

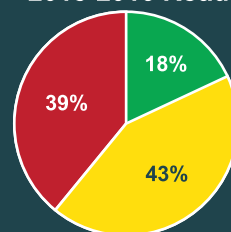


MICHIGAN'S ROADS & BRIDGES 2016 ANNUAL REPORT

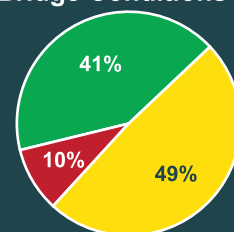


Michigan
Transportation Asset
Management Council

2015-2016 Road & Bridge Conditions



Road - Federal-Aid Eligible
Percent Lane Miles



Bridge - All of Michigan
Percent of Total

GOOD FAIR POOR

TRANSPORTATION ASSET MANAGEMENT COUNCIL (TAMC)

COUNCIL MEMBERS for 2016

AND THE ORGANIZATIONS THEY REPRESENT

**Joanna Johnson (TAMC Chair),
County Road Association of Michigan (CRA)**

**Brad Wieferich,
Michigan Department of Transportation
(MDOT)**

William McEntee (TAMC Vice-Chair), CRA

**Don Disselkoen,
Michigan Association of Counties (MAC)**

**Bob D. Slattery Jr.,
Michigan Municipal League (MML)**

**John Egalhaaf,
Michigan Association of Regions (MAR)**

**Dale Kerbyson,
MML**

**Jonathon R. Start,
Michigan Transportation Planning Association
(MTPA)**

**Dave Wresinski,
MDOT**

**Jennifer Tubbs,
Michigan Townships Association (MTA)**

Rob Surber, Michigan Center for Shared Solutions (Non-Voting)

The term of John Egalhaaf expired in May of 2016 and Derek Bradshaw was named as the new TAMC Representative for the MAR.

The term of Dale Kerbyson expired at the end of 2016 and Gary Mekjian, P.E. was selected to replace him as one of two TAMC Representatives for the MML

For brief biographical and contact information, please visit:

<http://tamc.mcgi.state.mi.us/TAMC/#/aboutus>

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Center for Technology and Training, MTU

ACRONYMS AND ABBREVIATIONS USED FREQUENTLY IN THIS REPORT

ADARS: Act-51 Distribution and Reporting System

BCFS: Bridge Condition Forecasting System

CPI: Consumer Price Index

CRA: County Road Association (of Michigan)

CSS: Center for Shared Solutions (DTMB)

CTT: Center for Training and Technology (MTU)

DTMB: Michigan Department of Technology, Management and Budget

FHWA: Federal Highway Administration

FAST: Fixing America's Surface Transportation Act

IBR: Inventory Based Rating

MAC: Michigan Association of Counties

MAP-21: Moving Ahead For Progress in the 21st Century

MAR: Michigan Association of Regions

MDNR: Michigan Department of Natural Resources

MDOT: Michigan Department of Transportation

MEDC: Michigan Economic Development Corporation

MML: Michigan Municipal League

MPO: Metropolitan Planning Organization

MTA: Michigan Township Association

MTPA: Michigan Transportation Planning Association

MTU: Michigan Technological University

NBI: National Bridge Inventory

NFC: National Functional Classification

NHS: National Highway System

PASER: Pavement Surface Evaluation and Rating

RPO: Regional Planning Organization

STP: State Transportation Program

TAMC: Transportation Asset Management Council

Any reference to Act 51 in this document refers to Public Act 51 of 1951

EXECUTIVE SUMMARY

The Transportation Asset Management Council (TAMC) was formed under [Public Act \(PA\) 499 of 2002](#) (amended by [PA 338 of 2006](#), [PA 199 of 2007](#), [PA 257 of 2010](#), [PA 298 of 2012](#) and [PA 506 of 2012](#)) to promote the use of asset management practices among Michigan's road owning agencies; to develop a coordinated, unified effort by the various roadway agencies within the state; and to advise the State Transportation Commission (STC) on a statewide asset management strategy.

This Executive Summary provides a few highlights from the 2016 TAMC Annual Report. The full report can be found at www.michigan.gov/TAMC.

In November of 2015, the Michigan legislature passed a transportation funding package that will generate approximately \$453 million in additional funds in fiscal year 2017. The package provides for a gradual rise to \$1.2 billion per year in new transportation funding in fiscal year 2021. Beginning in 2022 and continuing on into the future, the funding package then increases every year with the rate of inflation as calculated by the Consumer Price Index (CPI).

In December, 2015, Congress passed reauthorization legislation for the Federal Highway Administration (FHWA) which is expected to result in an approximate five percent increase in federal transportation dollars coming to Michigan. Taken together, and given the current conditions of Michigan's roads and bridges, these influxes of new funds are still not sufficient to improve Michigan's

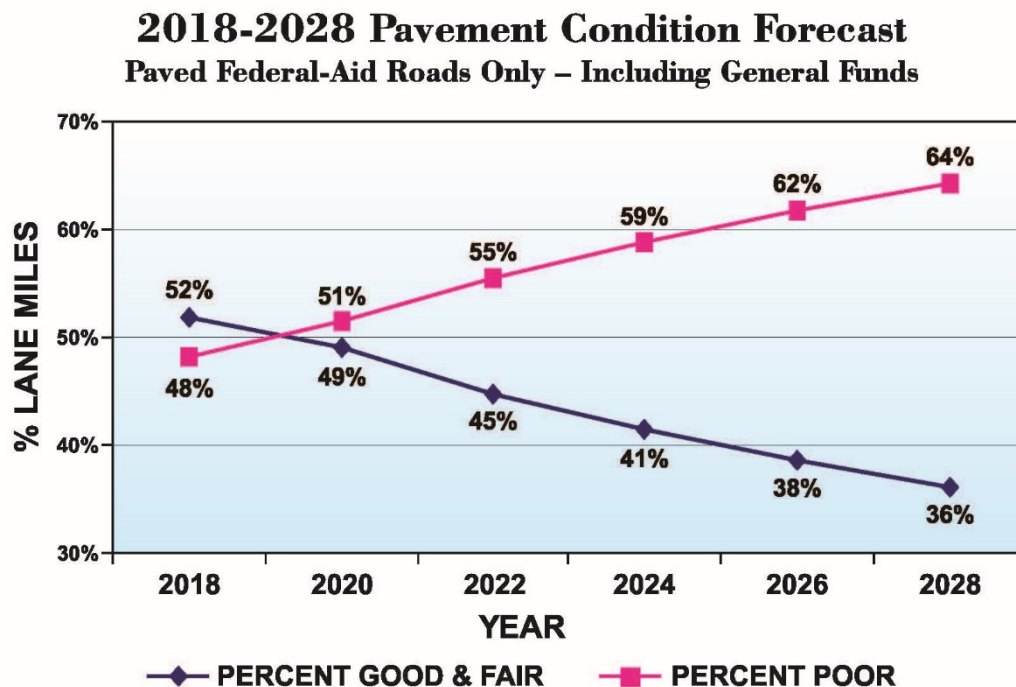


Figure ES- 1

road and bridge problems. Figure ES-1 shows the current projections for just pavement conditions on paved federal aid roads in Michigan using all the expected funding from both state and federal transportation sources. This year's forecast reflects new adjustments in funding expenditures and

pavement preservation strategies. These adjustments were based on detailed records now available to the council.

An analysis of bridge conditions in Michigan shows that bridge owners in the state are currently “holding their own” despite rising costs and revenue challenges. From 2004 to 2012, the overall network of bridges in the state saw a slight but steady improvement in overall condition. However, from 2012 to 2015 the improvement in bridge condition has stagnated and the current forecast shows a gradual decline as the forecast approaches the year 2026.

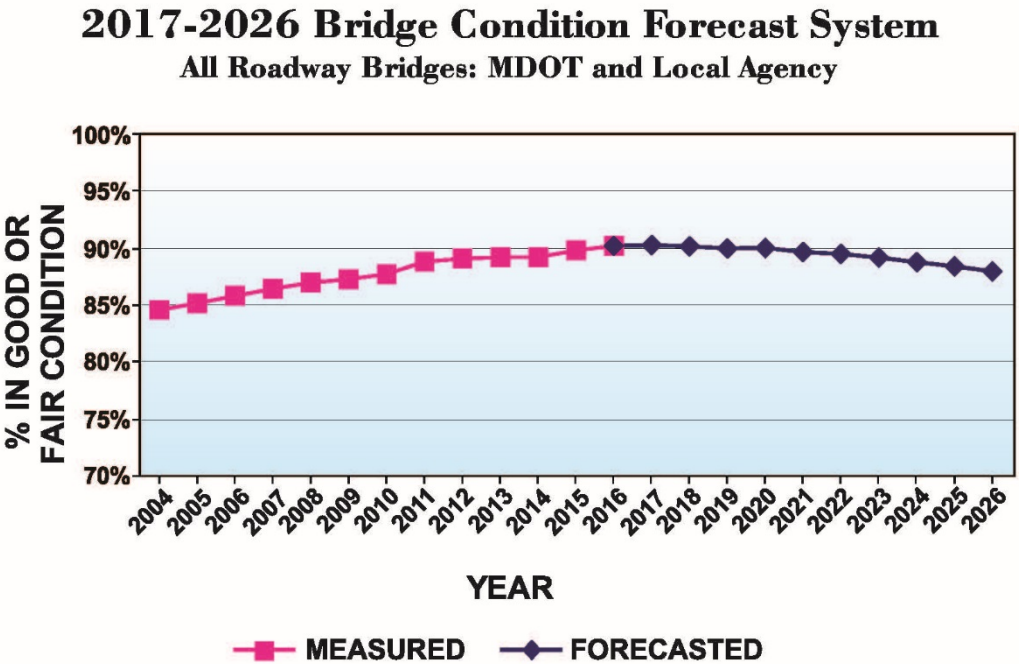


Figure ES- 2

Working from current bridge condition information from the National Bridge Inventory (NBI), the Bridge Condition Forecasting System (BCFS) estimates future condition of bridges in Michigan using bridge deterioration rates, project costs, expected inflation, and planned fix strategies. Figure ES-2 indicates the combined overall bridge condition of all the state’s bridges (both on state trunklines and on bridges owned by counties, cities, and villages) is expected to decline after 2016. By 2025, nearly half of the progress made toward improving bridge conditions since 2004 could be lost. In addition, the condition and forecast data shows the local bridge program could materially benefit from more bridge owning agencies actively adopting good capital preventive maintenance strategies.

While additional transportation funding was recently approved at both the state and federal level, no new funds were earmarked specifically for bridge programs. Therefore, the bridge forecast assumes no additional spending on bridges beyond those funds already designated for that purpose. If the road owning agencies begin programming some of the expected new transportation funds for bridge projects, that will be reflected in future forecasts.

The pessimistic outlook shown in Figures ES-1 and ES-2 is not unique to the TAMC. Both last year’s report from the [21st Century Infrastructure Commission \(November 2016\)](#) and a separate report from

the [Roads Innovation Task Force \(September 2016\)](#) painted a similar bleak picture. Even independent national organizations like TRIP¹, in their recently released study “[Modernizing Michigan's Transportation System Report](#)”, published in early April, 2017 and the American Society of Civil Engineers² in their recently released “[2017 Infrastructure Report Card](#)”, published in early March, 2017 indicate that Michigan is facing significant challenges regarding road and bridge infrastructure.

Current Conditions

Figure ES-3 summarizes the results of the 2015-2016 PASER rating: 18 percent of lane miles on the paved federal aid roads in Michigan were rated in “good” condition, 43 percent were rated in “fair” condition, and, 39 percent were rated in “poor” condition,

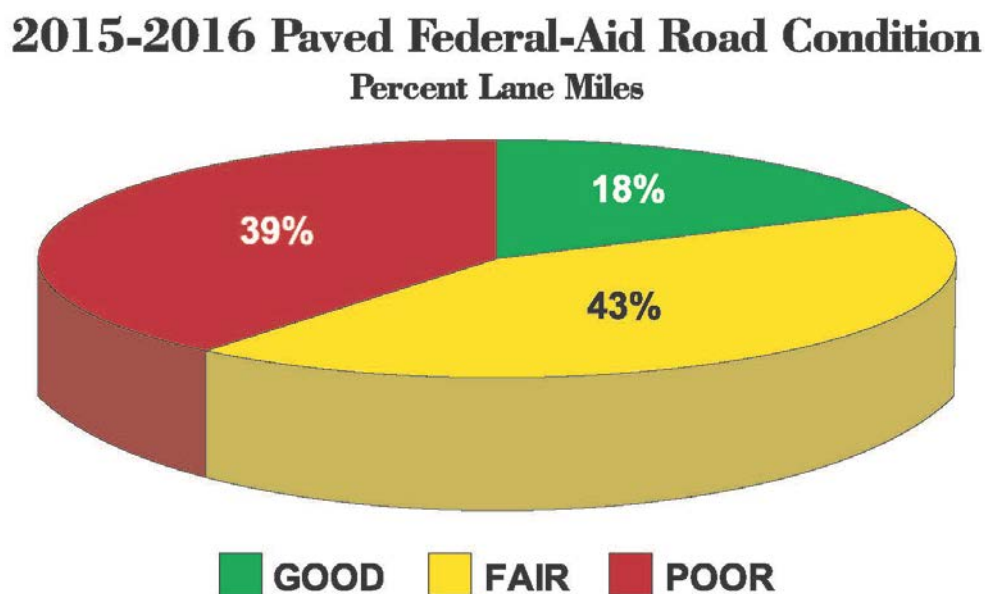


Figure ES- 3

For reporting purposes, the TAMC uses the following scale: road segments rated 8, 9, or 10 are categorized as “good”; segments rated between 5 and 7 are classified as “fair”; and segments rated 4 or less are in “poor” condition. Figure ES-4 shows the breakdown of the 2015-2016 pavement condition by percentage of lane miles on paved federal aid roads in each of the ten individual PASER rating units.

¹ Founded in 1971, TRIP is a private nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. More about the organization can be found at: <http://tripnet.org/>

² The American Society of Civil Engineers represents more than 150,000 members of the civil engineering profession in 177 countries. Founded in 1852, ASCE is the nation’s oldest engineering society. More about the organization can be found at: <http://www.asce.org/>

2015-2016 PASER Ratings

Percent Lane Miles

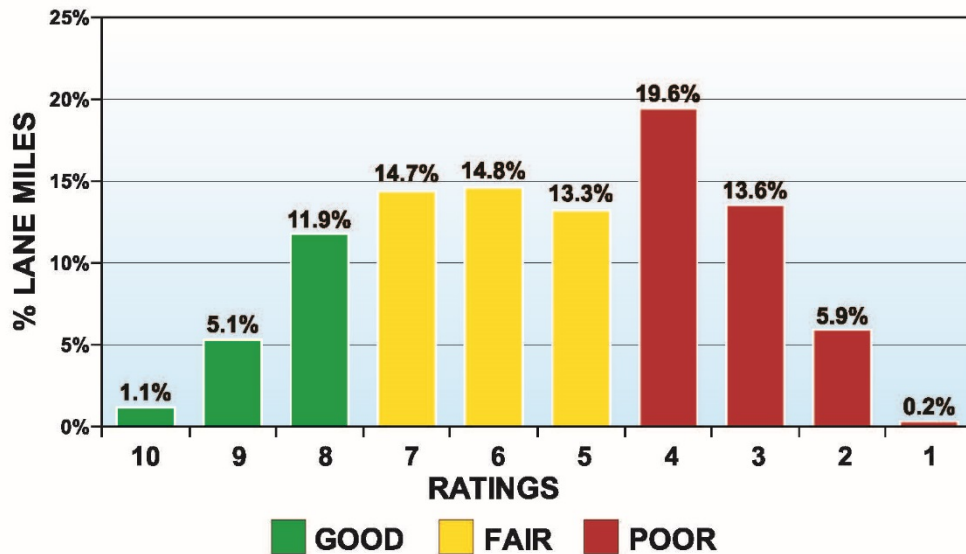


Figure ES- 4

Figure ES-5 shows the trend in pavement condition on federal aid roads in Michigan over the past ten years. Clearly, the overall condition of the federal-aid system is getting significantly worse with more miles currently in poor condition than in good condition.

2007-2016 Pavement Condition

Paved Federal-Aid Roads

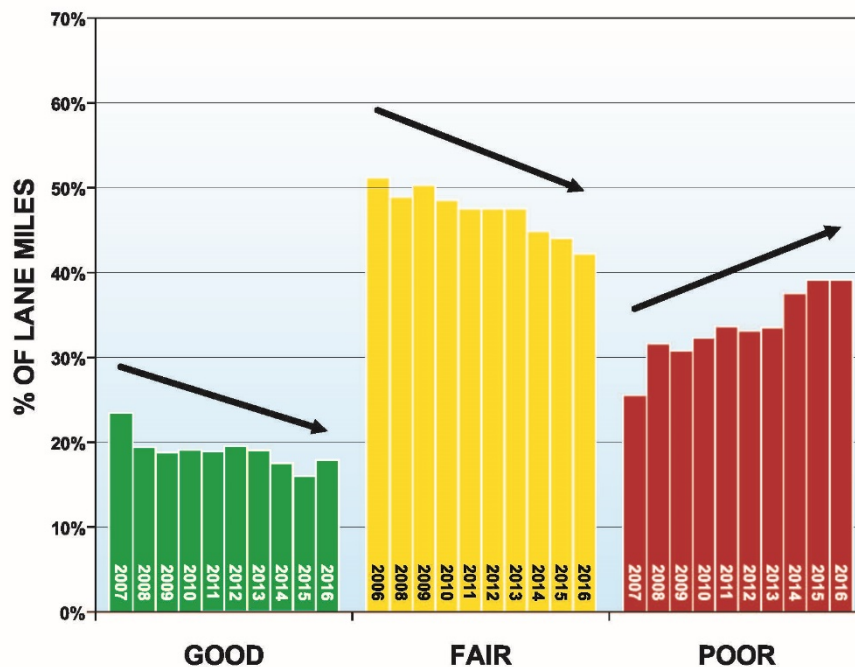


Figure ES- 5

The cost of returning a road from poor to good condition requires that the road be structurally improved. The cost of returning a road from fair condition to good condition means that capital preventive maintenance (CPM) must be performed. It costs four to five times as much perform structural improvements than it costs to perform capital preventive maintenance.

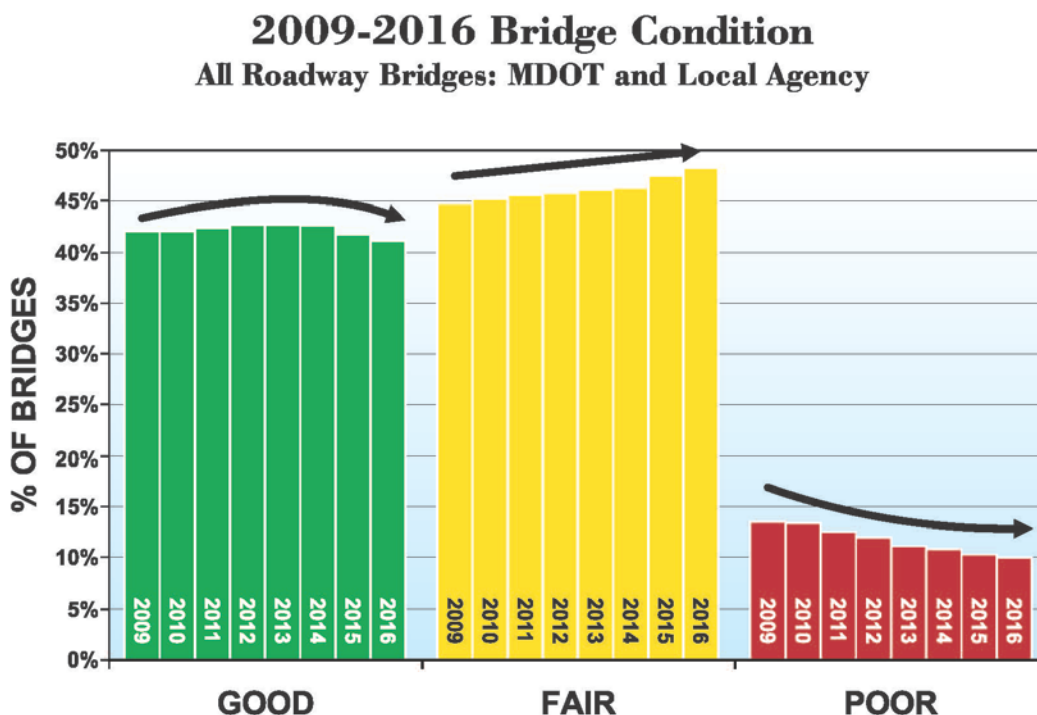


Figure ES- 6

Figure ES-6 summarizes the trend in the percentage of Michigan bridges in good, fair, and poor condition for the past eight years. Michigan bridge owners and decision makers have reduced the percentage of bridges in poor condition while increasing the number of bridges in good and fair condition.



MICHIGAN'S TRANSPORTATION ASSET MANAGEMENT COUNCIL

Formation and Charge

The Transportation Asset Management Council (TAMC) was formed under [Public Act \(PA\) 499 of 2002](#) (amended by [PA 338 of 2006](#), [PA 199 of 2007](#), [PA 257 of 2010](#), [PA 298 of 2012](#) and [PA 506 of 2012](#)) to promote the use of asset management practices among Michigan's road owning agencies; to develop a coordinated, unified effort by the various roadway agencies within the state; and to advise the State Transportation Commission (STC) on a statewide asset management strategy.

Vision Statement: TAMC sees itself as a national leader, promoting asset management principles and practices, to guide investment decisions among Michigan's transportation agencies.

Mission Statement: To support excellence in managing Michigan's transportation assets by:

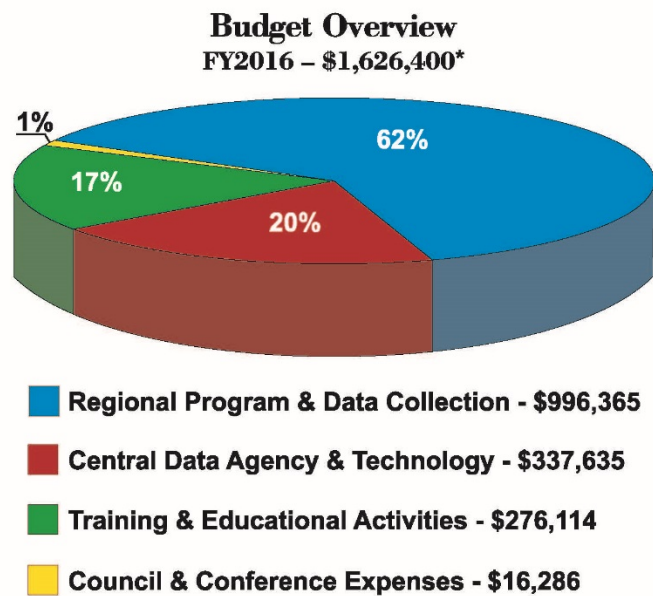
1. Advising the Legislature and State Transportation Commission
2. Promoting Asset Management Principles
3. Providing Tools and Practices for Road Agencies

Budget

The annual budget for the TAMC is \$1,626,400; this amount has been static since its creation in 2002. Funds for this program are provided from the Michigan Transportation Fund (MTF). Figure 1 shows a breakdown the TAMC's annual expenses.

The largest expense of the program is the Annual Data Collection Program which represents 62% of the TAMC's annual spending. These are the expenses associated with obtaining the pavement condition and inventory data. The TAMC administers this effort through contractual arrangements with 21 Regional and Metropolitan Planning Organizations across Michigan.

The second largest expense is the cost of processing, storing, analyzing and making accessible the information acquired by the Annual Data Collection Program. This represents 20% of the TAMC's annual expenses and includes the costs of software, data storage, Help Desk operations, website development and maintenance. This activity is administered through a contract with the Center for Shared Solutions (CSS) with the State of Michigan Department of Technology Management and Budget (DTMB).



*Funding Source: Michigan Transportation Fund

Figure 1

The third largest expense is the 17% of the total TAMC program cost that is used for the annual training and educational activities that TAMC provides for road owning agencies to fulfill data collection requirements and to further expand the procedures and application of asset management within road owning agencies. This activity is administered through a contract with the Center for Technology and Training (CTT) located at the Michigan Technological University.

Lastly, the TAMC spends roughly 1% of its annual budget on providing annual conferences, publications and the travel and activity expenses of council members engaged in TAMC business. It should be noted that the low overhead costs for the TAMC are a direct result of the legislation that created the TAMC, [P.A. 499 of 2002](#). That legislation directed MDOT to provide staff and administrative support as necessary to support the activities of the TAMC.

Year in Review TAMC Accomplishments in 2016

- **Integrating Investment Reporting Tool (IRT) into the Act 51 Distribution and Reporting System (ADARS) reporting process:**

By integrating these two reporting processes, the accuracy, consistency, and the reliability of the data being reported on both the TAMC dashboards and the TAMC interactive map is improved. Integrating these two processes also eliminated a certain amount of duplication of effort on the part of road owning agencies, thereby reducing both the cost and the effort needed for agencies to remain compliant with ACT 51 requirements.

- **Update of the TAMC Work Program:**

TAMC operates on a three year program of both ongoing and new activities designed to promote asset management practices and assist road owning agencies in their asset management efforts. The TAMC participated in a strategic planning session in 2016 that included the development of the 2017-2019 TAMC Workplan.

A copy of the current workplan can be found on our website at: http://tamc.mcgi.state.mi.us/TAMC/docs/aboutus/2014-16%20TAMC%20Work%20Program_FINAL.pdf

- **TAMC Spring Conference & Fall Conference:**

Two educational conferences were held. Both conferences were well attended and the feedback from attendees was positive. The Spring Conference was held at the Doubletree, in Dearborn and attracted about 150 attendees. The Fall Conference was held at the Ramada Inn, in Marquette and attracted about 120 attendees.

- **TAMC Data Source:**

Data Collected and shared by the TAMC continues to be cited in a variety of publications, including the 21st Century Infrastructure Commission's Report. In addition, one of the recommendations of the Commission was the creation of regional infrastructure oversight groups patterned after TAMC (more on this in the section focused on the Commission and its recommendations).

- **TAMC Relationships & Communication:**

2016 was a transition year for the TAMC. Both a new Chair and a new Coordinator came on board. One of the primary goals for the year was improving and enhancing communications with road owning agencies and support staff. Outreach efforts expanded to other transportation planning and governmental conferences. The TAMC reintroduced regularly scheduled calls with our regional planning agency partners, improved the administration of meeting agendas, meeting minutes, and budget/expense reporting, and the TAMC has taken steps to standardize monthly/quarterly invoices in order to address concerns expressed by auditors.

- **TAMC Website/Mobile Application/IRT Rewrite Updates:**

Updates in this effort began in 2016 and much of this effort is still in the works. In 2017 the TAMC anticipates additional enhancements to the website and mobile applications. The IRT rewrite has required a significant investment of resources and additional improvements to the process are expected in response to user feedback.

- **Revamped image:**

With help from MDOT graphics staff, a new logo was introduced on TAMC banners, notepads, pens, etc. in 2016.

- **TAMC Investment:**

For the first time since it was created in 2003, the TAMC has requested an increase in its appropriated budget for FY 2018. The additional funding was requested to expand data collection to include unpaved federal aid roads (Inventory Based Rating (IBR)), expanded data collection on paved non-federal-aid eligible roads, and to assist road agencies in the preparation of Asset Management Plans. If approved by the state legislature, TAMC's annual budget will increase from \$1,626,400 (FY2002 through 2017) to \$1,876,400 (FY2018).

TAMC Training and Education:

TAMC continues to focus on training and educating road owning agencies and elected and appointed officials on the benefits of asset management. Please visit the TAMC's website to download the *2016 TAMC Training Program Results Report*. In 2016 TAMC sponsored:

- Two (2) Asset Management Conferences; Topics at the two conferences included best practices, agency experiences, Michigan infrastructure challenges and opportunities, and technical presentations.
- Four (4) sessions of the Introduction to Asset Management for Elected & Appointed Officials Workshops were held in 2016, at locations in Menominee County, Van Buren County, Roscommon County and in Lansing. Combined attendance of 150 participants was down from the 211 attendees in 2015 when there were also four (4) sessions. Attendance for this program is expected to grow in 2017 as nine agencies have already scheduled/requested hosting this training so far. The Center for Technology & Training

is currently pursuing the creation of a promotional video to help promote participation/attendance at these workshops.

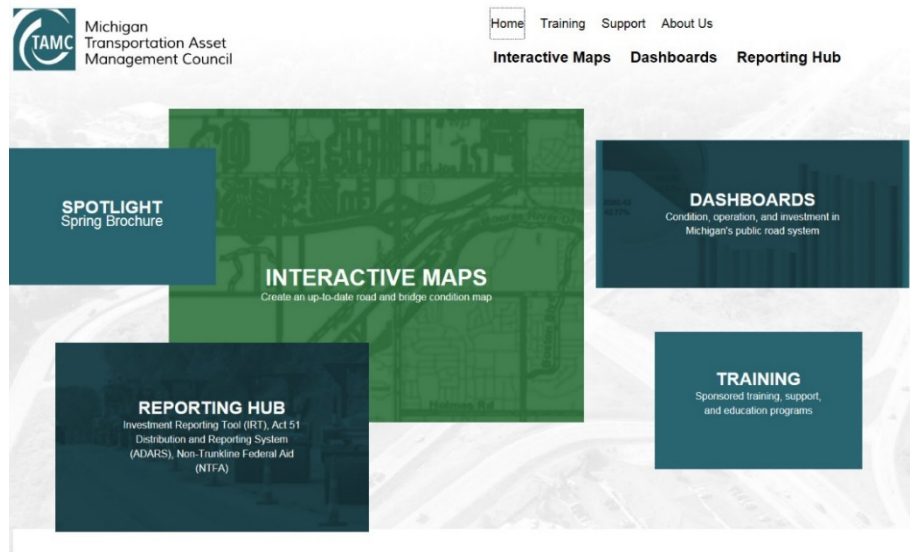
- Only two (2) Asset Management Workshops for practitioners were held statewide resulting in a combined attendance of 23 participants compared to 63 in 2015 when there were three workshops conducted. Plans are to restructure this course similar to the recent restructuring of the Bridge Asset Management Course, with both “Introductory” and “Advanced” modules.
- Ten (10) on-site PASER Trainings were held statewide and had 478 participants. In addition, five PASER training webinars were held with an additional 237 participants.
- There were no Bridge Asset Management Training Courses conducted in 2016 due to a restructuring of the class into both an “Introductory” and an “Advanced” training modules. A pilot version of the new “Advanced” bridge asset management class is scheduled for March 2017. As part of the advanced class, participants will be asked to bring in specific information and will leave the class with a draft asset management plan. If successful, a similar “Advanced” module will be developed for the road asset management training program.
- Five (5) on-site training sessions for the integrated IRT & ADARS reporting requirement with a total of 116 participants and an additional four (4) webinars with 171 participants in 2016. In total, 287 people received training in the integrated IRT/ADARS reporting process.

In total, the various TAMC training programs had a total of 1,508 participants in 2016. (For a complete copy of the Training Report, please visit the TAMC website: http://www.mcgi.state.mi.us/MITRP/Council/Default_Council.aspx)

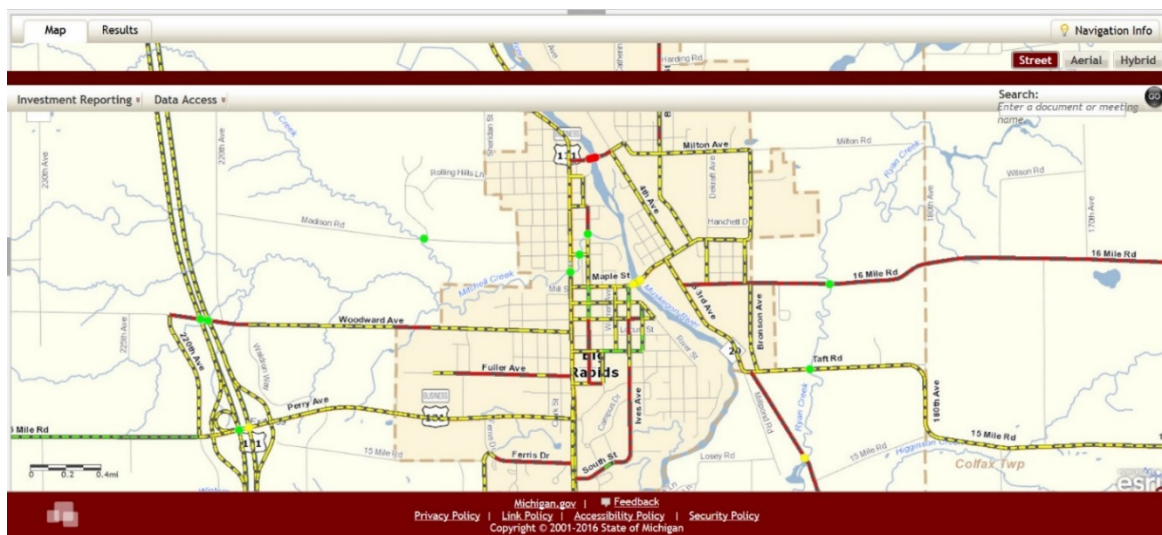


TAMC Webpage with Interactive Map and Dashboards

Webpage: The TAMC webpage is currently in the midst of a major overhaul. Portions of the webpage are now compatible with mobile devices like smartphones and tablets. Other portions of the website including some of the dashboards are currently still in the old format. Conversion to mobile compatibility for the remaining portions of the website are expected later in 2017. [Click](#) the graphics to hyperlink to the portion of the website depicted.

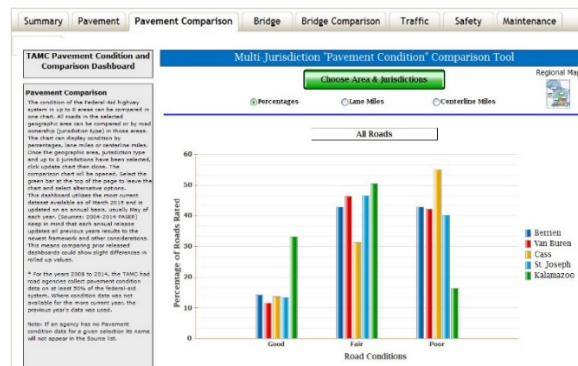
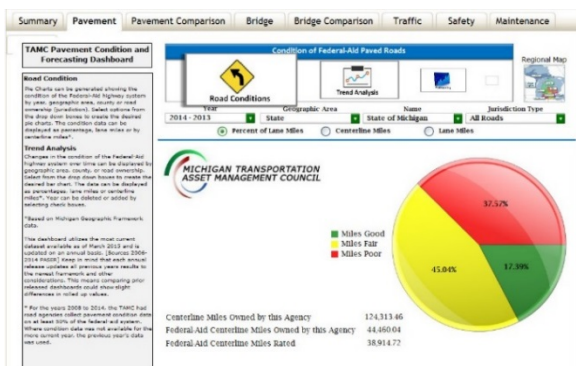


Interactive Map: The TAMC maintains a public interactive map that includes historical and most current PASER condition ratings, updated PASER data collection status information, and most current NBI bridge condition information. [Click](#) the map graphic to hyperlink to the Interactive Map.

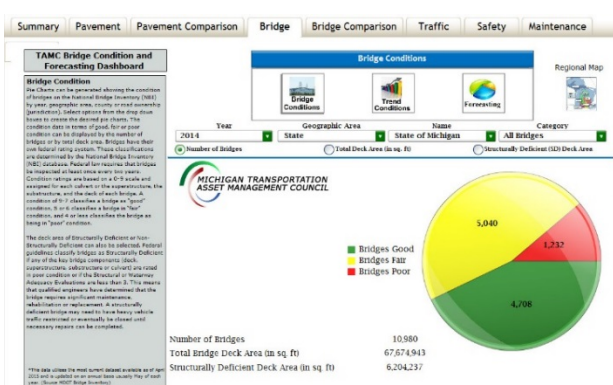


Performance Measure Dashboards: The TAMC has developed and improved upon several Performance Measure Dashboards that show the condition, operation, and investment in Michigan's public road and bridge system. Click on each graphic below for hyperlink to the Performance Measure Dashboards.

Pavement Condition & Pavement Comparison Dashboards: These two (2) dashboards are based on PASER surface condition ratings for all paved federal-aid eligible roads in the state. This includes all state trunklines as well as many roads under the jurisdiction of Michigan's counties, cities & villages. These dashboards illustrate both the current pavement condition and the trend over the past 8 years. The Pavement Comparison Dashboard provides the user with the ability to compare recent system performance for up to eight road owning agencies at one time.



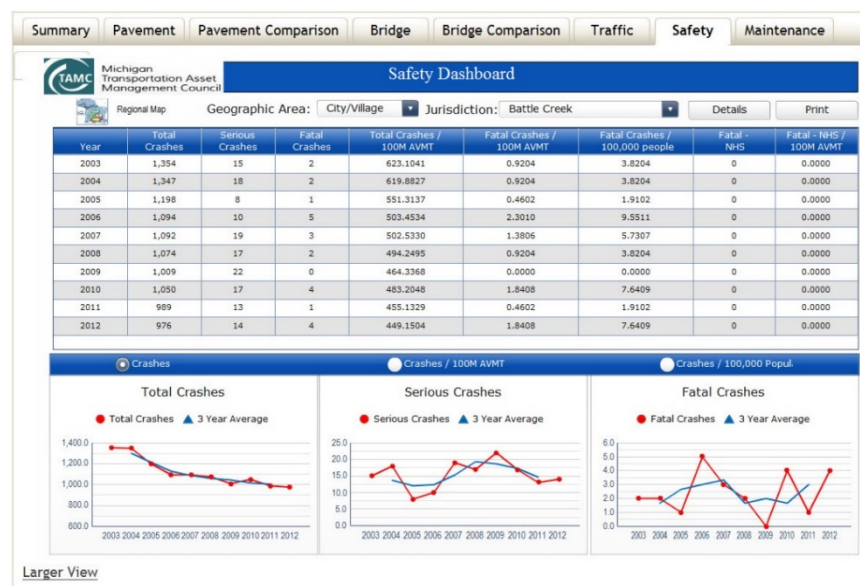
Bridge Condition & Bridge Comparison Dashboards: Bridge conditions are based on bi-annual inspections of over 10,000 state, county, city & village owned bridges. These two (2) dashboards illustrate bridge conditions and trends and provides the user with the ability to compare system performance for up to 8 bridge owning agencies at one time.



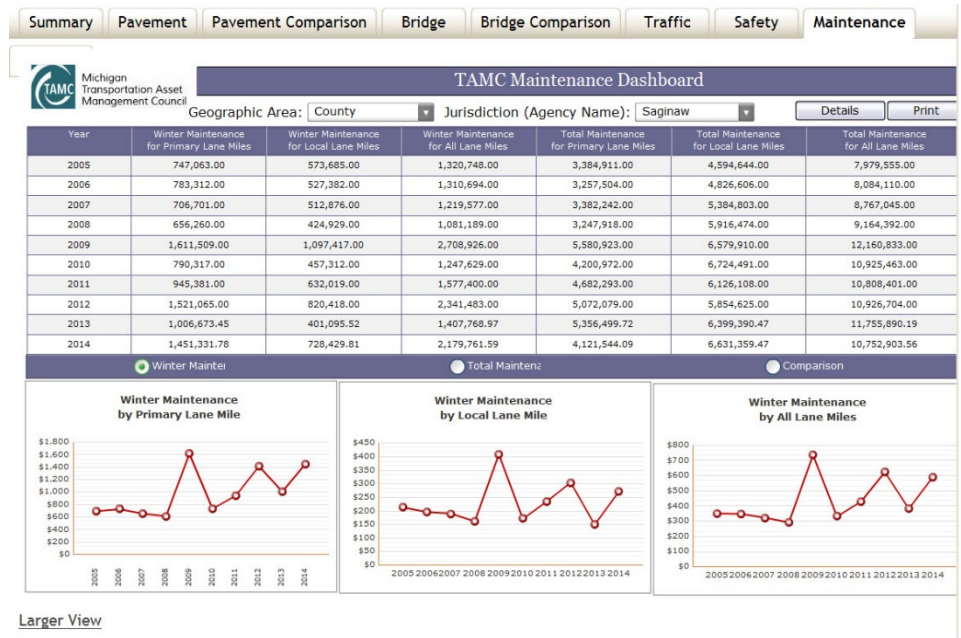
Traffic Dashboard: Traffic volumes are a measure of both road use and how effectively the road system is performing. This dashboard shows estimated annual miles of travel on Michigan's public roads by type and owner of road used, as well as a comparison of the relative sizes (in centerline miles) of those different portions of Michigan's road network.



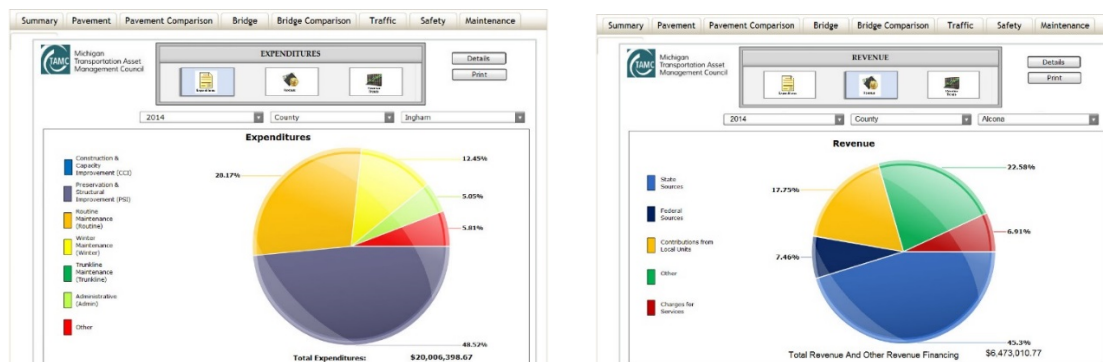
Safety Dashboard: The rate of crashes (fatalities, serious injuries) is a measure of how effectively the road system is performing.



Routine Maintenance Dashboard: This dashboard provides a county by county comparison of winter maintenance expenses to the total annual normal maintenance expenses that are required to keep roads and bridges performing as intended.



Finance Dashboard: Capital investments are necessary to extend the useful life of any asset including roads and bridges. This dashboard illustrates how Michigan's road owning agencies are investing Act51 funding into the roads and bridges they own and the revenues received annually by each agency.



TAMC Publications:

Annual Report: As required by law, TAMC submits an Annual Report to the State Transportation Commission and Michigan Legislature no later than May 2nd of each year. The Annual Report describes the TAMC's asset management related efforts during the past year, and the condition of the federal-aid eligible portion of Michigan's road & bridge system as measured during the past year. The report also includes information on the condition of a portion of the non-federal aid eligible roads in Michigan.

Asset Management Guide / Sample Asset Management Plan: The TAMC developed and adopted an updated Local Agency Guide for Developing an Asset Management Process/Plan and developed a new Sample Asset Management Plan. This Guide was intended to lead an agency through the steps of an asset management process with the idea that when applied to 600+ local agencies, one size does NOT fit all. This idea ultimately led to the creation of a tiered (Basic, Moderate, Advanced Levels) sample asset management plan.

Asset Management Guide for Local Agency Bridges in Michigan/Sample Bridge Asset Management Plan: TAMC has developed an Asset Management Guide for Local Agency Bridges. The guide is intended to provide assistance to bridge owners and decision makers in understanding bridge management and preservation. In this regard, the guide provides guidance in the planning, developing, programming, and implementing of effective and efficient capital programs and maintenance actions to preserve the bridges under their jurisdiction; and information to assist bridge owners (1) in understanding their bridge network, (2) in the preparation and implementation of a bridge preservation plan, and (3) to support applications for Local Bridge Program funding.

Inventory Based Ratings (IBR) for Unpaved Roads: The TAMC partnered with Michigan Technological University (MTU) to develop a process similar to PASER in ease of implementation, but tailor made for assessing relevant features of unpaved roads. The IBR system was created and implemented as a pilot project in five Michigan counties, assessing roads based on Surface Width, Drainage Adequacy and Structural Adequacy. These inventory features were selected because of their impact on road users and the significant cost to create and maintain them. The system defines a baseline condition for each inventory feature, which indicates a good rating in this *good-fair-poor* rating system.

Other Related Publications and Assistance

In addition to the documents identified above, the TAMC provides access to other documents related to Asset Management topics, processes, and procedures. The TAMC also provides links to contact information about organization or individuals who can assist local agencies with various aspects of asset management. Links to those items can be found [here](#).

TAMC Recognition:

Awards Program: The TAMC adopted an awards program to annually recognize those individuals and organizations that support and promote asset management practices. The following individuals and organizations have been recognized since the inception of the awards program in 2009:

Carmine Palumbo Individual Award Winners³

Organization Award Winners:

2009	John Daly III, PhD, Genesee County Road Commission	2009	Michigan Department of Transportation
2009	Brian Gutowski, Emmet County Road Commission	2009	Genesee County Metropolitan Planning
2010	Lance Malburg, Oceana County Road Commission	2009	City of Manistee
2010	Rob VanEffen, Delta County Road Commission	2009	City of Marquette
2010	Anamika Laad, East Michigan Council of Governments	2009	Alcona County Road Commission
2011	Edward G. Hug, SEMCOG	2009	Kent County Road Commission
2012	Jim Snell, Grand Valley Metro Council	2010	Kalamazoo County Road Commission
2012	Fazer, Eastern U.P. Regional Planning & Development Commission	2010	Roscommon County Road Commission
2012	Rep. Rick Olson, Michigan Legislature	2010	Genesee County Road Commission
2012	Kelly Bekken, Missaukee County Road Commission	2011	Ottawa County Road Commission
2013	Keith Cooper, MDOT	2012	Texas Township
2013	Nico Tucker, Northeast Michigan Council of Governments	2014	Kalamazoo Township
2013	Toby Kuznicki, City of Rogers City	2015	Kalamazoo County Road Commission
2014	Carmine Palombo, SEMCOG	2016	St. Joseph County Road Commission
2014	Robert E. Clegg, City of Port Huron	2017	-
2015	Carmine Palombo, SEMCOG		
2016	Tim Colling, PhD, Michigan Technological University		
2017	-		

³ Note: In 2015, the TAMC renamed the Individual Achievement Award in honor of Carmine Palombo, the first Chair of the TAMC, for his years of service and dedication to the TAMC, to the Southeast Michigan Council of Governments (SEMCOG, and to his continuing support of the asset management process.

SUMMARY OF CURRENT AND FUTURE TAMC EFFORTS

As noted earlier, the TAMC adopted a new Work Program covering the period from 2017 through 2019 during the summer of 2016. A copy of that Work Program can be found [here](#).

Highlights from the previous Work Program covering the year 2014 - 2016 include:

- ✓ Develop techniques and tools to inventory and rate unpaved roads.
- ✓ Creation of classes, training material, and support documentation for bridge related asset management activities.
- ✓ Integration of the IRT and ADARS reporting systems.
- ✓ Increased voluntary reporting of PASER ratings for paved non-federal aid eligible roads. (Individual road ratings can be found on the TAMC [Interactive Map](#) and a summary of all the ratings can be found on the [Pavement Dashboard](#).)

Goals from the 2017 - 2020 Work Program include:

- ✓ Further analysis of 10 years' worth of PASER data on the federal-aid eligible portion of Michigan's road network and bridge system.
- ✓ Continuing to encourage increased reporting of PASER data for the paved non-federal aid eligible portion of Michigan's road network.
- ✓ Creation of classes, training material, and support documentation for an "advanced" class to create asset management plans for road owning agencies.
- ✓ Implementing a rating program for the unpaved portion of Michigan's road network.
- ✓ Increased communication from TAMC.

In addition to the work program goals outlined above, the TAMC has been invited to exploring ways to coordinate with MDOT in its efforts to create a statewide Asset Management Plan focusing on the NHS roads in the state, and in its efforts to address new FHWA data collection requirements.

The TAMC has also expressed an interest in working with the 21st Century Infrastructure Commission during future activities. (Additional information later in this report in the section labelled "21st Century Infrastructure Commission.")

TAMC Investment Reporting:

The IRT was developed by the TAMC to allow all Michigan road agencies to satisfy the requirements of [PA 199 of 2007](#). The basic requirements are that road owning agencies report on projects they have completed and projects which are planned in the next three (3) years. Since its initial inception in 2005 the IRT has been refined and updated reflecting feedback from users. In October 2014 the reporting requirements were made mandatory and are based on an agency's fiscal year end date. Currently there are over 700 registered IRT users. The TAMC provides training and a help desk to assist agencies in satisfying this reporting requirement.

Since the IRT was first released for use in 2006, over 44,000 road projects and 1,500 bridge projects have been reported. Road projects include over 30,000 miles of Capital Preventative Maintenance (CPM) type projects and over 16,000 miles of Structural Improvement (SI) type projects. Bridge projects include over 600 Bridge Replacements (BRPL) and over 300 Bridge Capital Preventative Maintenance (BCPM) type projects.

The IRT has now been linked to ADARS. Both IRT data and ADARS data must be submitted within 120 days of an agencies' fiscal year end date. This linkage helps to ensure compliance. However, this does pose some challenges at the statewide level of reporting as project data is received throughout the year versus a common annual deadline.

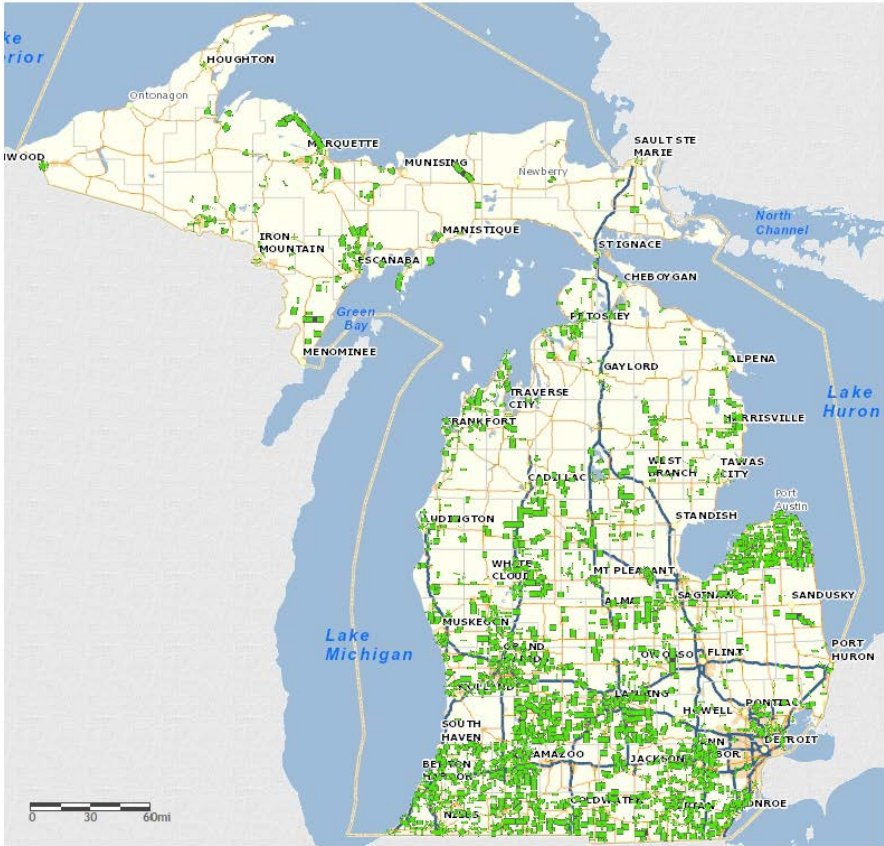
Because of the effective date of mandatory compliance, less than 200 agencies were required to report in FY 2015, however, the IRT reporting requirements were met by 310 agencies. These reports included over 5,300 miles of road projects completed in calendar year 2015. As of March 1, 2017, a total of 304 agencies have met their 2016 reporting requirements with over 2,800 miles of projects completed in 2016. The majority of the remaining agency 2016 reports are expected by June of 2017. Next year's annual report will contain a review of the complete FY 2016 IRT data.

IRT User Statistics	Number of Users
Number of total users	710
Number of Agencies with Users	485
Number of Regional Users	78

Overall Compliance Details	2015	2016* ⁴
# Agencies Completed Reporting	310	304*
# Agencies having Road Projects	202	159*
# Agencies having Bridge Projects	55	60*
Total Costs of Projects Reported	\$660,000,000	\$740,000,000*

⁴ NOTE: Majority of counties have not yet submitted 2016 data. The reporting deadline for all counties is 5/2/17. Complete FY 2016 Investment Data will be included in next years' annual report

2016 TAMC IRT Reporting
Over 550 Road & Bridge Projects Reported
in the IRT as of 3/1/2017



Map - 1

Map-1 shows the location of all the asset management projects reported during FY2015. The TAMC [Interactive Map](#) can be used to identify the type of project completed at each of the sites shown on Map-1

The following tables show the reported road and bridge projects for FY 2015 and FY 2016. As noted previously, these are not complete lists of all projects that were constructed in those years. This is the first time that composite detail of this nature has been available, and the TAMC looks forward to the additional analysis that may be possible when this information is reported on a continuing basis.

Road Projects Details	2015
Total Number of Roads Projects	3,147
Total Centerline Miles of Road Projects	5,358
Centerline miles of Structural Improvement	1,710
Centerline miles of Capital Preventive Maintenance	3,648

Bridge Projects Details	2015
Capital Preventive Maintenance Projects	53
Scheduled Maintenance Projects	42
Rehabilitation Projects	17
Replacement Projects	69
Structural Improvement Projects	1
Total Number of Bridge Projects	182

What are the differences between route miles, centerline miles, and lane miles?

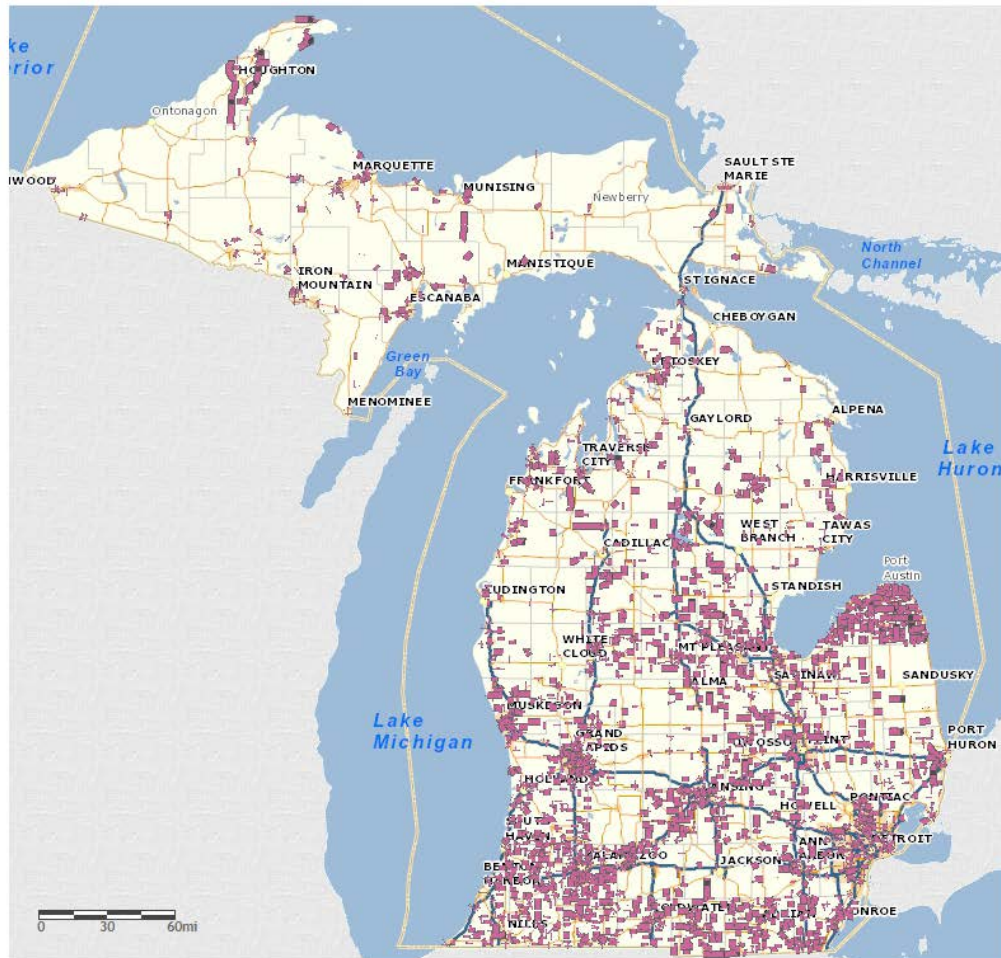
Route miles represent the length of a roadway, in miles, from one end to the other. Centerline miles also measure the length of a roadway from one end to the other, but it counts each side of a divided highway as if it were a separate roadway, i.e. one route mile of a freeway or boulevard is equal to two centerline miles. Lane miles represent the length of a road section, in miles, times the number of lanes of pavement in that segment, i.e. one route mile of a 5 lane roadway is equal to 5 lane miles. It is a way of measuring the total amount of pavement that is in each rating category.

Road Projects Details	2016 ⁵
Total Number of Roads Projects	408
Total Centerline Miles of Road Projects	2,874
Centerline miles of Structural Improvement	860
Centerline miles of Capital Preventive Maintenance	2,013

Bridge Projects Details	2016*
Capital Preventive Maintenance Projects	78
Scheduled Maintenance Projects	14
Rehabilitation Projects	39
Replacement Projects	93
Structural Improvement Projects	7
Total Number of Bridge Projects	231

⁵ * NOTE: Majority of counties have not submitted 2016 data as the reporting deadline is 5/2/17. This Data will be included in the next year's annual report.

2016 TAMC IRT Reporting
Over 3100 Road & Bridge Projects Reported
in the IRT as of 3/1/2017



Map - 2

Map-2 shows the location of all the asset management projects reported during FY2015. The TAMC [Interactive Map](#) can be used to identify the type of project completed at each of the sites shown on Map-2.

Road Data Review

Michigan's Annual PASER Condition Assessment – A Team Effort:

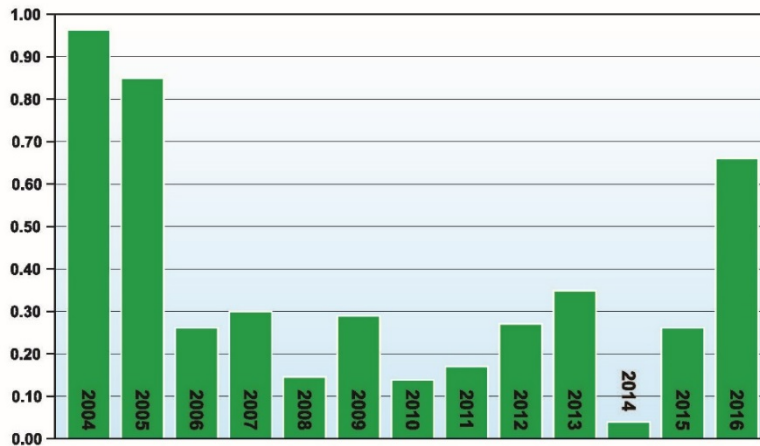
Every year since 2004 TAMC partners with each of Michigan's twenty-one Regional and Metropolitan Planning Organizations (RPO/MPO) to coordinate the annual PASER condition assessment of the paved federal-aid road system. A team of three raters composed of a representative from MDOT, RPO/MPO, and a local agency (County, City/Village) embark on an effort to rate at least 50 percent of the paved federal-aid road system each year. Over 100 teams of trained raters assess the condition of 84,000 lane miles of paved federal-aid eligible roads once every two years. Individuals must attend PASER training each year before being allowed to rate the roads.



Photo Courtesy of CTT at MTU

With over 100 teams of trained raters assessing the condition of roads statewide annually, data quality is of utmost importance to TAMC. Accurate PASER ratings depend on the judgment of the raters. Every year raters are required to attend PASER training and review the rating criteria. Various types of pavement distress are shown and there is a discussion on how various types of distress contribute to the appropriate rating for each road segment. The goal is uniformity: all rating teams should assign the same rating when observing a given segment of

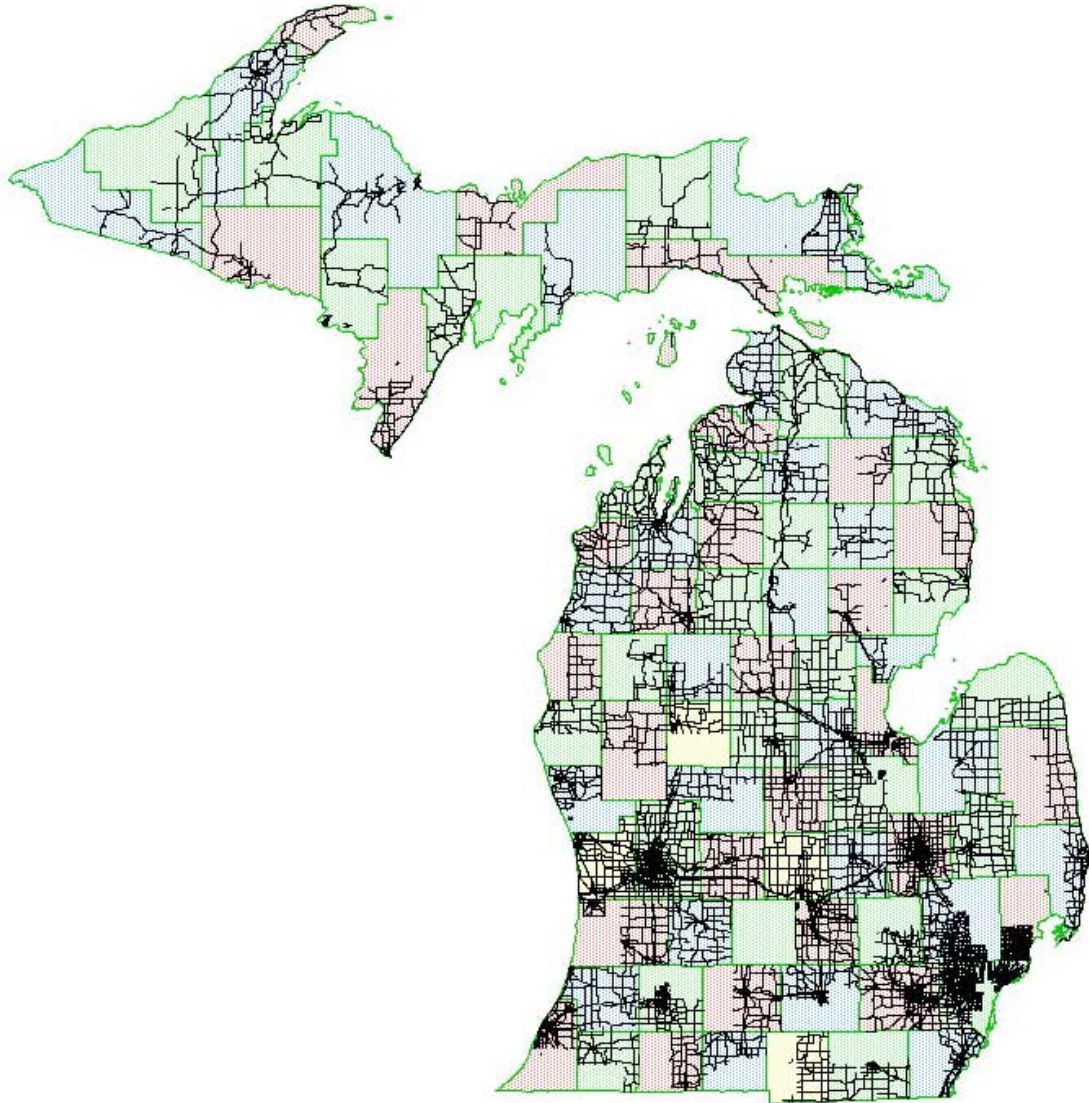
2004-2016 Average Difference in Rating
Team Minus QC



road. In order to ensure this uniformity, a qualified transportation technician observes and independently rates over 2,000 road segments scattered throughout the state. These ratings—known as the QC ratings—are later compared to the ratings reported by the teams. The analysis shows that over 90 percent of the ratings are either identical or within two rating points of each other. The average difference in ratings was just two thirds of a rating point.

2016 PAVEMENT CONDITION

Roads Rated in 2016
Paved Federal-Aid Roads Only



Map - 3

Federal-Aid Roads

From 2004-2007, the TAMC required 100 percent of all paved federal-aid roads be rated each year. Beginning in 2008, in response to budgetary and staffing concerns expressed by local road agencies, TAMC began to require that only 50 percent (by county) of the paved federal-aid eligible roads be rated each year, equating to 100 percent coverage of the statewide system every other year. In 2016, 66 percent of paved federal-aid roads were rated.

To provide a complete, accurate report on road conditions, both 2015 and 2016 PASER ratings were used in the analysis of road condition. 2015 ratings were used for the 34 percent of paved federal aid roads that were not rated in 2016.

2015-2016 Paved Federal-Aid Road Condition **Percent Lane Miles**

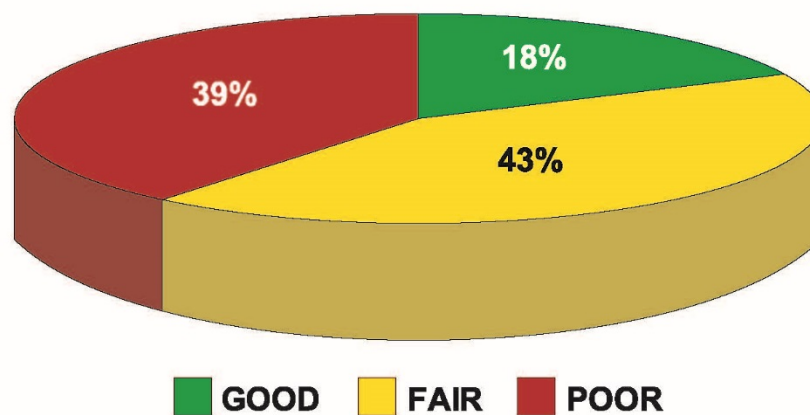


Figure 2

Source: 2015-2016 PASER Data Collection

Figure 2 summarizes the results of the 2015-2016 PASER rating: 18 percent were rated in “good” condition, 43 percent were rated in “fair” condition, and 39 percent were rated in “poor” condition. For reporting purposes, TAMC uses the following scale: road segments rated 8, 9, or 10 are categorized as “good”; segments rated between 5 and 7 are classified as “fair”; and segments rated 4 or less are considered to be in “poor” condition.

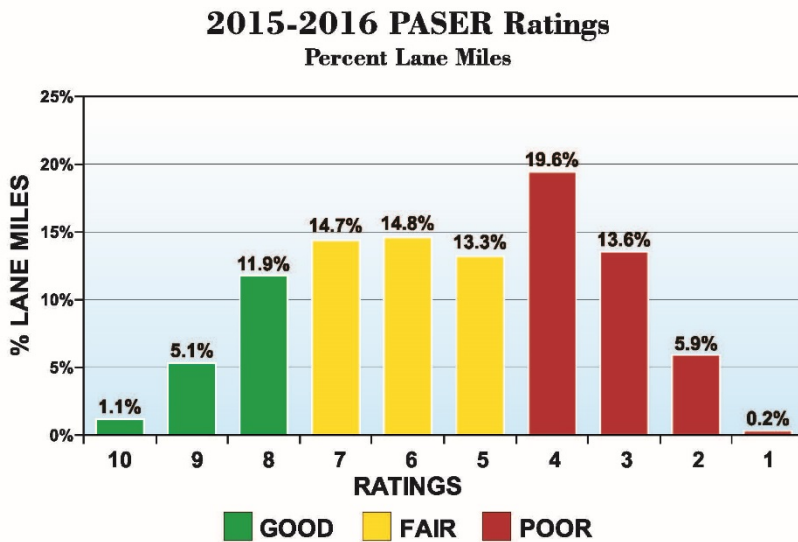


Figure 3

Source: 2016 PASER Data Collection

Figure 3 shows the breakdown of the 2015-2016 pavement condition by percentage of lane miles in each of the ten individual PASER rating units.

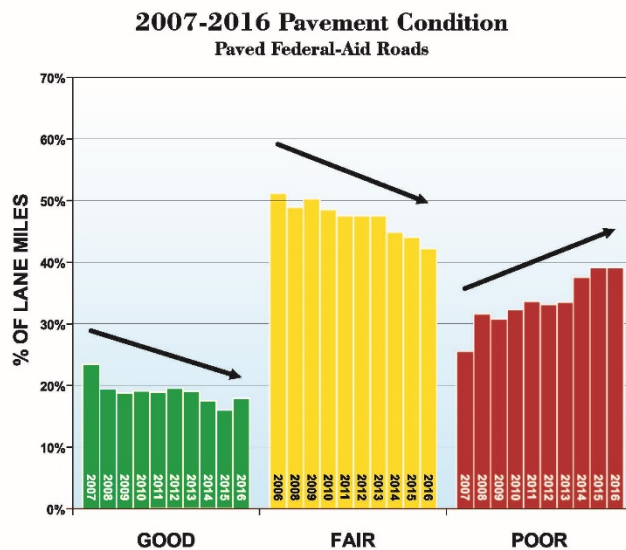


Figure 4

Source: 2007 – 2016 PASER Data Collection

Figure 4 shows that from 2007 to 2016, the trend has been a declining percentage of roadways in “good” or “fair” condition and a rising percentage of roads in “poor” condition. Clearly, the overall condition of the federal-aid system is getting significantly worse with more miles in poor condition than in good condition. The cost of returning a road from poor to good condition requires that the road be structurally improved. The cost of returning a road from fair condition to good condition means that capital preventive maintenance (CPM) must be

performed. It costs four to five times as much perform structural improvements than it costs to perform capital preventive maintenance

Allowing more roads to reach poor condition will dramatically increase the costs of repairing Michigan's road network.

What is Capital Preventive Maintenance (CPM)?

CPM is a planned strategy of cost effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system without substantially increasing structural capacity. CPM has two major subgroups, Pavement Sealing and Functional Enhancements.

Examples of Pavement Sealing include but are not limited to; Concrete Crack Treatment, Concrete Joint Resealing, Chip Seals, Micro-surfacing, Shoulder Fog Seal, Paver Placed Surface Seal, etc.

Examples of Functional Enhancements include but are not limited to; Non-Structural HMA Overlay(1.5"), Surface Milling with Non-Structural HMA Overlay (1.5"), HMA Shoulder Ribbons, Full Depth Concrete Pavement Repairs, Diamond Grinding, Dowel Bar Retrofit, Concrete Pavement Restoration, Underdrain Outlet Clean Out and Repair, etc.

PAVEMENT CONDITION FORECAST

In November of 2016, the Michigan legislature passed a transportation funding package that is expected to generate up to \$1.2 billion per year in new transportation funding by fiscal year 2021 and then continuing to increase with the rate of inflation as calculated by the CPI from 2022 onward.

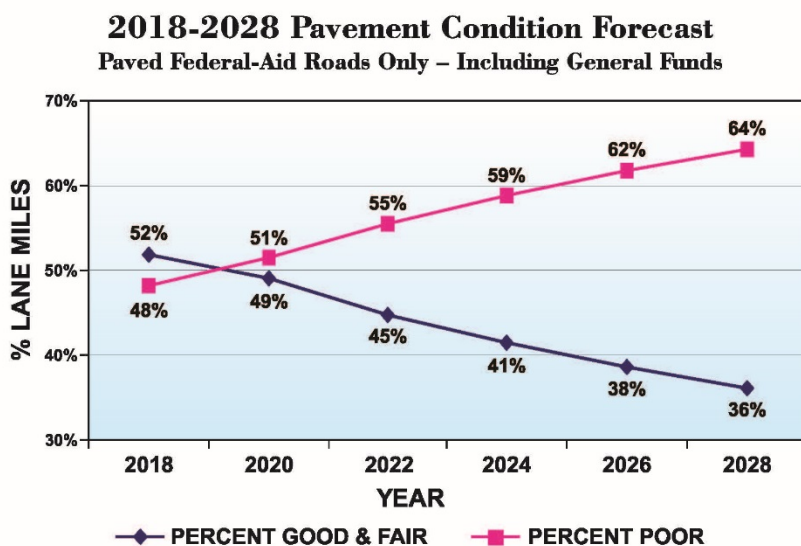


Figure 5

Then, in December of 2016, Congress passed reauthorization legislation for the Federal Highway Administration which is expected to result in an approximate five percent increase in federal transportation dollars coming to Michigan. Taken together, these influxes of new funds still are not sufficient to improve Michigan’s transportation problems, but they will slow the rate of deterioration of Michigan’s federal-aid eligible roads and bridges.

Figure 5 shows that even with the expected “new” funds from both the state and federal transportation packages, the condition of paved federal-aid roads will continue a downward trend. This year’s forecast reflects new adjustments in funding expenditures and pavement preservation strategies. These adjustments were based on detailed records now available to the council.

PAVEMENT CYCLE OF LIFE

Pavements deteriorate through a cycle starting from good condition, to fair condition and ultimately to poor condition. This doesn’t happen overnight, but age along a recognizable cycle. There are many places along the cycle where performing some capital preventive maintenance at a relatively minimal cost (when compared to the cost of reconstruction) can prolong the life of the pavement in a good or fair condition for several additional years. If appropriate investments can be made at or before the pavement has reached the threshold of poor condition, it is usually significantly less expensive and can extend the useful life of the asset in good or fair condition well beyond the “normally expected” lifespan of that asset.

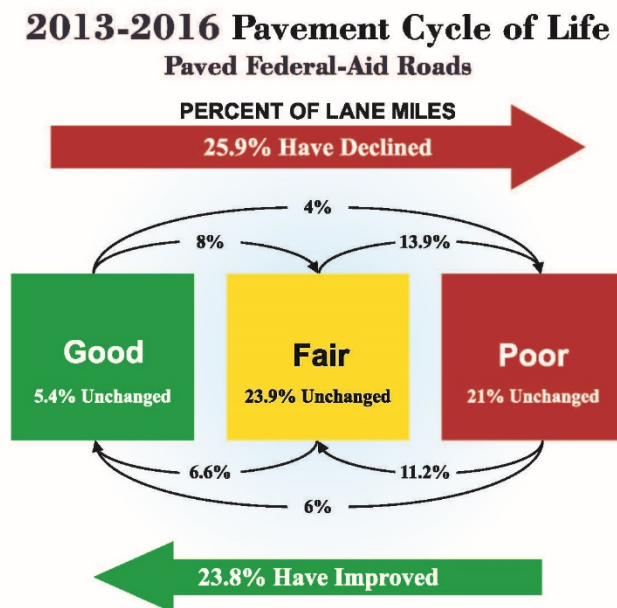


Figure 6

Source: 2013 – 2016 PASER Data Collection

Unfortunately, Figure 6 indicates that those investments are not being made as often as they should. The Pavement Cycle of Life charts the life of pavement on federal-aid system in the State of Michigan over the last four-years and shows that 25.9 percent of Michigan's roads have deteriorated; 8 percent of the roads went from good to fair, 13.9 percent went from fair to poor, and approximately 4 percent slid all the way from good to poor. At the same time, 23.8 percent of the roads were improved; 6.6 percent went from fair to good, 11.2 percent went from poor to fair, and 6 percent went from poor to good.



Fixing America's Surface Transportation (FAST)

National Highway System (NHS)



Map - 4

FAST is the first federal law in over a decade that provides long-term highway authorization and funding certainty and was signed into law by President Obama on December 4, 2015. The FAST Act authorizes \$305 billion from 2016 through 2020. The FAST Act maintains the focus on safety and keeps intact the established structure of the various highway-related programs managed by FHWA while continuing efforts to streamline project delivery and for the first

time provide a dedicated source of federal funds for freight related projects, Under the FAST Act, each state is required to develop a risk-based asset management plan for the National Highway System (NHS) to improve or preserve the condition of the assets and the performance of the system.

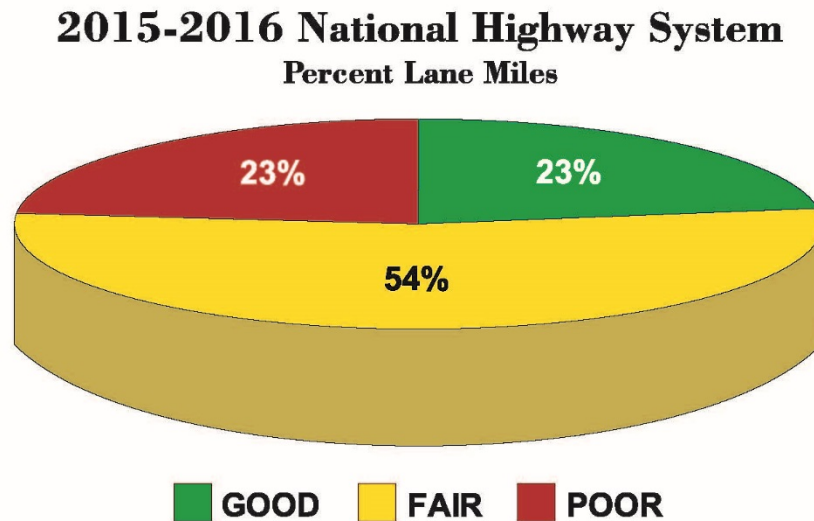


Figure 7

Source: 2015 - 2016 PASER Data Collection

Like the pavement ratings for federal-aid roads, the ratings for NHS roads are reported in lane miles. Figure 7 reveals that in the 2015 - 2016 rating period, 23 percent are in “good” condition, 54 percent are in fair condition, and 23 percent are in “poor” condition.

National Functional Classification (NFC)

Since its inception, the Council’s primary focus has been on how the transportation system functions. The federal-aid system is subdivided into four major NFC groups, Principal Arterials, Freeways (a subset of Principal Arterials), Minor Arterials and Collectors.

These groups are determined by the extent to which each provides two essential functions; mobility and accessibility. The following analysis compares the 2015-2016 paved federal-aid PASER ratings for each of these individual classification groups.

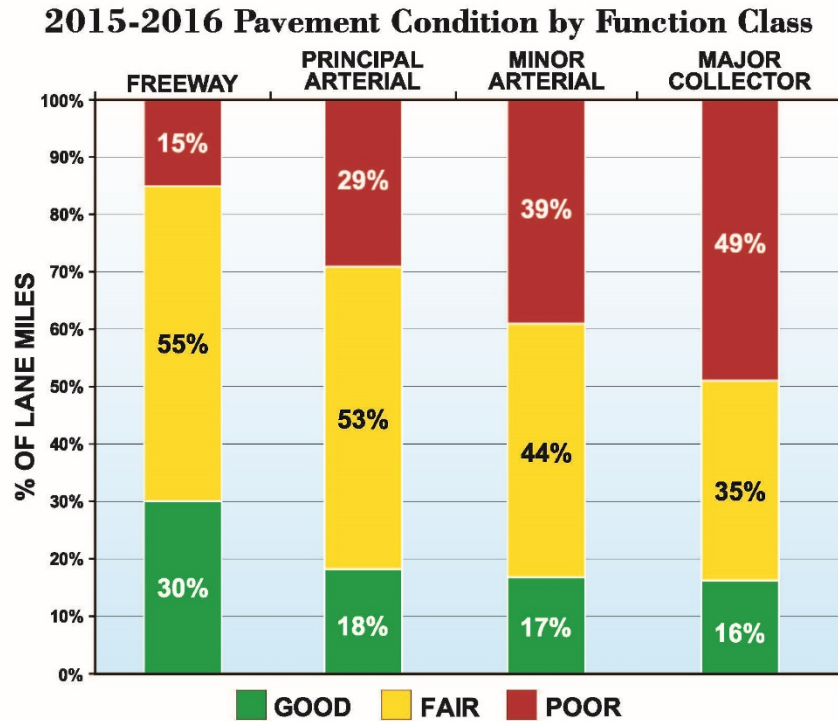


Figure 8

Source: 2015 - 2016 PASER Data Collection

The analyses of the 2015-2016 paved federal-aid PASER condition data by NFC reveals that the highest-level system of Principal Arterials is in the best condition of the three NFC systems. This Principal Arterial system is critical to all multi-state, multi-regional, and much intra-regional travel throughout Michigan and typically carries the highest traffic volumes and the longest trips. The PASER condition data shows a larger percentage of poor pavements in the “middle” NFC system of Minor Arterials. The Minor Arterial system is especially important to support inter- and intra- regional travel, and serves relatively high traffic volumes. Finally, this analysis reveals that the lowest level of federal-aid roads (Collectors) are also in the poorest condition of the three federal aid systems. Collector roads tend to have lower traffic volumes and serve shorter distance trips and/or the beginning or ending legs for longer distance trips, since they provide more accessibility to homes, businesses, and other attractions. This analysis is evidence that Michigan’s road owning agencies are strategically investing their limited transportation funds in the portion of the system that provides the greatest long-distance mobility and services the highest traffic volumes. However, most trips utilize some of each of the three systems; so, to have the safest, most efficient federal-aid system possible, funding must be strategically allocated to all three of these NFC systems.

Principal Arterials are at the top of the NFC hierarchical system. Principal arterials generally carry long distance, through-travel movements. They also provide access to important traffic generators, such as major airports or regional shopping centers. The 2015-2016 rating of the *Principal Arterial* system reveals that 18 percent were in good condition, 53 percent were in fair condition, and 29 percent were in poor condition.

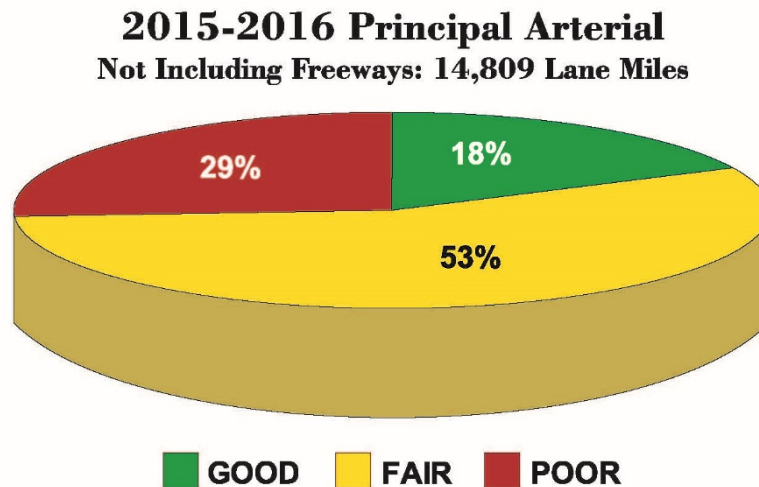


Figure 9
Source: 2015 - 2016 PASER Data Collection

Some examples of Principle Arterials from around the state would be M-24 in Southeast Michigan, 28th Street in the Grand Rapids area, US-2 from St. Ignace to Ironwood, M-72 between Traverse City and Grayling, US-31 from Ludington to Mackinac City, and US-41 from Menominee to Houghton.

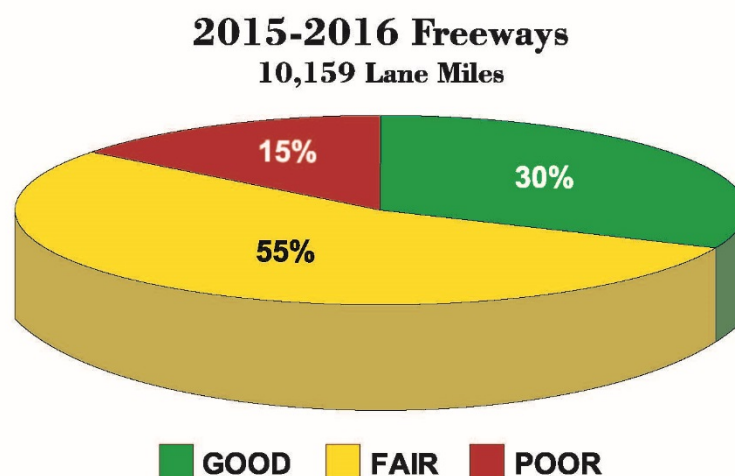


Figure 10
Source: 2015 - 2016 PASER Data Collection

Freeways are a subset of the *Principal Arterial* system that has no at-grade intersections with other roads, railroads, or non-motorized pathways/trails. Driveways are also prohibited. Freeways generally carry the highest volume of traffic. The 2015-2016 rating of the *Freeway* system reveals that 30 percent were in good condition, 55 percent were in fair condition, and 15 percent were in poor condition.



Michigan has 10,044 lane miles of freeway

Some examples of freeways from around the state would be any of the Interstates, US-23 between Flint and Toledo, Ohio, US-127 from St. Johns to Jackson, and US-131 from Cadillac to Portage.

Minor Arterials are similar in function to principal arterials, except they carry trips of shorter distance and to lesser traffic generators. The 2015-2016 rating of the *Minor Arterial* system reveals that 17 percent were in good condition, 44 percent were in fair condition, and 39 percent were in poor condition.

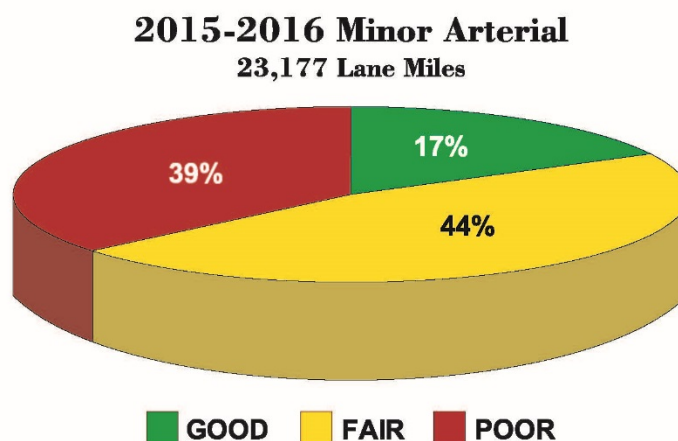


Figure 11

Source: 2015 - 2016 PASER Data Collection

Some examples of minor arterials would be the Belle Isle Bridge in Detroit, W. 16th Street/S. Shoreline Drive in Holland, Hagadorn Road in East Lansing, M-55 between West Branch and Tawas City, M-22 between Traverse City and Manistee, US-41 from Houghton to Copper Harbor, and M-35 between Gladstone and Negaunee.



Example of a minor arterial in poor condition

Major Collectors tend to provide more access to property than do arterials. Collectors also funnel traffic from residential and rural areas to arterials. The 2015-2016 rating of the *Collector* system reveals that 16 percent were in good condition, 35 percent were in fair condition, and 49 percent were in poor condition.

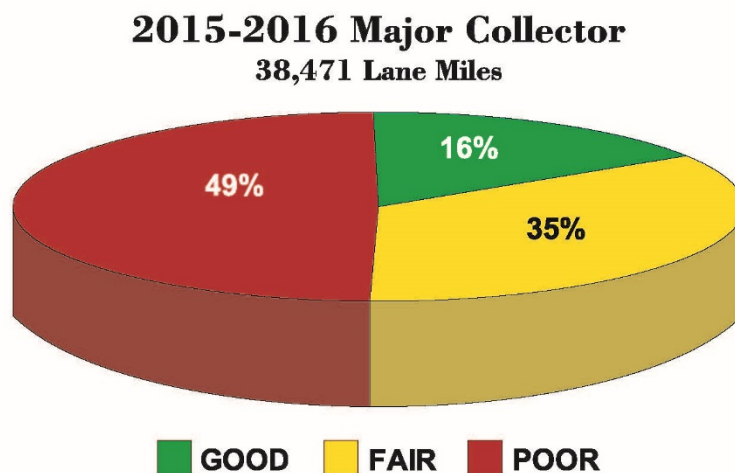


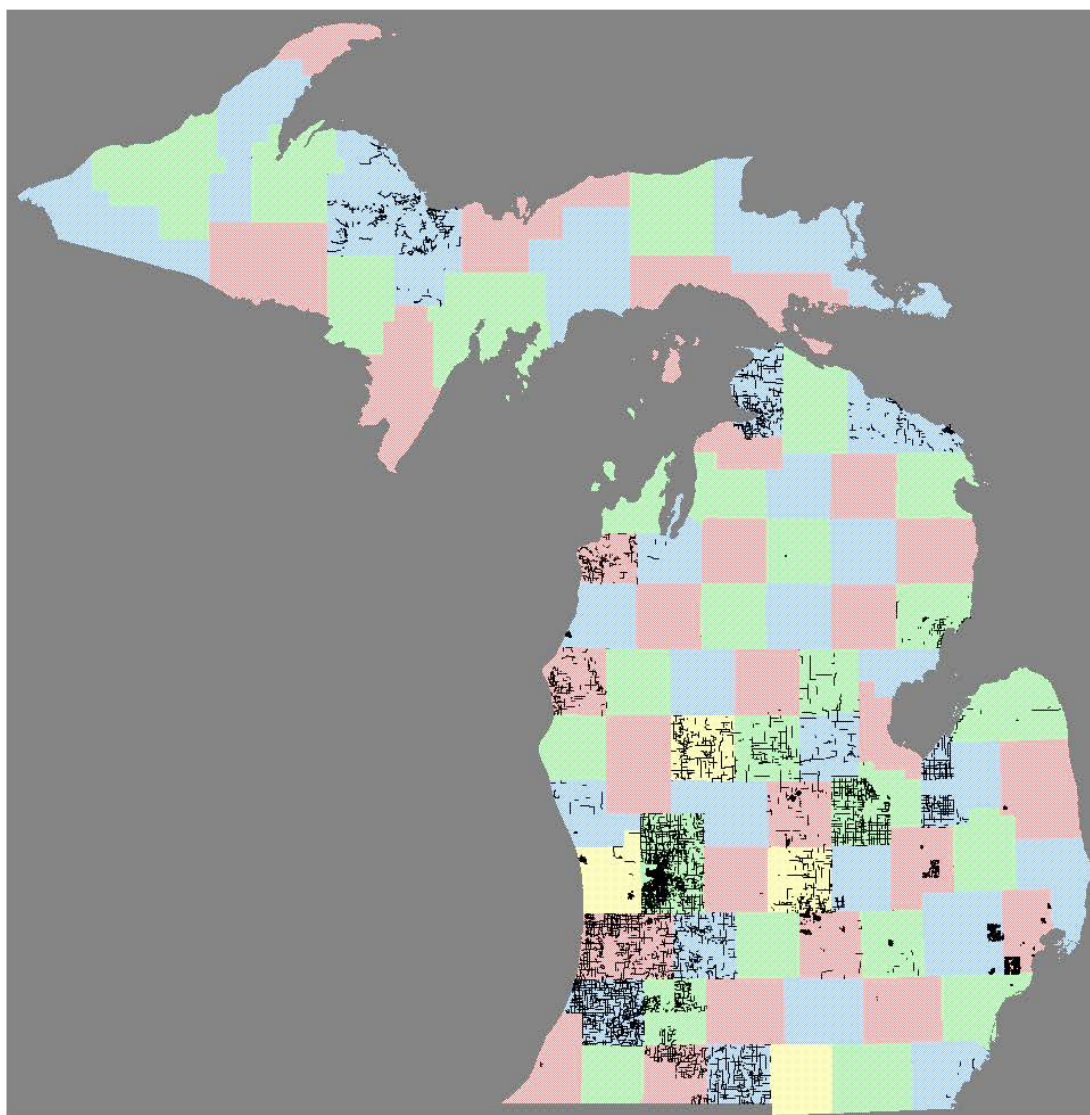
Figure 12

Some examples of major collectors would be Montcalm Street between Cass and Brush in Detroit, Capital City Blvd. at the Capital City Airport in Lansing, N. Burdick Street in Kalamazoo, M-37 on Old Mission Peninsula, Huron Street between US-23 and E. Central Avenue in Mackinac City, Big Bay Road from Marquette to Big Bay, and Canal Street between M-26 and Portage lake in Houghton.



A collector in good condition

2016 Paved Non-Federal-Aid Roads Rated and Reported to TAMC



Map - 5

Map Source: 2016 PASER Data Collection (Paved Non-Federal-Aid Roads)

Paved Non-Federal-Aid Roads & Streets

Not all roads in Michigan are eligible for federal-aid. Whether a road is eligible for aid or not depends upon its NFC. In general, non-federal-aid eligible roads are residential streets and lightly traveled county roads. Roughly half of these roads are unpaved.

Since its inception, TAMC has focused its attention on the condition of the 39,700 miles of federal aid eligible roads in the state as required by Act 51. In 2008, TAMC expanded its focus to include a major portion of the paved non-federal-aid eligible roads.

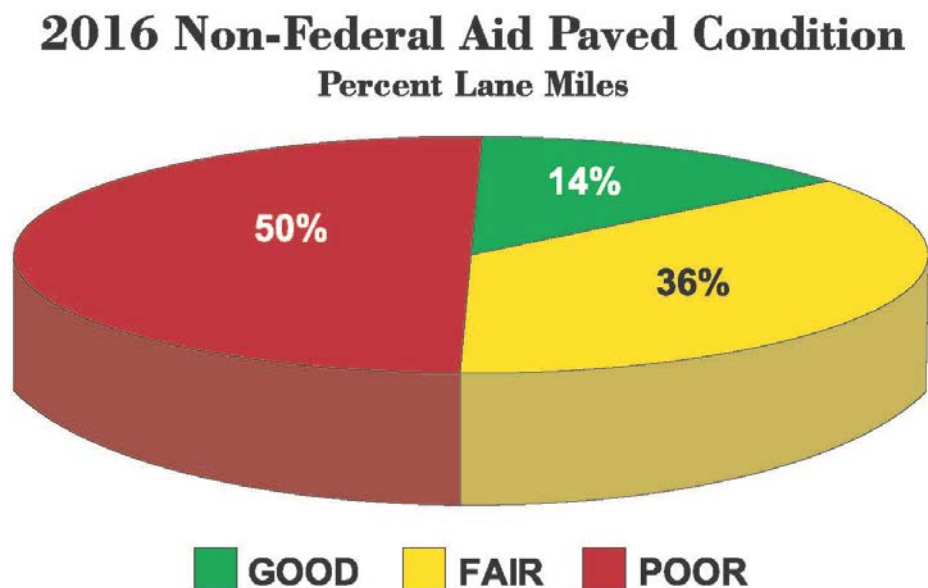


Figure 13

Source: 2015-2016 PASER (Paved Non-Federal-Aid) Data Collection

There are 80,000 miles of non-federal aid eligible roads in the state. Approximately one-half of this mileage (about 40,000 miles) is paved. Just over 18,000 lane miles of these roads were observed and assigned PASER ratings in 2015-2016 and reported to TAMC.

Similar to the pavement ratings for federal-aid roads, the ratings for paved non-federal-aid roads are reported in lane miles. Figure 13 indicates that only 14 percent of the lane miles that were rated and reported to TAMC in 2016 are in “good” condition, 36 percent are in “fair” condition, and 50 percent of lane miles reported are in “poor” condition.

2008-2016 Pavement Condition Paved Non-Federal-Aid Roads

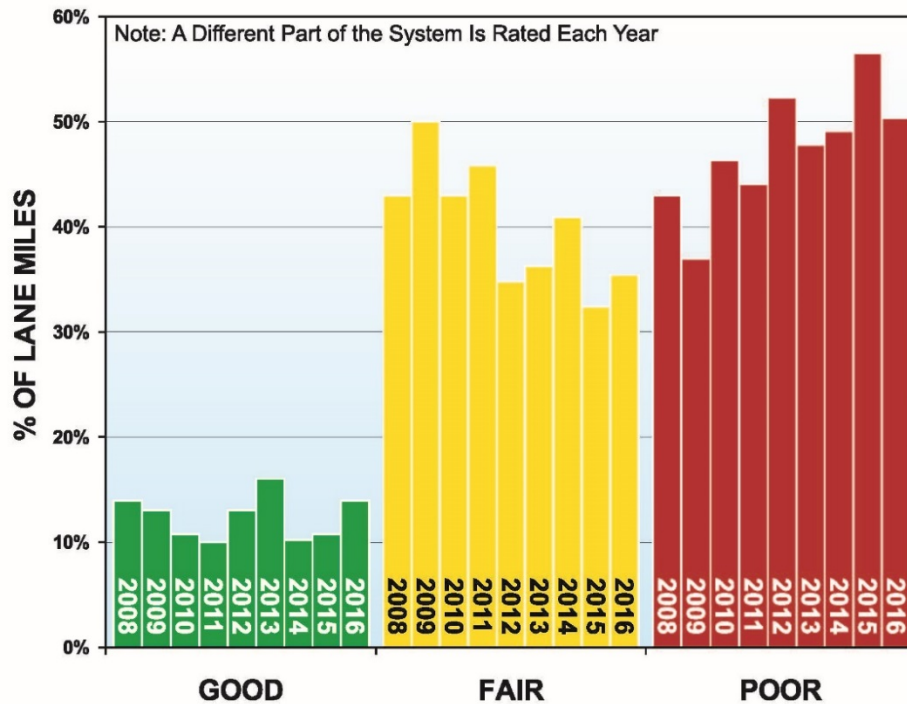


Figure 14

Source: 2008 to 2016 PASER (Paved Non-Federal-Aid) Data Collection

Figure 14 summarizes pavement ratings for paved non-federal aid roads that were reported to TAMC from 2008 to 2016. Unlike the similar graph in Figure 4, this graph does not illustrate a trend since each rating year on this graph includes a different group of the paved non federal aid roads in Michigan. TAMC will be expanding its efforts to collect data from these non federal aid roads so that future Annual Reports will be able to give us a more complete picture of the conditions and trends on all of Michigan's roads.

2016 BRIDGE CONDITIONS

An analysis of bridge conditions in Michigan shows that bridge owning agencies and decision makers are continuing to “hold their own” despite rising costs and revenue challenges. From 2004 to 2012, the overall network of bridges in the state saw a slight but steady improvement in overall condition. However, from 2012 to 2016 the improvement in bridge condition has stagnated as the number of fair bridges has increased and the number of poor bridges has decreased. This can be attributed to:

1. Progress being made initially in reducing the number of structurally deficient bridges in the state.
2. More bridge owning agencies are implementing preventive maintenance “mix of fixes” strategies on bridges that they own.
3. Rising costs and an increasing inventory of fair bridges creates a preservation need that exceeds available funding.

The percentage of Michigan's bridges which are rated structurally deficient is one of the five (5) measures of the overall strength of Michigan's economy, and this measure can be accessed here: <https://midashboard.michigan.gov/en/stat/goals/sh4z-hi5j/sdj5-79sn/sv3f-3xc3>

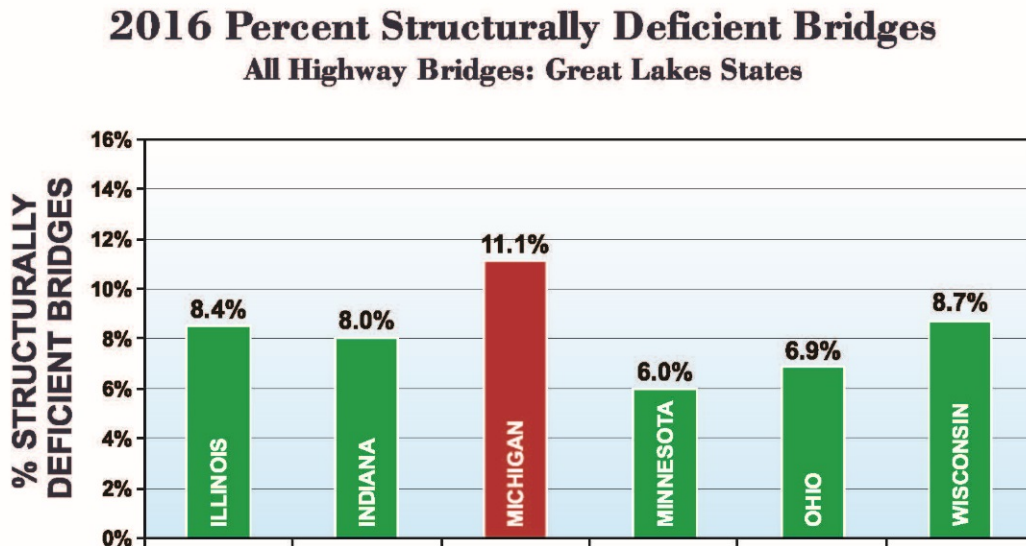


Figure 15

Source: MDOT March 2017

Comparing Michigan's progress toward reducing structurally deficient bridges with the rest of the nation and with our neighboring states highlights the need for continued concern regarding Michigan's ability to preserve its strategic bridge assets. Figure 15 indicates that Michigan has a significantly higher percentage of structurally deficient bridges than other Great-Lakes states. An analysis of the 2016 NBI data shows that 5.6 percent of MDOT bridges and 14.8

percent of county city and village bridges were structurally deficient, resulting in Michigan having 11.1 percent of all highway bridges structurally deficient.

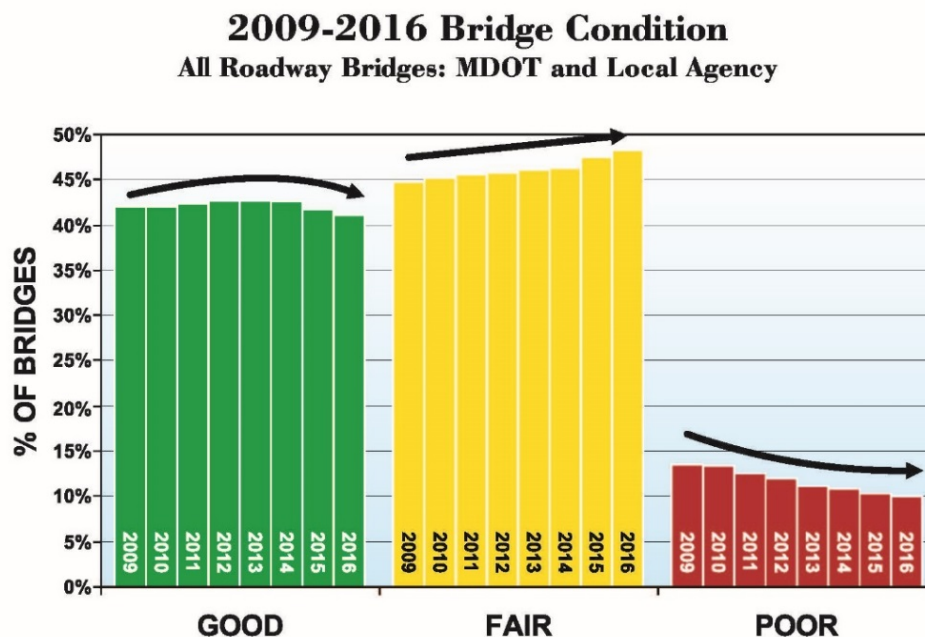


Figure 16

Source: MDOT 2009-16 Michigan Bridge Inventory

Figure 16 summarizes the percentage of Michigan bridges in good, fair, and poor condition for the years 2009-2016. Michigan bridge owners and decision makers have reduced the percentage of bridges in poor condition while increasing the number of bridges in good and fair condition. Although the trend-line for the poor category is decreasing, there is some concern that the trend for the good category is also decreasing. Without continued implementation of effective preventive maintenance strategies and additional funding directed toward bridge maintenance, those bridges located on the fair to poor border-line are in danger of dropping into the poor category.

2013-2016 Local Bridge Condition Trend

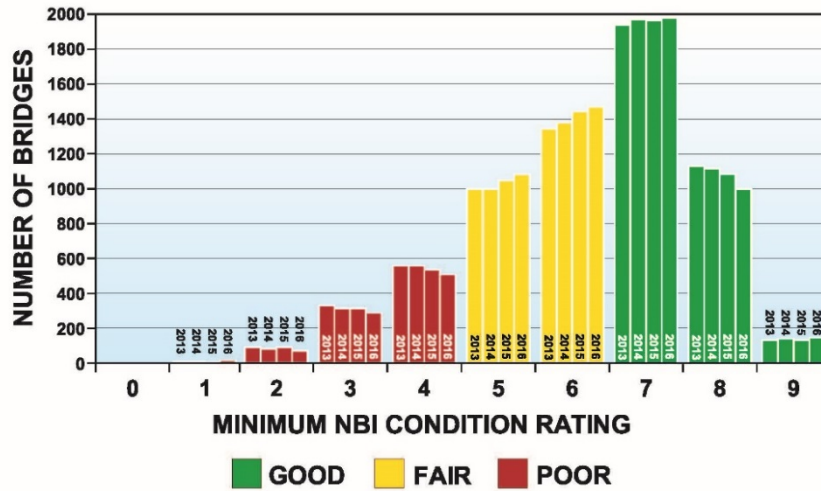


Figure 17

Source: MDOT, 2013-16 Michigan Bridge Inventory

Figure 17 shows that local bridge owners have maintained the number of poor bridges with only slight progress over the last four-years. The number of good bridges has decreased and the number of fair bridges has increased. It is important that bridge owning agencies apply strategic preventive maintenance strategies to maintain or reduce the number of bridges in fair condition (NBI Ratings of 5 or 6) to prevent them from dropping into the poor category (NBI Rating <5) where more expensive repairs are necessary.

2013-2016 State Bridge Condition Trend

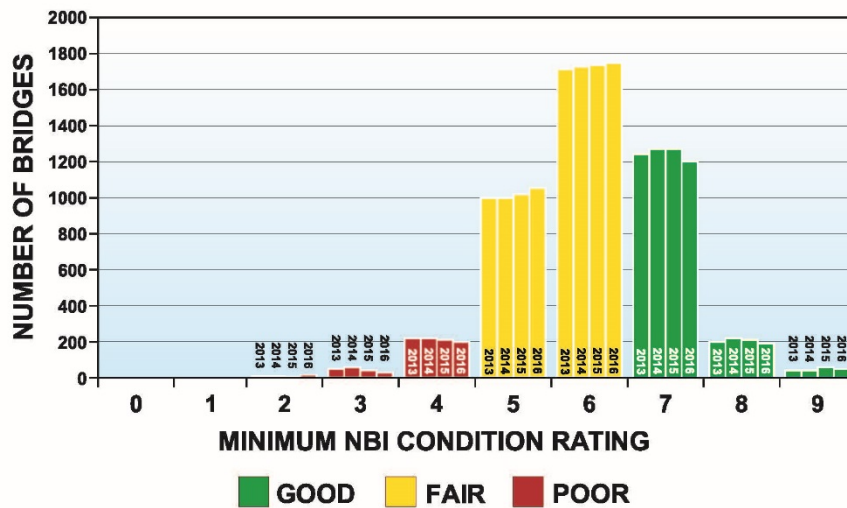


Figure 18

Source: MDOT, 2013-16 Michigan Bridge Inventory

Figure 18 shows that the MDOT's progress in reducing the number of poor bridges on state-owned roads has also slowed over the last four years. Until recently, the MDOT has been able to maintain the number of fair bridges before they reach the poor category, while increasing the number of good and fair bridges. An aging infrastructure and rising costs have reversed some of that progress, and the number of fair bridges has increased with only slight gains in reducing poor bridges as preservation needs exceed available revenues. Maintaining or improving the bridges rated in good or fair condition is imperative to prevent the number of bridges in the poor category from increasing.

BRIDGE CONDITION FORECASTS

Working from current bridge condition information (NBI Data), bridge deterioration rate, project costs, expected inflation, and fix strategies, the Bridge Condition Forecasting System (BCFS) estimates future condition of MDOT and local bridges. Figure 19 indicates the combined overall bridge condition of all the state's bridges is expected to decline after 2015. By 2025, nearly half of the progress made toward improving bridge conditions since 2004 could be lost.

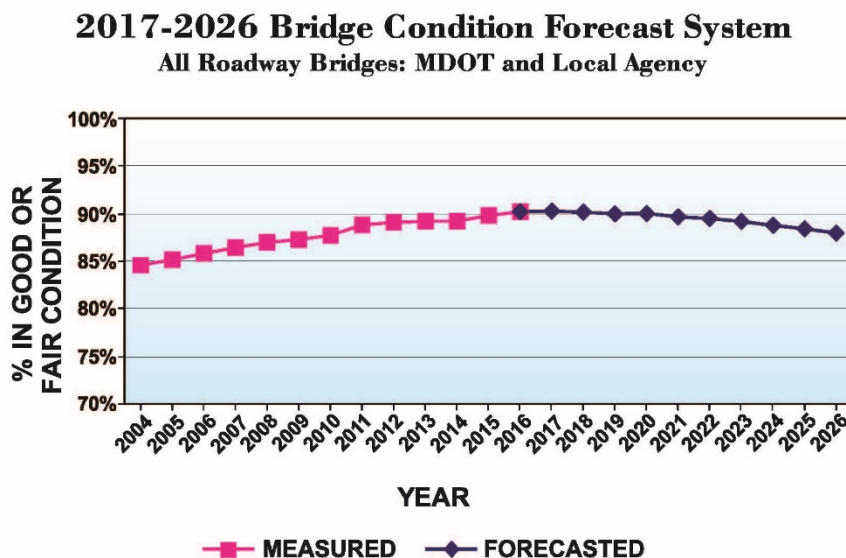


Figure 19

Source: MDOT March 2017

While additional highway funding was approved at both the state and federal level, no new funds were earmarked specifically for bridge programs. Therefore this forecast assumes no additional spending on bridges beyond those funds already designated for that purpose.

BRIDGE CYCLE OF LIFE

Figure 20 shows the percentage of bridges that have improved or deteriorated into each of the major condition categories over the last four years (2013 – 2016). Michigan’s overall goal is to reduce the number of poor bridges. Over this time span, 10.2 percent of Michigan’s bridges have worsened; 7.1 percent of the bridges went from good to fair, 2.9 percent went from fair to poor, and less than one percent slid all the way from good to poor. In that same three year period, only 6.7 percent of the bridges were improved; 2.6 percent went from fair to good, 1.5 percent went from poor to fair and 2.5 percent went from poor to good.

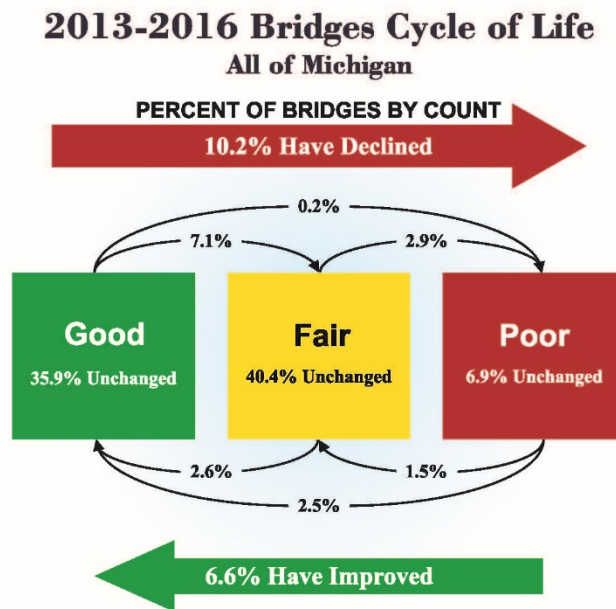


Figure 20

Source: MDOT Mar 2017

21ST CENTURY INFRASTRUCTURE COMMISSION

About the Commission

Governor Rick Snyder created the 21st Century Infrastructure Commission, an advisory body of 27 members that has developed a long-term vision and associated recommendations to drive Michigan toward that vision.

The commission's vision statement said:

Michigan will lead the nation in creating 21st century infrastructure systems that will include, at a minimum, innovative technology, sustainable funding solutions, sound economic principles, and a collaborative and integrated asset management and investment approach that will enhance Michiganders' quality of life and build strong communities for the future.

As part of Executive Order 2016-1, MDOT was, among other things, directed to:

- "...improve the coordination of infrastructure installation, repair, or replacement in conjunction with road infrastructure reconstruction..."
- "...Work with the Michigan Utilities Coordinating Committee and the Transportation Asset Management Council to encourage local agencies and their design consultants to consider incorporating infrastructure installation, replacement or improvement projects into their road construction projects..."
- "...Work with the 21st Century Infrastructure Commission to identify opportunities for partnership, funding alternatives and coordination of infrastructure investment in conjunction with road reconstruction..."
- "...Identify best practices for coordination of road work and infrastructure installation, relocation and replacement employed by state departments of transportation across the country or in Canadian provinces or recommended by technical experts..."

In Executive Order No. 2016-5, the Governor stated, "... sound and modern infrastructure is vital to the health and well-being of the people of Michigan, as well as Michigan's economy and vibrant communities..."

The Commission spent most of 2016 engaged in monthly meetings of the full Commission, along with biweekly meetings of various asset-focused subgroups. The Commission also included technical advisors in the process to ensure stakeholder input was heard and incorporated into discussion. In order to receive input from stakeholders across Michigan, the group hosted six listening tour events in various locations throughout the state and regularly solicited input from the public through the 21st Century Infrastructure Commission website:

http://www.michigan.gov/snyder/0,4668,7-277-61409_78737---,00.html

The TAMC was not directly involved in the Commission's activities, however, some former members of TAMC and several of the organizations with representation on TAMC were invited to make presentations to the Commission and the [Commission's Final Report](#) included several references to the TAMC, and cited information found in the TAMC website, interactive map, reports, and dashboards.

Connecting the Infrastructure Commission to TAMC

While the commission's efforts were broad based and discussed a variety of infrastructure types and issues, of primary interest to the TAMC are: the recommendations related to Transportation, and even more specifically to roads and bridges; and the discussion of the Michigan Infrastructure Council and the proposed Regional Infrastructure Pilot program. At this time, TAMC has taken no official position on any of the recommendations, the proposed Michigan Infrastructure Council, or any of the proposed funding mechanisms. In a letter to Governor Snyder, following the publication of the Commission's Report; TAMC Chair Joanna Johnson wrote that the TAMC was:

- "...anxious to assist with the 21st Century Infrastructure Commissions' critical initiatives among various levels of government, private sector partners and across several asset classes..."
- "...interested in participating in conversations which may ultimately lead to an increased focus for our organization, potentially including the incorporation of other statewide assets under our purview..."
- "...would like to be involved in discussions regarding the incorporation of our role with the role of other assets and organizational structures outlined in the Report..."

In his response, the Governor stated:

"It will be essential to have your organization at the table and as a partner during this endeavor. My staff will be reaching out to you to determine how best to involve you in the pilot, the process and the continued dialogue."

The TAMC will report on any involvement it has with the further work of the Commission in next year's Annual Report.

[illegible]

