYNE	M-39		VILLAGE ROAD OVER M-39	SUPERSTRUCTURE REPAIR	1.029	CON				
WAYNE	M-39		HUBBARD AVENUE EB OVER M-39	SUPERSTRUCTURE REPAIR	1.029	CON				

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

METRO Bridge - Replacement and Rehabilitation (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	M-39		HUBBARD AVENUE WB OVER M-39	SUPERSTRUCTURE REPAIR	1.029	CON				
WAYNE	M-85 (Fort Street)		M-85 (FORT STREET) OVER NS RAILROAD AND CONRAIL	BRIDGE REPLACEMENT	0.000	CON				
WAYNE	M-85 (Fort Street)		M-85 (FORT STREET) OVER PLEASANT STREET	BRIDGE REPLACEMENT	0.000	CON				
WAYNE	M-85 (Fort Street)		M-85 (FORT STREET) OVER SANDERS STREET	BRIDGE REMOVAL	0.000	CON				
WAYNE	M-85 (Fort Street)		M-85 NB OVER SEXTON-KILFOIL DRAIN	BRIDGE REPLACEMENT	0.000				CON	
WAYNE	M-85 (Fort Street)		M-85 SB OVER SEXTON-KILFOIL DRAIN	BRIDGE REPLACEMENT	0.000				CON	
WAYNE	US-24		US-24 OVER SMITH CREEK	CULVERT REPLACEMENT	0.094		CON			
WAYNE	US-24		FRISBEE STREET WALKOVER OVER US-24	BRIDGE REPLACEMENT	0.201		CON			
					12.041					

METRO Repair and Rebuild Roads

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
MACOMB	I-696 (Reuther Freeway)		AT I-94	RECONSTRUCTION	0.816	CON				
MACOMB	I-696	FES	GRATIOT TO I-75	ROADSIDE FACILITIES - PRESERVE	9.132	CON				
MACOMB	I-94		M-29 TO NORTH MACOMB COUNTY LINE	RESURFACE	6.179			CON		
MACOMB	I-94		STEPHENS TO MASONIC	RESURFACE	4.971				CON	
MACOMB	M-3 (Gratiot Ave)		11 MILE ROAD TO 14 MILE ROAD	RESURFACE	3.453					CON
MACOMB	M-3 NB (Gratiot Avenue)		REMICK TO SANDPIPER	RESURFACE	3.037		CON			
MACOMB	M-3 SB (Gratiot Avenue)		WELLINGTON CRESCENT TO SANDPIPER	RESURFACE	4.044		CON			
MACOMB	M-53 (Earle Memorial Highway)		34 MILE ROAD TO NORTH MACOMB COUNTY LINE	RECONSTRUCTION	4.436		CON			
MACOMB	M-97 (Groesbeck Highway)		HAYES TO 14 MILE ROAD	RECONSTRUCTION	3.433			CON		
OAKLAND	M-150 (Rochester Road)		2ND STREET TO UNIVERSITY DRIVE	RECONSTRUCTION	0.265			CON		
OAKLAND	M-24 (Lapeer Rd)		BROWN ROAD TO SCRIPPS ROAD	TRAFFIC OPERATIONS OR SAFETY WORK	3.013	CON				
OAKLAND	M-59		AT CROOKS ROAD INTERCHANGE	BRIDGE - IMPROVE	0.000		CON			
OAKLAND	M-59		OPDYKE TO CROOKS	RESURFACE	4.940		CON			
OAKLAND	N QUARTON/TELEGRAPH TURNAR		I-696 TO WEST QUARTON ROAD	RECONSTRUCTION	4.802	CON				
OAKLAND	OLD-59 (Auburn Road)		ADAMS ROAD TO DEQUINDRE ROAD	MAJOR WIDENING	5.997					CON
OAKLAND	US-24 (Telegraph Road)		EAST QUARTON ROAD TO LONG LAKE ROAD	RECONSTRUCTION	1.859	CON				
OAKLAND	US-24 (Telegraph Road)	FES	SQUARE LAKE ROAD TO OLD TELEGRAPH ROAD	RECONSTRUCTION	1.630	CON				
OAKLAND	US-24 (Dixie Highway)		TELEGRAPH TO I-75	RESURFACE	8.602				CON	
OAKLAND	US-BR-24 (Cesar Chavez)		LOOP TO MONTCALM	RESURFACE	1.059		CON			
ST. CLAIR	I-69		AT I-94 INTERCHANGE	RECONSTRUCTION	3.707			CON		

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

METRO Repair and Rebuild Roads (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	E I 94/S I 275 RAMP		EIGHT RAMPS AT I-275	RECONSTRUCTION	1.537	CON				
WAYNE	EXIT 44		I-75 NB OFF RAMP TO DEARBORN ST	RECONSTRUCTION	0.000	CON				
WAYNE	I-75		RAMPS DIX TOLEDO INTERCHANGE	RECONSTRUCTION	0.628		CON			
WAYNE	I-96 (Jefferies Freeway)		MIDDLEBELT TO US-24	RECONSTRUCTION	2.842				CON	
WAYNE	I-96 (Jeffries)		NEWBURGH ROAD TO MIDDLEBELT ROAD	RECONSTRUCTION	4.129					CON
WAYNE	M-1 (Woodward Avenue)		CHANDLER TO SIBLEY	RECONSTRUCTION	2.870	CON				
WAYNE	M-102		M-5 TO ROUGE RIVER	RESURFACE	2.193			CON		
WAYNE	M-102 (Eight Mile Road)		ROUGE RIVER TO M-39	RESURFACE	3.000					CON
WAYNE	M-153 (Ford Road)		VENOY ROAD TO ARCOLA AVENUE	RESURFACE	2.673	CON				
WAYNE	M-39 (Southfield Freeway)		MCNICHOLS TO M-10	RECONSTRUCTION	3.221		CON			
WAYNE	M-85 (Fort Street)		SIBLEY TO GODDARD	RECONSTRUCTION	3.870				CON	
WAYNE	M-85 (Fort Street)		I-75/SCHAEFER TO OAKWOOD	RECONSTRUCTION	1.336	CON				
WAYNE	OLD M-14 (Plymouth Road)		NEWBURGH TO FARMINGTON ROAD	RESURFACE	2.064			CON		
WAYNE	US-12 (Michigan Avenue)	FES	LIVERNOIS TO 28TH STREET	RESURFACE	0.835	CON				
WAYNE	US-12	FES	28TH STREET TO ROSA PARKS	RESURFACE	1.549	CON				
WAYNE	US-12 (Michigan Avenue)		AT WYOMING	ROADSIDE FACILITIES - IMPROVE	0.037	CON				
WAYNE	US-24 (Telegraph Road)		VREELAND TO WEST ROAD	MAJOR WIDENING	2.210		CON			
					110.369					

2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvement

METRO Ambassador Bridge Gateway Program

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	I-75 (Fisher Freeway)		I-75 AND I-96 AT THE AMBASSADOR BRIDGE	LANDSCAPING - NEW	0.642	CON				

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvement

METRO — Blue Water Bridge Plaze and the I-94 / I-69 at the Black River Bridge Corridor,

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ST. CLAIR	I-94		BLACK RIVER BRIDGE	BRIDGE REPLACEMENT	0.205		CON	CON	CON	
ST. CLAIR	I-94		BLACK RIVER BRIDGE	BRIDGE REPLACEMENT		ROW	ROW			
ST. CLAIR	I-94		BLACK RIVER BRIDGE	BRIDGE REPLACEMENT		PE	PE			
ST. CLAIR	I-94 / I-69 FREEWAY		PORT HURON, ST. CLAIR COUNTY	RECNST EXIST, NO WIDEN	2.936		CON	CON	CON	
ST. CLAIR	I-94 / I-69 FREEWAY		PORT HURON, ST. CLAIR COUNTY	RECNST EXIST, NO WIDEN		ROW	ROW			
ST. CLAIR	I-94 / I-69 FREEWAY		PORT HURON, ST. CLAIR COUNTY	RECNST EXIST, NO WIDEN		PE	PE			
ST. CLAIR	AREAWIDE		CITY OF PORT HURON/ST. CLAIR COUNTY	GENERAL MISCELLANEOUS		EPE				
ST. CLAIR	I-94/I-69		AT WATER STREET	BRIDGE REPLACEMENT	0.000		CON	CON		
ST. CLAIR	I-94/I-69		I-94/I-69	WETLAND MITIGATION	0.000		CON			
ST. CLAIR	I-94/I-69		I-94/I-69	WETLAND MITIGATION		PE	PE			
ST. CLAIR	M-25/PINE GROVE AVENUE (Pine G		M-25/PINE GROVE AVENUE	RELOCATION OF EXISTING ROUTE	2.270				CON	CON
ST. CLAIR	M-25/PINE GROVE AVENUE (Pine G		M-25/PINE GROVE AVENUE	RELOCATION OF EXISTING ROUTE		ROW	ROW	ROW	ROW	
ST. CLAIR	M-25/PINE GROVE AVENUE (Pine G		M-25/PINE GROVE AVENUE	RELOCATION OF EXISTING ROUTE		PE	PE	PE	PE	
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	GENERAL MISCELLANEOUS		ROW	ROW	ROW		
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	GENERAL MISCELLANEOUS					UTL	UTL
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		E.C. WILLIAMS HISTORIC HOUSE	GENERAL MISCELLANEOUS	0.000			CON	CON	
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		E.C. WILLIAMS HISTORIC HOUSE	GENERAL MISCELLANEOUS		PE	PE			
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	GENERAL MISCELLANEOUS	0.000				CON	CON
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	GENERAL MISCELLANEOUS		PE	PE	PE		
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	GENERAL MISCELLANEOUS	0.488					CON
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	GENERAL MISCELLANEOUS		ROW	ROW	ROW	ROW	
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	GENERAL MISCELLANEOUS		PE	PE	PE	PE	
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	BLDG EXPN-RST, WEL, WEI		EPE	EPE			
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	BLDG EXPN-RST, WEL, WEI		EPE	EPE			
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	BLDG EXPN-RST, WEL, WEI		EPE	EPE			
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	BLDG EXPN-RST, WEL, WEI	0.000					CON
ST. CLAIR	BLUE WATER BRIDGE PLAZA (Blue		BLUE WATER BRIDGE PLAZA	BLDG EXPN-RST, WEL, WEI			PE	PE	PE	

METRO — Detroit Intermodal Freight Terminal

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	COUNTYWIDE		LIVERNOIS JUNCTION YARD	GENERAL MISCELLANEOUS		ROW	ROW	ROW	ROW	ROW
WAYNE	COUNTYWIDE		LIVERNOIS JUNCTION YARD	GENERAL MISCELLANEOUS		PE	PE	PE	PE	PE

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvement

METRO — I-75, from M-102 (Eight Mile Road) Northerly to M-59

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
OAKLAND	I-75 (Walter P Chrysler Freeway)		M-102 (8 MILE ROAD) TO SOUTH OF 12 MILE ROAD	STUDIES		EPE				
OAKLAND	I-75		12 MILE ROAD TO M-59	STUDIES		EPE				

METRO — I-94, I96 to Connor in Detroit

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	I-94		I-96 TO CONNER AVE IN DETROIT	STUDIES		EPE				
WAYNE	I-94		VANDYKE (M-53) OVER I-94 IN THE CITY OF DETROIT	BRIDGE REPLACEMENT		ROW	ROW	ROW	ROW	ROW

METRO — M-53 at 18 1/2 Mile Road and Van Dyke Road

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
MACOMB	M-53		AT 18 1/2 MILE ROAD & VAN DYKE	NOISE BARRIER TYPE I ON EXISTING ROUTE	0.720	CON	CON			

METRO — M-59, Crooks to Ryan

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
OAKLAND	M-59	FES	FROM CROOKS ROAD TO RYAN ROAD	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M	5.529	CON	CON			
OAKLAND	M-59		FROM CROOKS ROAD TO RYAN ROAD	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M						
OAKLAND	M-59 (Dequindre/M-59 WB Ramp)		AT DEQUINDRE ROAD AND M-150 INTERCHANGES.	SOUND BARRIER TYPE I (REQUIRED) - NEW R	0.000		CON	CON		
					12.790					

2010-2014 ROAD & BRIDGE PROGRAM
New Roads

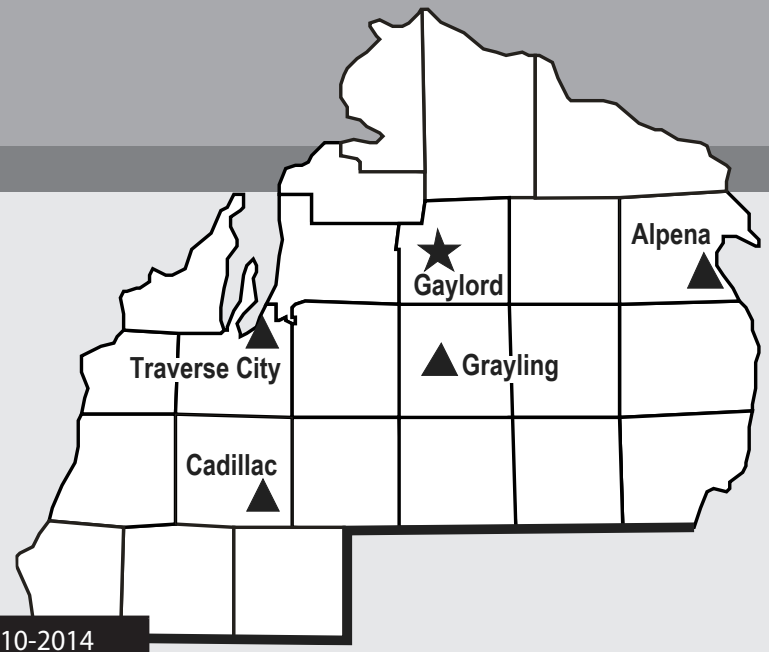
METRO — Detroit River International Crossing

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WAYNE	I-75		DETROIT RIVER INTNL. CROSSING	NEW ROUTES		PE	PE	PE	PE	PE
WAYNE	I-75 (I-75)		FROM CLARK STREET TO WEST END	NEW ROUTES		PE	PE	PE	PE	PE
					0.000					

** Projects that may be delayed due to the reduced highway investment strategy.*

NORTH REGION

The North Region is comprised of the 24 northernmost counties of the Lower Peninsula, which are: Alcona, Alpena, Antrim, Benzie, Charlevoix, Cheboygan, Crawford, Emmet, Grand Traverse, Iosco, Kalkaska, Lake, Leelanau, Manistee, Mason, Missaukee, Montmorency, Ogemaw, Osceola, Oscoda, Otsego, Presque Isle, Roscommon, and Wexford. Major routes include I-75, US-127, US-23, US-131, and US-31.



Five-Year Road and Bridge Program

The road and bridge preservation projects identified in this 2010 to 2014 Five-Year Transportation Program for the North Region total approximately $186 million. Investment is allocated in the following manner:

North Region	Total 2010-2014
Road Preservation	$112 million
Bridge Preservation	$9 million
Road and Bridge CPM	$65 million
Total 2010-2014	**$186 million**

(Amounts are rounded to the nearest million dollars)
(Road Preservation includes Roadside Facilities)

Capital Preventive Maintenance (CPM) projects are planned for a significant number of pavements and structures that do not require extensive repairs during this Five-Year Transportation Program period. CPM projects are short-term fixes, adding from five to 10 years of life to a pavement or maintaining the existing structure condition.

North Region	Route Miles of Road	Number of Bridges and Structures
Total in Region	1,962	461
Scheduled Work	94	7
Percentage of Region	5%	2%

The 2010-2014 program for road preservation work reflects approximately 94 (five percent) of the North Region's more than 1,962 route miles of state trunklines during the next five years. The 2009-2013 program for bridge preservation work will address seven (two percent) of the region's 461 trunkline bridges and structures.

There are also a number of programs that are selected based on statewide priorities or where project identification is completed throughout the year. These investments are not reflected above, but are included in the statewide investment strategy. Below is a brief description of major preservation projects that are currently planned for the 2010-2014 program.

2010

Replacement of the US-131 Bridge over the Manistee River in Wexford County. This work began in 2009 as part of the ARRA program, with a full detour to be in place over the winter of 2009/2010. The new bridge will provide the correct width at this juncture between the ending of the US-131 freeway section and the "Super-Two" section which transitions traffic into a traditional 2-lane/2-way roadway.

Reconstruction of 1.38 miles of M-68 in the City of Onaway, Presque Isle County. This project includes coordination with the city's watermain construction grant and loan project. The total reconstruction work includes new storm sewer, new pavement, curb and gutter, sidewalks, and slope restoration.

Reconstruction of the entire length (0.953 mile) of M-168 (Frankfort Avenue) in the Village of Elberta, Benzie County. Drainage work, removal of unsuitable soils, safety, and streetscaping enhancement items are included in this project.

Reconstruction and turnback of 1.069 miles of M-108 in Mackinaw City, Cheboygan County. The work will include crushing and shaping, hot mix asphalt resurfacing, and geometric improvements.

2011

Resurfacing on 6.5 miles of **US-31, from south of Coates Highway to Maidens Road, in Manistee County.**

Deck replacements on the **M-37 Bridge over the Pine River, and US-131 over the Clam River, both in Wexford County.**

2012

Reconstruction of 1.85 miles on **US-23, from the AuSable River Bridge to F-41 in Iosco County.**

I-75BL from I-75 to Woodland Drive in West Branch in Ogemaw County, 1.4 miles of resurfacing.

2013

Replacement of the **M-65 bridge over the North Branch of the Thunder Bay River in Alpena County.**

Reconstruction of 7.01 miles on **I-75 from Maple Valley Road to Nine Mile Hill Road, Roscommon county.**

2014

Replacement of the **M-22 Bridge over the Platte River, in Benzie County.**

US-131 SB, from the south county line to North of US-10, in Osceola County, 5.63 miles of pavement resurfacing.

CAPACITY IMPROVEMENTS AND NEW ROADS

US-131 over the Manistee River. This project will replace the existing bridge over the Manistee River in Wexford County with a wider bridge to meet the road cross section leading to and from the bridge. An innovative road design was used in this area to allow for a smooth transition from a 70 mile per hour limited access freeway to a 55 mile per hour two-lane free access road. The project is using American Recovery and Reinvestment Act, SAFETEA-LU, and TEA-21 funds. The construction will be completed in late 2010.

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

NORTH Bridge - Replacement and Rehabilitation

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ALPENA	M-65		M-65 OVER NORTH BRANCH THUNDER BAY RIVER	BRIDGE REPLACEMENT	0.493				CON	
BENZIE	M-22		M-22 OVER PLATTE RIVER	BRIDGE REPLACEMENT	0.069					CON
EMMET	M-68		M-68 OVER CROOKED RIVER	DECK REPLACEMENT	0.263			CON		
OGEMAW	I-75		I-75 NB OVER BRANCH LAPORTE CREEK	CULVERT REPLACEMENT	1.204		CON			
OGEMAW	I-75		I-75 SB OVER BRANCH LAPORTE CREEK	CULVERT REPLACEMENT	0.100			CON		
WEXFORD	M-37		M-37 OVER PINE RIVER	DECK REPLACEMENT	1.204		CON			
WEXFORD	US-131 BR		US-131 OVER CLAM RIVER	DECK REPLACEMENT	0.292		CON			
					3.625					

NORTH Repair and Rebuild Roads

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ALPENA	M-32		INTERSECTION AT RIPLEY STREET IN ALPENA	RECONSTRUCTION	0.456		CON			
ANTRIM	M-88		BELLAIRE TO CENTRAL LAKE	RESTORATION AND REHABILITATION	5.540				CON	
ANTRIM	US-31		FROM ELK RAPIDS TO CAMPBELL ROAD	RESTORATION AND REHABILITATION	4.697		CON			
BENZIE	M-168 (Frankfort Ave)		ENTIRE LENGTH OF M-168	RECONSTRUCTION	0.953	CON				
BENZIE	US-31		FROM BEULAH BRIDGE TO M-115	RESURFACE	0.607			CON		
CHARLEVOIX	M-32		M-32 FROM EAST JORDAN SOUTHERLY TO ROGERS ROAD	RESTORATION AND REHABILITATION	1.890		CON			
CHEBOYGAN	M-108		BETWEEN I-75 RAMPS AND OLD 31 TO END OF ROUTE	RESURFACE	1.069	CON				
CHEBOYGAN	US-23		FROM CHEBOYGAN EAST COUNTY LINE TO CORDWOOD	RESTORATION AND REHABILITATION	6.837		CON			
CRAWFORD	I-75		AT THE HARTWICK PINES REST AREA	ROADSIDE FACILITIES - IMPROVE	0.481		CON			
EMMET	US-31		US-31 FROM WEST OF DIVISION TO MANVEL AND M-119	TRAFFIC OPERATIONS OR SAFETY WORK	1.217		CON			
EMMET	US-31		PARADISE TR TO I-75	RESTORATION AND REHABILITATION	5.117			CON		
GRAND TRAVERSE	M-113		N. OF M-186 SOUTH TO US-131	RESTORATION AND REHABILITATION	5.088					CON
GRAND TRAVERSE	US-31		AT TOBECO CREEK	RECONSTRUCTION	0.114			CON		
IOSCO	M65		TURTLE RD TO 1200' NORTH OF SHERMAN STREET	RESTORATION AND REHABILITATION	3.213				CON	
IOSCO	US-23 (US-23)		AUSABLE RIVER BRIDGE TO F-41	RECONSTRUCTION	1.850			CON		
IOSCO	US-23		CRESENT DR. TO AU SABLE RIVER BRIDGE	RESTORATION AND REHABILITATION	4.700					CON
LAKE	US-10		DEPOT STREET TO WEST OF SADDLER ROAD	RESURFACE	1.764			CON		
LAKE	US-10		WEST OF WAVERLY ROAD TO BROADWAY	RESURFACE	0.950	CON				

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

NORTH Repair and Rebuild Roads (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
LEELANAU	M-22 (South Leelanau Highway)		FROM COUNTY LINE TO EMPIRE	RESTORATION AND REHABILITATION	2.687	CON				
LEELANAU	M-22 (West Bay Shore Drive)		FROM M-201 TO OMENA	RESTORATION AND REHABILITATION	5.043					CON
LEELANAU	M-22		FROM M-204 NORTH APPROX. .82 MILES	RESTORATION AND REHABILITATION	0.816				CON	
MANISTEE	US-31 (S US 31)		US-31 AT MEMORIAL DRIVE	TRAFFIC OPERATIONS OR SAFETY WORK	0.119			CON		
MANISTEE	US-31 (Chippewa Hwy)		SOUTH OF COATES HIGHWAY TO MAIDENS ROAD	RESURFACE	6.498		CON			
OGEMAW	I-75 BL		I-75 TO WOODLAND DR	RESTORATION AND REHABILITATION	2.080			CON		
OSCEOLA	US-10	FES	WEST COUNTY LINE TO US-131 INTERCHANGE	RESURFACE	1.890	CON				
OSCEOLA	US-131 SB		SOUTH COUNTY LINE TO NORTH OF US-10	RESTORATION AND REHABILITATION	5.630					CON
PRESQUE ISLE	M68 (M-68)		IN THE CITY OF ONAWAY	RECONSTRUCTION	1.380	CON				
ROSCOMMON	I-75		FROM MAPLE VALLEY ROAD TO NINE MILE HILL ROAD	RESTORATION AND REHABILITATION	7.010				CON	
ROSCOMMON	M-55		ROSCOMMON CO WCL TO US-127	RESTORATION AND REHABILITATION	2.213		CON			
ROSCOMMON	US-127 (US-127)		MUSKEGON RIVER NORTH	RESTORATION AND REHABILITATION	3.748					CON
ROSCOMMON	US-127 NB		AT HOUGHTON LAKE REST AREA	ROADSIDE FACILITIES - PRESERVE	0.335					CON
ROSCOMMON	US-127 SB		AT THE HIGGINS LAKE REST AREA	ROADSIDE FACILITIES - PRESERVE	0.514					CON
WEXFORD	M-115		45 ROAD TO WEST OF 48 1/2 ROAD	RECONSTRUCTION	1.400			CON		
WEXFORD	M-37 (M-37)		M-115 TO NORTH OF 10 ROAD	RESURFACE	3.995				CON	
WEXFORD	US-131BR (Mitchell St)		RIVER STREET TO NORTH OF BOON ROAD	RECONSTRUCTION	2.120		CON			
					94.021					

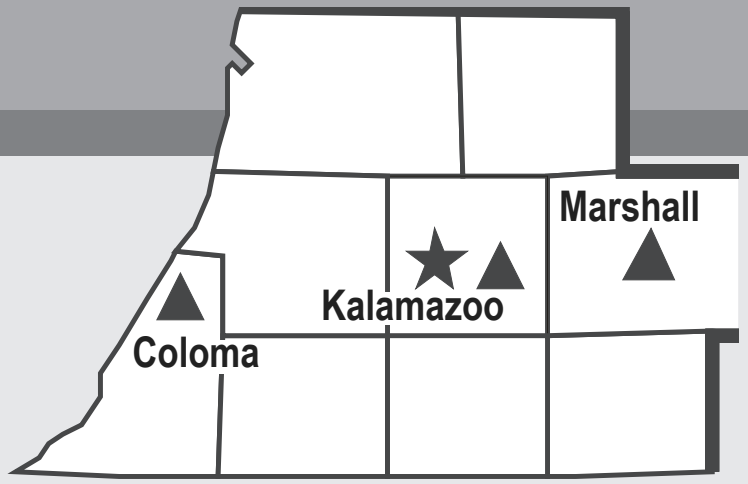
2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvement

NORTH US-131 Rel, S/ Cadillac to Manistee River

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
WEXFORD	US-131		OVER THE MANISTEE RIVER	BRIDGE REPLACEMENT	2.213	CON	CON			
WEXFORD	US-131	FES	OVER THE MANISTEE RIVER	BIT RESURF & MINOR WIDENING	1.110	CON	CON			
					3.323					

** Projects that may be delayed due to the reduced highway investment strategy.*

SOUTHWEST REGION



The Southwest Region covers nine counties in the southwestern part of the state: Allegan, Barry, Berrien, Branch, Calhoun, Cass, Kalamazoo, St. Joseph, and Van Buren Counties. Major state highways include: I-69, I-94, I-196, US-12, US-31, and US-131.

The region is traversed by I-94, an important international trade corridor linking Port Huron and Detroit to Chicago and Toronto. This makes the Southwest Region an ideal location for many industries, particularly those supporting the automobile manufacturing industry.
The region is also home to a significant portion of the agricultural industry, encompassing over 9,500 farms that annually produce agricultural products with a market value of over $900 million. To bolster industries and commerce that are important to the region and the state, project selection emphasizes freeway improvements and modernization.

Five-Year Road and Bridge Program

The road and bridge preservation projects identified in this 2010 to 2014 Five-Year Transportation Program for the Southwest Region total approximately $301 million. Investment is allocated in the following manner:

Southwest Region	Total 2010-2014
Road Preservation	$170 million
Bridge Preservation	$54 million
Road and Bridge CPM	$77 million
Total 2010-2014	**$301 million**

(Amounts are rounded to the nearest million dollars)
(Road Preservation includes Roadside Facilities)

Capital Preventive Maintenance (CPM) projects are planned for a significant number of pavements and structures that do not require extensive repairs during this Five-Year Transportation Program period. CPM projects are short-term fixes, adding from five to 10 years of life to a pavement or maintaining the existing structure condition.

Southwest Region	Route Miles of Road	Number of Bridges and Structures
Total in Region	1,226	607
Scheduled Work	86	38
Percentage of Region	7%	6%

The 2010-2014 program for road preservation work reflects approximately 86 (seven percent) of the Southwest Region's more than 1,226 route miles of state trunklines during the next five years. The 2010-2014 program for bridge preservation work will address 38 (six percent) of the region's 607 trunkline bridges and structures.

There are also a number of programs that are selected based on statewide priorities or where project identification is completed throughout the year. These investments are not reflected above, but are included in the statewide investment strategy. Below is a brief description of major preservation projects that are currently planned for the 2010-2014 program.

2010

I-196 from 118th Avenue to 130th Avenue will be resurfaced and the Plummerville Creek culvert will be replaced.

US-12 from Mason Street to the St. Joseph River in Union will be rehabilitated in 2010.

M-40 from St. Joseph Avenue to Power Plant Road in PawPaw will be resurfaced and operational changes implemented.

US-131 under 142nd Street in Kalamazoo County will have a superstructure replacement.

I-94 under Britain Road in Berrien County will have its superstructure replaced in 2011.

2011

I-94 westbound from 23 Mile Road to 29 Mile Road will be resurfaced during the summer of 2011.

M-140 from Dan Smith Road to the north city limits of Watervliet is programmed for reconstruction and drainage improvements in 2011.

M-96 from Michigan Avenue to 35th Street in Galesburg will be widened for a left turn lane and resurfaced.

M-89 from 28th Street to Kalamazoo Street in Allegan County will be rehabilitated in 2011.

2012

Northbound I-196 from 130th Avenue north to the US-31/I-196 split in Allegan County will be rehabilitated.

I-94 eastbound from Park Road to Hennesey in Berrien County will be resurfaced in 2012.

M-89 from west of US-131 to Hicks Street in Plainwell will be reconstructed and the bridge carrying M-89 over the Kalamazoo River Mill Race will be replaced in 2012.

2013

US-12 from Red Arrow Highway to Hoder Road will be rehabilitated in 2013.

US-12 from M-60 to the west village limit of Edwardsburg will be rehabilitated in 2013.

I-94 from Sawyer (Exit 12) to Red Arrow Highway (Exit 16) in Berrien County will be resurfaced.

2014

Southbound I-196 from 130th Avenue north to the US-31/I-196 split in Allegan County will be rehabilitated.

I-94BL from 11th Street to Seneca Lane in Kalamazoo will be reconstructed and the **I-94BL Bridge over US-131** will be replaced.

1-94 from Red Arrow Highway northerly for 1.6 miles in Berrien County will be rehabilitated.

I-94BL from 29 Mile Road/Clark Street to I-94 in Albion will be resurfaced in 2014.

CAPACITY IMPROVEMENT AND NEW ROADS

I-94, US-131 to Sprinkle Road in Kalamazoo County. This project will widen I-94 from two to three lanes in each direction between the US-131 interchange and Sprinkle Road. Construction of the segment between US-131 and Oakland Drive is complete and open to traffic. Construction of the segment from Oakland Drive east to east of Lover's Lane has begun and will be completed in 2011.

Part of this project is to replace the interchange at I-94 and Westnedge Avenue with a single point urban interchange. American Recovery and Reinvestment Act funding made this project possible in 2009.

US-131, Constantine By-Pass in St. Joseph County. This project includes a new two-lane bypass of the Village of Constantine from just north of Dickinson Road to south of Garber Road and truck climbing lanes on existing US-131 between Drummond Road and Gleason Road. The initial construction of this project will be between Dickinson Road and Quarterline Road. Design and right-of-way acquisition are underway and construction is scheduled for 2012. Subsequent construction phases will be programmed as funding becomes available.

US-31, Napier Avenue to I-94 in Berrien County. Design of this project is complete and right-of-way acquisition will continue in 2010; however, funding to construct this project has not been identified. This project will complete the last section of US-31 as a four-lane freeway between Napier Avenue and I-94 east of Benton Harbor.

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

SOUTHWEST **Bridge - Replacement and Rehabilitation**

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ALLEGAN	M-89		M-89 (ALLEGAN ST) OVER KALAMAZOO RIVER MILL RACE	BRIDGE REPLACEMENT	0.196			CON		
ALLEGAN	US-131		M-89 OVER US-131	OVERLAY - DEEP	0.390			CON		
ALLEGAN	US-131		M-89 OVER US-131	OVERLAY - DEEP	0.390			CON		
ALLEGAN	US-131		142ND AVENUE OVER US-131	SUPERSTRUCTURE REPLACEMENT	0.230	CON				
ALLEGAN	US-131		106 TH AVENUE OVER US-131	SUBSTRUCTURE REPAIR	0.436		CON			
ALLEGAN	US-31 BR		US-31 BR (58 TH) OVER NORTH BRANCH CREEK	SUBSTRUCTURE REPAIR	0.102		CON			
ALLEGAN	US-31 BR		US-31 BR (RAMP) OVER NORTH BRANCH CREEK	SUBSTRUCTURE REPAIR	0.102		CON			
BARRY	M-43		M-43 OVER THORNAPPLE RIVER	OVERLAY - DEEP	0.167			CON		
BERRIEN	I-196		I-196 NB OVER COLOMA ROAD	OVERLAY - DEEP	0.281		CON			
BERRIEN	I-196		I-196 SB OVER COLOMA ROAD	OVERLAY - DEEP	0.281		CON			
BERRIEN	I-94		BRITAIN ROAD OVER I-94	SUPERSTRUCTURE REPLACEMENT	0.552	CON				
BERRIEN	I-94		WILSON ROAD OVER I-94	OVERLAY - DEEP	2.417	CON				
BERRIEN	I-94		WARREN WOODS ROAD OVER I-94	OVERLAY - DEEP	2.417	CON				
BERRIEN	I-94		EAST ROAD OVER I-94	OVERLAY - DEEP	2.417	CON				
BERRIEN	I-94 (E I 94)		BENTON CENTER ROAD OVER I-94	OVERLAY - DEEP	3.438	CON				
BERRIEN	US-31 BR		US-31 BR OVER DOWAGIAC RIVER	SUPERSTRUCTURE REPLACEMENT	0.000			CON		
BRANCH	M-86 (Colon Road)		M-86 OVER MATTESON CREEK	BRIDGE REPLACEMENT	0.000	CON				
BRANCH	M-86		M-86 OVER BATAVIA #1 & #7 DRAIN	CULVERT REPLACEMENT	0.987		CON			
BRANCH	US-12		US-12 OVER PRAIRIE RIVER	BRIDGE REPLACEMENT	0.682	CON				
CALHOUN	I-194		I-194 OVER I-94 BL (DICKMAN ROAD)	SUPERSTRUCTURE REPAIR	0.121			CON		
CALHOUN	I-194		I-194 OVER FOUNTAIN STREET	OVERLAY - DEEP	0.121			CON		
CALHOUN	I-194		I-194 OVER GTW RAILROAD	OVERLAY - DEEP	0.110			CON		
CALHOUN	I-69		P DRIVE S OVER I-69	OVERLAY - DEEP	1.390		CON			
CALHOUN	I-69		J DRIVE SOUTH OVER I-69 SB	DECK REPLACEMENT	4.171	CON				
CALHOUN	I-69		J DRIVE SOUTH OVER I-69 NB	DECK REPLACEMENT	4.171	CON				
CALHOUN	I-94		22 1/2 MILE ROAD OVER I-94	OVERLAY - SHALLOW	0.309		CON			
CALHOUN	I-94		M-199 (26 MILE ROAD) OVER I-94	OVERLAY - SHALLOW	0.309		CON			
CALHOUN	M-66		M-66 OVER WANONDAGA CREEK	BRIDGE REPLACEMENT	0.785			CON		
CALHOUN	M-96		M-96 (COLUMBIA) OVER RAYMOND ROAD	SUPERSTRUCTURE REPLACEMENT	0.128				CON	
CALHOUN	M-99		M-99 (SUPERIOR STREET) OVER KALAMAZOO RIVER	SUPERSTRUCTURE REPLACEMENT	0.558	CON				
CASS	US-12		US-12 OVER VALLEY CREEK	BRIDGE REPLACEMENT	0.708	CON				
CASS	US-12		US-12 OVER MUD CREEK	MISCELLANEOUS BRIDGE CPM	0.708	CON				
KALAMAZOO	M-331		M-331 (PARK STREET) OVER AXTELL CREEK	BRIDGE REPLACEMENT	0.001			CON		
KALAMAZOO	US-131		I-94 BUSINESS LOOP (STADIUM DRIVE) OVER US-131	BRIDGE REPLACEMENT	0.040					CON

** Project~~s that may be~~ delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

SOUTHWEST Bridge - Replacement and Rehabilitation (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
VAN BUREN	I-196		I-196 NB OVER 20 TH AVENUE (CR 380)	DECK REPLACEMENT	3.878	CON				
VAN BUREN	I-196		I-196 SB OVER 20 TH AVENUE (CR 380)	DECK REPLACEMENT	3.878	CON				
VAN BUREN	I-94 (E I 94)		44 TH AVENUE (CR 376) OVER I-196	OVERLAY - DEEP	3.438	CON				
VAN BUREN	I-94 (E I 94)		46 TH STREET OVER I-94	OVERLAY - SHALLOW	3.438	CON				
					25.515					

SOUTHWEST Repair and Rebuild Roads

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ALLEGAN	I-196		118TH AVENUE NORTH TO 130TH AVENUE	RESURFACE	6.436	CON				
ALLEGAN	I-196		I-196 OVER PLUMMERVILLE CREEK	CULVERT REPLACEMENT	6.436	CON				
ALLEGAN	I-196		SB ONLY 130TH AVENUE NORTH TO US-31	RESTORATION AND REHABILITATION	7.375					CON
ALLEGAN	I-196 NB		AT THE SAUGATUCK REST AREA #727	ROADSIDE FACILITIES - IMPROVE	0.589				CON	
ALLEGAN	M-89 (Allegan Street)		28TH STREET EAST TO KALAMAZOO STREET	RECONSTRUCTION	7.519		CON			
ALLEGAN	M-89 (Allegan St)		WEST OF US-131 EAST TO HICKS STREET IN PLAINWELL	RECONSTRUCTION	1.210			CON		
ALLEGAN	NB I-196		NORTHBOUND ONLY, 130TH AVE. NORTH TO US-31 SPLIT	RESTORATION AND REHABILITATION	8.481			CON		
ALLEGAN	US-131 NB		AT THE NEW MARTIN TOWNSHIP REST AREA	ROADSIDE FACILITIES - PRESERVE	0.787			CON		
BARRY	M-37 (Broadway Street)		HANOVER STREET TO M-43 (STATE STREET)	RESURFACE	3.226			CON		
BARRY	M-43 (South Broadway Street)		M-37/M-43 (STATE STREET) TO NORTH STREET	RESTORATION AND REHABILITATION	1.334			CON		
BERRIEN	I-94		SAWYER (EXIT 12) TO RED ARROW HWY (EXIT 16)	RESURFACE	4.100				CON	
BERRIEN	I-94		NORTHERLY FROM RED ARROW HWY FOR 1.6 MILES	RESURFACE	1.600					CON
BERRIEN	I-94 EB		PARK ROAD TO HENNESEY	RECONSTRUCTION	2.138			CON		
BERRIEN	M-140 (N Main St)		DAN SMITH ROAD TO WATERVLIET NORTH CITY LIMITS	RECONSTRUCTION	2.400		CON			
BERRIEN	US-12		RED ARROW HIGHWAY TO HODER ROAD	RESTORATION AND REHABILITATION	1.636				CON	
BERRIEN	US-12 BR (N Lincoln Ave)	FES	US-12 BR FROM GRANT ST. TO THE ST. JOSEPH RIVER	RESURFACE	0.307	CON				
CALHOUN	I-94		M-311 (11 MILE ROAD) INTERCHANGE (EXIT 104)	RESTORATION AND REHABILITATION	0.678	CON				
CALHOUN	I-94 BL (E Michigan Ave)		29 MILE ROAD/CLARK STREET TO I-94	RESURFACE	1.964					CON
CALHOUN	I-94 BL (Columbia Ave W)		I-94 TO COLUMBIA AVENUE	RESURFACE	1.599					CON
CALHOUN	I-94 BL (E Michigan Ave)		EAST OF EAST DRIVE TO WEST OF CENTENNIAL ROAD	MISCELLANEOUS	0.114	CON				
CALHOUN	I-94 WB		23 MILE ROAD TO 29 MILE ROAD	RESURFACE	6.199		CON			
CALHOUN	M-60 (Leigh St)		WITHIN THE VILLAGE OF HOMER	RESURFACE	0.845		CON			
CASS	US-12		MASON STREET IN UNION TO ST. JOSEPH RIVER	RESTORATION AND REHABILITATION	5.919	CON				
CASS	US-12		M-60 TO EDWARDSBURG	RESURFACE	7.258				CON	
KALAMAZOO	I-94BL (Stadium Dr)		11TH STREET TO SENECA LANE, KALAMAZOO	RECONSTRUCTION	0.695					CON
KALAMAZOO	M-96 (East Michigan Avenue)		MICHIGAN AVENUE TO 35TH STREET	RESURFACE	3.868		CON			
VAN BUREN	M-40 (North Kalamazoo Street)	FES	ST. JOSEPH AVENUE TO POWER PLANT ROAD	RESURFACE	1.460	CON				
					79.737					

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvement

SOUTHWEST I-94 In Portage

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
KALAMAZOO	I-94 (I-94)	FES	AT NORFOLK SOUTHERN RR (R02 & R05), PORTAGE	RAILROAD OVERSIGHT	0.001	CON				

SOUTHWEST I-94 In Kalamazoo

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
KALAMAZOO	I-94		WEST OF 12TH STREET TO EAST OF SPRINKLE ROAD	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M		PE				
KALAMAZOO	I-94	FES	FROM EAST OF OAKLAND DRIVE TO EAST OF LOVERS LANE	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M	1.895	CON	CON			
KALAMAZOO	KILGORE/ W I 94 RAMP		EAST OF LOVERS LANE TO EAST OF PORTAGE ROAD	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M		ROW	ROW	ROW	ROW	ROW
KALAMAZOO	KILGORE/ W I 94 RAMP		EAST OF LOVERS LANE TO EAST OF PORTAGE ROAD	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M		PE	PE	PE	PE	PE
KALAMAZOO	I-94		ROAD AND BRIDGE RECONSTRUCTION	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M		ROW	ROW	ROW	ROW	ROW
KALAMAZOO	I-94		ROAD AND BRIDGE RECONSTRUCTION	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M		PE	PE	PE	PE	PE
					1.896					

2010-2014 ROAD & BRIDGE PROGRAM
New Roads

SOUTHWEST US-131 Relocated, Berrien County

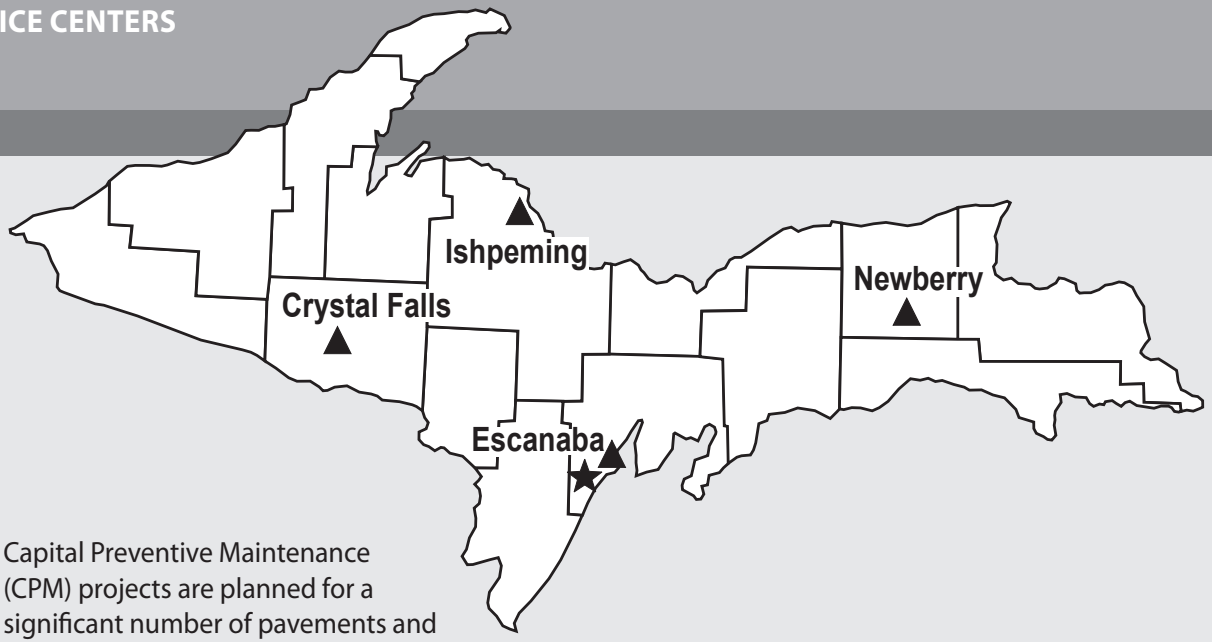
COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
BERRIEN	US-31 RELOCATION		NORTH OF NAPIER ROAD TO I-94	RELOCATION OF EXISTING ROUTE		ROW	ROW	ROW		

SOUTHWEST US-131, State Line to Lockport Township Line

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ST. JOSEPH	US-131		ST. JOSEPH COUNTY	RELOCATION OF EXISTING ROUTE	10.294			CON	CON	CON
ST. JOSEPH	US-131		ST. JOSEPH COUNTY	RELOCATION OF EXISTING ROUTE		ROW	ROW	ROW		
ST. JOSEPH	US-131		ST. JOSEPH COUNTY	RELOCATION OF EXISTING ROUTE		PE	PE	PE	PE	
					10.294					

** Projects that may be delayed due to the reduced highway investment strategy.*

SUPERIOR REGION



The Superior Region includes all 15 counties in the Upper Peninsula: Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft. Major state and federal highways include: I-75, US-41, US-45, US-2, M-26, M-35, M-95, M-117 and M-28. Connecting these state highways are six economic centers: Escanaba, Iron Mountain, Marquette, Houghton, Menominee, and Sault Ste. Marie.

Five-Year Road and Bridge Program

The road and bridge preservation projects identified in this 2010 to 2014 Five-Year Transportation Program for the Superior Region total approximately $164 million. Investment is allocated in the following manner:

Superior Region	Total 2010-2014
Road Preservation	$80 million
Bridge Preservation	$11 million
Road and Bridge CPM	$73 million
Total 2010-2014	**$164 million**

(Amounts are rounded to the nearest million dollars)

Capital Preventive Maintenance (CPM) projects are planned for a significant number of pavements and structures that do not require extensive repairs during this Five-Year Transportation Program period. CPM projects are short-term fixes, adding from five to 10 years of life to a pavement or maintaining the existing structure condition.

Superior Region	Route Miles of Road	Number of Bridges and Structures
Total in Region	1,820	487
Scheduled Work	147	9
Percentage of Region	8%	2%

The 2010-2014 program for road preservation work reflects approximately 147 (eight percent) of the Superior Region's more than 1,820 route miles of state trunklines during the next five years. The 2010-2014 program for bridge preservation work will address nine (two percent) of the region's 487 trunkline bridges and structures.

There are also a number of programs that are selected based on statewide priorities or where project identification is completed throughout the year. These investments are not reflected above, but are included in the statewide investment strategy. Below is a brief description of major preservation projects that are currently planned for the 2010-2014 program.

2010

In 2010, seven road and ITS projects are planned for construction in the Superior Region, totaling approximately $6.9 million. Road projects were selected in Marquette, Delta, and Gogebic Counties. Two additional ITS projects will be constructed at various locations throughout the Upper Peninsula.

US-41 Intersection Improvements, Marquette County (ARRA Funded)
The Upper Peninsula's first round-about will be constructed in Marquette County in 2010. The round-about will be constructed at the Front Street and US-41 location just south of downtown Marquette, and will replace the existing, deteriorated multi-ramp intersection. The project will be funded through the ARRA.

I-75 Business Spur Reconstruction, Chippewa County
More than one-half mile of I-75 BS will be reconstructed in Sault Ste. Marie, from 10th Avenue to Easterday Avenue. MDOT is partnering with the city to upgrade water main lines throughout this project area, as well as upgrade existing sidewalk ramps to current Americans with Disabilities Act standards. MDOT is also coordinating this project with a locally funded streetscape project planned for 2011 along the I-75BS, from Easterday Avenue to the Power Canal (Sheridan Street). This project is located along an MDOT Corridor of International Significance and is nearly two miles from the International Bridge border crossing.

Intelligent Transportation Systems Projects, Various Upper Peninsula Locations (ARRA Funded)
Two Intelligent Transportation Systems (ITS) projects will be funded in 2010 as part of the ARRA. The ITS projects will include eight Road Weather Information Systems (RWIS) and the installation of Digital Message Signs (DMS) at numerous locations. These projects will enable MDOT to provide real-time information pertaining to weather and road conditions and advanced warning of planned and unplanned detours and closures.

US-41 Reconstruction, Menominee County
Nearly two miles of US-41 will be reconstructed in Menominee County from 20th Avenue to 48th Avenue. The project will include two-lane re-configurations: a one mile stretch of four-lane highway will be converted to a three-lane, and a one mile stretch will be converted from a four-lane to a five-lane configuration. The lane re-configurations will improve safety and maintain capacity through this busy section of US-41. MDOT will also be partnering with the city to upgrade utilities, improve sidewalk ramps, and implement access management wherever possible.

US-2 Reconstruction, Iron County
Nearly a mile of US-2 through Crystal Falls Township and the city will be reconstructed, from US-141 to Sheldon Street. The roadway will be re-configured from a two-lane to a three-lane section, making the entire city/township corridor a contiguous three-lane highway. MDOT is partnering with the local governments to ensure utility upgrades are coordinated with the road construction project. MDOT also partnered with the city and township to submit a successful enhancement application to make major aesthetic and non-motorized improvements along this commercial corridor.

US-41 Baraga Cliffs Project, Baraga County
A one mile section of US-41 will be re-located 100 feet west in Baraga County as a result of a receding cliff along the east side of the highway. The project will begin at Old US-41 and end at Chelsey Creek. MDOT partnered with the owners of an existing railroad to provide the necessary right-of-way for the relocation. MDOT also partnered with the Michigan Technological University to conduct a two-year study which monitored the rate of recession of the Baraga Cliffs.

2011

US-141, Dickinson County
A major road and bridge project is planned for US-141, from the Wisconsin state line to US-2 in Dickinson County. A new bridge will be installed on US-141 over the Menominee River, just south of Iron Mountain. The bridge will include 10-foot shoulders and a barrier separated 8-foot-wide non-motorized pathway on the east side of the structure.

MDOT collaborated with Dickinson County, the Cities of Niagara and Iron Mountain, and the Wisconsin Department of Transportation to ensure the new structure will accommodate future needs. US-141 will be resurfaced and intersection improvements will be made at the Breitung Cutoff Road intersection. Safety improvements will also be made at or near the US-2/US-141 intersection, improving traffic flow on and off of US-2.

US-2 Reconstruction, Mackinac County
Approximately five miles of US-2 will be reconstructed from M-117 to the Milecoquins River. Located along a "Corridor of International Significance," this section of highway receives a significant amount of tourist and commercial traffic. As such, the road will remain open during construction, via a temporary widening. The project will also include a new carpool lot at the northeast corner of M-117 and US-2.

2012

US-41 Reconstruction, Menominee County
Approximately eight miles of US-41 will be reconstructed in Menominee County, from G12 Road to Bagley. Portions of this project throughout the City of Stephenson will include a two- to three-lane conversion. Additional coordination with local officials will occur to ensure access management improvements will be pursued at key locations.

US-2 Reconstruction, Iron County
A half mile section of US-2 will be reconstructed through Iron River, from 9th Street to River Street. MDOT is coordinating with the city to ensure utility upgrades are coordinated with the road construction project. MDOT has also worked with the city to submit an enhancement application to improve aesthetics and non-motorized accommodations along the section of highway.

2013

M-189 Reconstruction, Iron County
Over a mile of M-189 will be reconstructed in Iron County, from Hiawatha Street to US-2. A major portion of this project will include the removal of a curved section of roadway. This will improve the safety by correcting existing site distance issues. In hopes of further improving safety and maintaining capacity, MDOT will also pursue the conversion of this portion of highway from a four-lane to a three-lane configuration.

2014

M-35 Reconstruction, Menominee County
A major reconstruction project is planned for a one mile section of M-35, just north of downtown Menominee. Project limits will extend from US-41, north to 40th Avenue MDOT will partner with the city to coordinate utility upgrades and non-motorized facility improvements with the road construction project.

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

SUPERIOR Bridge - Replacement and Rehabilitation

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
CHIPPEWA	I-75		EASTERDAY AVENUE OVER I-75	WIDEN-MAINT LANES	0.254		CON			
CHIPPEWA	I-75		EASTERDAY AVENUE OVER I-75	OVERLAY - DEEP	0.254		CON			
CHIPPEWA	M-129		M-129 OVER SOUTH BRANCH CHARLOTTE RIVER	BRIDGE REPLACEMENT	0.000	CON				
DICKINSON	US-141		US-141 OVER MENOMINEE RIVER	BRIDGE REPLACEMENT	0.000	CON				
LUCE	M-123 (Falls Road)		M-123 OVER MURPHY CREEK	CULVERT REPLACEMENT	11.085	CON				
MACKINAC	I-75		I-75 OVER HOBAN CREEK	CULVERT REPLACEMENT	0.000		CON			
MACKINAC	I-75 SB		I-75 SB OVER CARP RIVER	OVERLAY - DEEP	1.532	CON				
MACKINAC	I-75 SB		I-75 SB OVER OLD US-2	OVERLAY - DEEP	1.532	CON				
					13.125					

** Projects that may be delayed due to the reduced highway investment strategy.*

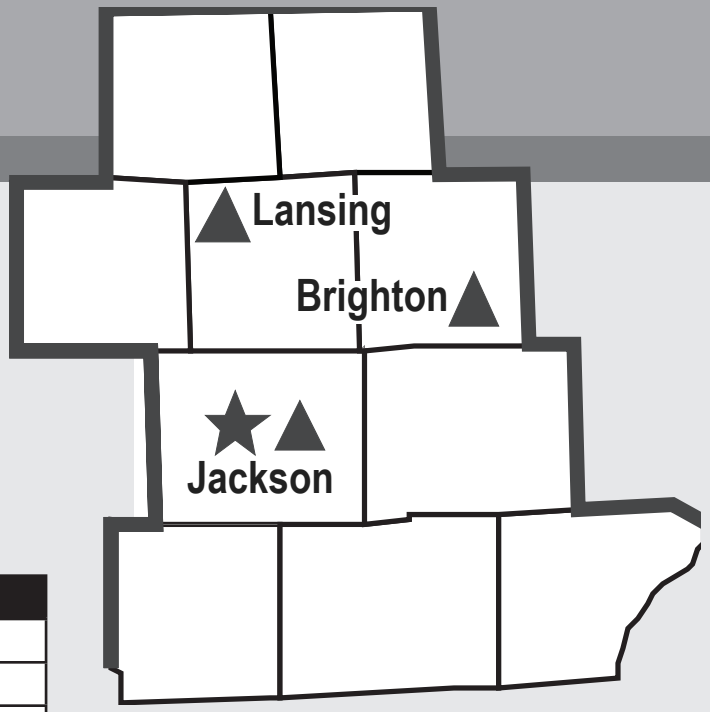
2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

SUPERIOR Repair and Rebuild Roads

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
ALGER	M-94 (M-94)	FES	CHATHAM TO MUNISING	TRAFFIC OPERATIONS OR SAFETY WORK	10.200			CON		
BARAGA	US-41		US-41, BARAGA COUNTY	RECONSTRUCTION	1.621	CON				
CHIPPEWA	I-75 BS (South Mackinac Trail)		FROM NORTH OF 10TH AVENUE TO ASHMUN STREET BRIDGE	RESURFACE	0.609	CON				
CHIPPEWA	I-75BS		I-75 BS FROM EASTERDAY AVE TO POWER CANAL	RECONSTRUCTION	0.253		CON			
CHIPPEWA	I-75BS (Portage Ave)		I-75BS, PORTAGE AVENUE	RECONSTRUCTION	0.622		CON			
CHIPPEWA	M-129 (Pickford Road)		SOUTH OF M-80 TO NORTH OF 10 MILE ROAD	RESTORATION AND REHABILITATION	7.251		CON			
CHIPPEWA	M-129 (Pickford Road)		M-129 OVER FLETCHER CREEK	HMA CAP (NO MEMBRANE)	7.251		CON			
CHIPPEWA	M-28		RACCO CONC SECTION	RESTORATION AND REHABILITATION	5.143					CON
CHIPPEWA	M-28		FROMLUCE CL TO M-123	RESTORATION AND REHABILITATION	10.769				CON	
CHIPPEWA	M-48		FROM M-129 TO M-134	TRAFFIC OPERATIONS OR SAFETY WORK	24.000			CON		
DELTA	M-35 (M-35)		25TH AVE SOUTH TO US-2	RECONSTRUCTION	1.850				CON	
DICKINSON	US-141		US-141 FROM STATE LINE TO US-2 IN DICKINSON COUNTY	RESTORATION AND REHABILITATION	1.533		CON			
HOUGHTON	M-26		TAMARACK TO HUBBEL	RECONSTRUCTION	1.220		CON			
HOUGHTON	M-26		LAURIUM	RECONSTRUCTION	1.110				CON	
HOUGHTON	M-26		M-26, OSCEOLA TOWNSHIP, HOUGHTON COUNTY	RESURFACE	1.180			CON		
HOUGHTON	M-26		M-26, HOUGHTON COUNTY	RESURFACE	3.130					CON
IRON	M-189		NORTH OF HIAWATHA ROAD TO US-2	RECONSTRUCTION	1.184				CON	
IRON	US-2		WEST OF US-141 TO EAST OF SHELDON STREET	RECONSTRUCTION	0.828	CON				
IRON	US-2		IRON RIVER	RECONSTRUCTION	0.580			CON		
IRON	US-2		US-2 FROM URBAN ST. TO CO. RD. 424	RESTORATION AND REHABILITATION	2.390					CON
KEWEENAW	M-26 (M-26)	FES	CEDAR CREEK IN KEWEENAW COUNTY	RESTORATION AND REHABILITATION	0.038	CON				
LUCE	M-28		FROM BORGSTROM RD TO THE LUCE CL	RESTORATION AND REHABILITATION	5.977			CON		
MACKINAC	US-2		BORGSTROM ROAD TO HIAWATHA TRAIL	RESURFACE	8.689				CON	
MACKINAC	US-2		M-117 TO NAUBINWAY	RESTORATION AND REHABILITATION	5.092		CON			
MARQUETTE	US-41/M-28		BAYOUT ST TO THE CARP RIVER	RECONSTRUCTION	2.290			CON		
MENOMINEE	M-35 (M-35)		US-41 NORTH TO 48TH AVE.	RECONSTRUCTION	0.950					CON
MENOMINEE	US-41 (Bridge Street)		20TH AVENUE TO 48TH AVENUE	RECONSTRUCTION	1.890	CON				
MENOMINEE	US-41		COUNTY ROAD G-12 TO BAGLEY	RESTORATION AND REHABILITATION	7.959			CON		
ONTONAGON	M-26 (M-26)	FES	US-141 (IRON COUNTY) AND M-26 (ONTONAGON COUNTY)	TRAFFIC OPERATIONS OR SAFETY WORK	31.323	CON				
ONTONAGON	M-28 (M-28)		FOUR LOCATIONS, ONTONAGON AND DICKINSON COUNTIES	RESTORATION AND REHABILITATION	0.001			CON		
					139.682					

** Projects that may be delayed due to the reduced highway investment strategy.*

UNIVERSITY REGION



The University Region serves 10 counties in the heart of south-central Michigan: Clinton, Eaton, Hillsdale, Ingham, Jackson, Lenawee, Livingston, Monroe, Shiawassee, and Washtenaw.
The University Region's central location makes it the crossroads of the Lower Peninsula, with eight corridors of highest significance (I-69, I-75, I-94, I-96, I-275, US-12, US-23 and US-127) passing through the region as part of the national and statewide network of highways that support commerce and international trade.

The University Region is home to the state capitol and governmental functions; institutions of higher learning, including the state's two largest universities, the University of Michigan and Michigan State University; industrial and commercial centers; and agricultural lands.

Five-Year Road and Bridge Program

The road and bridge preservation projects identified in this 2010 to 2014 Five-Year Transportation Program for the University Region total approximately $472 million. Investment is allocated in the following manner:

University Region	Total 2010-2014
Road Preservation	$80 million
Bridge Preservation	$11 million
Road and Bridge CPM	$73 million
Total 2010-2014	**$164 million**

(Amounts are rounded to the nearest million dollars)
(Road Preservation includes Roadside Facilities)

Capital Preventive Maintenance (CPM) projects are planned for a significant number of pavements and structures that do not require extensive repairs during this Five-Year Transportation Program period. CPM projects are short-term fixes, adding from five to 10 years of life to a pavement or maintaining the existing structure condition.

University Region	Route Miles of Road	Number of Bridges and Structures
Total in Region	1,333	985
Scheduled Work	132	57
Percentage of Region	10%	6%

The 2010-2014 program for road preservation work reflects approximately 132 (ten percent) of the University Region's more than 1,333 route miles of state trunklines during the next five years. The 2010-2014 program for bridge preservation work will address 57 (six percent) of the region's 985 trunkline bridges and structures.

There are also a number of programs that are selected based on statewide priorities or where project identification is completed throughout the year. These investments are not reflected above, but are included in the statewide investment strategy. Below is a brief description of major preservation projects that are currently planned for the 2010-2014 program.

2010

The University Region will be focusing its resources on a major rehabilitation project on **M-52 between Dutch Drive and I-94 in Washtenaw County and will be reconstructing I-96 between College and Meridian Roads in Ingham County.** Both of these projects will improve the pavement condition of the roadway for tens of thousands of travelers per day.

The region will reconstruct the **I-94 corridor in Jackson County between Sargent Road and the Washtenaw County line, partially funded by ARRA.**

2011

In 2011, the University Region will be implementing two major road rehabilitation projects: one along **US-23 in Livingston County and the other along US-223 in Jackson County.**

2012

In 2012, **M-14 in Washtenaw County east of Earhart to the Wayne County line** will be resurfaced.

The **M-43 Eastbound Bridge over the Grand River** in Lansing will be replaced.

2013

Five miles of **M-125 in Monroe County** will be resurfaced, improving the condition of over 22 lane miles of trunkline.

US-23 from the state line to School Road will be reconstructed, providing six miles of new pavement.

2014

In 2014, the region will be completing major rehabilitation to improve the condition and ride quality of **US-127 between Boardman Road and Henry Road in Jackson County.**

University Region and Transportation Service Center staff will continue to work proactively with local units of government to identify ways, such as access management, to improve operational efficiency and safety, and to get the most out of the current surface transportation system.

CAPACITY IMPROVEMENT AND NEW ROADS

I-96 at Latson Road, Livingston County. Construction of this new interchange at Latson Road is scheduled to begin in 2010 and is expected to be completed in Fall 2011. This project will improve access to Howell and includes widening of Latson and Nixon Roads from two to five lanes from just north of Grand River Avenue south to Chilson Road, and safety improvements at the CSX railroad crossing. The project received dedicated funding through SAFETEA-LU and several other federal appropriations. The schedule for this project is contingent upon the necessary right-of-way being provided by local stakeholders.

M-59, east of Michigan Avenue to Whitmore Lake Road, Livingston County. Construction for widening this nine-mile segment was deferred in 2003. Design of the combination five-lane roadway/four-lane boulevard was completed in 2009 and right-of-way activities will continue so that this project will be ready to move forward when construction funding becomes available. The construction of the sound barrier east of Tooley Road, which was included in related improvements west of this segment, will be completed in late 2009.

I-94 at Sargent Road, Jackson County. This project includes interchange reconstruction; removal and replacement of the Sargent Road bridge over I-94; removal of the I-94 bridge over I-94BL; removal of the eastbound I-94 exit ramp; construction of a new eastbound I-94 exit ramp and an eastbound I-94 entrance ramp; a realignment of Sargent Road to tie into both westbound I-94 ramps; and realignment of Ann Arbor Road to tie into the new Sargent Road alignment.

Construction of the interchange is scheduled for letting in September 2010. Preliminary construction activities will begin in 2011. The major work will be completed in 2012, after the ARRA reconstruction project on I-94 from east of Sargent Road to the Washtenaw County line is finished.

US-23, M-14 to I-96, Livingston and Washtenaw Counties. The feasibility study of possible remedies for congestion along this corridor will be completed in late 2009. The study investigated the feasibility of several alternatives, including: a transit option; bus-on-shoulder options; and operational improvements and widening to three lanes in each direction, which could include either a general purpose lane or a high occupancy vehicle/high occupancy toll lane. The study also included a tolling and managed lanes analysis and an analysis of innovative financing opportunities. The final report will be issued in late 2009.

US-127, St. Johns to Ithaca, Clinton and Gratiot Counties. FHWA approved the re-evaluation of the Environmental Impact Statement for this project in September 2009. A SAFETEA-LU earmark will allow partial right-of-way acquisition. Funding to complete right-of-way acquisition and construction of this project has not been identified.

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

UNIVERSITY **Bridge - Replacement and Rehabilitation**

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
CLINTON	I-96		M-100 OVER I-96	BRIDGE REPLACEMENT	0.169	CON				
EATON	M-50		M-50 OVER LITTLE THORNAPPLE RIVER	BRIDGE REPLACEMENT	3.105				CON	
EATON	M-50		M-50 OVER THORNAPPLE RIVER	BRIDGE REPLACEMENT	3.105				CON	
EATON	M-50		M-50 OVER MUD CREEK	BRIDGE REPLACEMENT	3.105				CON	
EATON	M-50		M-50 OVER SHAYTOWN CREEK	CULVERT REPLACEMENT	3.105				CON	
EATON	M-50		M-50 OVER CREEK	CULVERT REPLACEMENT	3.105				CON	
INGHAM	I-496		CLEMENS STREET OVER I-496 AND CSX RAILROAD	OVERLAY - DEEP	0.558			CON		
INGHAM	I-96		I-96 EB OVER I-96 BUSINESS LOOP RAMPS	DECK REPLACEMENT	0.150			CON		
INGHAM	I-96		I-96 WB OVER I-96 BUSINESS LOOP RAMPS	DECK REPLACEMENT	0.150			CON		
INGHAM	I-96		I-96 EB OVER CEDAR STREET	SUPERSTRUCTURE REPAIR	1.376			CON		
INGHAM	I-96		I-96 WB OVER CEDAR STREET	SUPERSTRUCTURE REPAIR	1.376			CON		
INGHAM	M-43		M-43 EB OVER GRAND RIVER	BRIDGE REPLACEMENT	0.131			CON		
INGHAM	US-127		KIPP ROAD OVER US-127	BRIDGE REPLACEMENT	0.001	CON				
INGHAM	US-127		BELLEVUE ROAD OVER US-127	OVERLAY - DEEP	0.400				CON	
INGHAM	US-127		BARNES ROAD OVER US-127	OVERLAY - DEEP	0.400				CON	
INGHAM	US-127		COLUMBIA ROAD OVER US-127	OVERLAY - DEEP	0.400				CON	
INGHAM	US-127		SITTS ROAD OVER US-127	OVERLAY - DEEP	0.400				CON	
INGHAM	US-127		LAKE LANSING ROAD OVER US-127	OVERLAY - DEEP	0.060				CON	
JACKSON	M-50 / US-127 BR (West Avenue)		M-50,US-127BR OVER CONRAIL	REPLACE BRIDGE, ADD LANES	0.000		CON			
JACKSON	M-99		M-99 OVER SOUTH BRANCH OF RICE CREEK	CULVERT REPLACEMENT	2.144			CON		
JACKSON	US-127 (N US 127)		M-50 OVER US-127	BRIDGE REPLACEMENT	0.200		CON			
JACKSON	US-127		PAGE AVENUE OVER US-127	DECK REPLACEMENT, WIDEN, ADD LANES	0.150	CON				
LENAWEE	US-223		US-223 OVER GALL COUNTY DRAIN	CULVERT REPLACEMENT	0.000		CON			
LENAWEE	US-223		US-223 OVER RAISIN RIVER	BRIDGE REPLACEMENT	0.238			CON		
LIVINGSTON	US-23		US-23 NB OVER SILVER LAKE ROAD	OVERLAY - DEEP	2.702		CON			
LIVINGSTON	US-23		LEE ROAD OVER US-23	SUPERSTRUCTURE REPAIR	2.702		CON			
LIVINGSTON	US-23		US-23 SB OVER HYNE ROAD	OVERLAY - DEEP	3.236		CON			
LIVINGSTON	US-23		US-23 NB OVER HYNE ROAD	OVERLAY - DEEP	3.234		CON			

** Project~~s that may be~~ delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

UNIVERSITY Bridge - Replacement and Rehabilitation (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
MONROE	I-75		I-75 NB OVER PLUM CREEK	OVERLAY - DEEP	101.339	CON				
MONROE	I-75		I-75 OVER PAPER CO WATERMAINS	OVERLAY - SHALLOW	101.339	CON				
MONROE	I-75		I-75 OVER CN/GTW RR & NS RR	OVERLAY - DEEP	101.339	CON				
MONROE	I-75		I-75 OVER NORFOLK SOUTHERN RR	OVERLAY - DEEP	101.339	CON				
MONROE	I-75		LAPLAISANCE ROAD OVER I-75	OVERLAY - SHALLOW	101.339	CON				
MONROE	I-75		I-75 OVER GTW & CR RAILROAD	OVERLAY - DEEP	101.339	CON				
MONROE	I-75		NEWPORT ROAD OVER I-75	SUBSTRUCTURE REPAIR	101.339	CON				
MONROE	I-75		I-275 SB TO I-75 NB RAMP OVER I-75	DECK REPLACEMENT	101.339	CON				
MONROE	I-75		I-275 SB OVER TELEGRAPH ROAD (US-24)	OVERLAY - DEEP	101.339	CON				
MONROE	I-75		I-275 NB OVER TELEGRAPH ROAD (US-24)	OVERLAY - DEEP	101.339	CON				
MONROE	I-75		I-75 SB OVER PLUM CREEK	OVERLAY - DEEP	0.849	CON				
MONROE	US-24		US-24 OVER LITTLE SANDY CREEK	CULVERT REPLACEMENT	0.010		CON			
SHIAWASSEE	I-69		M-71 OVER I-69	BRIDGE REPLACEMENT	0.000		CON			
SHIAWASSEE	I-69		STATE ROAD OVER I-69	OVERLAY - DEEP	3.493		CON			
SHIAWASSEE	I-69		I-69 EB OVER LOOKING GLASS RIVER	DECK REPLACEMENT	2.672		CON			
SHIAWASSEE	I-69		I-69 WB OVER LOOKIN GLASS RIVER	DECK REPLACEMENT	2.672		CON			
SHIAWASSEE	I-69		MORRICE ROAD OVER I-69	OVERLAY - DEEP	2.672		CON			
SHIAWASSEE	I-69		DURAND ROAD OVER I-69	OVERLAY - DEEP	2.672		CON			
SHIAWASSEE	M-71		M-71 OVER HOLLY DRAIN	DECK REPLACEMENT	0.000		CON			
WASHTENAW	M-52		M-52 OVER RAISIN RIVER	DECK REPLACEMENT	0.000		CON			
WASHTENAW	US-23		WILLOW ROAD OVER US-23	OVERLAY - DEEP	1.216				CON	
WASHTENAW	US-23		BEMIS ROAD OVER US-23	OVERLAY - DEEP	1.216				CON	
					127.433					

UNIVERSITY Repair and Rebuild Roads

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
CLINTON	I-96 EB		AT THE GRAND LEDGE REST AREA #825	ROADSIDE FACILITIES - IMPROVE	0.504	CON				
EATON	M-100		FRANKLIN ST TO RIVER ST	RESURFACE	0.468					CON
EATON	M-43 (Saginaw Street)		EAST OF CANAL TO WEST OF ROSEMARY	RESURFACE	3.545		CON			
HILLSDALE	US-127 (S Meridian Rd)	FES	OHIO STATE LINE TO M-34	RESURFACE	10.245	CON				
INGHAM	I-96		AT THE OKEMOS REST AREA	ROADSIDE FACILITIES - PRESERVE	0.381	CON				
INGHAM	I-96		COLLEGE ROAD TO MERIDIAN ROAD	RECONSTRUCTION	6.213	CON				
INGHAM	M-43 (Grand River Avenue)		ECL WILLIAMSTON TO EAST JCT OF M-52	RESURFACE	3.711		CON			
INGHAM	US-127 NB		AT THE LANSING REST AREA #810	ROADSIDE FACILITIES - IMPROVE	0.519		CON			
JACKSON	I-94 (WB I-94)	FES	EAST OF SARGENT ROAD TO WASHTENAW COUNTY LINE	RECONSTRUCTION	9.342	CON				
JACKSON	I-94 (WB I-94)	FES	WHIPPLE RD OVER I-94	DECK REPLACEMENT	9.342	CON				

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Repair and Rebuild - Roads and Bridges

UNIVERSITY Repair and Rebuild Roads (continued)

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
JACKSON	I-94 (WB I-94)	FES	I-94 WB OVER RACE RD	BRIDGE REPLACEMENT	9.342	CON				
JACKSON	I-94 (WB I-94)	FES	I-94 EB OVER RACE RD	BRIDGE REPLACEMENT	9.342	CON				
JACKSON	I-94BL (MICHIGAN AVENUE) (Michig		M-60 EASTERLY TO BROWN STREET	RESURFACE	3.206		CON			
JACKSON	M-60 (M-60)		COUNTY LINE TO CHAPEL ROAD	RESURFACE	8.465					CON
JACKSON	US-127 (NB US-127)		BOARDMAN ROAD TO HENRY ROAD	RESTORATION AND REHABILITATION	5.610					CON
LENAWEE	M-50 (W Chicago Blvd)		RIDGE HWY TO THE EVL OF BRITTON, LENAWEE COUNTY	RESURFACE	2.155			CON		
LENAWEE	M-52 (S Adrian Hwy)		US-223 NORTH TO SOUTH OF M-34	RECONSTRUCTION	0.779			CON		
LENAWEE	US-223 (US-223)		EAST OF SILBERHORN HWY TO WEST OF RODESILER ROAD	RESURFACE	3.447		CON			
LENAWEE	US-223 (US-223)		US-223 AT RODESILER HIGHWAY, IN LENAWEE COUNTY.	RESURFACE	0.000	CON				
LIVINGSTON	US-23		SILVER LAKE ROAD TO CSX RAILROAD	RESURFACE	0.353		CON			
LIVINGSTON	US-23		US-23 NB OVER HURON R	SUPERSTRUCTURE REPLACEMENT	0.353		CON			
LIVINGSTON	US-23		US-23 SB OVER HURON R	SUPERSTRUCTURE REPLACEMENT	0.353		CON			
LIVINGSTON	US-23		US-23 SB OVER SILVER LAKE RD	OVERLAY - DEEP	0.353		CON			
LIVINGSTON	US-23		CSX RR OVER US-23	PAINTING COMPLETE	0.353		CON			
MONROE	M-125 (M-125)		M-125 FROM 440' N OF JONES TO US-24	RESURFACE	5.227				CON	
MONROE	M-125 (Dixie Highway)	FES	FROM THE STATE LINE TO STERNS ROAD	RESTORATION AND REHABILITATION	1.430	CON				
MONROE	US-23 (NB US-23)		US-23 FROM STATE LINE TO SCHOOL RD	RECONSTRUCTION	6.000				CON	
MONROE	US-24 (Telegraph Road)		US-24 FROM STEWART RD TO LASALLE RD	RESURFACE	1.154		CON			
SHIAWASSEE	M-52 (Shiawassee)		M-21, CHESTNUT TO M-52, M-52, M-21 TO ARDELEAN	RESURFACE	3.272				CON	
SHIAWASSEE	M-52		M-52, MORRICE TO M-21	RECONSTRUCTION	1.830	CON				
WASHTENAW	I-94 BL (Jackson)		I-94BL FROM WEST JUNCTION I-94 TO MAIN STREET	RESURFACE	2.622					CON
WASHTENAW	M-14 (EB M-14)		M-14 FROM EAST OF EARHART ROAD TO WASHTENAW COUNTY	RESURFACE	7.819			CON		
WASHTENAW	M-52		AUSTIN TO DUTCH	RECONSTRUCTION	1.680		CON			
WASHTENAW	M-52		DUTCH DRIVE TO I-94	RESURFACE	9.981	CON				
WASHTENAW	M-52 (M-52)		M-52 FROM I-94 TO OLD US-12	RESURFACE	0.888					CON
WASHTENAW	US-12 (East Michigan Avenue)		US-12 FROM B01 TO MAPLE ROAD	RECONSTRUCTION	0.940					CON
WASHTENAW	US-23		AT THE NORTHFIELD CHURCH REST AREA	ROADSIDE FACILITIES - IMPROVE	0.554		CON			
					102.340					

** Projects that may be delayed due to the reduced highway investment strategy.*

2010-2014 ROAD & BRIDGE PROGRAM
Capacity Improvements

UNIVERSITY I-94, M-60 to Sargent Road - City of Jackson

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
JACKSON	I-94 (WB I-94)		I-94 AT SARGENT ROAD, JACKSON CO.	NEW INTERCHANGE-EXISTING ROUTE	3.178	CON	CON	CON		
JACKSON	I-94 (WB I-94)		I-94 AT SARGENT ROAD, JACKSON CO.	NEW INTERCHANGE-EXISTING ROUTE		ROW				

UNIVERSITY I-96 Access Improvements, Howell

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
LIVINGSTON	I-96		AT LATSON ROAD	NEW INTERCHANGE-EXISTING ROUTE	0.000	CON	CON	CON		
LIVINGSTON	I-96		AT LATSON ROAD	NEW INTERCHANGE-EXISTING ROUTE	1.000	CON	CON	CON		
LIVINGSTON	I-96		AT LATSON ROAD	NEW INTERCHANGE-EXISTING ROUTE		UTL				
LIVINGSTON	I-96		AT LATSON ROAD	NEW INTERCHANGE-EXISTING ROUTE	0.001	CON	CON	CON		
LIVINGSTON	I-96		AT LATSON ROAD	NEW INTERCHANGE-EXISTING ROUTE		ROW				
LIVINGSTON	I-96		AT LATSON ROAD	NEW INTERCHANGE-EXISTING ROUTE		PE	PE			
LIVINGSTON	I-96		AT LATSON ROAD	NEW INTERCHANGE-EXISTING ROUTE	1.000	CON	CON	CON		
LIVINGSTON	I-96		AT NIXON ROAD/CSX RAILROAD CROSSING	RR XING IMP & SFTY	0.000	CON				
LIVINGSTON	NIXON ROAD (Nixon Road)		AT CSX TRANSPORTATION, INC, RAILROAD CROSSING	RR XING IMP & SFTY	0.611	CON				

UNIVERSITY M-59, from East of I-96 to US-23, including the Interchange at US-23

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
LIVINGSTON	M-59 (Highland Road)		MICHIGAN AVENUE TO WHITMORE LAKE ROAD	RECONSTRUCT AND ADD LANE(S) OVER 0.5 M		ROW				
LIVINGSTON	M-59 (West Highland Road)		M-59 EAST OF TOOLEY ROAD	SOUND BARRIER TYPE I (REQUIRED) - NEW R	0.230	CON				

UNIVERSITY US-127, I69 to Ithaca

COUNTY	ROUTE (COMMON NAME)	DIR.	LOCATION	TYPE OF WORK	LENGTH	2010	2011	2012	2013	2014
CLINTON	US-127		NORTH OF ST. JOHN'S TO THE CLINTON COUNTY LINE	NEW ROUTES		ROW	ROW	ROW	ROW	ROW
					6.020					

** Projects that may be delayed due to the reduced highway investment strategy.*