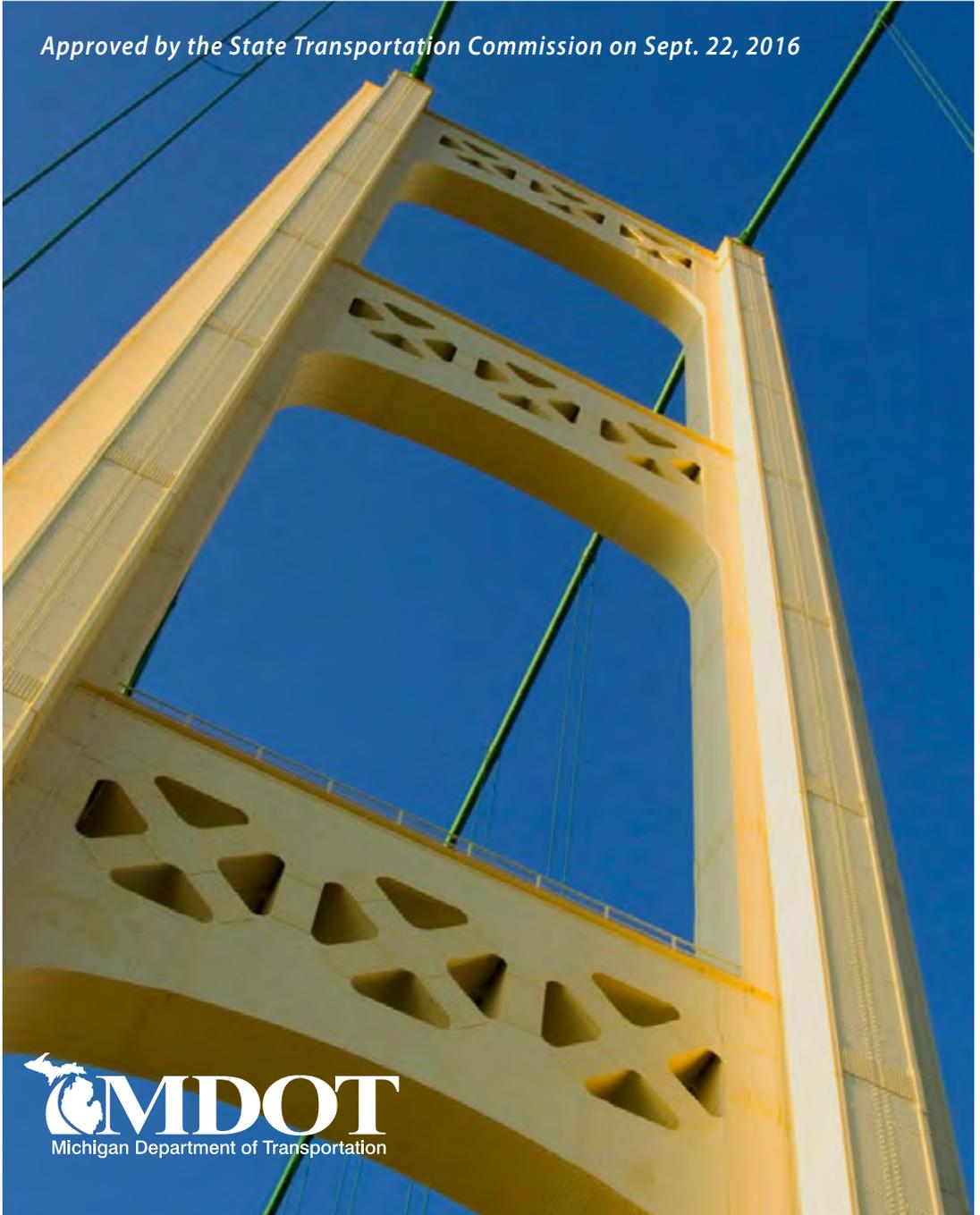




# 2017-2021 FIVE-YEAR TRANSPORTATION PROGRAM

*Approved by the State Transportation Commission on Sept. 22, 2016*





*Dear Reader:*

*I present to you the 2017-2021 Five-Year Transportation Program, a detailed accounting of the Michigan Department of Transportation's (MDOT) stewardship of the highway, bridge, public transit, rail, aviation, marine, and nonmotorized programs. This transportation program represents \$10.1 billion in multi-modal transportation investments over the next five-year timeframe. MDOT is determined to provide the highest quality integrated transportation services for economic benefit and improved quality of life in the safest and most efficient way possible.*

*A new federal transportation funding law called the Fixing America's Surface Transportation (FAST) Act was enacted in December 2015, following a new state revenue package that was signed into law in November 2015. The state fuel and vehicle registration tax increases will be phased in beginning Jan. 1, 2017, with the full \$1.2 billion in state funding not realized until after 2021 when shifts from the General Fund are planned to take full effect. Together, these funds will represent one of the largest increases in transportation revenues in recent years. State gasoline and diesel taxes and registration fees have not been altered since 1997. Following law established in Act 51 of 1951, MDOT will receive about 39 percent of these funds.*

*It is our responsibility at MDOT to provide the greatest return on investment to Michigan's taxpayers and businesses. In order to accomplish this, MDOT annually updates its Five-Year Transportation Program, which provides information on multi-modal revenues available, expected investments, performance measures, and a list of planned road and bridge projects. MDOT's 2017-2021 project lists utilized the new anticipated federal and state funding sources in order to deliver a Five-Year Transportation Program that will be the largest since the American Recovery and Reinvestment Act (ARRA).*

*MDOT consistently works to deliver the program in the most effective and efficient way possible. The department is always striving to be better, faster, cheaper, safer, and smarter. Read more about MDOT efficiencies on the department's website at [www.michigan.gov/roadfunding](http://www.michigan.gov/roadfunding).*

*Thank you for your interest in the Five-Year Transportation Program.*

*Sincerely,*

A handwritten signature in black ink, appearing to read "Kirk T. Steudle". The signature is fluid and cursive, written over a light-colored background.

*Kirk T. Steudle  
Director*

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# Michigan Mobility Innovations: The Future is Happening Now

Automotive mobility innovation began in Michigan, now it is a key part of our future. The Michigan Department of Transportation (MDOT) is continuously working to innovate the transportation network, through technology and infrastructure improvements, to further bolster Michigan's position as a major player in the world economy. This effort aligns with Gov. Rick Snyder's strategy to reinvent Michigan by stimulating economic growth and job creation.

Michigan has an undeniable role in the auto industry and large concentration of the North American research and development for automotive technologies. Gov. Snyder recently announced a mobility initiative called "Planet M," the mobility program that encourages research and development of autonomous vehicles and technologies for related infrastructure. This "smart infrastructure" electronically relates the autonomous vehicles to surrounding roads, traffic signals, pedestrians, bicyclists, trains, buses, etc. Verifying safety is obviously the primary goal for research and also a better understanding of the connected environment of the future. For more on these efforts, please visit [www.planetm.com](http://www.planetm.com).

By 2017, autonomous vehicle testing sites will be housed at the University of Michigan in Ann Arbor and at the American Center for Mobility located at Willow Run in Ypsilanti. These research facilities are the main testing laboratories for how driverless vehicles will work in urban and rural environments. These commitments are unprecedented within the U.S. New infrastructures are being designed and tested within Michigan to allow driverless vehicle use on a wider scale.



*Above photos: Testing the platooning connected vehicles*

Many other mobility innovation efforts are ongoing or being developed at MDOT. MDOT was awarded a federal grant to use technology to improve the customer experience for drivers using the Detroit Windsor Tunnel. MDOT and the Detroit Windsor Tunnel, LLC are partnering to provide predictive traffic management for the border crossing, which is significant for daily and event commuters and businesses. The "Border Wait Time System" will utilize Bluetooth, GPS, and cellular-enabled devices placed at strategic locations on the Detroit Plaza, the Windsor Plaza, and on nearby freeways. These devices will securely and anonymously collect data that will be summarized for effective traffic management. The goal of the system is not only to provide real-time information, but predictive information to allow for greater efficiencies.

Recurring traffic congestion adds significant delay to the traveling public and commercial traffic, and this congestion and delay is costly to individuals and businesses in terms of lost time/productivity, crashes, and vehicle operating costs, as well as being detrimental to the environment. Regional traffic operations centers (TOCs) in Detroit and Grand Rapids, and a statewide TOC in Lansing monitor traffic congestion in real time. Innovations include installation of dynamic signs, signals, and cameras working together with the TOCs to form a more intelligent transportation system. Technological innovations continue to be utilized as an effective strategy to minimize these delay costs for the public and businesses. These and other initiatives are centered on the road user to minimize delay on freeways. User delay costs in 2015 were reduced by more than \$30 million on the trunklines, compared to prior year averages. These costs are quantified based on the Federal Highway Administration (FHWA)-released values for passenger and commercial vehicles based on economic factors and traffic data collected for MDOT by third party contract. Please review at [http://www.michigan.gov/documents/mdot/Congestion\\_Mobility\\_Report\\_2015\\_Chapter\\_1\\_-\\_Introduction\\_523357\\_7.pdf](http://www.michigan.gov/documents/mdot/Congestion_Mobility_Report_2015_Chapter_1_-_Introduction_523357_7.pdf).

Since 2007, MDOT has used a road weather management system that employs sensors to alert operations and maintenance staff to inclement weather, visibility and poor road conditions. This information is relayed to road users via dynamic message signs. Similarly, the Truck Parking Management system implemented along I-94 in southwest Michigan alerts truck drivers where overnight parking is available via dynamic message signs on the freeway and on the Mi Drive website and app. Dynamic signs update road users with real-time information that helps to minimize unnecessary traffic delay.

MDOT is utilizing technologies to promote and build this highly integrated transportation network that will produce efficiencies and maximize the investment of public funds. From 1997 to today, the MDOT workforce is 26 percent smaller. Other innovations, such as e-Construction, virtual meetings, trainings, improvements

in numerous data collection systems and mapping systems, closing facilities, and refinancing bonds, has saved MDOT more than \$25 million from 2010 to the present. Review this list at [www.michigan.gov/documents/mdot/MDOT\\_CumulativeListofEfficiencies\\_450744\\_7.pdf](http://www.michigan.gov/documents/mdot/MDOT_CumulativeListofEfficiencies_450744_7.pdf).

MDOT is also working toward more efficient modes of travel and reduced environmental impacts. The Complete Streets initiative is aimed at making Michigan's transportation network work for everyone, with an emphasis on increasing opportunities, mobility and safety for those who travel by transit, bike or foot. This requires being sensitive to removing obstacles to travel, as well as making improvements that improve safety and mobility for all users. The types of facilities that may be needed are dependent on context, but may include things like better access to transit stops, bike lanes, pedestrian signals and crosswalk markings, sidewalks, and connected networks for travel between places and within communities. MDOT has been proactively supporting this concept and already has more than 3,000 miles of wide, paved shoulders and 40 miles of marked bicycle lanes on state highways. MDOT also partners with local agencies and other state agencies to expand the shared-use path network across the state. To move people more quickly and, in some cases, expand the regional reach of bus service, bus rapid transit (BRT) lines are being used, planned and studied in several urban areas, including Grand Rapids, Lansing, and the Detroit metropolitan area. MDOT continues its work to improve 135 miles of state-owned track that will enable Amtrak trains to travel at higher speeds between Detroit and Chicago.

As Michigan continues to reinvent itself to create new jobs and promote economic growth, a key component remains a modern and well-maintained transportation network that moves both people and goods dependably and efficiently. The network includes a variety of transportation modes: aviation, rail, marine, highways, transit, and pathways for bicyclists and pedestrians. Following is an update on ongoing and future projects to achieve this network for moving goods and, of course, people.

## Gordie Howe International Bridge

The Gordie Howe International Bridge (GHIB) project is a new freeway-to-freeway border crossing system between Detroit, Michigan, and Windsor, Ontario, that will improve the flow of international trade between the United States and Canada at the busiest border crossing between the two countries.

The project has three primary elements: a new Detroit River crossing (bridge), new state-of-the-art border inspection areas on each side of the river for the U.S. and Canadian border services agencies (plazas), and direct connections to highway systems in each country (I-75 in the United States and Highway 401 in Canada via the new \$1.4 billion Rt. Hon. Herb Gray Parkway).

Canada has agreed to finance Michigan's GHIB project components. This investment would be used for real estate purchases, utility work, construction of an I-75 interchange, and local road improvements. The agreement ensures that at least \$550 million is spent in Michigan and that the funds are eligible to help match federal aid for other critical highway projects across the state that are part of MDOT's 2017-2021 Five-Year Transportation Program. The funds will be repaid from toll revenue generated after the new bridge opens.

On June 15, 2012, an interlocal Crossing Agreement was signed by Gov. Snyder and Canadian officials to provide a framework for a Canadian Crossing Authority, now known as the Windsor-Detroit Bridge Authority (WDBA), to finance the new crossing under the oversight of a jointly established International Authority. Design, construction, operation and maintenance of the GHIB will be performed by a private entity through a public-private partnership (P3) agreement.

All environmental clearances in the United States and Canada have been secured. All requisite permitting, including the presidential permit and the Coast Guard navigational permit, has been obtained.



### *Two design types could be used for this signature bridge:*

- **Suspension**, which is recognized by its elongated "M" shape; or
- **Cable-stayed**, which has more of a "A" shape.

Once complete, the Gordie Howe International Bridge will be among the top five longest bridges in North America.

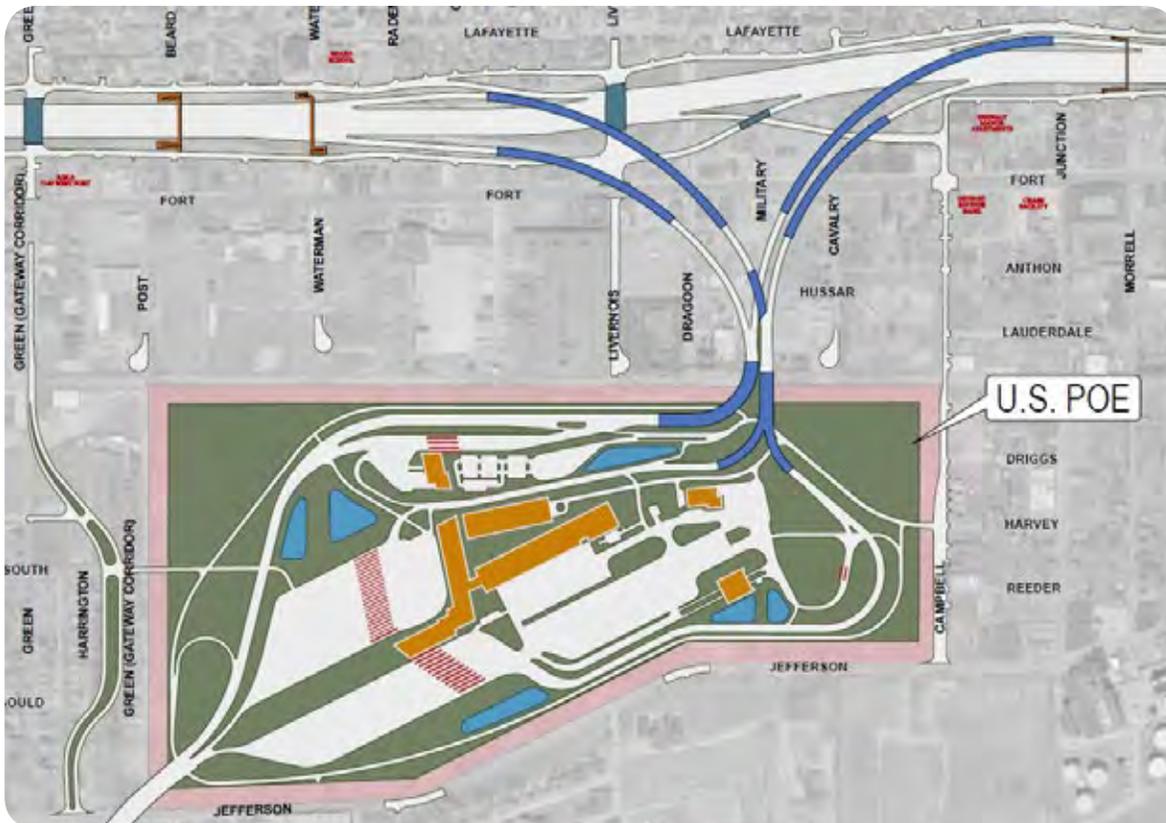
On July 30, 2014, Gov. Snyder and Lisa Raitt, Canada’s Minister of Transport, announced appointments to the International Authority that will oversee construction of the GHIB, as well as oversee and approve key steps in the P3 procurement process for the new Windsor-Detroit bridge crossing. It also will monitor WDBA compliance with the Crossing Agreement signed by Canada and Michigan.

The WDBA is managing the procurement process for the design, construction, operation and maintenance of the new bridge through a P3. In July 2015, the procurement process was launched with the issuance of a request for qualifications for the P3 concessionaire. Six North American and international respondent teams submitted responses that were evaluated by WDBA officials and partner organizations under the supervision of an independent fairness monitor. On Jan. 20, 2016, the WDBA announced three short-listed respondents that would move forward in the competitive procurement

process. The next step will be release of the request for proposals for the concessionaire. The WDBA will oversee the work of the P3, manage the concession agreement and payments, and set and collect tolls.

Almost all pre-construction activities in Canada, including land acquisition, demolition and the construction of the parkway that will connect Highway 401 to the GHIB, have been completed. The WDBA has retained numerous consultants, including a general engineering consultant who will perform important project-related functions. MDOT has retained land acquisition and environmental consultants to assist its efforts to acquire properties located in the GHIB footprint on the U.S. side.

Implementation of this project will be complex, lengthy, and must comply with the Crossing Agreement. Procurement for the P3 concessionaire will take approximately two years, with construction taking another four to five years.



*Graphic of U.S. Plaza and I-75 connection to GHIB*

## Modernizing the I-75 and I-94 Corridors

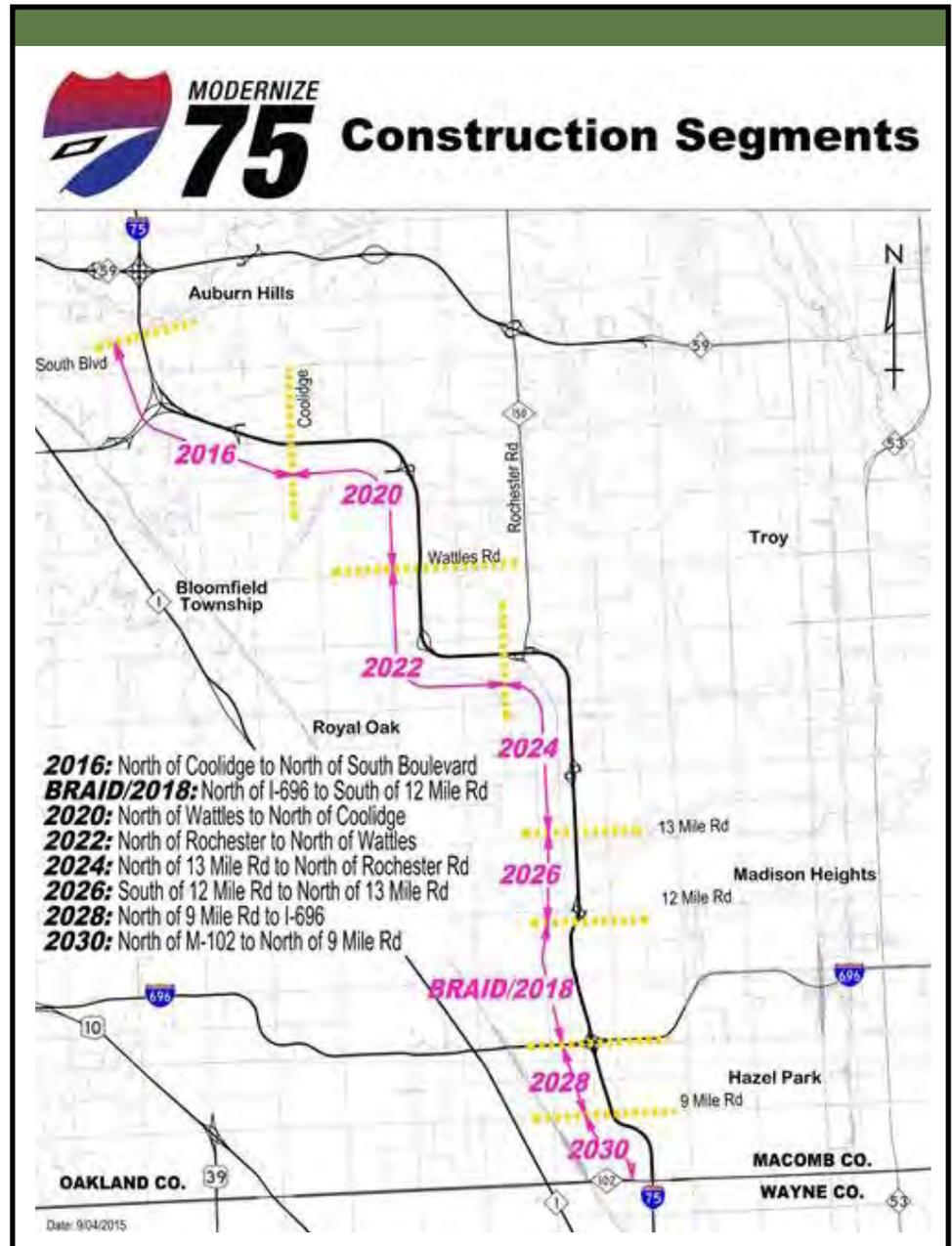
The I-75 and I-94 corridors are crucial segments of Michigan's portion of the global transportation network. I-94 carries more than 20 million tons of freight annually valued at \$28.7 billion, while I-75 carries 18.5 million tons of freight annually valued at more than \$26 billion. The corridors are major trade routes for goods moving across the Ambassador Bridge in Detroit and the Blue Water Bridge in Port Huron.

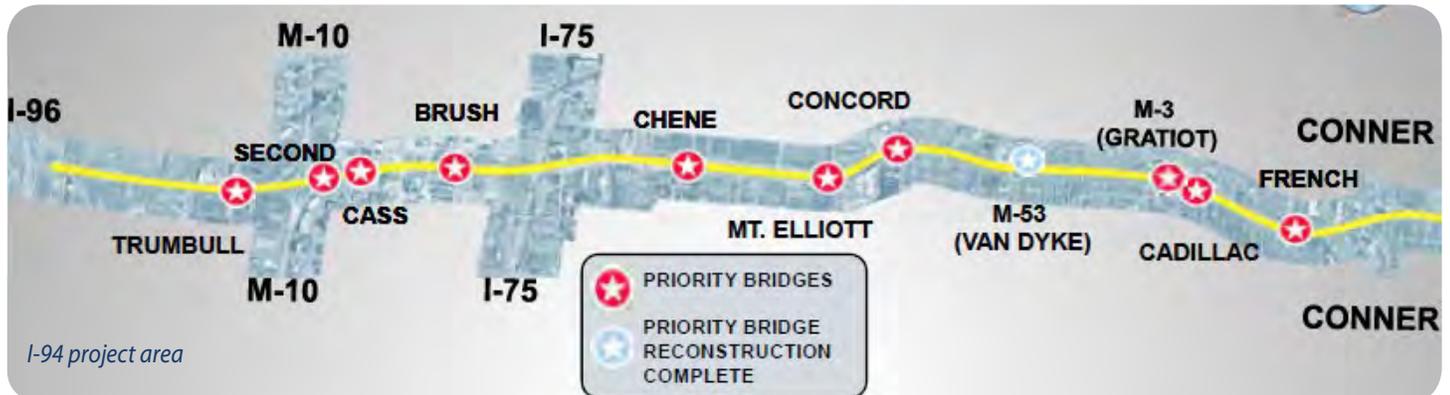
### I-75 Modernization in Oakland County

The I-75 modernization project focuses on a 17.7-mile section from M-102 (8 Mile Road) to north of South Boulevard, which includes 11 interchanges and 16 road crossings through six communities within Oakland County. It carries daily traffic volumes ranging from 103,000 to 178,000 vehicles per day in the project area. Looking 3 miles to the east and west of I-75 within the project limits, this corridor supports 23,000 businesses and more than 339,000 employees. The project is to be delivered in eight segments, starting in 2016 with a design-build segment from north of Coolidge Road to north of South Boulevard (see the above graphic).

This first segment will modernize the Square Lake Road interchange with standard right on and off ramps without impacting right of way (ROW) and remains in the existing interchange footprint. This modification is to improve

operations and safety at the interchange and, along the I-75 corridor specifically, reduce sideswipe and rear-end crashes, and improve the merge/weave movements within this segment. It will also provide the addition of peak hour-only high-occupancy vehicle (HOV) lanes in each direction through this segment, along with reconstruction of existing pavement.





The second segment of construction scheduled for 2018 will extend from I-696 to south of 12 Mile Road. The redesigned section from the I-696 on ramp to northbound I-75 over the northbound 11 Mile Road off ramp is key to alleviating congestion in this area. This segment will also include the addition of the peak-hour HOV lane, pavement reconstruction and drainage improvements.

The third construction segment will begin in 2020 from north of Wattles Road to north of Coolidge Road. This segment is adjacent to the 2016 segment, and will include the addition of the peak-hour HOV lane, pavement reconstruction, modernization of ramps, replacement of bridges, and drainage improvements. As illustrated on the “modernize I-75” map, construction will continue on the remaining portions of the I-75 Oakland County corridor outside of this Five-Year Transportation Program time frame.

### I-94 Modernization in Detroit

The I-94 modernization project involves reconstructing 6.7 miles of I-94 from east of the I-94/I-96 interchange to east of Conner Avenue in Detroit. This section of I-94 through midtown Detroit needs to be reconstructed to improve safety, traffic flow, pavement and bridge condition, freight mobility, and local access to the freeway.

In addition to the reconstruction of the I-94 roadway, the project currently includes rebuilding 67 bridge structures and six railroad overpasses. It also involves local access improvements, including the linking of east/west I-94 services drives, and reconstructing and modernizing the



*Trumbull Avenue bridge deck work over I-94.*

ramps and interchanges, including the elimination of freeway left-lane exits and entrances. Work to improve several bridges over I-94 is currently under way. The new Van Dyke Bridge at I-94 has been completed. Design has been completed on the Gratiot Avenue bridge.

In 2015, the Woodward Avenue overpass was completed and built to accommodate M-1 RAIL/QLINE. In 2016, construction started on building the new Trumbull Avenue bridge. The design of the remaining eight priority bridges at Second Avenue, Cass Avenue, Chene Street, Brush Street, Mt. Elliott Street, Concord Avenue, Cadillac Avenue, and French Road is under way and will be constructed from 2017 to 2019. Construction of the eastern portion of the project on I-94 (Chene Street to Conner Street) is expected to begin in 2019.

## I-75 over the Rouge River

The I-75 bridge over the Rouge River in the city of Detroit carries 37 million vehicles per year and is 1.6 miles long and eight lanes wide. With a deck area equal to 20 football fields, this is the largest bridge, in total area, in Michigan. Constructed in 1967, the bridge deck is nearly 50 years old and in poor condition. Deck patching and repairs are no longer viable options, so the deck is scheduled for complete replacement beginning in 2017. Due to the size of the structure, construction will take two years to complete and will require detouring southbound I-75 traffic. Northbound I-75 traffic will be maintained at all times. Stage I in 2017 will have northbound traffic on the northbound bridge while the southbound bridge deck is replaced. For Stage II in 2018, northbound traffic will be shifted onto the southbound bridge while the northbound bridge deck is replaced.

To take advantage of this detour and to reduce future impacts on the public, other improvements to this I-75 corridor have been packaged together. Significant work will take place on I-75 over Fort Street and on I-75 over Goddard Road and the Sexton-Kilfoil drain, as well as 11 other bridges. The investment of these projects is estimated at more than \$135 million.

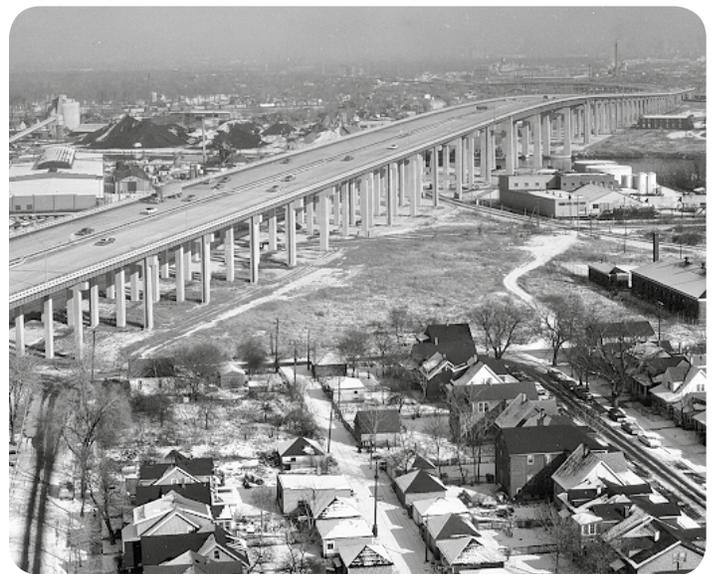
The size, type of work, and physical constraints of these projects limit the ability to perform this work without a freeway detour. Improving each bridge part-width would extend the length of the construction duration, require multiple stages, put motorists in close proximity to construction workers, increase traffic delays, and increase the cost of the projects. To determine the best option for maintaining traffic, 12 concepts were studied and a detailed traffic analysis was performed on viable options to determine the safest option that would minimize traffic delays and expedite construction.

The design plans will include a precast deck panel option as another possible method of expediting construction. With precast deck panels, the deck could be replaced quicker with less disruption to traffic. The option of either a cast-in-place deck or precast deck allows contractors to determine the best approach based on the contractor's available resources and their past experience.

A website will be created to keep the public informed of the project's progress, provide news, updates, frequently asked questions, and provide MDOT contact information. Twitter and Facebook feeds will also be employed for information outreach.



*The I-75 Rouge River bridge today.*



*The I-75 Rouge River bridge when constructed 1967.*

## I-75 in Monroe County

I-75 in Monroe County was originally constructed in 1956 as a four-lane interstate freeway. It was widened to three lanes in each direction in 1977, and the pavement was reconstructed in 1988. I-75 is a vital link to Detroit and to the rest of the state for vehicular travel and commercial freight. On average, it carries 15,500 commercial vehicles per day. The route is also crucial for international trade as it provides a link to the Ambassador Bridge and the future Gordie Howe International Bridge. The Michigan Truck Tonnage map visually shows the importance of this link to freight and trade.

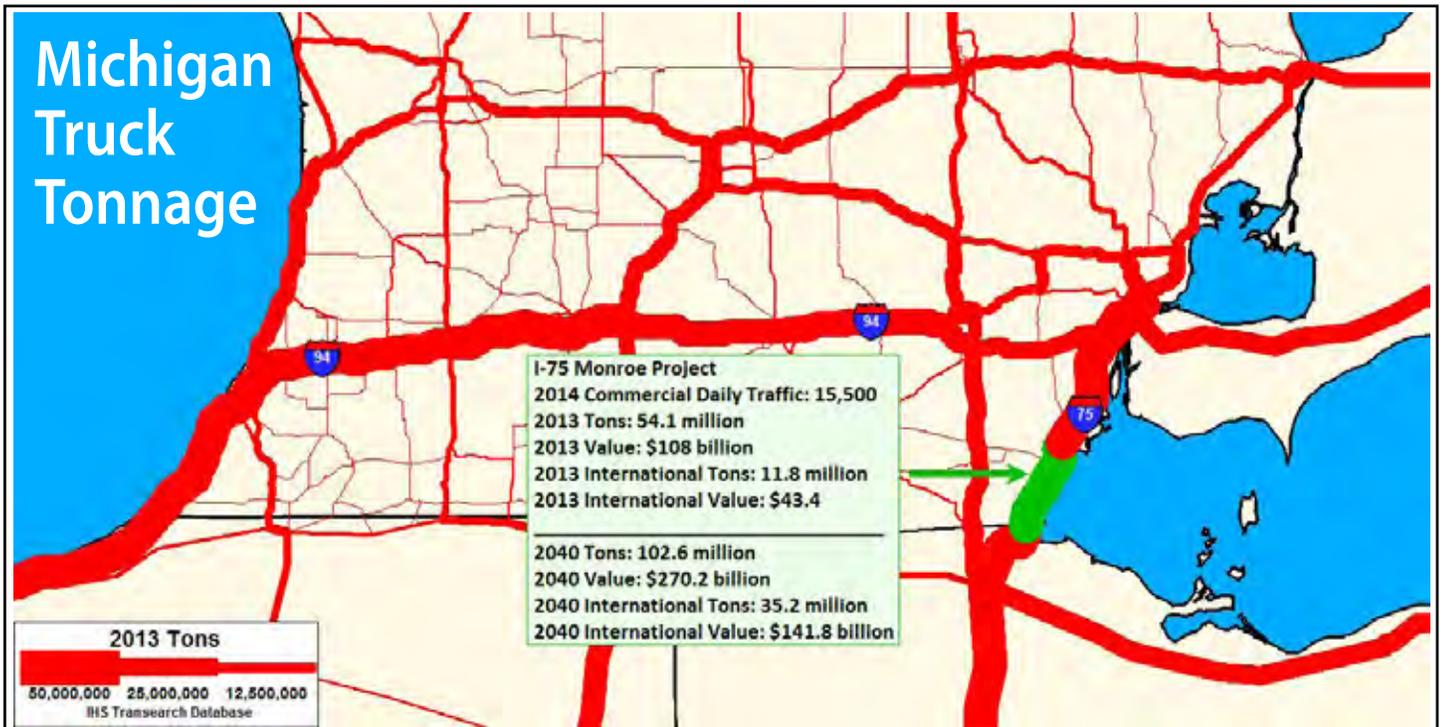
Much of the existing pavement is rated in poor condition. The base of this section of I-75 has been failing during the last 20 years, and the pavement has required annual concrete patching, which causes significant vehicular delay. Bridges in this area are also rated poor, and bridge under clearance needs to be improved to accommodate modern freight-haulers.

The I-75 reconstruction project in Monroe County will include the reconstruction of pavement from the Ohio state line north to Erie Road. The project also includes interchange improvements and the replacement of 11 bridges and two bridge superstructures. The I-75

reconstruction project began in 2015, and the final phase will be completed in 2028.



*The overall limits of the project are from the Michigan/Ohio state line north to Newport Road, approximately 21 miles. The project passes through the Monroe urbanized area, population 51,240.*



## I-94/US-31 in Berrien County

The I-94 freeway project in Berrien County scheduled to begin in FY 2021 will address poor pavements and bridge conditions on I-94 from Britain Road to I-196. The pavement within this area is composite, which indicates that asphalt has been placed over the original concrete, which dates to the 1960s. Ride quality of this road is poor due to the failed joints in the underlying concrete.

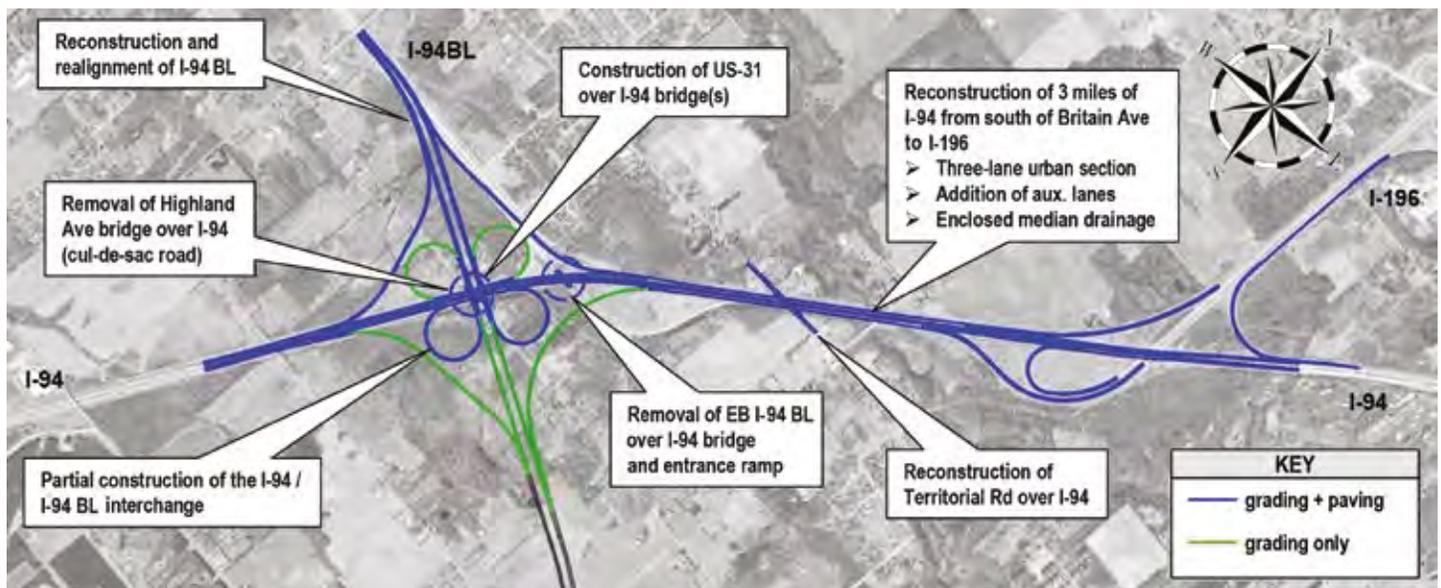
The reconstruction project within this five-year plan will include reconfiguring and partial construction of the I-94 BL interchange. The reconfigured interchange and bridges will be realigned; however, it will not complete the connection from I-94 to US-31. The freeway terminus will remain Napier Avenue.



Top Photo: False decking on the bridge overpass to prevent falling concrete pieces on eastbound I-94 BL over the I-94 entrance ramp.



Left Photo: View of westbound I-94 from Highland Avenue shows poor pavements and the need for reconstruction.



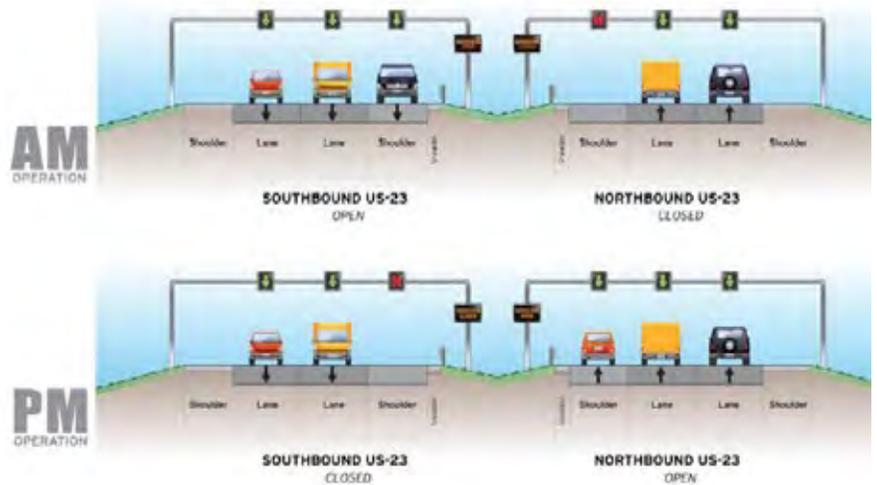
## US-23 Flex Route

The US-23 corridor from Brighton to Ann Arbor (M-14 to I-96) experiences high levels of delay associated with the morning and evening peak-hour traffic flows into and out of Ann Arbor. US-23 currently operates with two lanes in each direction, with daily traffic levels of more than 66,000 vehicles.

With the current lack of federal and state funding, a widening of the existing US-23 corridor is not feasible. MDOT is choosing to help alleviate congestion by using an active traffic management strategy that consists of widening the shoulders to carry traffic during peak hours and during incidents. The shoulder lanes will be controlled through the installation of dynamic message signs, lane control signs (see the following graphic), and full camera coverage for incident management. The project will also consist of new freeway courtesy patrols to service immobile vehicles and improve traffic flow. Crash investigation sites will be installed for motorists to safely pull off the

road during an incident. The corridor project also involves improving interchange ramp operations to meet current design standards and widening, reconstructing and repairing the corridor's bridges.

The US-23 Flex Route will be the first of its kind in the state of Michigan. The first phase of the project will be from M-14 to M-36 and will be complete in 2018. The second phase will be from M-36 to I-96. The second phase currently lacks funding and is not scheduled within this five-year program time frame.



## Jackson County - Reynolds Field

Jackson County - Reynolds Field is the primary airport for Jackson County. It is located adjacent to I-94 and near M-60, and is primarily a general aviation airport with some cargo operations. It is the primary airport used by race teams and the public for race weeks at Michigan International Speedway in the Irish Hills.



The airport's primary runway is presently 6/24 with a 14/32 crosswind runway. The primary runway does not currently meet Federal Aviation Administration (FAA) standards for runway safety areas and runway protection zones. The limiting obstruction for meeting the standards is I-94 and the Airport Road interchange. In order to meet FAA standards, the airport is going to shift the orientation of the primary runway to 7/25. This will provide the room necessary for the runway to meet the standards. Shifting the runway will be accomplished by building a brand new runway on the new 7/25 orientation. The new runway will be built to the same length as the old runway.

A FY 2015 airport capital improvements program (ACIP) grant of more than \$9.5 million will fund the majority of the construction in 2015 and 2016, with additional federal funds being committed in FY 2016 and FY 2017. Previous projects that have supported this realignment includes land acquisition, building relocation, and repair and lengthening of the crosswind runway to continue use of the airport during construction.

This project will enable the airport to continue to support the economies of the city and county of Jackson. It will provide a safer environment for larger aircraft currently using the airport and will encourage even more use, which will increase the economic benefit the airport brings to the area.

## M-1 RAIL/QLINE Streetcar

Working with the state and community partners, M-1 RAIL, now called the QLINE - a 501c3 nonprofit - is developing a 3.3-mile, 11-station light rail/streetcar system along Woodward Avenue that will become the centerpiece for economic development and future connectivity in the Detroit region. The project is an unprecedented P3, funded by \$110 million in private philanthropic investments, \$10 million from MDOT, and \$25 million in Federal Transit Administration (FTA) funds.

Construction is proceeding on schedule and is estimated to cost \$135 million - \$145 million. MDOT's investment in QLINE includes technical assistance and coordinating design and engineering with the department's planned reconstruction of Woodward Avenue from Chandler Street to Sibley Street. Streetcar operations are expected to begin in spring 2017.



## Detroit Bike Share

The Detroit Department of Transportation (DDOT), in coordination with the Downtown Detroit Partnership (DDP), will install and operate the Detroit Bike Share System. Bike share offers short-term bike rental at a network of stations and provides cost-effective and practical mobility options for trips too far to walk, but not long enough to take transit or drive a vehicle. The Detroit Bike Share System supports efforts by the City of Detroit, MDOT, QLINE, and many other partners to create a multi-modal transportation network with mobility options for people who live in, work in, and visit the city. The Detroit Bike Share System is partially funded with a Transportation Alternatives grant that includes the purchase and installation of up to 35 bike share stations and related bike share amenities.

## Bus Rapid Transit (BRT) and Regional Transit Planning

Bus rapid transit (BRT) is express bus service with minimal stops, enhanced by technology such as signal prioritization and express ticketing options at accessible bus stations/stops with entry level boarding platform.

The Rapid (the Grand Rapids area transit agency) moves into the third year of operations of their Silver Line, Michigan's first BRT line, which connects Grand Rapids, Kentwood and Wyoming, mainly servicing the Division Avenue corridor with 33 stations along 9.6 miles. Their second BRT line - the Laker Line, designed to enhance the connection between Grand Valley State University's Allendale campus and downtown Grand Rapids - is slated to receive a federal construction grant in FY 2017.

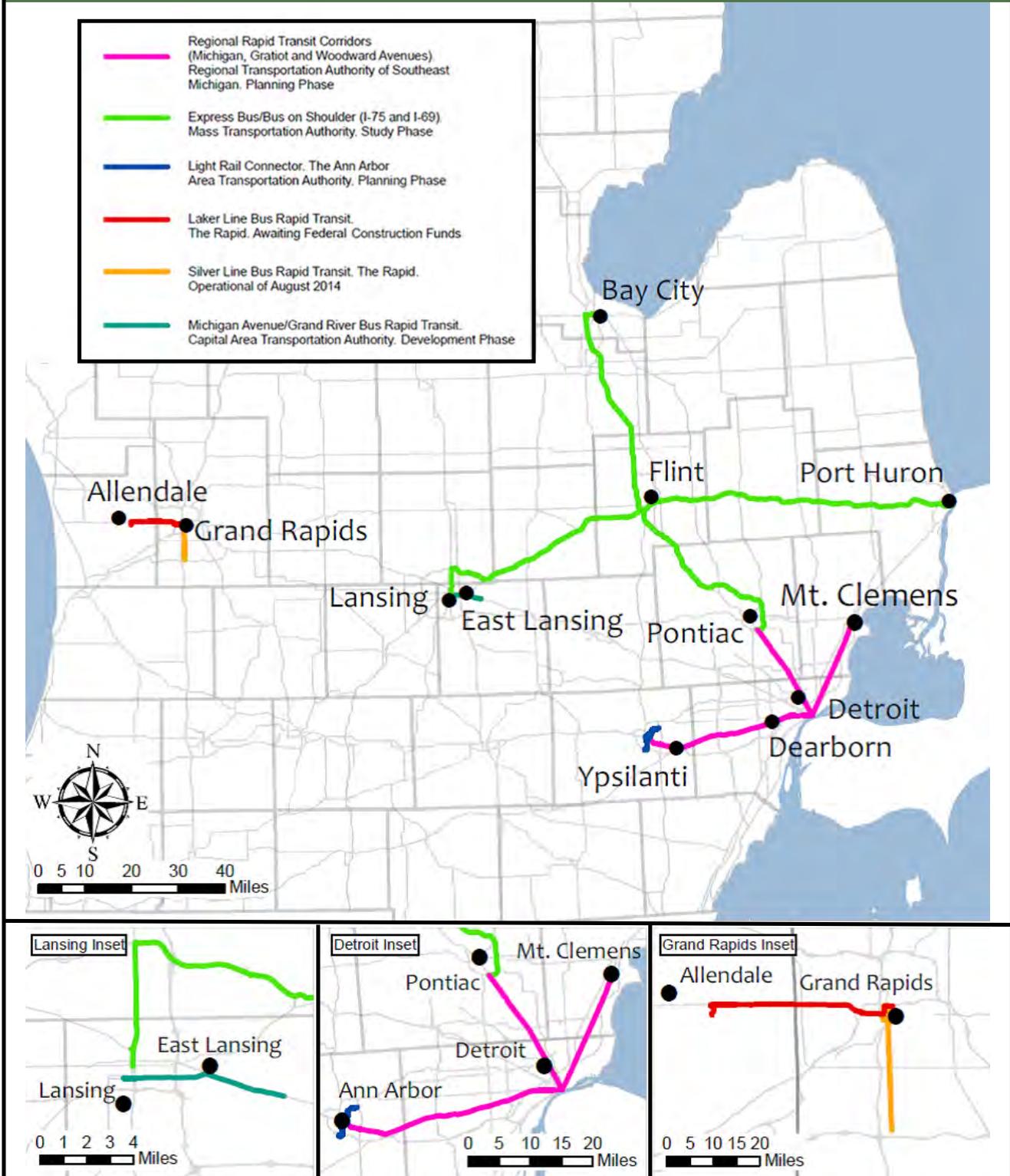
In the Lansing area, the Capital Area Transportation Authority (CATA) is completing development of their Michigan/Grand River Avenue BRT service in hopes of securing federal construction funds in 2017 or 2018. This is an 8.5-mile BRT line from the state Capitol in downtown Lansing linking Michigan State University (MSU) and



downtown East Lansing to the Meridian Mall area in Meridian Township. The project would replace CATA's highest ridership line and would include 28 stations, park and ride spaces, off-board fare collection, transit signal priority, and the procurement of 17 new articulated buses.

Regional transit planning is an important element in the quest to fill service gaps and improve transit options. Several urbanized areas are conducting studies to determine the best solutions for their regional transit needs. In southeast Michigan, the Regional Transportation Authority of Southeast Michigan (RTA) is planning for the expansion of regional transit services in Wayne, Oakland, Macomb and Washtenaw counties. The RTA will complete a regional transit master plan and corridors study in 2016 and will begin implementing some elements, including regional funding initiatives and selecting service options for major corridors. The Woodward Avenue study has already led to the selection of a locally preferred alternative (LPA) - BRT along the 27-mile corridor that will operate within the existing right of way, servicing 26 stations primarily on Woodward Avenue through 11 communities in Wayne and Oakland counties, and environmental work is proceeding.

## Planned Transit Projects Across the State



Studies have also been conducted for the Michigan Avenue and Gratiot Avenue corridors. The two studies evaluated alternatives for reliable, higher-quality transit between Detroit and Mt. Clemens, including the portion of Gratiot Avenue to M-59 and between Detroit and Ann Arbor, including the Detroit Metropolitan Wayne County (Metro) Airport. Actual service implementation will be dependent on their ability to secure federal, state and local funding. The RTA recently announced its intent to go to local voters in November to secure funding for their transit operations.

In Ann Arbor, an alternatives analysis is under way to improve and enhance public transit from northeast of town to south of town, including connections between the University of Michigan, downtown, the medical center, the train station and commercial areas. The proposed service is being referred to as “The Connector” and is proposed to be one or two light rail/streetcar lines.

The Flint-area transit agency, The Mass Transportation Authority, has commissioned a study of the I-75 corridor between Bay City and Detroit, which will include the I-69 corridor from Port Huron to Lansing, to determine the transit needs and how to best address them today and into the future.

## Iron Belle Trail

The Iron Belle Trail is the longest designated state trail in the nation and includes a route for hiking and a route for biking between Belle Isle Park in Detroit and Ironwood in the Upper Peninsula. The 1,273-mile hiking route (69 percent complete as of 2016) incorporates a large portion of the existing North Country National Scenic Trail. It traverses the west side of the Lower Peninsula and borders Lake Superior in the Upper Peninsula. The 791-mile bicycle route (64 percent complete as of 2016) uses existing multi-use trails and follows US-2, a designated U.S. Bicycle Route in the U.P.

MDOT is supporting the Michigan Department of Natural Resources (DNR)-led effort, along with multiple local, regional, nonprofit, and corporate partners and sponsors, to complete the trail. MDOT’s efforts include awarding grant funding, as well as providing technical assistance, design, project management, and construction engineering expertise.

MDOT is also partnering with the DNR and local partners to pair Iron Belle Trail construction with road and bridge construction projects where feasible. For example, there are two major nonmotorized projects planned along US-2 in 2017 and 2018 that will establish new connections for the Iron Belle Trail. As part of a major bridge replacement project on US-2 in Escanaba, a new barrier separated pathway will be constructed across the Escanaba River. This project also includes the installation of a short pathway and box culvert beneath a nearby railroad viaduct for bicyclists and pedestrians using the Iron Belle Trail.

MDOT has also committed Transportation Alternatives grant funds for a nonmotorized pathway parallel to US-2 along the shores of Lake Michigan. This pathway will provide an essential nonmotorized link between the cities of Gladstone and Escanaba. Both of these projects were made possible through strong partnerships with communities and will work in tandem to eliminate major nonmotorized barriers along the Iron Belle Trail system.



# Five-Year Transportation Program Process

The Five-Year Transportation Program is an essential part of the governor’s plan for economic growth for Michigan, and includes planned investments for highways, bridges, public transit, rail, aviation, marine, and nonmotorized transportation. Investments in all of these transportation modes provide important jobs to the Michigan economy, accessibility to urban and rural development, improved safety and efficiency of the transportation network, and enhanced quality of life for Michigan citizens.

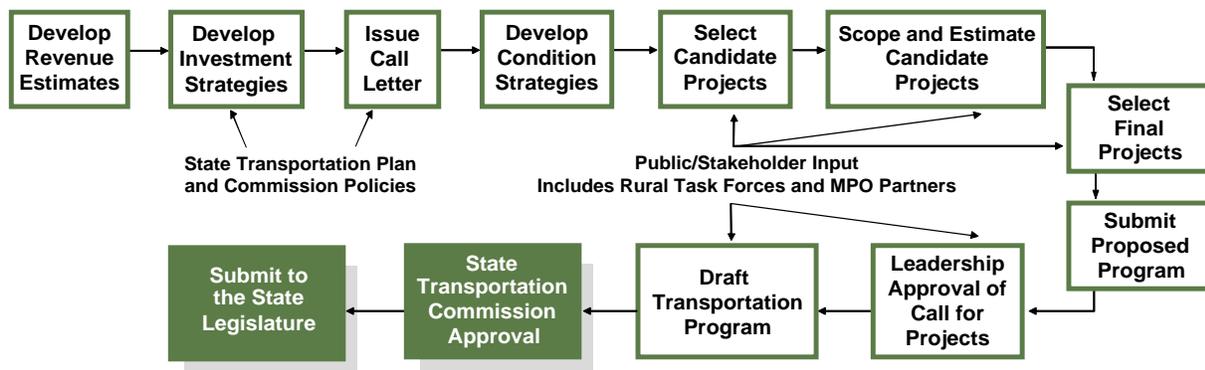
This program implements the state’s vision for transportation presented within the 2040 MI Transportation Plan, which is anticipated to be adopted by the State Transportation Commission in July 2016. For more information on the plan, please visit the website [http://www.michigan.gov/documents/mdot/MDOT\\_2016SLRP\\_DRAFT\\_523728\\_7.pdf](http://www.michigan.gov/documents/mdot/MDOT_2016SLRP_DRAFT_523728_7.pdf).

The highway portion is a rolling program; each year, the first year is implemented, a new fifth year is added, and program/project adjustments are made to the other years. This document only pertains to that portion of the programs that MDOT delivers. It does not account for programs 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 below flowchart.

MDOT strives to continually involve the public and stakeholders in development of its programs and projects. Transportation projects are often many years in the making, so it is important to engage stakeholders early so that public participation can help shape mutually desired outcomes. The Five-Year Transportation Program creates a continuous, interactive dialogue with the users of the state transportation system to anchor MDOT’s project development and delivery systems. MDOT’s seven region offices, 22 Transportation Service Centers (TSC) and statewide planning staff work throughout the year to share project lists with local agencies, stakeholders and the public. In addition to formal presentations, MDOT staff members informally discuss individual projects within the plan with economic development and tourism agencies, rural planning agencies, metropolitan planning organizations (MPOs), road commissions, local officials, tribal governments, businesses, local nonprofit groups, and the general public.

Public participation in MDOT’s Five-Year Transportation Program feeds into the State Transportation Improvement Program (STIP). The Five-Year Transportation Program serves as an opportunity for the public to be notified and provide local input to the upcoming STIP. The road and bridge projects proposed in the Five-Year Program are incorporated into MDOT’s STIP. Michigan is required to complete this planning process to receive federal transportation funding.



## Public Involvement

The public review and comment period for the preliminary draft of the MDOT 2017-2021 Five-Year Transportation Program was July 22 – Aug. 26, 2016. On July 22, MDOT placed the document on the MDOT website and issued a news release and e-mail notification to invite comments. Also available on the MDOT website was an interactive state map feature, which encouraged users to view the Five-Year Transportation Program project list geographically and quickly locate projects by year. The interactive website containing the document and

the interactive maps received about 3,200 visits and the document was downloaded 675 times within the comment period.

MDOT received public comments on the draft 2017-2021 Five-Year Transportation Program from nine different individuals, including respective comments from the Macatawa Area Coordinating Council and the Washtenaw County Water Resources Commissioner. Many of the comments were highly substantive and are included in the following categorized listing. If a person provided more than one comment, each comment was included in the following review.



### Safety/Road Conditions

- One comment expressed safety concerns over the passing zones along M-26 near Toivola in Houghton County.
- One comment was directed at poor road conditions on the I-94 Business Loop from Mills Street to Lake Street in Kalamazoo.
- One comment suggests the intersection of US-131 and M-186 near Fife Lake in Grand Traverse County should be improved due to safety concerns.
- One comment suggests the road conditions on state trunkline in the northeast Lower Peninsula be addressed.



### Alternatives/Suggestions

- The Washtenaw County Water Resources Commissioner suggests that there be a greater priority to storm water treatment in future road projects.
- One comment suggests that projects in the Five-Year Transportation Program be posted online as an electronic spreadsheet.
- The Macatawa Area Coordinating Council suggested the I-196 reconstruction project from US-31 to 130th Avenue in Allegan County currently on the 2021 project list be advanced.
- One comment suggests that all of I-69 in Flint be reconstructed at once instead of segments.

*Public Involvement continued*



## Oppose a Project

- One comment opposes the M-1 Rail (QLINE) project in Detroit due to ridership usage concerns.



## Other

- One comment expressed concerns over changes to a local bus route in Detroit.
- One comment asked if the I-475/I-69 and I-75/I-69 Interchanges in Flint will be reconstructed.

Information and comments received were directed to appropriate MDOT project areas or MDOT region planners. Responses were sent to individuals to acknowledge a comment. Local road comments were forwarded to the appropriate local offices. MDOT will work with urban metropolitan planning organizations (MPOs) and rural transportation agencies to assure the Five Year Transportation Program list of projects is consistent with the 2017-2020 STIP.

MDOT appreciates receiving this feedback and looks forward to providing more avenues for public involvement through enhancements to the MDOT website and social media outlets.

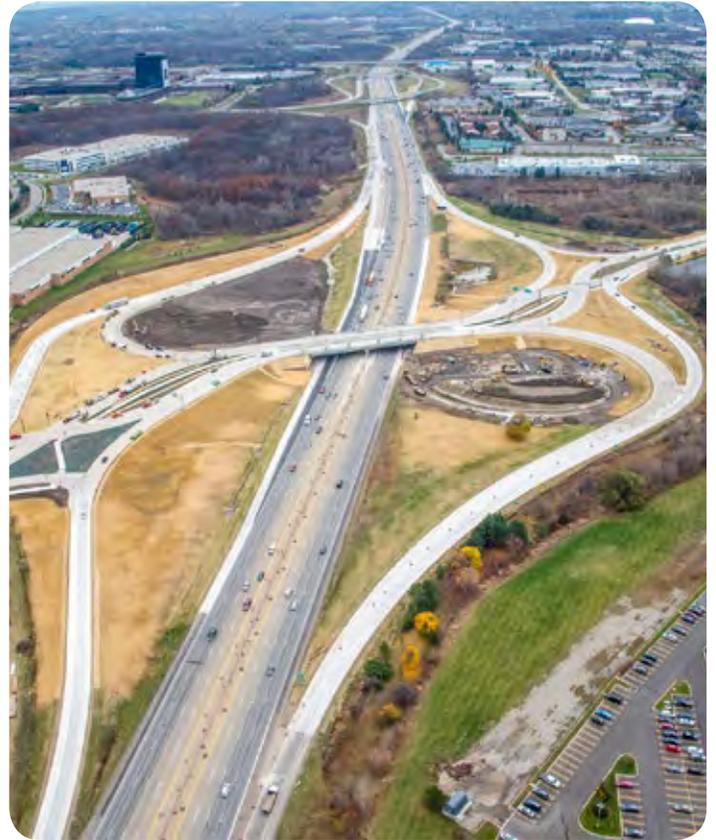


# Revenue Assumptions and Investment Strategies

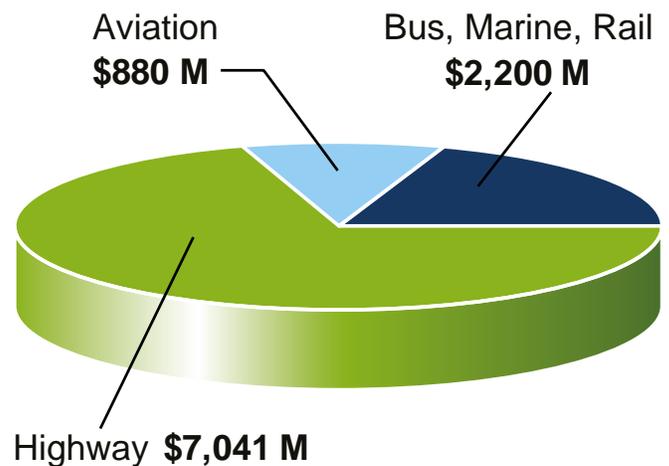
## Overview

Enhancing economic development by preserving and maintaining a safe transportation system remains MDOT's highest priority. This Five-Year Transportation Program invests nearly \$10.1 billion in MDOT's transportation system. This includes investments in the Highway, Aviation, Bus, Rail, and Marine programs. A total of \$7 billion (including routine maintenance) will be invested in the 2017-2021 Highway Program. Over these five years, \$880 million will be invested in the Aviation Program and \$2.2 billion will be invested in Bus, Rail, and Marine/Port programs (see the following pie chart).

The Highway Program focuses on system preservation through the repair, modernization and maintenance of Michigan's roads and bridges. The majority of the Multi-Modal Program concentrates on system preservation as well. Investments in Michigan's transportation system focus on a comprehensive safety program and increased emphasis on mobility and expanded work zone safety efforts. MDOT strives to reduce travel times through construction zones while still making safety a priority. The Five-Year Transportation Program documents that MDOT's investments in the state transportation system directly benefit Michigan citizens by providing them with expanded options, mobility, and access.



### Total - \$10.1 Billion



# Highway Program Revenue Assumptions

## Federal funding

On Dec. 4, 2015, the Fixing America's Surface Transportation Act, or the FAST Act, was signed into law. The FAST Act authorizes the investment of \$305 billion in federal funding in the nation's surface transportation system through FY 2020. The legislation breaks the cycle of short-term funding authorizations that have characterized the federal program for the past 10 years and, in covering nearly five full fiscal years, represents the longest surface transportation authorization bill enacted since 1998. The passage of a multi-year federal bill provided for predictability and certainty for state and local governments because so much of the capital program funding relies upon federal assistance.

The FAST Act builds on the reforms included in the Moving Ahead for Progress in the 21st Century Act (MAP-21), which directed agencies to think more about freight by interacting more closely with stakeholders and engaging in specific freight planning efforts. The FAST Act continues this focus on freight by creating two new programs to better target investments to projects that promote efficient movement of freight. The FAST Act supports performance-based decisions by funding efforts to collect and manage data for performance analysis, and to improve capacity of transportation agencies to better link investments with outcomes.

Reliance on non-transportation revenue to support investments in surface transportation is continued in the FAST Act. It transfers \$70 billion from the federal General Fund into the federal Highway Trust Fund (HTF) to ensure that all the investments in highways and transit during the next five fiscal years are fully paid for. This brings the total amount of non-transportation revenue that has supported investments from the HTF during the past seven years to nearly \$145 billion.

The FY 2017-2021 federal-aid revenue estimate is based on FAST Act estimates of federal funding available for



Michigan. Federal funding is assumed to grow about 2 percent per year for the entire Five-Year Program time period. It is projected that \$4 billion in federal funding will be made available to the Highway Program for this Five-Year Transportation Program.

## State funding

On Nov. 10, 2015, Gov. Snyder signed into law a funding package that will provide more state transportation revenue. The nine-bill package includes registration fee increases, motor fuel tax increases and appropriations from the General Fund.

The gasoline tax will be increased from 18.7 to 26.3 cents per gallon on Jan. 1, 2017, and the diesel fuel tax will increase from 15.0 to 26.3 cents per gallon. The motor fuel tax will be applied to natural gas (CNG) as well. Fuel tax rates will be tied to inflation beginning in 2022 to remedy the decline in purchasing power of the fuel tax. Registration fees for most cars and trucks will increase by 20 percent on Jan. 1, 2017. New electric car fees of \$100 per year, and \$30 for plug-in hybrid cars, will equalize road-user fees for vehicles that use little or no taxed fuel. The user-fee increases will generate an additional \$600 million per year for the Michigan Transportation Fund. Starting Oct. 1, 2019, General Fund revenues will be appropriated for roads, increasing from \$150 million to \$600 million over three years, until 2021. These revenues will be distributed to road agencies only, under the usual Act 51 formula.

The state revenue estimate is based on MDOT's share of the MTF, as estimated by consensus with the Department of Treasury, Economic and Revenue Forecasting Division. Future state revenue is forecast using a long-range forecasting model managed by MDOT's Statewide Transportation Planning Division. It is estimated that \$3.4 billion in state revenue will be available for MDOT's Highway Program.

### Funding Distribution

Public Act 51 of 1951 (Act 51) mandates how transportation funds are distributed and spent between MDOT and local entities. The intent of Act 51 in regard to federal highway aid is to distribute approximately 25 percent of federal aid to local jurisdictions for use on federal-aid-eligible local roads. The remainder is to be used by MDOT. The funds collected from state fuel tax and vehicle registration revenues are deposited into the Michigan Transportation Fund (MTF), the distribution fund for transportation revenues. MDOT receives approximately 39 percent of this fund (known as the State Trunkline Fund, or STF), county road commissions receive 39 percent, and cities and villages receive about 22 percent.

### Highway Program Investment Strategy

The State Transportation Commission (STC) establishes policies, goals, and objectives that provide the basis for

highway funding allocation decisions. MDOT developed an investment strategy process to accomplish the effective use of financial resources on the state trunkline Highway Program. The process allocates an investment amount to various program categories (bridge, road, safety, etc.) annually, based on program improvement strategy, goals, and statewide priorities. It sets the level of funding to achieve highway improvement priorities and provides a tool to constrain the overall statewide program against available revenues.

MDOT has a pavement preservation formula that allocates funding to its seven regions. The formula weighs four overall factors: pavement condition, eligible lane miles for pavement reconstruction and repair work, usage (average daily traffic volumes), and regional cost. These factors form the basis for how pavement preservation funds are distributed to each region. The formula is updated annually with current pavement condition, traffic, cost and eligible lane miles.

Bridge funding is distributed to MDOT regions using the bridge preservation allocation formula. It uses the deck area of bridges in each National Bridge Inventory condition to allocate funds to each MDOT region. Funding is split into investment targets for replacement, repair, and preventive maintenance work.



The following table provides the Highway Program investments strategy for FY 2017-2021.

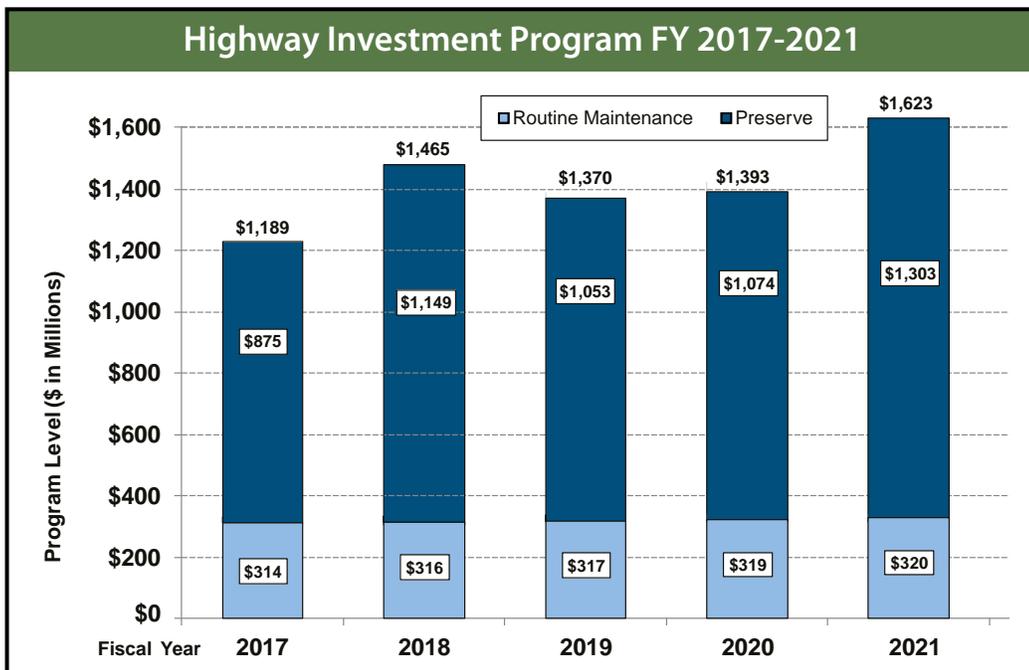
## Highway Investment Program FY 2017-2021

	FY 2017-2021 Annual Average (millions)	Five-Year Total (millions)
<b>REPAIR AND REBUILD ROADS AND BRIDGES</b>		
<b>REPAIR AND REBUILD ROADS</b>		
Rehabilitation and Reconstruction	\$385	\$1,927
Capital Preventive Maintenance	\$144	\$719
Non-Freeway Resurfacing Program	\$20	\$100
Freeway Lighting	\$6	\$28
Trunkline Modernization	\$180	\$902
<b>TOTAL - Repair and Rebuild Roads</b>	<b>\$735</b>	<b>\$3,676</b>
<b>REPAIR AND REBUILD BRIDGES</b>		
Bridge Replacement	\$62	\$310
Bridge Preservation	\$60	\$300
Big Bridges	\$19	\$93
Special Needs	\$17	\$87
Blue Water Bridge-Appropriated Capital Outlay Projects	\$7	\$33
<b>TOTAL - Bridges</b>	<b>\$165</b>	<b>\$823</b>
<b>ROUTINE MAINTENANCE</b>	<b>\$317</b>	<b>\$1,586</b>
<b>TOTAL - REPAIR AND REBUILD ROADS AND BRIDGES</b>	<b>\$1,217</b>	<b>\$6,084</b>
<b>SAFETY AND SYSTEM OPERATIONS</b>	\$138	\$690
<b>TRANSPORTATION ALTERNATIVES</b>	\$12	\$58
<b>ROADSIDE FACILITIES</b>	\$5	\$26
<b>WORKFORCE DEVELOPMENT</b>	\$7	\$35
<b>NON-FEDERALLY FUNDED PROGRAMS</b>	\$30	\$148
<b>TOTAL - FIVE-YEAR TRUNKLINE PROGRAM</b>	<b>\$1,408</b>	<b>\$7,041</b>

The FY 2017-2021 Five-Year Transportation Program estimates that investments for the Highway Program total approximately \$7 billion. This total reflects investments for pre-construction (scoping, design, environmental clearance and right-of-way acquisition) and construction activities. This Highway Program investment will provide Michigan travelers with approximately 304 miles of improved roads per year over the next five years, and repairs to 114 bridges per year. MDOT also will manage its road system by extending the life of approximately 1,800 miles of pavement each year through the CPM program. The Non-Freeway Resurfacing Program (NFRP) includes projects to help address surface condition on low volume roadways that are less likely to be improved with the current Road R&R program. The Trunkline Modernization category includes design and construction for portions of the I-75 corridor in Oakland County, and design and construction for portions of the I-94 corridor in Detroit. This document includes a project listing by region for additional projects in major work categories. These projects also can be viewed on a state map and regional maps on the MDOT website at <http://mdotnetpublic.state.mi.us/fyp/>.



The following graph illustrates the annual Highway Program investments by program categories over the five-year time frame. The annual investments range from a low of \$1.2 billion in FY 2017 to a high of \$1.6 billion in FY 2021.



## Multi-Modal Programs

MDOT's FY 2017-2021 Multi-Modal Program includes two main areas: public transportation and aviation. Public transportation programs are administered by two offices. The Office of Passenger Transportation (OPT) administers the Bus and Marine programs while the Office of Rail (OoR) administers the Rail and Port programs. The Office of Aeronautics administers the Aviation Program. These offices provide capital and operating assistance, technical support, and safety oversight.

The Multi-Modal Program focuses largely on continued safe and secure operation of the existing transportation system through routine maintenance, capital replacement/repair, and preservation of existing service levels. MDOT's approach to the Multi-Modal Program differs significantly from the Highway Program. The majority of the infrastructure is owned, managed, and operated by entities other than MDOT, and the state and federal funding that MDOT is responsible for represents only a portion of the overall investments in these modes. However, MDOT's recent acquisition and upgrade of the rail corridor between Dearborn and Kalamazoo has changed the landscape. Investing nearly \$400 million in federal grant dollars, MDOT purchased this corridor from Norfolk Southern Railway and undertook substantial improvements designed to enable accelerated passenger train speeds. As a condition of the federal grant, MDOT is now responsible for funding the annual maintenance of the corridor, as well as those capital improvements necessary to keep the line in a state of good repair.

The multi-modal portion of the five-year program contains overview information where the modes or programs have similar conditions, and mode-specific information when appropriate due to unique considerations or funding issues.



## Public Transportation Revenue Assumptions (Bus, Rail, Marine, Port)

### Public Transportation Revenue Issues

The Public Transportation Program receives most of its state funding through the CTF. Prior to the new transportation revenue package, approximately two-thirds of CTF revenues were from the MTF, which is funded by the state motor fuel tax and vehicle registration fees. The MTF will increase due to the increases in fuel taxes and registrations but additional General Fund revenues will not pass into the CTF. The MTF revenue is estimated to increase slightly to 70 percent of the CTF revenues in FY 2018, the first full fiscal year to receive the new MTF funds. Fluctuations in MTF revenues impact CTF revenues. The CTF also receives revenues from auto-related sales tax revenue, which varies from year to year. The distribution of the MTF to the CTF and the sales tax contributions to the CTF are called for in state law, but neither is constitutionally protected. In recent years, the Public Transportation Program has also been appropriated General Fund dollars since CTF revenue was insufficient to match federal funds and support a continuation level of services.



For CTF revenues, this five-year program is based on the FY 2017 CTF appropriation and revenue estimates for FY 2018 through FY 2021. Based on current FY 2017 revenue estimates, CTF funding available for appropriation in FY 2017 is \$47.8 million more than in FY 2016. If the \$25 million of General Fund dollars appropriated for transit capital and rail infrastructure in FY 2016 is included in the calculation, CTF funding in FY 2017 is \$22.8 million more than the CTF/General Fund combined in FY 2016. This increase is largely due to the new transportation revenue package. In FY 2018, with one full year of the new MTF revenue, CTF revenue for programs is estimated to be \$304.3 million, an increase of \$14.6 million, or 5 percent, over FY 2017. Even with the additional revenue generated by newly enacted legislation, revenues may not be sufficient to meet the program needs over this five-year period.

### Passenger Transportation (Bus and Marine) Program Development

The bus and marine programs are administered by MDOT's Office of Passenger Transportation and cover local transit (bus), marine, and intercity bus - the largest of these being local transit. In many ways, development of a five-year program for these programs is not feasible, at least not in the same way as is feasible for MDOT's road and bridge program, primarily because the vast majority of local transit projects are selected at the local level, not by MDOT, and are determined annually. In addition, the CTF is subject to an annual appropriations process, the results of which determine the funding available for each of the programs.

Because the CTF is subject to an annual appropriations process, it is rare that MDOT makes a multi-year funding commitment from the CTF, other than continuation of the annual programs mandated in Act 51. Therefore, what is presented in this document is MDOT's annual program for FY 2017, the estimated funding that may be available for the remaining years of the program, and a description of the factors anticipated to influence both the funding availability and the annual decisions that will be made over the life of this program.

## Local Transit Revenue Assumptions

The programs in this category provide funding for operating and capital support, training, and special projects to local bus operators that service the general public. Assistance also is provided to support transportation services focused on the needs of senior citizens and persons with disabilities, as well as the transportation-to-work needs of low income individuals. A total of 119 transit providers (81 local agencies and 38 specialized services agencies) in all 83 Michigan counties are provided support under these programs.

The FAST Act continues all the federal transit formula programs as outlined in MAP-21, with increases that are roughly inflationary. It also maintains the same basic structure of these programs in terms of which programs/funds are apportioned to the state to deliver to MDOT's subrecipients and that are apportioned directly to urbanized areas. New program requirements included in MAP-21 pertaining to transit asset management and transit safety planning and related performance measures remain in place. The asset management and safety requirements have yet to come into effect because FTA rulemaking is still in process and once they become effective they may influence local and state investment decisions.

The FAST Act includes a new competitive program ("Buses and Bus Facilities") that allows the FTA to make competitive grants to states and transit agencies for bus and bus facility capital projects. The predecessor to this program - under prior authorizations - was an important source of capital funding, via both congressional earmarks and FTA competitive grants, for many urban and rural transit agencies in Michigan. When the discretionary portion of the bus and bus facilities program was eliminated in MAP-21, it resulted in a reduction of federal funding to agencies in Michigan and projected declines in the condition of the state's bus infrastructure, even as nationwide transit funding amounts remained level. MDOT will submit annual applications to the FTA in hopes of getting funding to improve the condition of the rural and specialized transit fleets. Urban agencies throughout the state will likely also compete for these funds.



It is important to note that more than 80 percent of FTA formula funds for local bus systems go directly to transit agencies and are not reflected in MDOT's program. Also, the federal discretionary funds that will be sought by urban transit agencies under the "Buses and Bus Facilities" program, as well as the grants that The Rapid, CATA and the RTA will seek to implement their regional transit improvements, will not flow through MDOT. However, under Act 51 all of these federal funds are matched by MDOT using the CTF appropriated for that purpose. Therefore, when CTF dollars are not available to match federal funds, the impact is largely on local programs, not MDOT programs, which means impacts on the transit infrastructure and on transit providers' ability to access federal funds is not detailed in this five-year program document. Given the discretionary nature of some of these funds, it is not yet known if the CTF dollars available will be sufficient to match all available federal transit aid.

Also part of local transit is the MichiVan Program. MDOT contracts with private service providers to help organize and sustain vanpools as a commuting alternative. Federal funds for MichiVan come from FHWA's Congestion Mitigation and Air Quality (CMAQ) Program and are programmed under the Highway Program. A small amount of CTF also is used each year for MichiVan.

## Marine Revenue Assumptions

The FHWA Ferryboat Formula Program continues in the FAST Act. While the FHWA formula program provides a guaranteed annual allotment to eligible ferry systems in Michigan, the annual funding level for each system is small and inadequate for major capital improvements, such as replacing ferry vessels, expanding terminals or docks, or upgrades. Each ferry system that receives a federal allocation on this program will determine how to use the funds, and MDOT will issue grants accordingly. The federal funds that will come to Michigan under the FHWA program are not shown in the Bus and Marine programs, but are included in the highway portion of this five-year program.

## Intercity Bus Revenue Assumptions

The Intercity Bus Program provides both operating and capital assistance for the intercity network in the state, with a goal to allow residents access to the national transportation network. The program is supported with a combination of federal and state funds, with the exception of the Terminal Development Program, which pays for small projects using only state funds. Under the FAST Act, the federal funds available for intercity bus should remain at about the same level for the duration of this five-year program. MDOT anticipates state funds to be adequate to support the continuation of the current level of service.

## Rail (Passenger and Freight) and Port Program Development

Like OPT, the Office of Rail cannot develop a comprehensive five-year program. Much of the Office of Rail's ongoing expenditures will be for Amtrak operating support and for maintenance of the Kalamazoo-Dearborn corridor, both of which vary annually. Projects funded under most other Office of Rail programs are developed annually as well; many are application-based. Therefore, the Office of Rail scales its efforts to fit available funding. While projected funding is not sufficient to maintain all MDOT rail efforts, this five-year program assumes some degree of continuation. This five-year program also includes projects that have been funded by prior federal grants and programs.

## Rail Revenue Assumptions

MDOT's rail programs are funded by dedicated federal-aid, MTF, and CTF dollars. Dedicated federal-aid and MTF money support motorist safety at railroad crossings on local roads. CTF revenue supports the other passenger and freight rail activities. MDOT will continue to compete for federal funding, potentially including new programs offered under the FAST Act, to assist with rail capital enhancements, as appropriate. Federal funding generally requires a minimum of 20 percent matching funds. If state revenues are not sufficient to meet the match requirements, these opportunities would be lost.

*NOTE: STF dollars and corresponding dedicated federal funds support a trunkline crossing program that also is invested as a part of the Rail Program, but those funds are accounted for as a part of the Highway Program.*

## Port Revenue Assumptions

The pass-through assistance provided to the Detroit-Wayne County Port Authority is expected to continue at FY 2017 levels over the next five years. FY 2017-appropriated revenue for ports is nearly \$470,000.



## Aviation Revenue Assumptions

The Federal Aviation Administration Modernization and Reform Act provided \$3.35 billion in federal funds for the Airport Capital Improvement Program (ACIP) nationwide. Congress recently extended this funding legislation through Sept. 30, 2017. In FY 2017, federal funding for ACIP is expected to remain at present levels. ACIP funding for Michigan airports is expected to be approximately \$95 million in FY 2017-2021.

Continued lack of adequate state aviation revenue will continue to place an increasing burden on local communities for maintaining the airport infrastructure. 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 significantly decline. Revenues from aviation fuel decreased from \$8.62 million in 2000 to \$6.9 million in 2015, but are beginning to show some recovery. When adjusted for inflation, the projected aviation fuel tax revenues are less than half of those available in FY 1998.

In December 2015, Gov. Snyder signed legislation that dedicated 2 percent of the sales tax on aviation fuel to fund aviation programs. Sixty-five percent is sent to the Qualified Airport Fund (airports with more than 10 million yearly-enplaned passengers) and 35 percent to SAF. The State Budget Office estimates that the total sales tax revenue will be \$13.5 million yearly in the initial years, with \$4.725 million being sent to SAF.

Other sources of revenue include aircraft registration, airport licensing, tall structures permits, and aircraft dealer licensing. Additional revenue for FY 2016 includes a one-time \$1.5 million allocation from the General Fund to match federal aid and a one-time transfer from the Transportation Economic Development Fund of \$2 million. It is anticipated with the arrival of additional funding from the partial dedication of the sales tax on

aviation fuels that the General Fund and other non-dedicated funds will not be added to aviation programs. This will keep the amount of funds expected over the five years of this plan steady without the uncertainty of further legislative budget attention.

Since 2009, certain statewide programs funded directly from the SAF were suspended or reduced. Those programs include statewide pavement maintenance, statewide paint marking, all weather access, and the Air Service Program. In the case of pavement maintenance, paint marking, and all weather programs, these projects are now done on the same cost basis as ACIP. The Air Service Program that supports the Governor's Dashboard is unfunded in FY 2016, but will be funded at \$250,000 for FY 2017. Additional Aeronautics revenue is needed to grow this program to its desired level of \$1 million annually.

In summary, aviation program revenue assumptions are:

- **Federal Revenues**

- Uncertain through 2020, but estimated at present levels.
- Continued formula apportionments, congressional earmarks, and discretionary grants.
- In partnership with locals competing for federal discretionary funds.

- **State Revenues**

- Committed to match all available federal funding.
- Excise fuel tax revenue may be recovering to near previous level.
- Increase in bond debt service.
- New sales tax revenue will continue to help bring funding levels up.

## Public Transportation Investment Strategy

MDOT's Public Transportation Program includes local transit, intercity bus, marine passenger, the MichiVan vanpool program, port, freight rail, and passenger rail. The program provides for a combination of capital and operating assistance, technical support, safety oversight, and compliance monitoring for each of the modes.

This Five-Year Transportation Program represents the beginning of a recovery process for a program that has been steadily reduced over a number of years. The newly enacted revenue package will provide additional funding to help support this program.

The total Public Transportation Program for FY 2017 is estimated to be \$420.2 million, of which \$290.6 million is CTF and \$129.6 million is a combination of federal, other state, local, and private funds. With the new revenue package, the program will grow a small amount in FY 2018. The estimated FY 2018 program is \$434.8 million, with an increase of approximately \$14.6 million in CTF funds. The CTF revenue estimates are from the Michigan Department of Treasury Office of Revenue and Tax Analysis's (ORTA) January 2016 estimates. Based on the proposed FY 2017 program, ORTA's estimates for FY 2018, and internal estimates for FY 2019 through FY 2021, the five-year program estimate is placed at \$2.2 billion.

The investment of CTF revenues in the public transportation system is determined by the detailed requirements currently set forth in Act 51, as well as the annual appropriations process. Act 51 requires the majority of CTF revenues to be used for local transit. Based on the current structure of Act 51 and the requested revenue, the investments called for in this five-year program are focused heavily on the preservation of the existing public transportation system.

## Local Transit Investment Strategy

State funds are combined with federal and local dollars, including farebox revenue and local millages, to support operation and maintenance of the local transit network. The state's annual investment strategy for the Local Transit Program is largely determined by detailed requirements set forth in Act 51 of 1951 for annual distribution/use of CTF revenues and the eligible uses of federal formula apportionments and competitive grant awards.

The budgeted funds for FY 2017, which include additional funds from the new state transportation funding package, allowed a slight increase in state Local Bus Operating (LBO) assistance with the hope of increasing slightly and stabilizing the state's share of local transit operations. The CTF available to match federal aid will be sufficient to leverage all anticipated federal operating and capital formula allocations but may not be sufficient to match all competitive awards. A high level of success in receiving new federal discretionary funds could put a strain on the CTF.

The MichiVan Program will be maintained with state, federal, and local funds. Demand for new vanpools continues to increase as fuel prices fluctuate.

### MDOT's local transit investments will focus on:

- Preservation of existing services in all 83 counties via operating assistance to local transit, intercity bus, and public marine service providers.
- Preservation and maintenance of the existing infrastructure (largely locally owned) via state investment and match to federal funds for routine vehicle replacement.
- Support of local capital strategies established by individual transit agencies via matching federal capital grants for infrastructure replacement and repairs, and, in very limited situations, some minor capacity expansion.

Based on this model, there is limited CTF anticipated in the program for urban growth with projects, such as CATA's Michigan Avenue/Grand River Avenue BRT, the North-South Commuter Rail (Howell-Ann Arbor), or expanded transit in the new RTA service area.

### Intercity Bus Investment Strategy

MDOT will continue to use state and federal funds to contract with intercity bus carriers to provide route service that would not otherwise exist (i.e., service that would not be provided by the carrier absent a state subsidy).

Every three years, MDOT bids out the five routes in northern Michigan that private carriers have abandoned due to lack of profitability. Based on the FAST Act and anticipated CTF funding levels, the current level of service will be maintained for the life of this five-year program. This service includes a partnership with the Wisconsin Department of Transportation to co-fund two routes that benefit both states and provide meaningful connections to the national network. Vehicles used on these routes and routes in the southern portion of the state deemed essential to national connectivity also are funded with a combination of state and federal funds.

MDOT also will use state and/or federal funds to enhance the intercity passenger infrastructure. The Terminal Development Program is used to maintain intermodal/intercity terminals and infrastructure so the public can safely and conveniently access intercity services. There are no major construction projects planned in the next five years, so a minimal amount of funding has been requested to maintain the current facilities and pathfinder signs.

The Intercity Program also includes regulating the commercial business activities of both intercity bus and limousine services. These activities are funded through the department's operating budget and fee collections.

### Marine Passenger Investment Strategy

The four state-subsidized marine passenger systems will continue to receive operating assistance under the Local Bus Operating Assistance Program called for in Act 51 to preserve the service they provide. Any state marine capital funds available over the life of this program will be used for routine infrastructure maintenance and improvements to ensure the integrity of the system. However, with the small amount of state and federal capital funding available for the Marine Passenger Program, deterioration of the locally owned infrastructure over the life of this five-year program is likely, which will make it difficult to preserve the system and likely impossible to replace the aging ferryboats.



### Rail

MDOT's rail investments using state and federal funds will preserve and enhance Michigan's passenger and freight rail systems, ensure railroad crossing safety and promote economic development.

The bulk of the state and federal funds will be invested to preserve and enhance Michigan's intercity passenger rail services mandated by federal statute or existing contractual arrangements, including operating expenses on the three Michigan routes that service 22 station communities and maintenance of the state-owned track between Kalamazoo and Dearborn. This five-year program will also complete federal grant projects to enhance the state-owned track between Kalamazoo and Dearborn and undertake other

capital improvements necessary to accommodate passenger train speeds up to 110 mph and, as part of a multi-state \$268 million procurement, replace existing intercity passenger train equipment on all three Michigan services. In addition, the planning and site selection process for a new station in Ann Arbor will be finalized.

MDOT is planning to announce a call for projects for the Michigan Rail Loan Assistance Program (MiRLAP) in early FY2017. While the revolving loan fund's cash balance was transferred to the General Fund in 2010, and no new loans have been awarded for several years, subsequent repayments have rebuilt a sufficient balance to allow the department to again solicit applications. MiRLAP offers no-interest loans to railroads to improve the efficiency and/or safety of rail infrastructure.

If funding permits, state CTF dollars also will be invested in freight economic development loans and state-owned line preservation, while dedicated MTF and federal dollars will be invested in safety enhancements at railroad crossings. Specific projects will be identified annually based on available funding, but generally will include:

- Preservation of freight service on 665 miles of state-owned track through capital repairs that supports economic development.
- Low-interest loans through the Freight Economic Development Program to assist new or expanding businesses with access to the rail system.
- Projects to enhance motorist safety and improve the driving surface at railroad crossings. Safety projects to reduce motorist risk at crossings will include warning device enhancements and crossing elimination projects on roads under local jurisdiction. A special effort to eliminate crossings by relocating track will be undertaken in FY 2017 as a result of a one-time infusion of funds provided under the FAST Act. Projects on the state trunkline system designed both to improve crossing surfaces and upgrade warning devices are accounted for under the Highway Program. A new competitive program for surface improvements on roads on the local system will be launched in FY 2017.

MDOT also will continue to plan and support other passenger rail projects, including providing assistance to commuter and light rail in southeast Michigan.

However, in this five-year program, little rail investment is anticipated beyond intercity passenger services and crossing safety projects.

## Port

For each of the next five years, MDOT anticipates providing \$468,200 in legislatively appropriated funding to the Detroit-Wayne County Port Authority to assist with operating costs and marketing activities.

## Aviation Investments

### Airport Capital Improvement Program (ACIP)

ACIP provides funding for approximately 235 public use airports for capital improvement projects and pavement maintenance. Of the 235 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 themselves, not MDOT. However, projects are ranked according to a priority system and encouraged to provide not only benefits to the airport, but the system as well.

In addition, MDOT can and does provide supplemental funding for projects and makes the decision on which projects receive these funds through the State Block Grant Program. 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 (MASP), as approved by the Michigan Aeronautics Commission or published FAA priorities, as appropriate. A revision to the MASP 2008 is currently under way with a scheduled completion date of January 2017.

Priorities are a significant part of the funding decisions that support the organizational mission and represent the overall vision driving the airport infrastructure investment strategy. While constrained, these include:

- Address MASP goals (asset management) by reducing system and facility deficiencies.
- Preserve critical infrastructure, particularly pavements, navigational aids and airspace.
- Maximize federal funds and leveraging state, local and private funding.
- Support job growth and economic development through projects related to freight/logistics, aircraft maintenance, and other emerging opportunities.
- Support air service passengers statewide.

To the extent possible over the next five years, efforts will continue to focus on integration with other modes of transportation, addressing environmental issues, public awareness/outreach, and education.

In 2014, the ACIP showed a gap between the needs identified by airports and anticipated funding of approximately \$60 million per year, or \$300 million over

five years. Today, that gap is nearly \$80 million annually, or \$400 million over the five-year period. This growing shortfall is due to the increased cost of delaying and phasing projects versus being able to accomplish them in a single effort. This difference can be narrowed somewhat by discretionary funding, which is distributed by the FAA on a regional basis among various states. Michigan has competed well for these funds and, given the identified needs, will continue to aggressively pursue these opportunities. Additional state and other funding options will continue to be explored to impact the shortfall.



## MDOT's Multi-Modal Investment Strategy

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

	Annual Average	Five-Year Total
<b>AVIATION</b>		
Airport Improvement Program (AIP)*	\$176 million	\$880 million
<b>PUBLIC TRANSPORTATION PROGRAM</b>		
(Local Transit, Intercity Bus, Passenger Rail, Rail Freight, and Ports)**		\$2.2 billion
<b>TOTAL</b>		<b>\$3.08 billion</b>

\* Includes comprehensive program of needed investments for primary airports and general aviation airports as identified in the MDOT ACIP.

\*\* Includes federal, local and sub-fund expenditure authority, which is often overstated to account for potential revenue.



# Highlighting Upcoming FY 2017

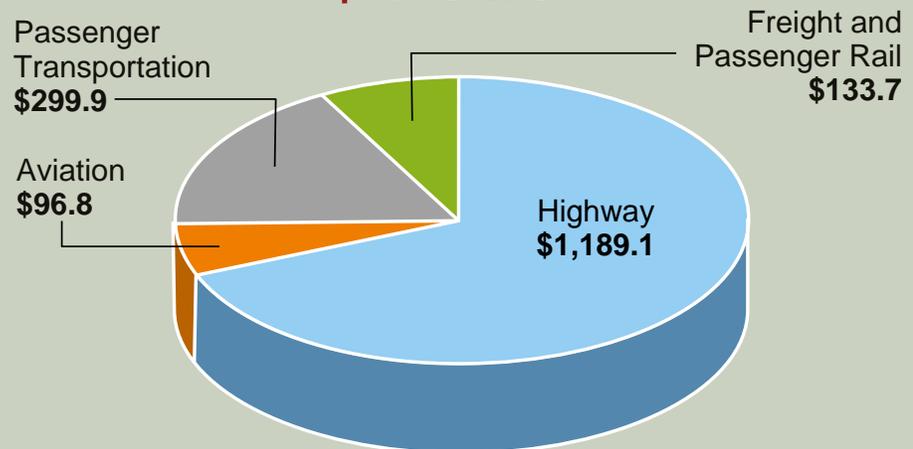


MDOT's FY 2017 Transportation Program invests \$1.7 billion and is a vital part of Michigan's economy, estimated to support 24,540 jobs. This program continues to emphasize preservation of the transportation system, safe mobility for motorists, and efficient system operations.

In FY 2017, MDOT will invest approximately \$1.2 billion in system preservation, maintenance, safety, and operation of Michigan's state trunkline roads and bridges. The preservation and safety of Michigan's existing transportation system continue to be MDOT's highest priorities.

MDOT's FY 2017 Multi-Modal Program provides for capital and operating assistance, technical support, and safety oversight of the air, passenger rail, rail freight, marine and port, intercity bus, charter bus, limousine, and local transit sectors of Michigan's transportation system. In FY 2017, MDOT will invest \$530.4 million in state, federal, and local funds to maintain Michigan's multi-modal operations and infrastructure.

## FY 2017 MDOT Transportation Program \$1.7 Billion



Totals in chart shown in millions.

# MDOT FY 2017 Transportation Program

## Highway Program Revenue Assumptions:

The FY 2017 Highway Program spending is consistent with anticipated federal and state revenues. It is projected that approximately \$760 million in federal funding will be available in FY 2017 for road and bridge construction. The state revenue estimate is based on the Department of Treasury forecast for the STF, which includes revenue for state trunkline routine maintenance. The estimated state transportation revenue available for the FY 2017 trunkline capital program and routine maintenance totals \$474 million, after allowing for debt service.

These revenue estimates assume additional state revenues due to the passage of a legislative state revenue package signed into law in November 2015. Additional revenues will be collected due to fuel and registration increases that are scheduled to go into effect Jan. 1, 2017. Additional revenues are estimated to be about \$161 million to MDOT. Please see page 22 for more discussion of these revenues.

## Public Transportation Program Revenue Assumptions:

The FY 2017 Public Transportation Program (bus, marine, passenger rail, freight rail, and port programs) is based on PA 268 of 2016, Article XVII – the state's FY 2017 operating budget – and includes federal, state, local, and private revenue. The FY 2017 budget includes an appropriation of \$291 million of CTF. The CTF appropriation funding was based on the Department of Treasury's Jan. 14, 2016, MTF, motor vehicle-related sales tax and miscellaneous revenue estimates, and expected CTF unreserved fund balance at the end of FY 2016. The FY 2017 CTF appropriation is approximately 19.7 percent greater than the FY 2016 CTF appropriation, or 8.5 percent greater than the combined CTF and General Fund appropriations. MTF funding of \$3 million annually is provided for grade crossing safety purposes through a set-aside in Act 51. This funding is shared between projects on local roads and on state trunklines. Additionally, beginning in FY 2017, another \$3 million is available to improve grade crossing surfaces on local roads.

The Public Transportation Program can also receive varying levels of federal dollars. For bus transit programs, the funds shown in the program are those that come directly to MDOT, most of which are distributed to agencies serving nonurban areas of the state. The majority of the federal funds that come to Michigan go directly from FTA to the urban transit systems and are not reflected in this program. With the exception of dedicated grade crossing safety funds, neither passenger nor freight rail programs receive ongoing federal funding, but both can compete for discretionary programs available under the FAST Act.

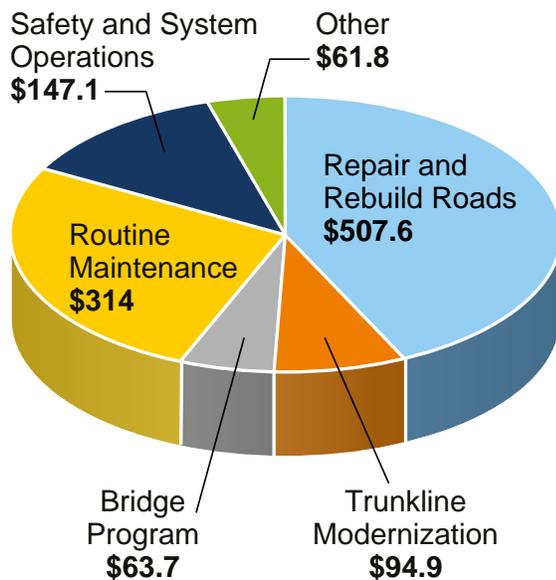
## Aviation Program Revenue Assumptions:

Federal funding for aviation remains uncertain. FY 2017 funds were estimated based on FY 2015 requests, since FY 2016 funds have not been received. Revenue assumptions for the plan include continued formula apportionments, congressional earmarks, and discretionary grants. MDOT is in partnership with locals competing for federal discretionary funds. State aviation fuel revenues for FY 2017 will be utilized to match all available federal funding, and are expected to be the same as FY 2016 revenues. Over the last decade, aviation fuel tax revenues in Michigan have continued to significantly decline. Revenues from aviation fuel have decreased from \$8.6 million in 2000 to a projected \$5.1 million in 2016. General Fund revenues were replaced by a sales tax on aviation fuels.

Interested in an FY 2017 MDOT project? Please go to the project list starting on page 52 or go to the MDOT website at <http://mdotnetpublic.state.mi.us/fyp/>.

# \$1.7 Billion Total Investment

## FY 2017 MDOT Highway Program \$1.2 Billion

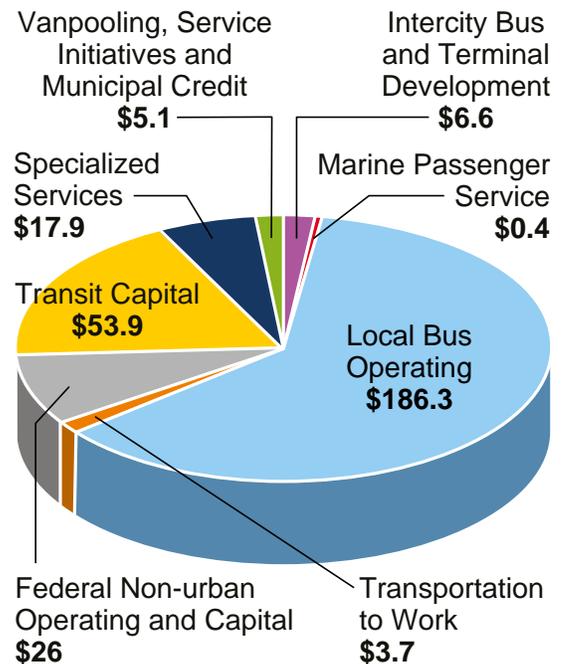


### Highway Program Investment Strategy

- FY 2017 Repair and Rebuilding Roads total includes:
  - 234 lane miles of reconstruction and resurfacing repairs
  - 1,800 lane miles of capital preventive maintenance (CPM)
  - 147 miles of non-freeway resurfacing
- Bridge preservation activities, including bridge rehabilitation and reconstruction and CPM, will total \$63.7 million. An additional \$134 million in bridge reconstruction was advanced into FY 16, including the I-75 Rouge River Bridge, discussed on page 10. This work will be constructed in FY 2017.
- Trunkline Modernization Program totals \$94.9 million. Seven bridges on I-94 (Chene Street, Second Avenue, Mt. Elliott Street, Gratiot Avenue, Cass Avenue, Cadillac Avenue, and Concord Avenue) will be replaced among other work.
- Safety investments include operational improvements, dynamic signing, signals, pavement markings, and other safety improvements

Totals in chart shown in millions.

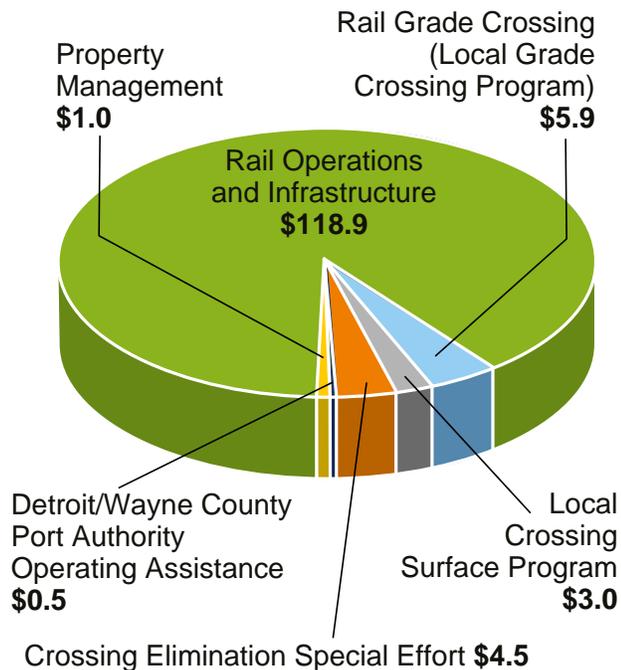
## FY 2017 Passenger Transportation \$299.9 Million



### Passenger Transportation Investment Strategy:

- Act 51 defines how CTF will be expended
- Preservation of existing local transit and marine services
  - 78 local bus transit agencies
  - Four passenger ferry systems
  - 38 specialized service providers
  - More than 90 million public transit trips in FY 2015
- Preservation of state-subsidized intercity bus service
  - Five MDOT-contracted routes
  - Two jointly funded routes
- Preservation and maintenance of existing infrastructure
- Limited funding for regional transit improvements

## FY 2017 Freight and Passenger Rail \$133.7 Million

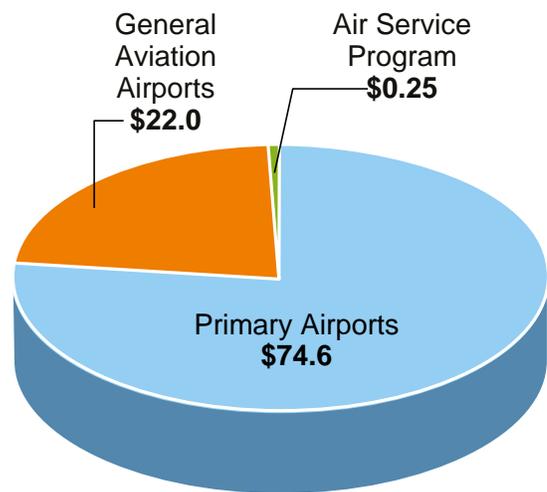


### Rail Investment

- **Passenger Rail**
  - Amtrak operating support for three Michigan corridors
  - Maintenance and capital investments in the Kalamazoo-Dearborn corridor, including completion of all grant-funded capital work related to Michigan's Accelerated Rail Program
  - Assist in continued study/development of two commuter services (Ann Arbor to Detroit and Howell)
- **Freight Rail**
  - Assist new and expanding businesses with rail infrastructure needs through the Freight Economic Development Program
  - Strategic capital investments on 530 miles of state-owned freight lines
- **Grade Crossing Safety**
  - Local roads – warning device enhancements at approximately 30 locations

Totals in chart shown in millions.

## FY 2017 Aviation Program \$96.8 Million



### Aviation Investment Strategy:

Priorities are a significant part of the funding decisions that support the organizational mission and represent the overall vision driving the airport infrastructure investment strategy.

For aviation, these include:

- Address asset management by reducing system and facility deficiencies.
- Preserve critical infrastructure, particularly pavements, navigation-aids and airspace.
- Maximize federal funds and leverage state, local and private funding.
- Support job growth and economic development through projects related to freight/logistics, aircraft maintenance and other emerging opportunities.

Continued emphasis on identifying improved service delivery methods, efficiencies and innovations will compliment efforts to create jobs and align with the regional prosperity initiative to support economic development.

# Performance Measurement and System Condition

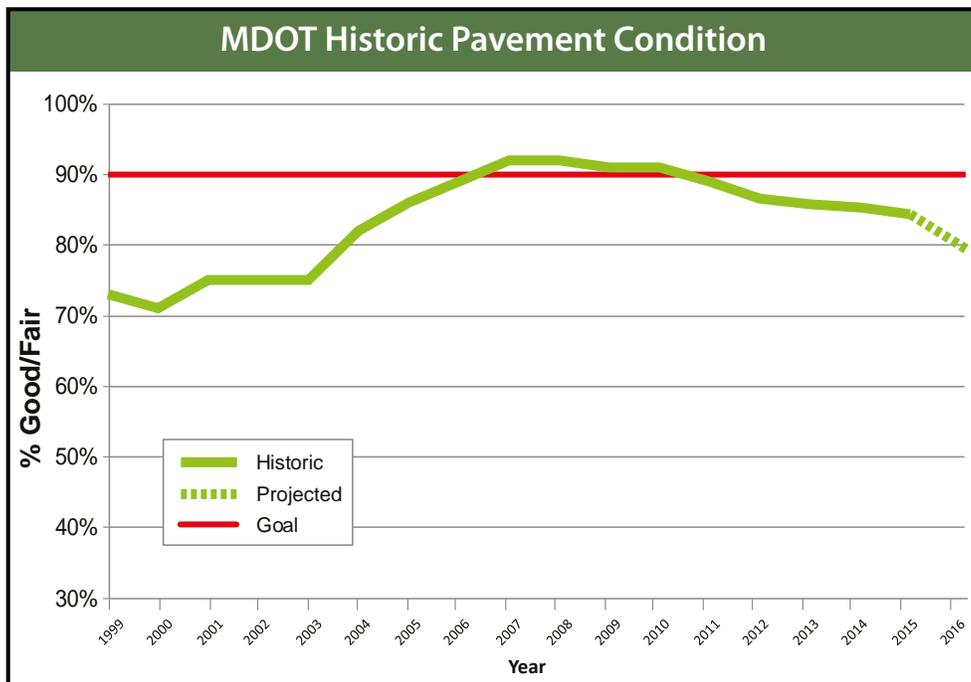
## MDOT Performance Measurement

Maintaining and growing Michigan’s economy depends on the preservation, modernization, and efficient operation of its transportation system. To achieve the goals that have been set forth, it is necessary to benchmark and monitor the performance of the system.

MDOT formalized its approach to improving, measuring, and reporting the condition of its transportation networks with the STC’s 1997 adoption of pavement condition goals. Since then, MDOT has developed performance measures to reflect a broader range of the transportation system. The following sections reflect a representative sample of the performance measures that MDOT is using to track the highway, aviation, and passenger transportation modes of travel.

## Highway Pavement Condition Goal

This section of the document only pertains to the state trunkline routes that MDOT has jurisdiction over - I, M, and US routes - which carry 53 percent of passenger traffic and 66 percent of commercial traffic in the state. These routes are important trade routes, business corridors, and keys to economic development. MDOT continues to make program development and project selection decisions based on the pavement’s remaining service life (RSL), a measure of the pavement’s overall health. It is defined as the estimated remaining time in years until a pavement’s most cost-effective treatment requires either reconstruction or major repair. Pavements with an RSL of two years or less are considered to be in the “poor” pavement category. MDOT uses an asset management approach of short, medium, and long-term improvements to maintain overall pavement health. Once pavements deteriorate into the “poor” category, it is more costly to bring them back into “good” condition. MDOT strives to employ an appropriate mix of fixes to maintain its pavement infrastructure in the best condition possible.



The graph shows the state trunkline system condition based on RSL. MDOT was able to maintain its goal of 90 percent of pavement in good or fair condition from 2007 to 2010. Trunkline conditions were estimated to be at 84 percent good or fair in 2015. As the graphic shows, the deterioration rate in recent years was about 1 percent per year. This rate is forecasted to accelerate considerably in the future. Additional funding from the recent state revenue package will slow pavement decline, but projections show it will not meet and sustain pavement goals in future years.

## Bridge Condition Goal

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

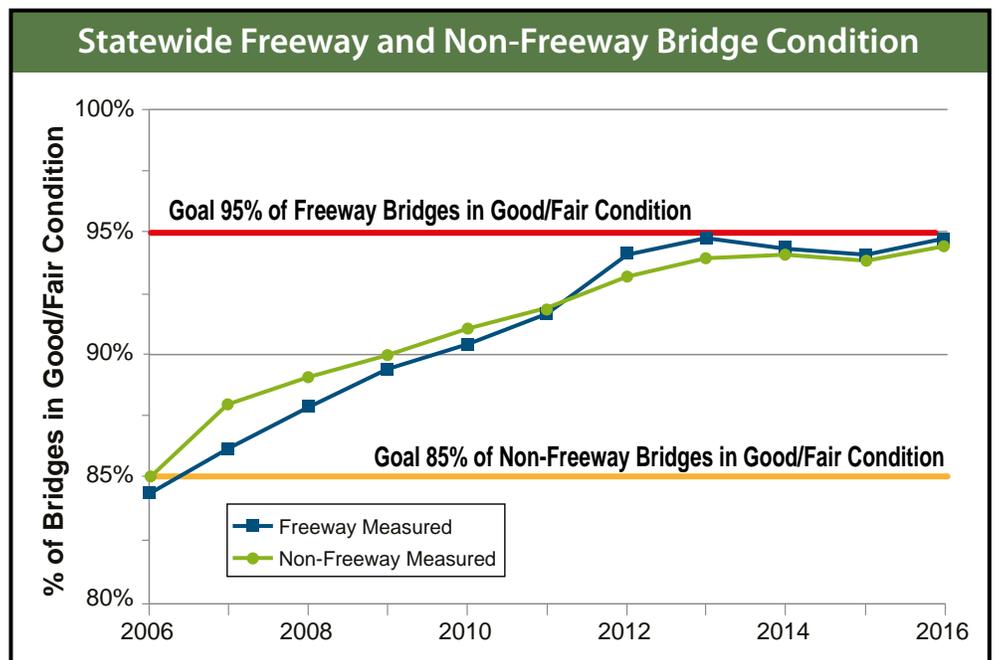
An important BMS tool used by MDOT to develop preservation policies is the Bridge Condition Forecasting System (BCFS). Working from current bridge conditions, bridge deterioration rates, project costs, expected inflation, and fix strategies, BCFS estimates the future condition of the state trunkline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

MDOT bridge conditions were close to 95 percent good or fair at the end of 2013, declined slightly in 2014 and 2015, but increased again in 2016. Without additional funding, the freeway bridge condition will continue to decline in future years, falling short of maintaining the freeway bridge goal of 95 percent in good or fair condition. Additional funding from the recent state revenue package will significantly slow this decline, but projections show it will not meet and sustain freeway bridge goals. As shown in the chart below, MDOT has met and is projecting to sustain the non-freeway bridge goal of 85 percent good or fair condition.

## Safety Goals

MDOT's safety goal is to reduce fatalities and serious injuries on the state trunkline system in support of the Michigan Strategic Highway Safety Plan (SHSP) and the department's efforts of achieving the vision of Toward Zero Deaths (TZD).

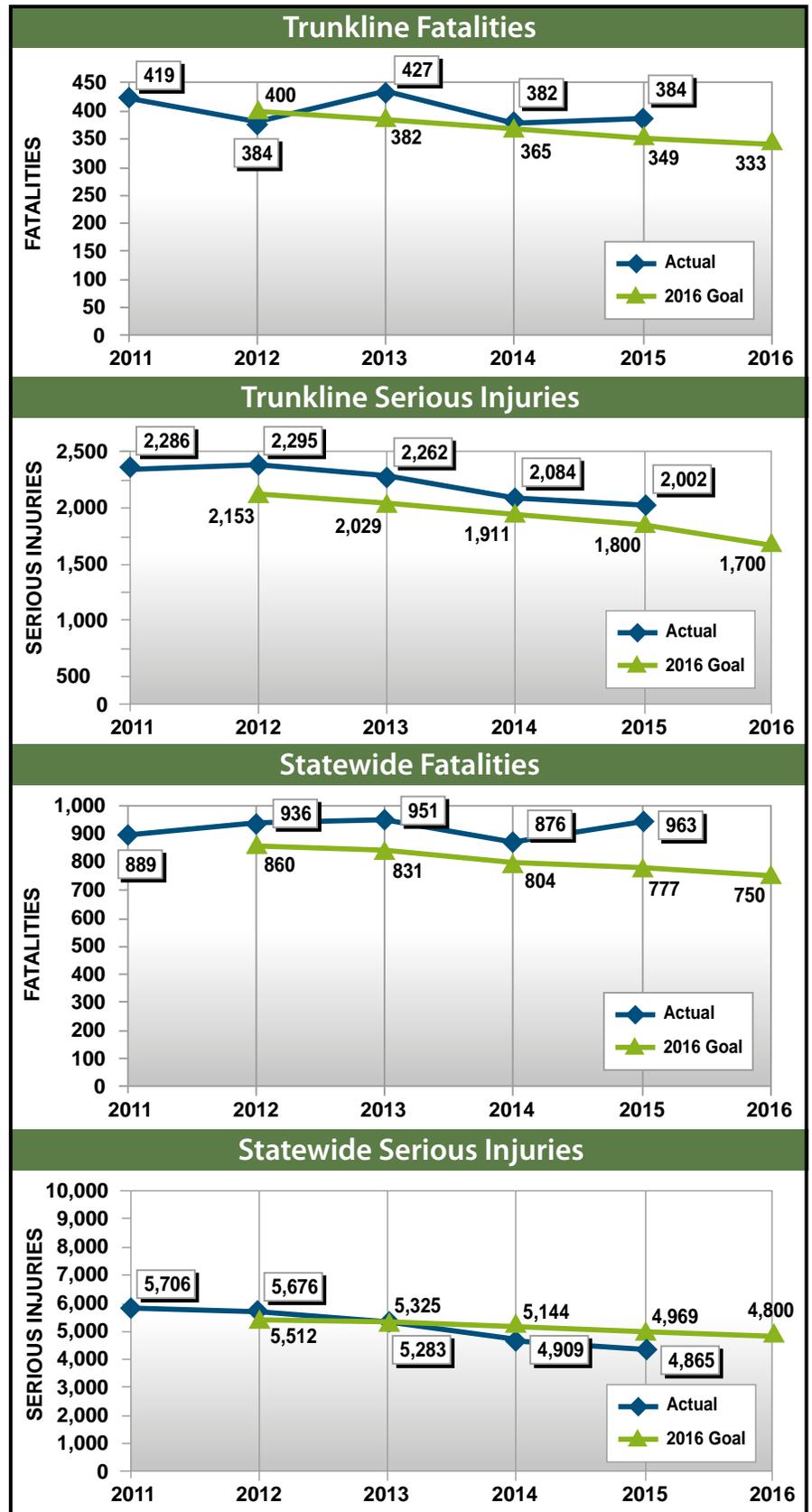
To meet the department's safety goal, the strategy of the Safety Program is to select cost-effective safety improvements, as identified in the SHSP, to address trunkline locations with correctable fatality (K) and serious injury (A) crashes. Locations identified will support the key focus areas of the SHSP. The purpose of the SHSP is to identify key safety needs in the state and guide investment decisions that achieve significant reductions in highway fatalities and serious injuries. SHSP identifies four broad emphasis areas: high-risk behaviors, at-risk road users, engineering infrastructure, and system administration. Of these areas, engineering infrastructure is predominately addressed by the Safety Program through intersection safety and lane departure projects. In addition, pedestrian and bicycle safety improvements are the department's emphasis for at-risk road users.



In 2013, the SHSP was revised to reflect current safety needs and goals. An emphasis on goals established an incremental reduction of the frequency of fatalities and serious injuries. The 2013 SHSP goals were to reduce traffic fatalities and serious injuries on all roadways from 889 and 5,706, respectively, in 2011 to 750 and 4,800, respectively, in 2016. In 2015, there were 963 fatalities and 4,865 serious injuries reported statewide.

On the state trunkline system, the department's goal is to reduce fatalities and serious injuries from 419 and 2,286, respectively, in 2011 to no more than 333 and 1,700, respectively, in 2016. This equates to a 4.5 and 5.8 percent reduction per year, respectively. While this is the goal for 2016 on the state trunkline, MDOT's vision is TZD with the ultimate goal to reduce fatalities to zero and minimize serious injuries. The 2016 goal is an interim goal of that vision. In 2015, there were 384 fatalities and 2,002 serious injuries reported on the state trunkline system. Compared to 2014, fatalities increased from 382, while serious injuries decreased from 2,084.

To the right are statewide and trunkline graphs that compare the actual values of fatalities and serious injuries compared to the 2016 interim goals.



# Multi-Modal Performance Measures

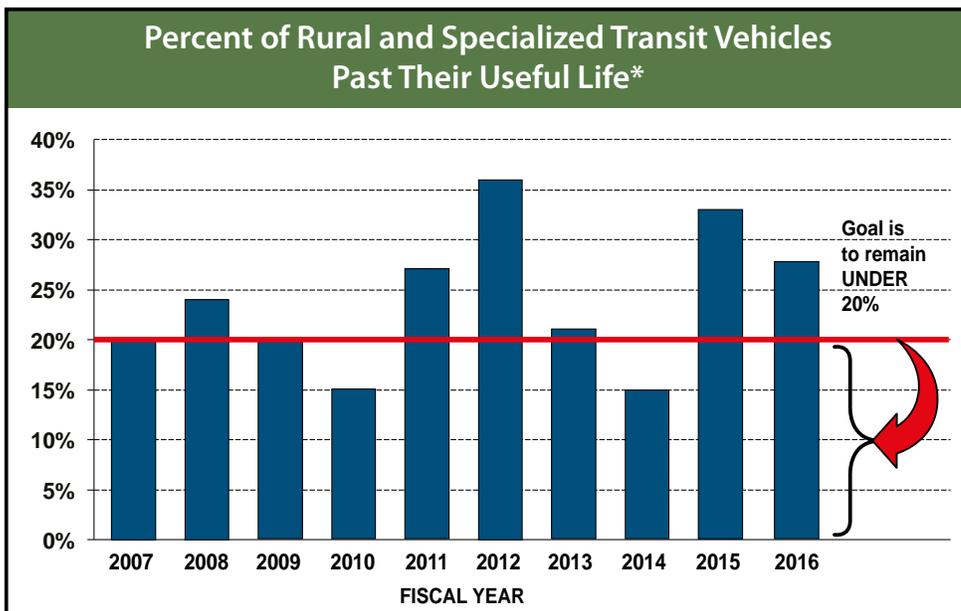
## Local Transit Performance Measures

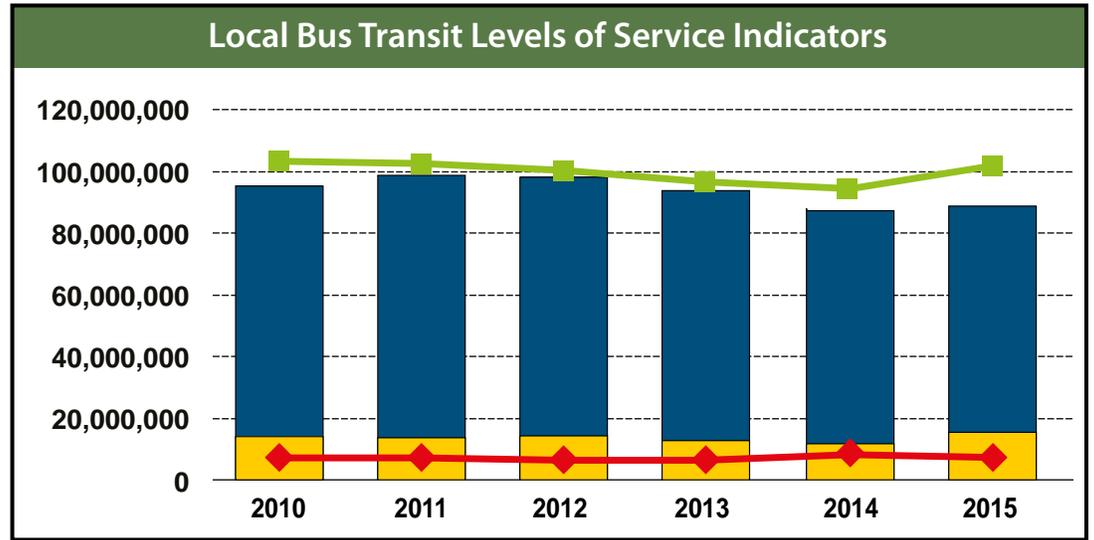
The OPT considers many factors when planning the investment strategy for local transit. Two primary performance measures considered are the condition of the rural transit fleet and the local transit level of service.

- The condition of the rural transit fleet is based on the percent of vehicles past their useful life. The goal is to have less than 20 percent of the rural fleet beyond useful life. That goal was achieved in 2014 due to a combination of federal State of Good Repair grants and the fact that fewer vehicles were eligible for replacement that year. Unfortunately, in 2015 the percentage went back up to 33 percent of the eligible fleet unfunded. MDOT will submit annual applications to FTA under the new "Buses and Bus Facilities" competitive program in the FAST Act in hopes of improving and stabilizing fleet condition.
- The local transit level of service is measured using total annual hours and miles of service and total annual passenger trips (considering elderly/disabled



passenger trips as a subset of the total). The goal is to preserve service levels and continue providing service in all 83 counties. Service levels peaked in 2008 when gas prices soared, then started to return to lower levels as gas prices stabilized. Service is still available in all 83 counties of the state and service levels are starting to return to previous points. Transit agencies continue to innovate to increase their service levels. MDOT is hopeful that this innovation in combination with the slight increase in state operating assistance will show positive results over the life of this five-year program.





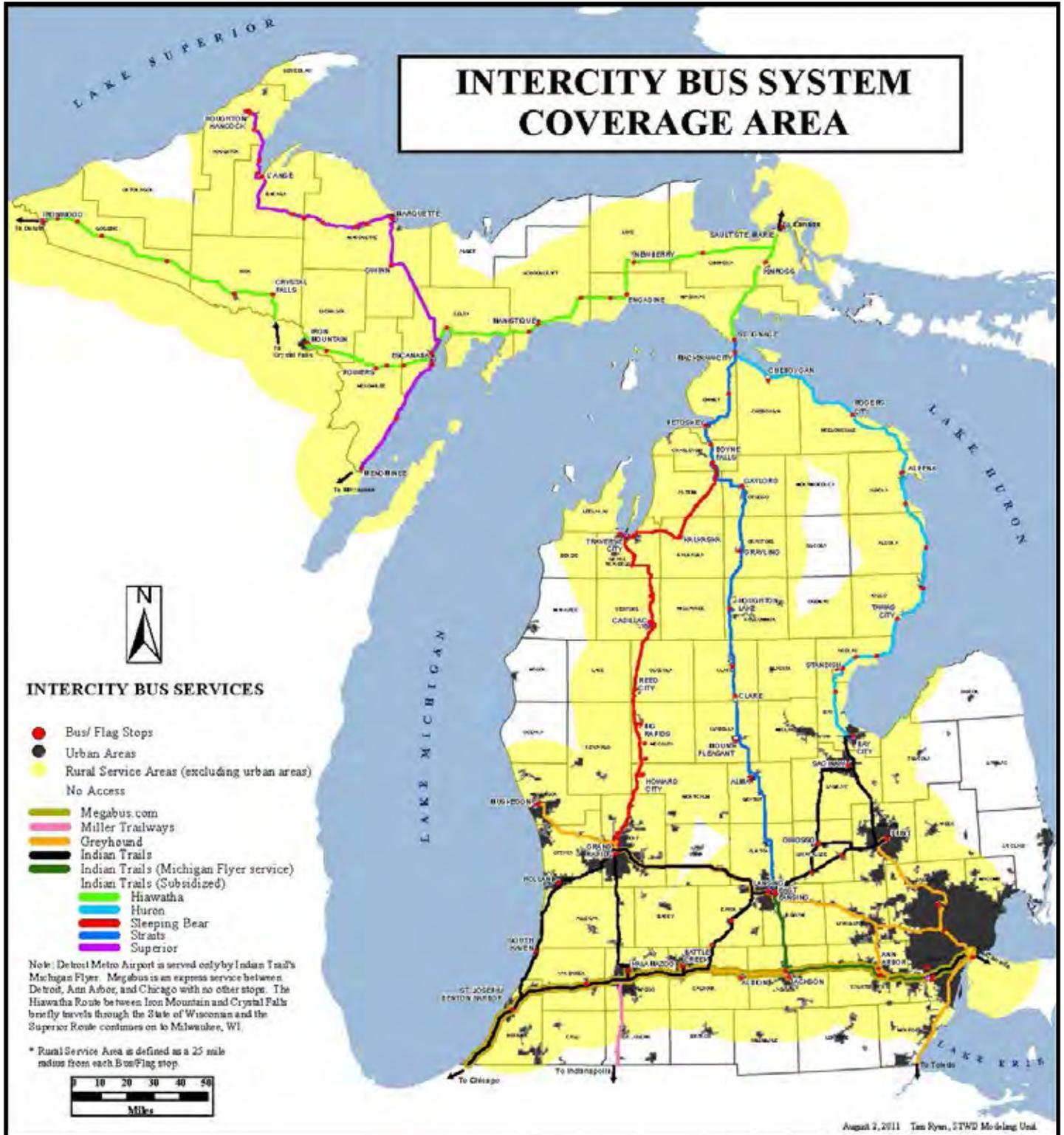
	2010	2011	2012	2013	2014	2015
<b>Passenger Trips Total</b> (LBO excluding marine plus specialized service)	97,526,236	99,736,273	98,266,915	96,198,970	89,444,565	89,692,521
<b>Elderly and Disabled Passenger Trips</b> (as subset of total)	12,909,367	12,690,839	13,287,228	12,587,813	12,269,803	12,727,836
<b>Hours of Service</b>	6,548,547	6,569,528	6,076,923	6,035,194	6,717,358	6,470,836
<b>Miles of Service</b> (only LBO SS not reported)	105,102,288	104,732,214	100,964,794	98,077,359	96,770,436	101,523,828

### Intercity Bus Performance Measure

The factor used to determine the investment strategy for intercity bus service is to provide reasonable access to intercity bus service in rural areas where connectivity to the national transportation network is often difficult to attain. MDOT's goal is to preserve the existing level of service, which has 81 percent of the rural population within 25 miles of an intercity bus stop. The national average is 78 percent.



# INTERCITY BUS SYSTEM COVERAGE AREA

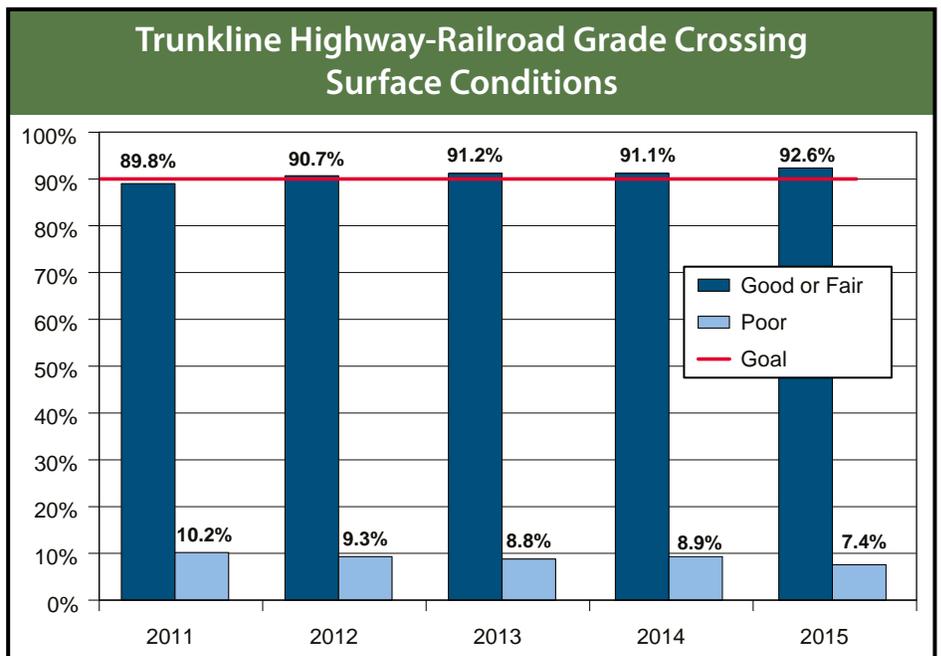
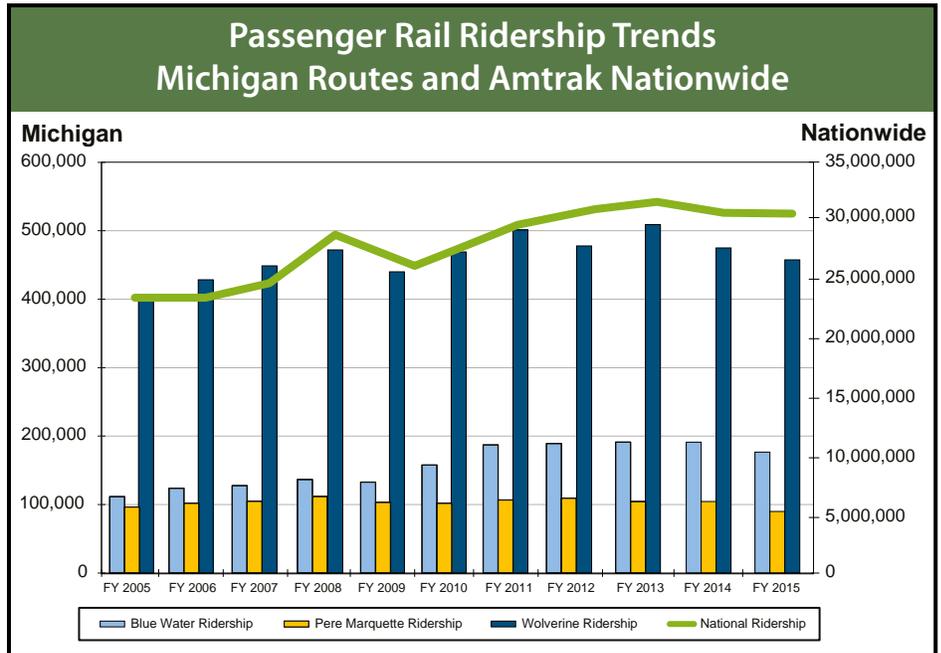


### Rail Performance Measures

Two rail-related goals are included in MDOT's performance measurement efforts.

MDOT tracks the total number of passengers using state-supported passenger rail services, with a goal of maintaining ridership consistent with (within 10 percent) or better than national trends. MDOT is meeting its goal.

MDOT also tracks the railroad crossing surface condition on the state trunkline system, with a goal of at least 90 percent in good or fair condition. The percentage of the railroad crossing surfaces on the state trunkline system in at least fair condition has been increasing. As of FY 2015, 92.6 percent of the crossing surfaces were in good or fair condition.

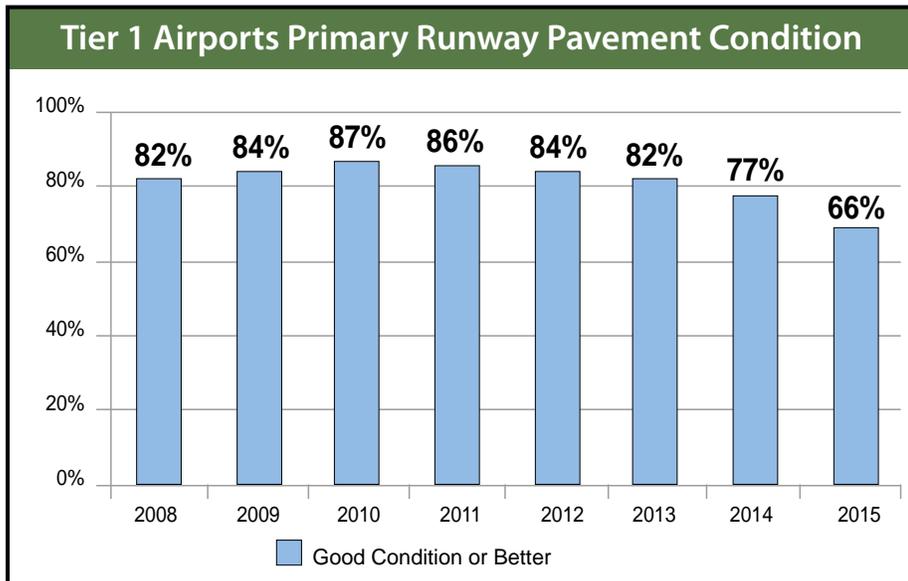


### Aviation Performance Measures

The Office of Aeronautics has made significant progress toward meeting its system planning goals related to providing access to air travel for Michigan residents. The primary performance measurement goal is to keep the pavement conditions at the Tier 1 Airports' primary runways at a rating of good or better, according to Pavement Condition Index inspections. The goal is to have 100 percent of these pavements in good or better condition; the latest inspections show the system is at 66 percent. This is a reduction compared to prior years and it is anticipated the rate will continue to decline based on increasing and accelerating deterioration of pavements.

- **Measure:** Airport Pavement Condition Index (PCI)
- **Target:** Maintain 100 percent of Tier 1 airport primary runways in good or better condition.

*Note: Decreases in 2014 and 2015 are due to a slight decline in overall pavement condition and revised evaluation methodology.*



# Transportation Funding Generates Michigan Jobs

## Highway Economic Impacts

Highway infrastructure investments are a vital part of the state's overall economic development strategy. An efficient highway system in good condition plays an integral role in supporting the economy of a state. In order to assess the economic impacts of the FY 2017-2021 Highway and Bridge Program, including additional programming as a result of new road funding

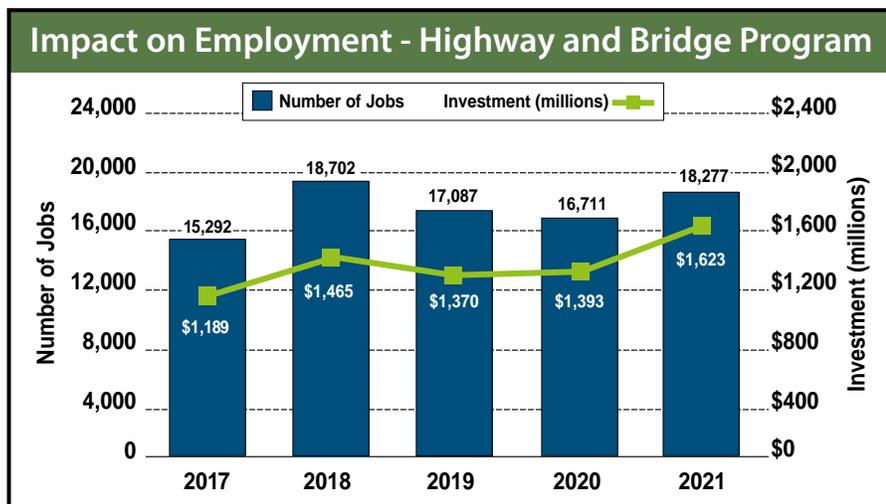
packages, the Michigan Benefits Estimation System for Transportation Tool (MI BEST Tool) and the Regional Economic Models, Inc. (REMI) were used to evaluate the outcomes.

This analysis includes the spending impacts of capital and operations investment in Highway and Bridge Program, as well as the economic benefits derived from the travel efficiencies. The travel efficiencies were evaluated utilizing changes of traffic data, vehicle miles traveled (VMT) and vehicle hours traveled (VHT) from the statewide Travel Demand Model based on build and no-build scenarios of the proposed five-year improvement projects.

The following table and chart display statewide economic impacts of MDOT's FY 2017-2021 Highway and Bridge Program for the state of Michigan.

## Economic Impacts of FY 2017-2021 Highway and Bridge Program

	2017	2018	2019	2020	2021	Total
Investment (millions)	\$1,189	\$1,465	\$1,370	\$1,393	\$1,623	\$7,041
Employment Impact (jobs)	15,292	18,702	17,087	16,711	18,277	86,068
Real Personal Income (millions)	\$783	\$1,006	\$971	\$1,004	\$1,143	\$4,907
Gross State Product (millions)	\$1,148	\$1,441	\$1,351	\$1,351	\$1,506	\$6,797



# Public Transportation Benefits

## Local Transit

Transportation investments are a vital part of the state's overall economic development strategy. More than 100 million trips are made annually on local public transit in Michigan. While the direct benefits of transit to its users are clear, it can be shown that the overall benefits of these trips extend beyond transit riders. Through improved mobility, safety, air quality, and economic development, public transit also benefits users of the roadway network and the community at large. Many of these trips satisfy the mobility needs of numerous households for whom owning and driving a vehicle is not an effective or affordable transportation option. As a result, there are societal benefits that result from providing essential mobility.

In order to assess the economic impacts of the FY 2017- 2021 Transit Program (public transportation program), including additional programming as a result of new funding package, MDOT staff used the MI BEST Tool and the Regional Economic Models, Inc. to evaluate the investment outcomes.

The resulting economic impacts reflect the statewide \$1.5 billion investment for the Transit Program in this Five-Year Transportation Plan. This public transportation program will support an average of 5,334 jobs annually, and add \$1.6 billion in real personal income and \$2.1 billion in gross state product for this five-year period. In this analysis, the spending-only impacts of capital and operations investment in public transportation were considered.

The following table displays economic impacts of MDOT's FY 2017-2021 Transit Program for the state of Michigan.

## Economic Impacts of FY 2017-2021 Transit Program

	2017	2018	2019	2020	2021	Total
Investment (millions)	\$299	\$303	\$306	\$310	\$314	\$1,532
Employment Impact (jobs)	5,329	5,369	5,388	5,335	5,248	26,670
Real Personal Income (millions)	\$281	\$289	\$317	\$337	\$352	\$1,576
Gross State Product (millions)	\$408	\$418	\$426	\$428	\$427	\$2,106

Although this analysis attempts to assess the benefits of transit in a comprehensive manner, it does not account for the considerable additional benefits that can arise from rapid transit investments in urban areas. Therefore, the results of the model can be considered conservative. National models have shown that a dollar invested in light rail or rapid transit can return up to \$6 in economic benefits, including local economic development around transit stops.



## Rail Program Benefits

Michigan's rail system has approximately 3,600 miles of track operated by 28 railroads. It carries about 19 percent of the state's freight tonnage. These commodities totaled more than \$160 billion in 2013. Rail is particularly important for the movement of heavy and bulky commodities, as well as hazardous materials.

Growing healthy rail corridors is good for Michigan's economy, whether a corridor is specifically freight, passenger, or both. For the federally designated Chicago-Detroit/Pontiac accelerated rail corridor, MDOT will continue to improve the 135 miles of state-owned track between Kalamazoo and Dearborn. MDOT will have an opportunity to encourage and expand economic development along this corridor for both passenger and freight rail interests. In addition, when funding permits, MDOT will work with the Michigan Economic Development Corp., as well as the Michigan Department of Agriculture and Rural Development, to provide support to rail-reliant businesses throughout the state, most directly by helping provide access to the system through the Freight Economic Development Program.



## Aviation Program Benefits

In order to maintain a competitive advantage in a global economic environment, access to convenient and efficient air travel is essential. While commercial airline services are often the most recognizable facet of aviation, the fact is that general aviation accounts for 97 percent of the nation's airports. These airports support a variety of aviation activities that employ thousands of people and create millions of dollars in economic impact and benefit.

Aviation, both commercial and general, is big business in Michigan.

- Aviation contributes more than \$20 billion annually to Michigan's economy.
- Michigan airports serve more than 36 million passengers each year.
- Michigan airports move more than 500 million pounds of air cargo each year.
- Michigan is in the top 10 nationwide for the number of registered business aircraft.

Businesses throughout the state 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 the economic ripple effects in the community, enhancing economic activity far from the airport itself. In a state like Michigan, airports serve a vital role in supporting rural communities, particularly in the Upper Peninsula.

Economic benefits also include expenditures made by those transient passengers who use the airport but spend money throughout the region. Airports also provide savings in time and money as a result of the travel efficiencies they create. In addition, economic benefits 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, recreation, emergency medical flights, on-demand charter services, and flight instruction for future pilots.

## Regional Service Areas

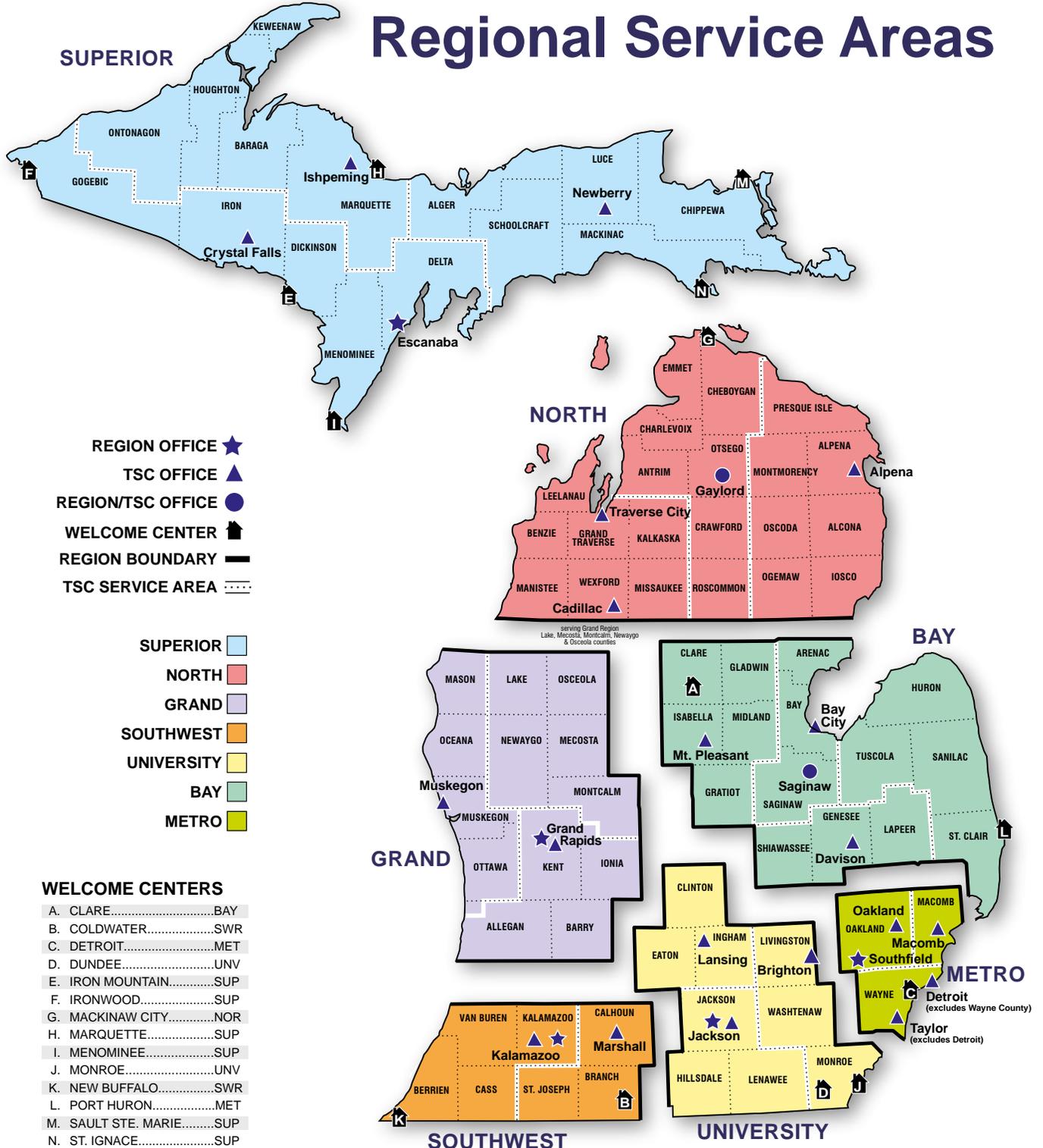
Regional Service Areas create a framework within the state of Michigan for creating vibrant regional economies. Michigan's existing state, regional and local boundaries often have overlapping goals and competing priorities. With Regional Service Areas, MDOT reoriented its seven regional areas to correspond to Gov. Snyder's common geographic boundaries that all state agencies will recognize and use. This initiative is intended to simplify boundaries for the public and also be a catalyst for the development of a local "economic vision." All state agencies can contribute to implementing a vision that is created locally. Transportation infrastructure provides a key part of the core for these local economic activities - making MDOT a significant part of this initiative.

The MDOT's regional road and bridge project lists, containing planned projects for the 2017-2021 time frame, also are subdivided by Regional Service Area boundaries. The chosen projects reflect MDOT's efforts to coordinate road and bridge work, preserve the existing system, address safety needs, and make the most of anticipated revenues. To find your MDOT Regional Service Area, refer to the adjacent map and project lists. These projects can also be viewed on maps online at <http://mdotnetpublic.state.mi.us/fyp/>. For assistance for the visually impaired, please call MDOT Public Information Officer Bob Parsons at 517-373-9534 or contact your local MDOT region office listed on page 69.

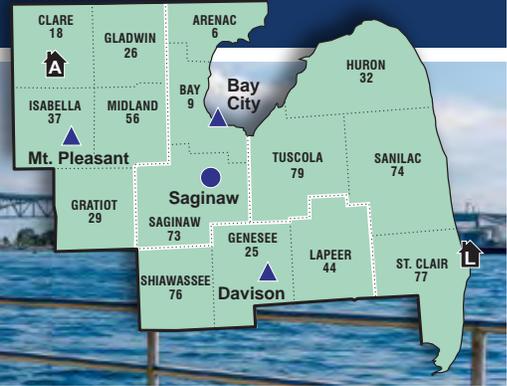




# Regional Service Areas



# BAY REGION



## BAY REGION

### BRIDGE - BIG BRIDGE PROGRAM

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
BAY	M-13	M-13 & M-84 OVER EAST CHANNEL SAGINAW RIVER	BRIDGE REPLACEMENT	0.210				CON	
				0.210					

### BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ARENAC	I-75	I-75 SB OVER S BR PINE RIVER	SCOUR PROTECTION	3.003			CON		
ARENAC	I-75	I-75 NB OVER S BR PINE RIVER	SCOUR PROTECTION	3.003			CON		
ARENAC	I-75	WORTH ROAD OVER I-75	OVERLAY - EPOXY	3.003			CON		
ARENAC	I-75	US-23 OVER I-75	OVERLAY - EPOXY	3.003			CON		
ARENAC	I-75	I-75 SB OVER M-61	OVERLAY - EPOXY	3.003			CON		
ARENAC	I-75	I-75 NB OVER M-61	OVERLAY - EPOXY	3.003			CON		
ARENAC	I-75	LINCOLN ROAD OVER I-75 SB	OVERLAY - EPOXY	3.003			CON		
ARENAC	I-75	LINCOLN ROAD OVER I-75 NB	OVERLAY - EPOXY	3.003			CON		
ARENAC	I-75	US-23 RAMP F I-75 OVER I-75	HEALER SEALER	3.003			CON		
BAY	I-75	I-75 SB OVER KAWKAWLIN RIVER	OVERLAY - DEEP	2.397			CON		
BAY	I-75	I-75 NB OVER KAWKAWLIN RIVER	OVERLAY - DEEP	2.397			CON		
BAY	I-75	I-75 SB OVER M-13 SB CONNECTOR	OVERLAY - DEEP	2.397			CON		
BAY	I-75	I-75 SB OVER WHEELER ROAD	OVERLAY - DEEP	2.397			CON		
BAY	I-75	I-75 SB OVER BEAVER ROAD	OVERLAY - DEEP	2.397			CON		
BAY	I-75	I-75 NB OVER WHEELER ROAD	OVERLAY - DEEP	2.397			CON		
BAY	I-75	I-75 NB OVER BEAVER ROAD	OVERLAY - DEEP	2.397			CON		
BAY	I-75	I-75 NB OVER M-13 SB CONNECTOR	OVERLAY - DEEP	2.397			CON		
CLARE	US-127	US-127 NB OVER US-127 BR & M-61	OVERLAY - EPOXY	1.159				CON	
CLARE	US-127	US-127 SB OVER US-127 BR & M-61	OVERLAY - EPOXY	1.159				CON	
GENESEE	I-475	I-475 OVER DETROIT STREET	OVERLAY - EPOXY	0.435		CON			
GENESEE	I-75 (S Saginaw Road)	S SAGINAW (OLD M-54) OVER I-75	OVERLAY - EPOXY	0.011		CON			
GENESEE	I-75	I-75 TO I-69 RAMP B OVER GTW RR & I-75	OVERLAY - EPOXY	0.010				CON	
GRATIOT	US-127	US-127 NB OVER MAPLE RIVER	OVERLAY - EPOXY	1.257					CON
ISABELLA	US-127	US-127 BR NB OVER US-127 SB	OVERLAY - EPOXY	0.380			CON		
ISABELLA	US-127	US-127 BR NB OVER US-127 SB	OVERLAY - DEEP	0.380			CON		
ISABELLA	US-127	US-127 NB OVER M-20	OVERLAY - EPOXY	0.782				CON	
ISABELLA	US-127	US-127 SB OVER M-20	OVERLAY - EPOXY	0.782				CON	
SAGINAW	I-75	I-75 NB OVER CSX RR	OVERLAY - EPOXY	0.365	CON				
SAGINAW	M-83 (S Main Street)	M-83 OVER CASS RIVER	SUPERSTRUCTURE REPAIR, STEEL	0.271	CON				
				10.070					

### BRIDGE REPLACEMENT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ARENAC	US-23	MELITA ROAD OVER US-23	SUPERSTRUCTURE REPLACEMENT	0.031				CON	
BAY	I-75	WILDER ROAD OVER I-75	DECK REPLACEMENT	1.690				CON	
BAY	I-75	CHIP ROAD OVER I-75	DECK REPLACEMENT	1.690				CON	
BAY	I-75	MACKINAW ROAD OVER I-75	DECK REPLACEMENT	1.690				CON	
CLARE	US-10	US-10 EB OVER LITTLE TOBACCO DRAIN	CULVERT REPLACEMENT	0.488		CON			
GENESEE	I-475	HARVARD STREET WALKOVER OVER I-475	BRIDGE REMOVAL	0.435		CON			

EPE= Study/Environmental PE=Preliminary Engineering/Design PE-B=Preliminary Engineering/Design for Bridges  
 UTL=Utility work ROW=Right of way/Real Estate CON=Construction

2017-2021 ROAD AND BRIDGE PROJECTS

BAY REGION

BRIDGE REPLACEMENT - Continued

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
GENESEE	I-69	I-69 EB OVER HAMMERBERG ROAD	WIDEN-MAINTAIN LANES	0.339	CON				
GENESEE	I-69	I-69 WB OVER HAMMERBERG ROAD	WIDEN-MAINTAIN LANES	0.339	CON				
GENESEE	I-69	PEDESTRIAN BRIDGE AT PARK DRIVE OVER I-69	BRIDGE REMOVAL	0.437	CON				
GENESEE	M-15 (State Road)	M-15 OVER PADDISON CO DRAIN	CULVERT REPLACEMENT	0.308			CON		
GRATIOT	M-57 (West Cleveland Road)	M-57 OVER BRADLO DRAIN	CULVERT REPLACEMENT	0.963				CON	
GRATIOT	US-127	US-127 SB OVER MAPLE RIVER	DECK REPLACEMENT	1.256					CON
MIDLAND	M-20 (East Isabella Road)	M-20 OVER TITABAWASSEE RIVER AND CSX RR (ABNDN)	BRIDGE REPLACEMENT	1.036		CON			
SAGINAW	I-75	I-75 OVER CSX RR	DECK REPLACEMENT	0.596				CON	
SAGINAW	I-75	M-46 OVER I-75	BRIDGE REPLACEMENT	0.596				CON	
SAGINAW	M-46	M-46 OVER MC CLELLAN RUN CREEK	CULVERT REPLACEMENT	0.498		CON			
ST. CLAIR	I-94	I-94 WB OVER M-25 CONNECTOR	DECK REPLACEMENT	0.103					CON
ST. CLAIR	M-25	M-25 OVER HOWE DRAIN	SUPERSTRUCTURE REPLACEMENT	0.184		CON			
				8.364					

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
BAY	I-75	COTTAGE GROVE ROAD TO LINWOOD ROAD	ROAD REHABILITATION	1.801	CON				
BAY	I-75	M-13 CONNECTOR TO BEAVER ROAD	ROAD REHABILITATION	5.328			CON		
BAY	I-75 (NB I-75)	BEAVER RD TO COTTAGE GROVE	ROAD REHABILITATION	3.600					CON
BAY	M-13 (Huron Road)	NORTH ST TO BAY/ARENAC COUNTY LINE	ROAD REHABILITATION	3.335			CON		
BAY	M-247 (N Euclid Avenue)	M-13 TO BAY CITY STATE PARK	RESURFACE	3.036		CON			
CLARE	M-61 (W Temple Drive)	OSCEOLA/CLARE COL TO BRINGOLD ROAD	RESURFACE	7.138		CON			
CLARE	US-10	US-127 TO LEATON ROAD	ROAD REHABILITATION	3.599		CON			
GENESEE	I-475	CARPENTER RD TO CLIO RD	RECONSTRUCTION	3.061		CON			
GENESEE	I-69	BALLENGER HIGHWAY TO FENTON ROAD	RECONSTRUCTION	1.556	CON				
GENESEE	M-54 (Dort Highway)	COLDWATER ROAD TO MT. MORRIS ROAD	ROAD REHABILITATION	2.027			CON		
GENESEE	M-54 (Saginaw Road)	SAGINAW RD TO M-57	RESURFACE	2.070	CON				
GENESEE	M-54 (N Dort Highway)	MT. MORRIS RD TO SAGINAW ROAD	RESURFACE	2.412		CON			
GLADWIN	M-18	BEAVERTON TO M-61	RESURFACE	6.542	CON				
GRATIOT	US-127	VAN BUREN ROAD TO BEGOLE ROAD	ROAD REHABILITATION	3.000	CON				
HURON	M-142 (Sand Beach Road)	M-19 TO MACDONALD ROAD	ROAD REHABILITATION	5.081	CON				
HURON	M-142 (Pigeon Road)	WEALE RD TO ELKTON WVL	RESURFACE	4.080	CON				
HURON	M-53 (N Van Dyke Road)	KINDE ROAD TO PORT AUSTIN	RESURFACE	7.299		CON			
ISABELLA	US-10	LEATON ROAD BRIDGE TO MIDLAND/ISABELLA COUNTY LINE	ROAD REHABILITATION	5.350			CON		
ISABELLA	US-127	US-127 BR TO M-20	ROAD REHABILITATION	3.979				CON	
LAPEER	M-24 (Main Street)	NEPESSING ST TO DAVIS LAKE ROAD	ROAD REHABILITATION	1.669	CON				
LAPEER	M-53 (Van Dyke Road)	M-90 N JCT TO MARLETTE SCL	ROAD REHABILITATION	5.742					CON
SAGINAW	I-75 (S I-75)	HESSE TO SOUTH I-675 INTERCHANGE	MAJOR WIDENING	2.551				CON	
SAGINAW	M-46 (Gratiot Road)	WEST LIMITS OF MERRILL TO BRENNAN ROAD	ROAD REHABILITATION	4.785		CON			
SAGINAW	M-46 (Gratiot Road)	BRENNAN ROAD TO M-52	ROAD REHABILITATION	5.975		CON			
SAGINAW	M-57 (W Brady Road)	SAGINAW/GRATIOT COUNTY LINE TO M-52	ROAD REHABILITATION	10.194				CON	
SANILAC	M-46 AND M-25	M-46 AND M-25 IN PORT SANILAC	RECONSTRUCTION	1.076		CON			
SANILAC	M-90 (Peck Road)	BLACK RIVER TO M-25	RESURFACE	4.715	CON				
ST. CLAIR	I-69 (EB I-69)	RILEY CENTER ROAD TO M-19	ROAD REHABILITATION	5.240					CON
TUSCOLA	M-15 (State Road)	VASSAR WCL TO M-46	RESURFACE	4.535	CON				
TUSCOLA	M-24 (Biebel Road)	DECKERVILLE RD TO M-138	RESURFACE	7.445		CON			
				128.221					

BAY REGION

CAPACITY IMPROVEMENT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ST. CLAIR	COUNTYWIDE	COUNTYWIDE	PLANNING		EPE	EPE	EPE	EPE	
ST. CLAIR	AREAWIDE	CITY OF PORT HURON	PLANNING		EPE				
ST. CLAIR	I-94	CITY OF PORT HURON	LANDSCAPING	0.001	CON				
				0.001					

EPE= Study/Environmental PE=Preliminary Engineering/Design PE-B=Preliminary Engineering/Design for Bridges  
 UTL=Utility work ROW=Right of way/Real Estate CON=Construction



# GRAND REGION

**GRAND REGION**

**BRIDGE - PRESERVATION**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ALLEGAN	I-196 WB	I-196 WB OVER CSX RR	OVERLAY - DEEP	0.279					CON
KENT	I-196 (Gerald R Ford Freeway)	I-196 EB OVER M-45 WB RAMP TO I-196 WB	OVERLAY - SHALLOW	0.000			CON		
KENT	I-196 EB	I-196 EB OVER M-45	OVERLAY - SHALLOW	0.000			CON		
KENT	I-96	I-96 EB OVER GRAND RIVER	OVERLAY - DEEP	0.383		CON			
KENT	I-96	I-96 WB OVER GRAND RIVER	OVERLAY - DEEP	0.383		CON			
KENT	I-96	I-96 EB OVER MONROE AVENUE	DECK PATCHING	1.241		CON			
KENT	I-96	I-96 WB OVER MONROE AVENUE	DECK PATCHING	1.241		CON			
KENT	I-96	I-96 EB OVER COIT AVENUE	DECK PATCHING	1.241		CON			
KENT	I-96	I-96 WB OVER COIT AVENUE	DECK PATCHING	1.241		CON			
KENT	I-96	I-96 EB OVER CSX, CR RR & W RIVER DRIVE	DECK PATCHING	1.241		CON			
KENT	I-96	I-96 WB OVER CSX, CR RR & WEST RIVER DRIVE	DECK PATCHING	1.241		CON			
KENT	I-96	I-96 EB OVER US-131	DECK PATCHING	1.241		CON			
KENT	I-96	I-96 WB OVER US-131	DECK PATCHING	1.241		CON			
KENT	I-96 EB	I-196 WB & M-21 OVER I-96 EB	OVERLAY - DEEP	0.300		CON			
KENT	M-11	M-11 OVER CSX RR & M-21 BR	OVERLAY - EPOXY	0.004		CON			
KENT	M-6	PATTERSON AVENUE OVER M-6	BRIDGE APPROACH	0.109		CON			
KENT	US-131	84TH STREET OVER US-131	OVERLAY - EPOXY	0.110	CON				
KENT	US-131	M-46 (17 MILE ROAD) OVER US-131	OVERLAY - EPOXY	0.350	CON				
KENT	US-131	US-131 SB & M-46 WB OVER CEDAR SPRINGS AVENUE	OVERLAY - DEEP	0.226		CON			
KENT	US-131	US-131 NB & M-46 EB OVER CEDAR SPRINGS AVENUE	OVERLAY - DEEP	0.226		CON			
KENT	US-131 NB	US-131 NB OVER WHITE CREEK AVENUE	OVERLAY - DEEP	0.277	CON				
KENT	US-131 SB	US-131 SB OVER WHITE CREEK AVENUE	OVERLAY - DEEP	0.436	CON				
MECOSTA	M-20 (8 Mile Road)	M-20 (EIGHT MILE ROAD) OVER MUSKEGON RIVER	OVERLAY - EPOXY	1.688		CON			
MUSKEGON	I-96	I-96 OVER HILE ROAD	OVERLAY - DEEP	0.310				CON	
MUSKEGON	I-96	I-96 EB OVER NORRIS CREEK	OVERLAY - DEEP	1.107				CON	
MUSKEGON	I-96	I-96 WB OVER NORRIS CREEK	OVERLAY - DEEP	1.107				CON	
MUSKEGON	US-31	US-31 SB OVER MUSKEGON RIVER	BRIDGE APPROACH	1.679	CON				
MUSKEGON	US-31	US-31 SB OVER NORTH CHANNEL OF THE MUSKEGON RIVER	SUBSTRUCTURE REPLACEMENT	1.679	CON				
MUSKEGON	US-31	US-31 NB OVER NORTH CHANNEL OF THE MUSKEGON RIVER	SUBSTRUCTURE REPAIR	1.679	CON				
OTTAWA	I-196 BL	I-196 BL EB OVER BRANCH OF BLACK RIVER	OVERLAY - DEEP	0.330				CON	
OTTAWA	I-196 BL	I-196 BL WB OVER BRANCH OF BLACK RIVER	OVERLAY - DEEP	0.330				CON	
OTTAWA	I-96	I-96 EB OVER CROCKERY CREEK	OVERLAY - DEEP	1.035				CON	
OTTAWA	I-96	I-96 WB OVER CROCKERY CREEK	OVERLAY - DEEP	1.035				CON	
				9.864					

**BRIDGE REPLACEMENT**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ALLEGAN	I-196 AND US-31 SB	I-196 / US-31 SB OVER KUIPERS DRAIN	CULVERT REPLACEMENT	0.804			CON		
ALLEGAN	M-89	M-89 OVER KALAMAZOO RIVER OVERFLOW	SUPERSTRUCTURE REPLACEMENT	1.504		CON			
BARRY	M-66	M-66 OVER QUAKER BROOK	BRIDGE REPLACEMENT	0.092			CON		
IONIA	I-96	CUTLER ROAD OVER I-96	BRIDGE REPLACEMENT	0.604			CON		
KENT	I-196	I-196 M-21 WB OVER PLYMOUTH ROAD	BRIDGE REPLACEMENT	0.326		CON			
OCEANA	M-20	M-20 OVER GILLON LAKE DRAIN	CULVERT REPLACEMENT	0.509				CON	
OCEANA	US-31 BR (Polk Road)	US-31BR (POLK ROAD) OVER RUSSELL CREEK	CULVERT REPLACEMENT	0.492			CON		
				4.331					

2017-2021 ROAD AND BRIDGE PROJECTS

GRAND REGION

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ALLEGAN	I-196 (SB)	130TH AVENUE NORTH TO US-31	RECONSTRUCTION	7.375					CON
ALLEGAN	I-196 (WB)	CSX RAILROAD EAST TO ALLEGAN/OTTAWA CO LINE	ROAD REHABILITATION	2.086			CON		
ALLEGAN	I-196 (WB)	US-31 EAST TO CSX RAILROAD	ROAD REHABILITATION	4.170					CON
ALLEGAN	M-179 (129th Avenue)	US-131 EAST TO GRAND ELKS RAILROAD	ROAD REHABILITATION	0.460					CON
ALLEGAN	M-40	FROM 134TH AVE TO REIMINK STREET	ROAD REHABILITATION	1.754		CON			
BARRY	M-66	BRUMM ROAD NORTH TO THORNAPPLE LAKE ROAD	ROAD REHABILITATION	1.027					CON
BARRY	M-66	BARRY SOUTH COUNTY LINE NORTH TO COX ROAD	RESURFACE	4.305	CON				
BARRY	M-66	COX ROAD NORTH TO ASSYRIA ROAD	RESURFACE	4.457		CON			
BARRY	M-79 (Scott Road)	BARRYVILLE ROAD EAST TO NASHVILLE VWL	ROAD REHABILITATION	3.330					CON
IONIA	I-96	SARANAC REST AREA EAST TO M-66	MAINTENANCE OF TRAFFIC	5.009					CON
IONIA	M-21 (Lincoln Avenue)	WALL STREET EAST TO M-66 (E JCT)	ROAD REHABILITATION	1.047			CON		
IONIA	SARANAC REST AREA	AT THE SARANAC REST AREA #532I -96 EB IONIA CO.	ROADSIDE FACILITIES - PRESERVE	0.000	CON				
KENT	I-196 (Gerald R Ford Freeway)	FULLER AVE TO I-96	RECONSTRUCTION	2.051			CON		
KENT	I-196 (Gerald R Ford Freeway)	I-196 (EB) OVER PLYMOUTH AVENUE	BRIDGE REPLACEMENT	2.051			CON		
KENT	I-96	WEST RIVER DRIVE TO THE GRAND RIVER	RECONSTRUCTION	0.472		CON			
KENT	I-96	THORNAPPLE RIVER DR EAST TO W/ WHITNEYVILLE AVE	ROAD REHABILITATION	2.158					CON
KENT	I-96	THORNAPPLE RIVER DRIVE EAST TO WHITNEYVILLE ROAD	MAINTENANCE OF TRAFFIC	2.734			CON		
KENT	M-21 (Fulton Street)	M-37 EAST TO I-96	ROAD REHABILITATION	0.869	CON				
KENT	M-44 (Belding Road)	WOLVERINE BLVD EAST TO BLAKELY DRIVE	RECONSTRUCTION	1.044	CON				
KENT	US-131	10 MILE ROAD NORTH TO 14 MILE ROAD	RECONSTRUCTION	7.422		CON			
KENT	US-131	14 MILE ROAD NORTH TO WHITE CREEK AVENUE	RECONSTRUCTION	7.403	CON				
MASON	US-31	US-10 TO SUGAR GROVE ROAD	ROAD REHABILITATION	3.735			CON		
MASON	US-31	OCEANA/MASON CO LINE NORTH TO MEISENHEIMER ROAD	ROAD REHABILITATION	4.560					CON
MASON	US-31	HOAGUE ROAD NORTH TO MASON/MANISTEE CO LINE	ROAD REHABILITATION	2.187					CON
MONTCALM	M-46 (Howard City Edmore Road)	M-66 TO SECOND STREET	ROAD REHABILITATION	2.003		CON			
MONTCALM	M-91 (Greenville Road)	PECK ROAD NORTH TO COLBY ROAD	ROAD REHABILITATION	3.490				CON	
MUSKEGON	M-120 (Holton Road)	WHITEHALL RD EAST TO MID-MICHIGAN RR	ROAD REHABILITATION	0.696	CON				
MUSKEGON	M-120 (Holton Road)	MID-MICHIGAN RR EAST TO GETTY STREET	ROAD REHABILITATION	1.203			CON		
MUSKEGON	US-31 BR (Colby Street)	HALL STREET TO THE WHITE RIVER	ROAD REHABILITATION	1.234	CON				
NEWAYGO	M-37 (State Road)	M-82 (S JUNCTION) NORTH TO THE MUSKEGON RIVER	ROAD REHABILITATION	1.541		CON			
NEWAYGO	M-37 (Maple Street)	COMMERCE STREET TO STATE STREET	ROAD REHABILITATION	0.332		CON			
OCEANA	US-31	SHELBY ROAD NORTH TO POLK ROAD	ROAD REHABILITATION	4.989					CON
OCEANA	US-31	SHELBY ROAD NORTH TO POLK ROAD	MAINTENANCE OF TRAFFIC	4.989				CON	
OCEANA	US-31 NB	AT THE ROTHBURY REST AREA #529	ROADSIDE FACILITIES - IMPROVE	0.647					CON
OSCEOLA	US-10 (BR) (Chestnut Street)	CHURCH ST NORTH TO US-10	ROAD REHABILITATION	1.011					CON
OTTAWA	I-196 (EB)	W/32ND AVENUE EAST TO OTTAWA/KENT COUNTY LINE	RECONSTRUCTION	4.950				CON	
OTTAWA	I-196 (WB)	32ND AVENUE EAST TO OTTAWA/KENT COUNTY LINE	RECONSTRUCTION	4.996			CON		
OTTAWA	I-196 WB	32ND AVENUE EAST TO OTTAWA/KENT COUNTY LINE	MAINTENANCE OF TRAFFIC	4.868		CON			
OTTAWA	M-6 (Paul B Henry Freeway)	JACKSON STREET EAST TO WILSON AVENUE	ROAD REHABILITATION	2.981		CON			
				109.585					

GRAND REGION

CAPACITY IMPROVEMENT

US-31, HOLLAND TO GRAND HAVEN

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
OTTAWA	US-31	LAKEWOOD BOULEVARD NORTH TO QUINCY STREET	RECONSTRUCT AND ADD LANE(S) OVER	2.898	CON				
OTTAWA	US-31	LAKEWOOD BLVD NORTH TO QUINCY STREET	MAINTENANCE OF TRAFFIC	2.898	CON				
				5.796					

EPE= Study/Environmental PE=Preliminary Engineering/Design PE-B=Preliminary Engineering/Design for Bridges  
 UTL=Utility work ROW=Right of way/Real Estate CON=Construction

# METRO REGION



## METRO REGION

### BRIDGE - BIG BRIDGE PROGRAM

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
WAYNE	DOUGLAS MACARTHUR BRIDGE	BELLE ISLE TRAFFIC OVER DETROIT RIVER	HEALER SEALER	0.430		CON			
				0.430					

### BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
MACOMB	I-94	I-94 OVER CLINTON RIVER CONTROL CHANNEL	OVERLAY - EPOXY	1.745				CON	
MACOMB	I-94	I-94 RAMP (WB BEACH) OVER CLINTON RIVER SPILLWAY	OVERLAY - EPOXY	1.745				CON	
MACOMB	I-94	I-94 WB OVER CLINTON RIVER, N&S ROADS	SCOUR PROTECTION	1.745				CON	
MACOMB	I-94	I-94 EB OVER CLINTON RIVER, N&S ROADS	SCOUR PROTECTION	1.745				CON	
MACOMB	I-94	I-94 EB OVER SELFRIDGE ANGB SPUR TRACK	HEALER SEALER	1.745				CON	
MACOMB	I-94	I-94 WB OVER SELFRIDGE ANGB SPUR TRACK	HEALER SEALER	1.745				CON	
MACOMB	I-94	I-94 EB OVER CROCKER ROAD	OVERLAY - EPOXY	1.745				CON	
MACOMB	I-94	I-94 WB OVER CROCKER ROAD	OVERLAY - EPOXY	1.745				CON	
MACOMB	I-94	I-94 EB OVER JOY ROAD	SUPERSTRUCTURE REPAIR, CONCRETE	1.745				CON	
MACOMB	I-94	I-94 WB OVER JOY ROAD	SUPERSTRUCTURE REPAIR, CONCRETE	1.745				CON	
MACOMB	I-94	21 MI ROAD OVER I-94	OVERLAY - EPOXY	1.843				CON	
MACOMB	I-94	COTTON ROAD OVER I-94	OVERLAY - EPOXY	1.843				CON	
MACOMB	I-94	I-94 EB OVER SALT RIVER	BRIDGE BARRIER RAILING REPLACE	1.257				CON	
MACOMB	I-94	I-94 WB OVER SALT RIVER	BRIDGE BARRIER RAILING REPLACE	1.257				CON	
MACOMB	I-94	M-19 NEW HAVEN ROAD OVER I-94	JOINT REPLACEMENT	1.257				CON	
MACOMB	I-94	26 MILE ROAD OVER I-94	OVERLAY - EPOXY	1.257				CON	
MACOMB	I-94	COUNTY LINE ROAD OVER I-94	OVERLAY - DEEP	1.257				CON	
MACOMB	M-53	M-53 SB OVER CLINTON RIVER	OVERLAY - DEEP	0.372			CON		
MACOMB	M-53	M-53 NB OVER CLINTON RIVER	OVERLAY - SHALLOW	0.372			CON		
MACOMB	M-53	M-53 OVER BEAVER CREEK	SCOUR PROTECTION	0.191			CON		
MACOMB	M-59	M-59 WB OVER M-53	OVERLAY - EPOXY	0.033		CON			
MACOMB	M-59	M-59 EB OVER M-53	OVERLAY - EPOXY	0.033		CON			
OAKLAND	I-696	I-696 EB OVER ROUGE RIVER	SCOUR PROTECTION	0.458		CON			
OAKLAND	I-696	I-696 WB OVER ROUGE RIVER	SCOUR PROTECTION	0.458		CON			
OAKLAND	I-75	I-75 NB OVER CLINTON RIVER	SCOUR PROTECTION	0.807		CON			
OAKLAND	I-75	I-75 SB OVER CLINTON RIVER	SCOUR PROTECTION	0.807		CON			
OAKLAND	I-75	NB JOSLYN TO I-75 OVER GTW RR	SUPERSTRUCTURE REPAIR, CONCRETE	0.948		CON			
OAKLAND	I-75	FEATHERSTONE ROAD OVER I-75	JOINT REPLACEMENT	0.948		CON			
OAKLAND	I-75	FEATHERSTONE ROAD OVER I-75	OVERLAY - EPOXY	0.948		CON			
OAKLAND	I-75	M-24 CONN EB OVER I-75	HEALER SEALER	0.948		CON			
OAKLAND	I-75	M-24 CONN WB OVER I-75	HEALER SEALER	0.948		CON			
OAKLAND	I-96	NOVI ROAD OVER I-96	OVERLAY - EPOXY	0.069				CON	
OAKLAND	M-10 (W 10 Mile Rd)	MOUNT VERNON STREET OVER M-10	OVERLAY - SHALLOW	1.130				CON	
OAKLAND	M-10 (W 10 Mile Rd)	EVERGREEN ROAD NB OVER M-10	OVERLAY - SHALLOW	1.130				CON	
OAKLAND	M-10 (W 10 Mile Rd)	EVERGREEN ROAD SB OVER M-10	OVERLAY - SHALLOW	1.130				CON	
OAKLAND	M-10 (W 10 Mile Rd)	10 MI ROAD OVER M-10	SUPERSTRUCTURE REPAIR, STEEL	1.130				CON	

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2017-2021 ROAD AND BRIDGE PROJECTS

METRO REGION

BRIDGE - PRESERVATION - *Continued*

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
OAKLAND	M-5	I-96 BL (GRAND RIVER) OVER M-5	OVERLAY - DEEP	0.000			CON		
OAKLAND	M-5	DRAKE ROAD OVER M-5	DECK PATCHING	0.000			CON		
WAYNE	I-275	SB TO EB I-96 OVER I-275 NB	OVERLAY - EPOXY	0.458			CON		
WAYNE	I-275	FIVE MILE ROAD OVER I-96	OVERLAY - DEEP	0.458			CON		
WAYNE	I-75	I-75 NB OVER ALLEN ROAD	SUPERSTRUCTURE REPAIR, STEEL	0.205		CON			
WAYNE	I-75	I-75 SB OVER ALLEN ROAD	SUPERSTRUCTURE REPAIR, STEEL	0.205		CON			
WAYNE	I-75	GIBRALTAR ROAD OVER I-75	DECK PATCHING - FULL DEPTH	0.219	CON				
WAYNE	I-75	WEST ROAD OVER I-75	PAINTING COMPLETE	0.219	CON				
WAYNE	I-75	DAVISON TO I-75 RAMP OVER I-75, M-8 & GTW RR	DECK PATCHING - FULL DEPTH	2.080		CON			
WAYNE	I-75	HOLBROOK AVENUE OVER I-75	DECK PATCHING - FULL DEPTH	2.080		CON			
WAYNE	I-75	SAVANNAH AVENUE OVER I-75	PAINTING COMPLETE	2.080		CON			
WAYNE	I-75	MEADE STREET OVER I-75	PAINTING COMPLETE	2.080		CON			
WAYNE	I-75	I-75 OVER RAMP TO DAVISON (M-8)	SUBSTRUCTURE PATCHING	2.080		CON			
WAYNE	I-75	I-75 & RAMPS C & D OVER M-8 DAVISON & SERVICE ROADS	DECK PATCHING - FULL DEPTH	2.080		CON			
WAYNE	I-75	DAVISON RAMP(M-8) OVER I-75	DECK PATCHING - FULL DEPTH	2.080		CON			
WAYNE	I-75	DAVISON RAMP TO I-75 OVER DEQUINDRE AVENUE	OVERLAY - EPOXY	2.080		CON			
WAYNE	I-75	I-75 NB OVER GTW RR	PAINTING COMPLETE	0.044		CON			
WAYNE	I-75	I-75 SB OVER GTW RR	PAINTING COMPLETE	0.044		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 AND CONRAIL OVER I-94	PAINTING COMPLETE	0.000			CON		
WAYNE	I-94	I-94 WB OVER WAYNE ROAD	SUBSTRUCTURE REPAIR	0.070			CON		
WAYNE	I-94	I-94 EB RAMP TO M-10 OVER I-94 WB & M-10 SB	OVERLAY - SHALLOW	0.000			CON		
WAYNE	I-94	I-94 EB OVER WAYNE ROAD	OVERLAY - EPOXY	1.517			CON		
WAYNE	I-94	I-94 EB OVER MIDDLEBELT ROAD	OVERLAY - EPOXY	1.517			CON		
WAYNE	I-94	I-94 EB OVER ECORSE ROAD	OVERLAY - EPOXY	1.517			CON		
WAYNE	I-94	I-94 EB OVER BEECH-DALY ROAD	OVERLAY - EPOXY	1.517			CON		
WAYNE	I-94	I-94 EB OVER MERRIMAN ROAD	OVERLAY - EPOXY	0.924			CON		
WAYNE	I-94	I-94 WB OVER MERRIMAN ROAD	OVERLAY - EPOXY	0.924			CON		
WAYNE	I-94	I-94 EB OVER INKSTER ROAD	OVERLAY - EPOXY	0.924			CON		
WAYNE	I-94	I-94 WB OVER INKSTER ROAD	OVERLAY - EPOXY	0.924			CON		
WAYNE	I-94	VINING RD OVER I-94 INTERCHANGE	OVERLAY - EPOXY	0.924			CON		
WAYNE	I-96	I-96 RAMP OVER LAND	JOINT REPLACEMENT	0.006				CON	
WAYNE	I-96	I-96 RAMP OVER WB SERVICE ROAD	BRIDGE BARRIER RAILING REPLACE	0.006				CON	
WAYNE	I-96	WEST CHICAGO AVENUE OVER I-96	OVERLAY - EPOXY	0.006				CON	
WAYNE	I-96	W GRAND BLVD & TIREMAN OVER I-96	SUBSTRUCTURE PATCHING	0.276				CON	
WAYNE	I-96	W GRAND BLVD & TIREMAN OVER I-96	JOINT REPAIR	0.276				CON	
WAYNE	I-96	TURN RDWY EB TO SB OVER WB & U-TURN SERVICE ROADS	OVERLAY - DEEP	0.020					CON
WAYNE	I-96	TURN RDWY 3RD LEVEL OVER I-96 ROADWAYS	OVERLAY - DEEP	0.020					CON
WAYNE	I-96	I-96 RAMP OVER OPEN GROUND	OVERLAY - DEEP	0.020					CON
WAYNE	I-96	FULLERTON AVENUE OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - DEEP	0.020					CON
WAYNE	I-96	SCHAEFER ROAD OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY	0.688					CON
WAYNE	I-96	MEYERS ROAD OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY	0.688					CON
WAYNE	I-96	WYOMING AVENUE OVER I-96 (JEFFRIES FREEWAY)	OVERLAY - EPOXY	0.688					CON
WAYNE	I-96	I-96 WB COLLECTOR OVER M-8	OVERLAY - EPOXY	0.688					CON
WAYNE	M-10	CALVERT AVENUE OVER M-10	SUPERSTRUCTURE REPAIR, STEEL	0.049	CON				
WAYNE	M-10 N / I-75 S CD RAMP	RAILROAD PEDESTRIAN WALK OVER M-10	BRIDGE REMOVAL	0.079	CON				
WAYNE	M-10 N / I-75 S CD RAMP	M-10 N TO I-75 S RAMP OVER M-10	OVERLAY - DEEP	0.079	CON				
WAYNE	M-10 N / I-75 S CD RAMP	I-75 W S RAMP OVER M-10	OVERLAY - EPOXY	0.079	CON				
WAYNE	M-102	M-102 (8 MILE ROAD) OVER I-75	BRIDGE BARRIER RAILING REPLACE	0.011	CON				
WAYNE	M-153	M-153 WB OVER ROUGE RIVER	PIN & HANGER REPLACEMENT	0.098					CON
WAYNE	M-153	M-153 EB OVER ROUGE RIVER	OVERLAY - SHALLOW	0.098					CON
WAYNE	M-153	MILLER ROAD OVER M-153	OVERLAY - EPOXY	0.109					CON
WAYNE	M-39	M-39 OVER ROUGE RIVER	JOINT REPLACEMENT	0.555			CON		
WAYNE	M-39	M-39 NB SERVICE ROAD OVER ROUGE RIVER	SUBSTRUCTURE REPAIR	0.555			CON		
WAYNE	M-39	M-39 SB SERVICE ROAD OVER ROUGE RIVER	SUBSTRUCTURE REPAIR	0.555			CON		

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2017-2021 ROAD AND BRIDGE PROJECTS

**METRO REGION**

**BRIDGE - PRESERVATION - Continued**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
WAYNE	M-39	WB TO SB TURN ROADWAY OVER 3RD LEVEL TURN ROADWAY	OVERLAY - EPOXY	0.269					CON
WAYNE	M-39	U-TRN SERVICE ROAD OVER M-39 (SOUTHFIELD EXPR)	OVERLAY - EPOXY	0.269					CON
WAYNE	M-39	I-96 WB COLLECTOR OVER M-39 (SOUTHFIELD EXPR)	OVERLAY - EPOXY	0.269					CON
WAYNE	M-39	I-96 WB MAIN ROADWAY OVER M-39 (SOUTHFIELD EXPR)	OVERLAY - EPOXY	0.269					CON
WAYNE	M-39	I-96 RAMP OVER EB SERVICE ROAD	OVERLAY - EPOXY	0.269					CON
WAYNE	M-8	CHAREST AVENUE WALKOVER OVER M-8	SUBSTRUCTURE REPAIR	0.068	CON				
WAYNE	M-85 (Fort Street)	M-85 (FORT STREET) OVER M-10	SUBSTRUCTURE PATCHING	0.134	CON				
WAYNE	M-85 (Fort Street)	W C C R R (ABN) OVER M-10	SUBSTRUCTURE PATCHING	0.134	CON				
WAYNE	M-85 (Fort Street)	RR PARK/GDECK(ABN) OVER M-10	SUBSTRUCTURE REPAIR	0.134	CON				
WAYNE	US-24	US-24 NB OVER ROUGE RIVER	OVERLAY - EPOXY	0.170			CON		
WAYNE	US-24	US-24 SB OVER ROUGE RIVER	OVERLAY - EPOXY	0.170			CON		
				16.902					

**BRIDGE REPLACEMENT**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
WAYNE	I-75	I-75 EAST-NORTH RAMP OVER M-10	DECK REPLACEMENT	0.214	CON				
WAYNE	I-75 (US-24 Connector)	I-75 SB OVER US-24 CONN	DECK REPLACEMENT	9.359		CON			
WAYNE	I-75 (US-24 Connector)	I-75 NB OVER EUREKA ROAD	DECK REPLACEMENT	9.359		CON			
WAYNE	I-75 (US-24 Connector)	I-75 SB OVER EUREKA ROAD	DECK REPLACEMENT	9.359		CON			
WAYNE	I-75 (US-24 Connector)	I-75 NB OVER NORTH LINE RD	DECK REPLACEMENT	9.359		CON			
WAYNE	I-75 (US-24 Connector)	I-75 SB OVER NORTH LINE RD	DECK REPLACEMENT	9.359		CON			
WAYNE	I-75	I-75 SB OVER BLAKELY DRAIN	DECK REPLACEMENT	0.639		CON			
WAYNE	I-75	I-75 NB OVER BLAKELY DRAIN	DECK REPLACEMENT	0.639		CON			
WAYNE	I-94	I-94 WB OVER ECORSE ROAD	BRIDGE REPLACEMENT	0.375			CON		
WAYNE	I-96	HUBBELL AVENUE OVER I-96 (JEFFRIES FREEWAY)	DECK REPLACEMENT	0.039				CON	
WAYNE	I-96	FULLERTON AVENUE OVER I-96 (JEFFRIES FREEWAY)	DECK REPLACEMENT	0.039				CON	
WAYNE	I-96 RAMP	I-96 RAMP NB TO EB OVER M-39 RAMP & E SERVICE RD	DECK REPLACEMENT	0.011					CON
WAYNE	M-10 (John C Lodge Fwy)	M L KING (STIMSON) OVER M-10	SUPERSTRUCTURE REPLACEMENT	0.111		CON			
WAYNE	M-14 OLD	OLD M-14 OVER MIDDLE ROUGE RIVER	BRIDGE REPLACEMENT	0.139	CON				
WAYNE	M-14 OLD	HINES DRIVE OVER OLD M-14 (ANN ARBOR ROAD)	BRIDGE REPLACEMENT	0.139	CON				
WAYNE	M-39	SAWYER AVENUE WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.682	CON				
WAYNE	M-39	GLENDALE WALKOVER OVER M-39	BRIDGE REMOVAL	1.682	CON				
WAYNE	M-39	VERNE STREET WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.682	CON				
WAYNE	M-39	TOURNIER AVENUE WALKOVER OVER M-39	BRIDGE REMOVAL	1.682	CON				
WAYNE	M-39	VASSAR AVENUE WALKOVER OVER M-39	BRIDGE REPLACEMENT	1.682	CON				
WAYNE	NB I-375/SB I-75 Ramp	14TH STREET OVER I-75	SUBSTRUCTURE REPLACEMENT	0.715		CON			
WAYNE	NB I-375/SB I-75 Ramp	TRUMBULL AVENUE OVER I-75	SUBSTRUCTURE REPAIR	0.715		CON			
WAYNE	NB I-375/SB I-75 Ramp	I-375 N W TURN ROAD OVER I-75 & RAMP	SUBSTRUCTURE REPAIR	0.715		CON			
WAYNE	NB I-375/SB I-75 Ramp	WARREN AVENUE OVER I-75	SUBSTRUCTURE REPAIR	0.715		CON			
WAYNE	SB I-75/Warren Ramp	I-75 SB EXIT RAMP OVER I-75 E & W TO SB TURN RDWY	DECK REPLACEMENT	0.000		CON			
WAYNE	US-12	US-12 EB OVER M-39	DECK REPLACEMENT	0.017			CON		
WAYNE	US-12	US-12 WB OVER M-39	DECK REPLACEMENT	0.017			CON		
WAYNE	US-24 (Telegraph Road)	US-24 NB OVER FRANK & POET DRAIN	BRIDGE REPLACEMENT	0.060		CON			
				13.500					

**REPAIR AND REBUILD ROADS**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
MACOMB	M-59	M-53 TO E. OF ROMEO PLANK ROAD	RECONSTRUCTION	1.807	CON				
WAYNE	I-275	FROM M-153 TO 5 MILE ROAD	RECONSTRUCTION	5.662				CON	
WAYNE	I-75 NB (Walter P Chrysler Freeway)	N OF CANFIELD STREET TO S OF PIQUETTE STREET (NB)	ROAD REHABILITATION	0.999	CON				
WAYNE	M-14 OLD	NEWBURGH ROAD TO MARKET STREET	RECONSTRUCTION	0.393	CON				
				8.861					

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2017-2021 ROAD AND BRIDGE PROJECTS

**METRO REGION**

**NEW ROADS**

GORDIE HOWE INTERNATIONAL BRIDGE

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
WAYNE	I-75	FROM CLARK STREET TO WEST END	NEW ROAD	1.755					CON
WAYNE	GORDIE HOWE INTERNATIONAL	GORDIE HOWE INTERNATIONAL BRIDGE-PLAZA AREA	NEW ROAD		ROW	ROW	ROW	ROW	
WAYNE	GORDIE HOWE INTERNATIONAL	GORDIE HOWE INTERNATIONAL BRIDGE-PLAZA AREA	NEW ROAD		PE	PE	PE	PE	
WAYNE	GORDIE HOWE INTERNATIONAL	GORDIE HOWE INTERNATIONAL BRIDGE-INTERCHANGE AREA	NEW ROAD		ROW	ROW	ROW	ROW	ROW
WAYNE	GORDIE HOWE INTERNATIONAL	GORDIE HOWE INTERNATIONAL BRIDGE-INTERCHANGE AREA	NEW ROAD		PE	PE	PE	PE	PE
WAYNE	GORDIE HOWE INTERNATIONAL	GORDIE HOWE INTERNATIONAL BRIDGE-BRIDGE AREA	NEW ROAD		ROW	ROW	ROW	ROW	ROW
WAYNE	GORDIE HOWE INTERNATIONAL	GORDIE HOWE INTERNATIONAL BRIDGE-BRIDGE AREA	NEW ROAD		PE	PE	PE	PE	PE
				1.755					

**TRUNKLINE MODERNIZATION**

I-75, FROM M-59 TO 8 MILE ROAD

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
OAKLAND	I-75	FROM NORTH OF COOLIDGE ROAD TO SOUTH BOULEVARD	RECONSTRUCT AND ADD LANE(S) OVER	3.084	CON	CON			
OAKLAND	I-75	FROM NORTH OF COOLIDGE ROAD TO SOUTH BOULEVARD	RECONSTRUCT AND ADD LANE(S) OVER		PE				
OAKLAND	I-75	FROM 8 MILE TO M-59, OAKLAND COUNTY	PROJECT MANAGEMENT CONTRACT		EPE	EPE	EPE	EPE	EPE
OAKLAND	I-75	FROM 8 MILE TO M-59, OAKLAND COUNTY	REAL ESTATE ACTIVITIES		ROW	ROW	ROW		
OAKLAND	I-75	FROM NORTH OF WATTLES ROAD TO NORTH OF COOLIDGE ROAD	MAJOR REHABILITATION	1.582				CON	CON
OAKLAND	I-75	FROM NORTH OF WATTLES ROAD TO NORTH OF COOLIDGE ROAD	MAJOR REHABILITATION			PE	PE	PE	
OAKLAND	I-75	FROM 8 MILE TO M-59, OAKLAND COUNTY	PROJECT MANAGEMENT CONTRACT				EPE	EPE	EPE
OAKLAND	I-75	FROM NORTH OF I-696 TO SOUTH OF 12 MILE	MAJOR REHABILITATION	1.970		CON	CON	CON	
OAKLAND	I-75	FROM NORTH OF I-696 TO SOUTH OF 12 MILE	MAJOR REHABILITATION		PE	PE			
OAKLAND	I-75	FROM NORTH OF ROCHESTER ROAD TO NORTH OF WATTLES ROAD	MAJOR REHABILITATION					PE	PE

I-94, I-96 TO EAST OF CONNER AVENUE IN DETROIT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
WAYNE	I-94 (Ford Freeway)	M-3 OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT	0.001	CON	CON	CON	CON	
WAYNE	I-94 (Ford Freeway)	CHENE STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT	0.339	CON	CON			
WAYNE	I-94 (Ford Freeway)	CHENE STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		ROW	ROW			
WAYNE	I-94 (Ford Freeway)	CHENE STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	CHENE STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE-B				
WAYNE	I-94 (Ford Freeway)	SECOND AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT	0.074	CON	CON			
WAYNE	I-94 (Ford Freeway)	SECOND AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		ROW	ROW			
WAYNE	I-94 (Ford Freeway)	SECOND AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	SECOND AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE-B				
WAYNE	I-94 (Ford Freeway)	SECOND AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		UTL				
WAYNE	I-94 (Ford Freeway)	CADILLAC AVENUE, DETROIT, WAYNE COUNTY	BRIDGE REPLACEMENT	0.010	CON	CON			
WAYNE	I-94 (Ford Freeway)	CADILLAC AVENUE, DETROIT, WAYNE COUNTY	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	CADILLAC AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE-B				
WAYNE	I-94 (Ford Freeway)	CADILLAC AVENUE, DETROIT, WAYNE COUNTY	BRIDGE REPLACEMENT		UTL				
WAYNE	I-94 (Ford Freeway)	FRENCH RD OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT	0.189		CON	CON		
WAYNE	I-94 (Ford Freeway)	FRENCH RD OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		ROW				
WAYNE	I-94 (Ford Freeway)	FRENCH RD OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	FRENCH ROAD OVER I-94	BRIDGE REPLACEMENT		PE-B				
WAYNE	I-94 (Ford Freeway)	CONCORD AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT	0.129		CON	CON		
WAYNE	I-94 (Ford Freeway)	CONCORD AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		ROW				
WAYNE	I-94 (Ford Freeway)	CONCORD AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		UTL	UTL			
WAYNE	I-94 (Ford Freeway)	MOUNT ELLIOT STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT	0.074	CON	CON			

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2017-2021 ROAD AND BRIDGE PROJECTS

METRO REGION

TRUNKLINE MODERNIZATION - Continued

I-94, I-96 TO EAST OF CONNER AVENUE IN DETROIT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
WAYNE	I-94 (Ford Freeway)	MOUNT ELLIOT STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	MOUNT ELLIOT STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE-B				
WAYNE	I-94 (Ford Freeway)	MOUNT ELLIOT STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		UTL	UTL			
WAYNE	I-94 (Ford Freeway)	CASS AVENUE, DETROIT, WAYNE COUNTY	BRIDGE REPLACEMENT	0.130	CON	CON			
WAYNE	I-94 (Ford Freeway)	CASS AVENUE, DETROIT, WAYNE COUNTY	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	CASS AVENUE OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE-B				
WAYNE	I-94 (Ford Freeway)	CASS AVENUE, DETROIT, WAYNE COUNTY	BRIDGE REPLACEMENT		UTL	UTL			
WAYNE	I-94 (Ford Freeway)	BRUSH STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT	0.138		CON	CON		
WAYNE	I-94 (Ford Freeway)	BRUSH STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		ROW				
WAYNE	I-94 (Ford Freeway)	BRUSH STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		PE				
WAYNE	I-94 (Ford Freeway)	BRUSH STREET OVER I-94, WAYNE COUNTY	BRIDGE REPLACEMENT		UTL	UTL			
WAYNE	I-94 (Ford Freeway)	TRUMBULL AVENUE OVER I-94, DETROIT, WAYNE COUNTY	BRIDGE REPLACEMENT	0.179	CON				
WAYNE	M-1 (Woodward Ave)	WOODWARD AVENUE (M-1) OVER I-94	BRIDGE REPLACEMENT	0.073	CON				
WAYNE	I-94 (Ford Freeway)	I-96 TO CONNER AVENUE, WAYNE COUNTY	PROJECT MANAGEMENT CONTRACT		EPE	EPE			
WAYNE	I-94 (Ford Freeway)	FROM I-96 TO EAST OF CONNER AVENUE	REAL ESTATE ACTIVITIES		ROW				
WAYNE	I-94 (Ford Freeway)	FROM CONNER AVENUE TO CHENE STREET	RECONSTRUCT AND ADD LANE(S) OVER	7.598			CON		
WAYNE	I-94 (Ford Freeway)	FROM CONNER AVENUE TO CHENE STREET	RECONSTRUCT AND ADD LANE(S) OVER			ROW			
WAYNE	I-94 (Ford Freeway)	FROM CONNER AVENUE TO CHENE STREET	RECONSTRUCT AND ADD LANE(S) OVER			PE	PE	PE	PE
WAYNE	I-94 (Ford Freeway)	FROM I-96 TO EAST OF CONNER AVENUE	PROJECT MANAGEMENT CONTRACT				EPE		
WAYNE	I-94 (Ford Freeway)	FROM I-96 TO CONNER AVENUE, CITY OF DETROIT	BRIDGE REPLACEMENT		PE	PE			
WAYNE	I-94 (Ford Freeway)	FROM I-96 TO EAST OF CONNER AVENUE	PROJECT MANAGEMENT CONTRACT						PE
WAYNE	I-94 (Ford Freeway)	BETWEEN STREET AUBIN & BARRETT AVENUE	BRIDGE REPLACEMENT	2.208					CON
WAYNE	I-94 (Ford Freeway)	FROM SAINT AUBIN STREET TO FRONTENAC ROAD	RECONSTRUCT AND ADD LANE(S) OVER	1.504					CON
				19.282					

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# NORTH REGION

## NORTH REGION

### BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
GRAND TRAVERSE	US-31	US-31 OVER BOARDMAN RIVER	OVERLAY - DEEP	0.271	CON				
MANISTEE	M-55	M-55 OVER MANISTEE RIVER	SUBSTRUCTURE PATCHING	0.746			CON		
ROSCOMMON	I-75	M-18 OVER I-75	OVERLAY - DEEP	0.360		CON			
				1.377					

### BRIDGE REPLACEMENT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ROSCOMMON	M-18	M-18 OVER BACKUS CREEK	CULVERT REPLACEMENT	2.145			CON		
				2.145					

### REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
BENZIE	US-31	M-115 SOUTH TO THE BETSIE RIVER	RECONSTRUCTION	1.416				CON	
CHARLEVOIX	US-131 (Mackinaw Trail)	BOYNE FALLS	RECONSTRUCTION	0.962					CON
CHEBOYGAN	I-75 SB	NORTH OF M-27 TO TOPINABEE MAIL ROUTE	ROAD REHABILITATION	2.245				CON	
CHEBOYGAN	NB & SB I-75	LEVERING ROAD NORTH 3.1 MILES	ROAD REHABILITATION	3.044					CON
CHEBOYGAN	US-23	CORDWOOD ROAD TO DUNCAN AVENUE	ROAD REHABILITATION	6.995					CON
CHEBOYGAN	US-23	PINEWOODS CIRCLE DRIVE NORTH TO MILL CREEK PARK DRIVE	RESURFACE	7.200	CON				
CRAWFORD	M-72	KALKASKA/CRAWFORD COUNTY LINE TO M-93	ROAD REHABILITATION	6.074			CON		
EMMET	US-31	FROM DOUGLAS LAKE ROAD TO E LEVERING ROAD	ROAD REHABILITATION	4.147	CON				
EMMET	US-31	FROM LIBERTY STREET TO ROSEDALE AVENUE	RECONSTRUCTION	1.339			CON		
GRAND TRAVERSE	M-37	VANCE ROAD TO BLAIR TOWNHALL ROAD	ROAD REHABILITATION	1.000					CON
GRAND TRAVERSE	M-37	BLAIR TOWNHALL ROAD TO M-113	ROAD REHABILITATION	4.024					CON
IOSCO	M-55	CHAMBERS ROAD TO GERMAN STREET	RESURFACE	6.520		CON			
IOSCO	US-23 (Huron Road)	TAWAS BEACH ROAD TO KIRKLAND DRIVE	RECONSTRUCTION	5.628		CON			
KALKASKA	M-72	GRAND TRAVERSE COUNTY LINE EAST TO KALKASKA ROAD	ROAD REHABILITATION	7.731		CON			
MANISTEE	M-55	CLAYBANK ROAD TO UDELL HILLS RD	ROAD REHABILITATION	7.640				CON	
MONTMORENCY	M-32	JEROME STREET TO HAAS ROAD	ROAD REHABILITATION	3.381				CON	
OGEMAW	I-75	FROM OGEMAW COUNTY LINE NORTHERLY TO COOK ROAD	ROAD REHABILITATION	6.631	CON				
OGEMAW	M-33	NORTH OF MAIN TO NORTH OF OYSTER ROAD	RESURFACE	1.874		CON			
OSCODA	M-33	CHERRY CREEK ROAD TO WEST OF THE M-33/M-72 JUNCTION	ROAD REHABILITATION	6.719			CON		
ROSCOMMON	US-127	M-55 TO MUSKEGON RIVER BRIDGE	ROAD REHABILITATION	5.246				CON	
				89.816					

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**SOUTHWEST REGION**

**BRIDGE - BIG BRIDGE PROGRAM**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
BERRIEN	I-94 BL	I-94 BL OVER ST JOSEPH RIVER	OVERLAY - EPOXY	0.179			CON		
BERRIEN	M-63	M-63 OVER ST JOSEPH RIVER	OVERLAY - EPOXY	0.189			CON		
				0.368					

**BRIDGE - PRESERVATION**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
BERRIEN	I-94	LAPORTE ROAD OVER I-94	OVERLAY - DEEP	1.511		CON			
BERRIEN	I-94	KRUGER ROAD OVER I-94	OVERLAY - DEEP	1.511		CON			
BERRIEN	I-94	LAKE SIDE ROAD OVER I-94	OVERLAY - DEEP	1.511		CON			
BERRIEN	I-94	MAUDLIN ROAD OVER I-94	PAINTING COMPLETE	0.672		CON			
BERRIEN	I-94	UNION PIER ROAD OVER I-94	PAINTING COMPLETE	0.672		CON			
BERRIEN	I-94	GLENLORD ROAD OVER I-94	OVERLAY - EPOXY	0.385			CON		
BERRIEN	I-94	CLEVELAND AVENUE OVER I-94	OVERLAY - DEEP	0.385			CON		
BERRIEN	US-31 NB & SB	US-31 SB OVER US-12	OVERLAY - SHALLOW	0.410				CON	
BERRIEN	US-31 NB & SB	US-31 NB OVER US-12	OVERLAY - SHALLOW	0.410				CON	
BRANCH	I-69	I-69 BL (FENN ROAD) OVER I-69	OVERLAY - DEEP	1.840				CON	
BRANCH	I-69	STATE ROAD OVER I-69	OVERLAY - DEEP	1.840				CON	
BRANCH	I-69	NEWTON ROAD OVER I-69	OVERLAY - DEEP	1.840				CON	
CALHOUN	I-69	N DRIVE NORTH OVER I-69	OVERLAY - DEEP	2.325					CON
CALHOUN	I-69	GARFIELD ROAD OVER I-69	OVERLAY - DEEP	2.325					CON
CALHOUN	M-66	I-194 & M-66 NB OVER I-94	BRIDGE BARRIER RAILING REPLACE	0.060					CON
CALHOUN	M-66	I-194 & M-66 SB OVER I-94	BRIDGE BARRIER RAILING REPLACE	0.060					CON
KALAMAZOO	I-94	I-94 EB OVER GRAND ELK RAILROAD & PORTAGE CREEK	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 WB OVER GRAND ELK RAILROAD & PORTAGE CREEK	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 EB OVER SOUTH WESTNEDGE AVENUE	CRACK SEALING	1.592	CON				
KALAMAZOO	I-94	I-94 WB OVER SOUTH WESTNEDGE AVENUE	CRACK SEALING	1.592	CON				
KALAMAZOO	I-94	LOVERS LANE OVER I-94	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 EB OVER 12 TH STREET	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 WB OVER 12 TH STREET	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 EB & CD RAMP OVER US-131 SB	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 WB OVER US-131 SB	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 EB & CD RAMP OVER US-131 NB	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 WB OVER US-131 NB	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	OAKLAND DRIVE OVER I-94	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	SOUTH US-131 TO EAST I-94 OVER SB US-131	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 EB OVER US-131 SB TO I-94 EB CONNECTOR	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	I-94 WB OVER US-131 SB TO I-94 EB CONNECTOR	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	SOUTH US-131 TO EAST I-94 OVER NB US-131	HEALER SEALER	1.592	CON				
KALAMAZOO	I-94	9TH STREET OVER I-94	BRIDGE BARRIER RAILING REPLACE	0.040		CON			
ST. JOSEPH	M-66	M-66 OVER PRAIRIE RIVER	PAINTING COMPLETE	1.286		CON			
ST. JOSEPH	M-66	M-66 OVER ST JOSEPH RIVER	OVERLAY - EPOXY	1.286		CON			
ST. JOSEPH	US-131 NB & SB	US-131 NB OVER ROCKY RIVER	OVERLAY - DEEP	1.162	CON				
ST. JOSEPH	US-131 NB & SB	US-131 SB OVER ROCKY RIVER	OVERLAY - EPOXY	1.162	CON				
VAN BUREN	I-94	32ND STREET (CR653) OVER I-94	OVERLAY - SHALLOW	1.014					CON
				12.297					

2017-2021 ROAD AND BRIDGE PROJECTS

**SOUTHWEST REGION**

**BRIDGE - REPLACEMENT**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
BERRIEN	I-196	M-63 OVER I-196	BRIDGE REPLACEMENT	0.300		CON			
BRANCH	US-12	US-12 OVER MICHIGAN SOUTHERN RAILROAD	BRIDGE REMOVAL	0.587		CON			
CALHOUN	M-311	M-311 (11 MILE ROAD) OVER KALAMAZOO RIVER	BRIDGE REPLACEMENT	0.499			CON		
KALAMAZOO	US-131	US-131 NB OVER AMTRAK & KL AVENUE	DECK REPLACEMENT	0.000			CON		
KALAMAZOO	US-131	US-131 SB OVER AMTRAK & KL AVENUE	DECK REPLACEMENT	0.000			CON		
ST. JOSEPH	M-66	M-66 OVER NYC RR (ABANDONED)	BRIDGE REMOVAL	0.648		CON			
ST. JOSEPH	US-131 BR	US-131 BR OVER STREET JOSEPH RIVER	DECK REPLACEMENT	0.204					CON
				2.238					

**REPAIR AND REBUILD ROADS**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
BERRIEN	I-196	FROM I-94 TO NORTH OF M-63 (EXIT 7)	ROAD REHABILITATION	8.089		CON			
BERRIEN	I-94	FROM INDIANA STATE LINE TO M-239	ROAD REHABILITATION	1.466		CON			
BERRIEN	I-94	FROM BRITAIN AVENUE TO I-196	RECONSTRUCTION	3.870					CON
BERRIEN	I-94	HIGHLAND ROAD OVER I-94	BRIDGE REMOVAL	3.870					CON
BERRIEN	I-94	I-94 BL EB (MAIN) OVER I-94	BRIDGE REMOVAL	3.870					CON
BERRIEN	I-94	TERRITORIAL ROAD OVER I-94	BRIDGE REPLACEMENT	3.870					CON
BERRIEN	I-94	NB US-31 & WB I-94 BL OVER I-94	NEW STRUCTURE ON RELOCATED ROUTE	3.870					CON
BERRIEN	I-94	SB US-31& EB I-94 BL OVER I-94	NEW STRUCTURE ON RELOCATED ROUTE	3.870					CON
BERRIEN	I-94 WB	FROM I-196 TO 0.7 MILES WEST OF M-140	ROAD REHABILITATION	5.603					CON
BERRIEN	M-140 (Watervliet Road)	M-140 FROM CR 378 TO I-196 AND NAPIER TO DAN SMI.	RESURFACE	9.560	CON				
BRANCH	M-60	FROM STREET JOSEPH COUNTY LINE TO 8 MILE ROAD	ROAD REHABILITATION	8.569	CON				
CALHOUN	I-94	FROM 17 1/2 TO 21 1/2 MILE ROAD	ROAD REHABILITATION	4.445	CON				
CALHOUN	I-94	I-94 EB OVER RICE CREEK	HEALER SEALER	4.445	CON				
CALHOUN	I-94	I-94 WB OVER RICE CREEK	HEALER SEALER	4.445	CON				
CALHOUN	M-199 (25 1/2 Mile Road)	FROM MICHIGAN AVENUE TO I-94	ROAD REHABILITATION	1.255					CON
CALHOUN	M-311 (11 Mile Road)	FROM M-60 TO I-94 BL	ROAD REHABILITATION	13.432				CON	
CALHOUN	M-60	M-60 FROM OLD US-27 TO HOMER VILLAGE LIMITS	RESURFACE	8.992		CON			
CALHOUN	M-99 (Superior Street)	FROM ASH STREET TO VINE STREET IN ALBION	RECONSTRUCTION	0.374	CON				
CASS	M-40	ONE MILE SOUTH OF M-60	RECONSTRUCTION	0.500		CON			
CASS	US-12	WEST VILLAGE LIMITS OF EDWARDSBURG TO M-62	ROAD REHABILITATION	0.840		CON			
KALAMAZOO	I-94	FROM EAST OF LOVERS LANE TO EAST OF PORTAGE ROAD	MAJOR WIDENING	1.160					CON
KALAMAZOO	I-94	I-94 OVER PORTAGE ROAD	REPLACE BRIDGE, ADD LANES	1.160					CON
KALAMAZOO	I-94	KILGORE ROAD OVER I-94	REPLACE BRIDGE, ADD LANES	1.160					CON
KALAMAZOO	I-94	FROM PORTAGE ROAD TO SPRINKLE ROAD	MAJOR WIDENING	1.200					CON
KALAMAZOO	I-94	I-94 OVER OLMSTEAD CREEK	REPLACE BRIDGE, ADD LANES	1.200					CON
KALAMAZOO	I-94	I-94 OVER NORFOLK SOUTHERN	REPLACE BRIDGE, ADD LANES	1.200					CON
KALAMAZOO	I-94	I-94 EB OVER GTW RAILROAD	REPLACE BRIDGE, ADD LANES	1.200					CON
KALAMAZOO	I-94	I-94 WB OVER GTW RAILROAD	REPLACE BRIDGE, ADD LANES	1.200					CON
KALAMAZOO	I-94 BL (Stadium Drive)	AT HOWARD STREET INTERSECTION	MINOR WIDENING	0.556		CON			
KALAMAZOO	I-94 BL (Stadium Drive)	FROM EAST OF SENECA TO HOWARD	ROAD REHABILITATION	2.762		CON			
KALAMAZOO	M-96 (King Highway)	M-96 FROM THE KALAMAZOO RIVER TO LAWNSDALE AVE.	RESURFACE	2.570	CON				
ST. JOSEPH	US-131	FROM BROADWAY ROAD TO COON HOLLOW ROAD	RECONSTRUCTION	1.169	CON				
VAN BUREN	I-94	FROM 56TH STREET TO WEST OF M-51	ROAD REHABILITATION	5.754	CON				
				82.166					

**SOUTHWEST REGION**

**CAPACITY IMPROVEMENT**

**I-94 IN KALAMAZOO**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
KALAMAZOO	I-94	EAST OF OAKLAND DRIVE TO WEST OF SPRINKLE ROAD	RECONSTRUCT AND ADD LANE(S) OVER		ROW	ROW	ROW	ROW	
				0.000					

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**SUPERIOR REGION**

**BRIDGE - BIG BRIDGE PROGRAM**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ONTONAGON	M-64	M-64 & M-38 OVER ONTONAGON R, RIVER RD,RR	OVERLAY - EPOXY	0.292		CON			
				0.292					

**BRIDGE - PRESERVATION**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ALGER	M-28	M-28 OVER SAND RIVER	OVERLAY - SHALLOW	0.522			CON		
DELTA	M-35	US-2, US-41 OVER FORD RIVER	JOINT REPLACEMENT	0.810		CON			
DICKINSON	US-8	US-8 OVER MENOMINEE RIVER	OVERLAY - DEEP	0.343		CON			
GOGEBIC	M-28	M-28 OVER JACKSON CREEK	SUBSTRUCTURE REPAIR	3.789		CON			
HOUGHTON	US-41	US-41 OVER STURGEON RIVER SLOUGH	PAINTING COMPLETE	2.030				CON	
IRON	US-2	US-2 OVER S BRANCH IRON RIVER	BRIDGE BARRIER RAILING REPLACE	0.660			CON		
MARQUETTE	M-95	M-95 OVER MICHIGAMME RIVER	SUBSTRUCTURE REPAIR	0.194			CON		
MENOMINEE	M-35	M-35 OVER BIG CEDAR RIVER	PAINTING COMPLETE	0.810		CON			
MENOMINEE	M-35	M-35 OVER DEER CREEK	SUPERSTRUCTURE REPAIR, CONCRETE	1.470				CON	
SCHOOLCRAFT	M-28	M-28, M-77 OVER FOX RIVER	PAINTING COMPLETE	0.269				CON	
				10.897					

**BRIDGE REPLACEMENT**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ALGER	US-41	US-41 OVER WEST BRANCH WHITEFISH RIVER	DECK REPLACEMENT	1.230					CON
MACKINAC	US-2	US-2 OVER BREVORT RIVER	DECK REPLACEMENT	5.617		CON			
MARQUETTE	M-94	M-94 (CO RD 460) OVER E BRANCH CHOCOLAY RIVER	CULVERT REPLACEMENT	0.991					CON
MENOMINEE	US-2	US-2 OVER BIG CEDAR RIVER	DECK REPLACEMENT	0.722			CON		
ONTONAGON	M-28	M-28 OVER BALTIMORE RIVER	DECK REPLACEMENT	1.000				CON	
ONTONAGON	M-64	M-64 OVER FLOODWOOD RIVER	DECK REPLACEMENT	0.588			CON		
				10.148					

**REPAIR AND REBUILD ROADS**

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
ALGER	M-28	FROM 0.86 MI E OF FFR 2275 TO 0.13 MI E OF MUN AVENUE	ROAD REHABILITATION	4.339				CON	
ALGER	M-94 (State Highway 94)	M-94 IN ALGER & SCHOOLCRAFT COUNTIES	RESURFACE	11.321		CON			
BARAGA	M-28	OLD M-28 TO US-41 IN BARAGA COUNTY	RESURFACE	3.224	CON				
BARAGA	US-41	FROM OLD US-41 NORTH TO THE HOUGHTON COUNTY LINE	ROAD REHABILITATION	6.946		CON			
BARAGA	US-41	US-41, COVINGTON & SPUR TOWNSHIPS, BARAGA COUNTY	ROAD REHABILITATION	9.633				CON	
CHIPPEWA	I-75	I-75 FROM MACKINAC COUNTY LINE N'LY TO M-28.	ROAD REHABILITATION	0.000	CON				
CHIPPEWA	I-75 BS (Ashmun Street)	FROM I-75/3 MILE RAMPS TO M-129	RECONSTRUCTION	1.739		CON			
CHIPPEWA	I-75 BS	FROM 15TH STREET TO 10TH STREET	ROAD REHABILITATION	0.443		CON			
DELTA	US-2	WESTBOUND US-2 BETWEEN GLADSTONE & RAPID RIVER	ROAD REHABILITATION	5.521		CON			
DELTA	US-2	EASTBOUND US-2 BETWEEN GLADSTONE & RAPID RIVER	ROAD REHABILITATION	5.549				CON	

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2017-2021 ROAD AND BRIDGE PROJECTS

SUPERIOR REGION

REPAIR AND REBUILD ROADS - *Continued*

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
DICKINSON	M-95	FROM CHANNING NORTH TO MARQUETTE COUNTY LINE	ROAD REHABILITATION	9.494		CON			
GOGEBIC	US-2 (Lead Street)	FROM FAIRVIEW STREET TO OLD US-2	RECONSTRUCTION	1.239					CON
HOUGHTON	US-41	CITY OF HANCOCK & FRANKLIN TWP, HOUGHTON COUNTY	ROAD REHABILITATION	1.673				CON	
HOUGHTON	US-41	US-41 FROM MACINNES DRIVE TO PROSPECT STREET	RECONSTRUCTION	0.857					CON
IRON	US-2	FROM OSS ROAD EAST TO CRYSTAL FALLS	ROAD REHABILITATION	5.165	CON				
IRON	US-2	US-2 OVER FORTUNE LAKE OUTLET	DECK PATCHING	5.165	CON				
IRON	US-2	ANGELI'S PLAZA EASTERLY TO BATES-AMASA ROAD	ROAD REHABILITATION	3.490			CON		
MACKINAC	I-75 BL	FROM GRONDEN ROAD TO MACKINAC TRAIL	RECONSTRUCTION	1.108	CON				
MACKINAC	US-2	FROM EAST LIMITS OF NAUBINWAY TO BORGSTROM ROAD	ROAD REHABILITATION	5.409			CON		
MACKINAC	US-2	BETWEEN HIAWATHA TRAIL & CUT RIVER, MACKINAC COUNTY	RELOCATION OF EXISTING ROAD	1.392					CON
MARQUETTE	US-41	FROM IROQUOIS STREET TO WATER STREET IN NEGAUNEE	RECONSTRUCTION	1.630	CON				
MARQUETTE	US-41	FROM CR HQ TO WEST OF BRICKYARD ROAD, MARQUETTE	RECONSTRUCTION	1.000			CON		
MARQUETTE	US-41	US-41 FROM FRONT STREET TO COUNTY ROAD HQ	ROAD REHABILITATION	3.087					CON
SCHOOLCRAFT	M-77 (State Highway 77)	PINE STREET TO M-28	RESURFACE	6.670	CON				
SCHOOLCRAFT	US-2	FROM M-149 TO MANISTIQUE CL	ROAD REHABILITATION	4.036					CON
				94.965					



# UNIVERSITY REGION

## UNIVERSITY REGION

### BRIDGE - BIG BRIDGE PROGRAM

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
MONROE	I-75	I-75 OVER CONRAIL, RAISIN RIVER, FRONT STREET	OVERLAY - EPOXY	0.131			CON		
				0.131					

### BRIDGE - PRESERVATION

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
CLINTON	I-69	I-69 SB OVER CSX RR	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	AIRPORT ROAD OVER I-69	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	LOWELL ROAD OVER I-69	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	I-69 SB OVER EB TURNING ROADWAY	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	I-69 NB OVER EB TURNING ROADWAY	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	I-69 SB OVER I-96 BL GRAND RIVER AVENUE	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	I-69 NB OVER I-96 BL GRAND RIVER AVENUE	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	I-69 SB OVER I-96	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	FRANCIS ROAD OVER EB & WB TURNING ROAD	OVERLAY - EPOXY	3.829					CON
CLINTON	I-69	EB TURNING RDWY OVER I-96	OVERLAY - EPOXY	3.829					CON
EATON	I-69	I-69 SB OVER INDIAN CREEK	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 NB OVER INDIAN CREEK	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 NB OVER BATTLE CREEK RIVER	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 SB ON RAMP OVER INDIAN CREEK	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 NB OFF RAMP OVER INDIAN CREEK	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 SB OVER BIG CREEK	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 NB OVER BIG CREEK	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 SB OVER BATTLE CREEK RIVER	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 NB OVER GTW RAILROAD	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 SB OVER GTW RAILROAD	OVERLAY - EPOXY	9.093					CON
EATON	I-69	BASE LINE HIGHWAY OVER I-69	OVERLAY - EPOXY	9.093					CON
EATON	I-69	BUTTERFIELD HIGHWAY OVER I-69	OVERLAY - EPOXY	9.093					CON
EATON	I-69	SHERWOOD ROAD OVER I-69	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 BL OVER I-69	OVERLAY - EPOXY	9.093					CON
EATON	I-69	KALAMO ROAD OVER I-69	OVERLAY - EPOXY	9.093					CON
EATON	I-69	ISLAND HIGHWAY OVER I-69	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 SB OVER STINE ROAD	OVERLAY - EPOXY	9.093					CON
EATON	I-69	FIVE POINT HIGHWAY OVER I-69	OVERLAY - EPOXY	9.093					CON
EATON	I-69	I-69 NB OVER STINE ROAD	OVERLAY - EPOXY	9.093					CON
EATON	I-69	AINGER ROAD OVER I-69	OVERLAY - DEEP	0.348					CON
EATON	I-69	I-96 EB OVER GRAND RIVER	OVERLAY - EPOXY	3.829					CON
EATON	I-69	I-96 WB OVER GRAND RIVER	OVERLAY - EPOXY	3.829					CON
EATON	I-69	I-69 SB TO I-96 EB OVER GRAND RIVER	OVERLAY - EPOXY	3.829					CON
INGHAM	I-96	HAGADORN ROAD OVER I-96	DECK PATCHING	3.854					CON
INGHAM	I-96	MERIDIAN ROAD OVER I-96	DECK PATCHING	3.854					CON
INGHAM	I-96	ZIMMER ROAD OVER I-96 EB	DECK PATCHING	3.854					CON
INGHAM	I-96	ZIMMER ROAD OVER I-96 WB	DECK PATCHING	3.854					CON
INGHAM	I-96	WILLIAMSTON ROAD OVER I-96	DECK PATCHING	3.854					CON

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2017-2021 ROAD AND BRIDGE PROJECTS

UNIVERSITY REGION

BRIDGE - PRESERVATION - *Continued*

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
INGHAM	I-96	ELM ROAD OVER I-96	DECK PATCHING	3.854				CON	
INGHAM	I-96	WALLACE ROAD OVER I-96	OVERLAY - EPOXY	3.854				CON	
INGHAM	M-143	M-143 E MICHIGAN AVENUE OVER GRAND RIVER	OVERLAY - EPOXY	0.120		CON			
MONROE	SB I-75/SUMMIT RAMP	I-75 & M-125 CONNECTOR OVER I-75	OVERLAY - DEEP	0.378			CON		
MONROE	SB I-75/SUMMIT RAMP	I-75 RAMP B OVER I-75	OVERLAY - DEEP	0.378			CON		
WASHTENAW	US-23	US-23 NB OVER CONRAIL & HURON RIVER	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	US-23 SB OVER CONRAIL & HURON RIVER	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	US-23 NB, I-94 BL OVER PACKARD ROAD	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	US-23 SB, I-94 BL OVER PACKARD ROAD	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	US-23 NB OVER US-23 BR	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	US-23 SB OVER US-23 BR	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	US-23 NB OVER HURON RIVER DRIVE	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	US-23 SB OVER HURON RIVER DRIVE	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	GEDDES ROAD OVER US-23	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	EARHART ROAD OVER US-23	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	PLYMOUTH-ANN ARBOR OVER US-23	OVERLAY - EPOXY	2.142			CON		
WASHTENAW	US-23	ELLSWORTH ROAD OVER US-23	OVERLAY - EPOXY	2.142			CON		
				23.593					

BRIDGE REPLACEMENT

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
JACKSON	I-94	I-94 OVER CONRAIL AND GRAND RIVER	BRIDGE REPLACEMENT	0.404		CON			
JACKSON	I-94	M-106 NB OVER I-94	BRIDGE REPLACEMENT	0.204		CON			
JACKSON	I-94	M-106 SB OVER I-94	BRIDGE REPLACEMENT	0.204		CON			
JACKSON	M-60	M-60 EB OVER I-94	BRIDGE REPLACEMENT	0.267				CON	
JACKSON	M-60	M-60 WB OVER I-94	BRIDGE REPLACEMENT	0.267				CON	
MONROE	I-75 (I-75 NB)	I-75 NB OVER MUDDY CREEK	BRIDGE REPLACEMENT	2.624					CON
MONROE	I-75 (I-75 NB)	I-75 SB OVER MUDDY CREEK	BRIDGE REPLACEMENT	2.624					CON
MONROE	I-75 (I-75 NB)	I-75 NB OVER OTTER CREEK	BRIDGE REPLACEMENT	2.624					CON
MONROE	I-75 (I-75 NB)	I-75 SB OVER OTTER CREEK	BRIDGE REPLACEMENT	2.624					CON
MONROE	I-75	I-75 NB OVER HALFWAY CREEK	BRIDGE REPLACEMENT	4.596			CON		
MONROE	I-75	I-75 SB OVER HALFWAY CREEK	BRIDGE REPLACEMENT	4.596			CON		
MONROE	I-75	I-75 NB OVER BAY CREEK	BRIDGE REPLACEMENT	4.596			CON		
MONROE	I-75	I-75 SB OVER BAY CREEK	BRIDGE REPLACEMENT	4.596			CON		
MONROE	I-75	I-75 NB OVER POWER CO RR SPUR	BRIDGE REPLACEMENT	4.596			CON		
MONROE	I-75	I-75 SB OVER POWER CO RR SPUR	BRIDGE REPLACEMENT	4.596			CON		
MONROE	I-75	I-75 NB OVER BAY CREEK ROAD	SUPERSTRUCTURE REPLACEMENT	4.596			CON		
MONROE	I-75	I-75 SB OVER BAY CREEK ROAD	SUPERSTRUCTURE REPLACEMENT	4.596			CON		
MONROE	I-75	ERIE ROAD OVER I-75	BRIDGE REPLACEMENT	4.596			CON		
MONROE	I-75	LAPLAISANCE RD OVER I-75	BRIDGE REPLACEMENT	0.782					CON
				8.877					

REPAIR AND REBUILD ROADS

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
CLINTON	I-69	I-96 TO AIRPORT ROAD	RECONSTRUCTION	5.636					CON
CLINTON	M-21	M-21 FROM THE COUNTY LINE TO ST. JOHNS	RESURFACE	13.716	CON				
EATON	I-496	I-496 FROM I-96 TO LANSING ROAD	RECONSTRUCTION	4.529				CON	
EATON	I-69	I-69 SOUTH OF THE CALHOUN/EATON COUNTY LINE TO M-50	ROAD REHABILITATION	13.087				CON	
INGHAM	LANSING REST AREA RAMP	LANSING REST AREA #810 US-127 NB INGHAM COUNTY	ROADSIDE FACILITIES - PRESERVE	0.000		CON			
JACKSON	I-94	M-60 TO SARGENT ROAD	RECONSTRUCTION	8.925		CON			
JACKSON	I-94	I-94 AT ELM ROAD	RECONSTRUCTION	1.499					CON
JACKSON	I-94	ELM RD OVER I-94	BRIDGE REPLACEMENT	1.499					CON
JACKSON	I-94 BL (Washington)	BROWN TO LOUIS GLICK	RECONSTRUCTION	1.701	CON				

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2017-2021 ROAD AND BRIDGE PROJECTS

UNIVERSITY REGION

REPAIR AND REBUILD ROADS - *Continued*

COUNTY	ROUTE (COMMON NAME)	LOCATION	TYPE OF WORK	LENGTH	2017	2018	2019	2020	2021
JACKSON	I-94BL (Washington)	LOUIS GLICK & WASHINGTON	ROAD REHABILITATION	0.905	CON				
JACKSON	M-52 (M-52)	WASHTENAW COUNTY LINE TO M-106	RESURFACE	3.827		CON			
JACKSON	M-60	CHAPEL ROAD TO EMERSON ROAD	ROAD REHABILITATION	1.567	CON				
LIVINGSTON	I-96	I-96 FROM CHILSON TO DORR	ROAD REHABILITATION	3.725					CON
LIVINGSTON	NB US-23	NB US-23 BET 8 MILE & M-36	OPERATION IMPROVEMENTS	0.413				CON	
MONROE	I-75	I-75 FROM OHIO STATE LINE TO ERIE ROAD	RECONSTRUCTION	5.060			CON		
MONROE	I-75	I-75 FROM ERIE ROAD TO OTTER CREEK ROAD	RECONSTRUCTION	3.731					CON
WASHTENAW	M-52 (M-52)	M-52 SOUTH COUNTY LINE TO AUSTIN ROAD	RESURFACE	5.216		CON			
				73.537					

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# Acronyms

<b>ACIP</b>	Aviation Capital Improvement Program
<b>BRT</b>	Bus Rapid Transit
<b>CATA</b>	Capital Area Transportation Authority
<b>CMAQ</b>	Congestion Mitigation Air Quality
<b>CPM</b>	Capital Preventive Maintenance
<b>CTF</b>	Comprehensive Transportation Fund
<b>DDOT</b>	Detroit Department of Transportation
<b>DDP</b>	Downtown Detroit Partnership
<b>DNR</b>	Michigan Department of Natural Resources
<b>FAA</b>	Federal Aviation Administration
<b>FAST</b>	Act Fixing America's Surface Transportation Act
<b>FHWA</b>	Federal Highway Administration
<b>FTA</b>	Federal Transit Administration
<b>HTF</b>	Highway Trust Fund
<b>LBO</b>	Local Bus Operating
<b>MAP-21</b>	Moving Ahead for Progress in the 21st Century
<b>MPO</b>	Metropolitan Planning Organization
<b>MTF</b>	Michigan Transportation Fund
<b>QLINE</b>	M-1 RAIL in Detroit
<b>R &amp; R</b>	Road Rehabilitation and Reconstruction
<b>RSL</b>	Remaining Service Life

## Acronyms - *continued*

<b>RTA</b>	Regional Transportation Authority of Southeast Michigan
<b>SHSP</b>	Strategic Highway Safety Plan
<b>STF</b>	State Trunkline Fund
<b>STIP</b>	State Transportation Improvement Program
<b>TIP</b>	Transportation Improvement Program
<b>TSC</b>	Transportation Service Center
<b>TZD</b>	Toward Zero Deaths

MICHIGAN DEPARTMENT  
OF TRANSPORTATION

2017-2021  
FIVE-YEAR  
TRANSPORTATION  
PROGRAM

VOLUME XIX

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