

House Transportation Standing Committee Meeting

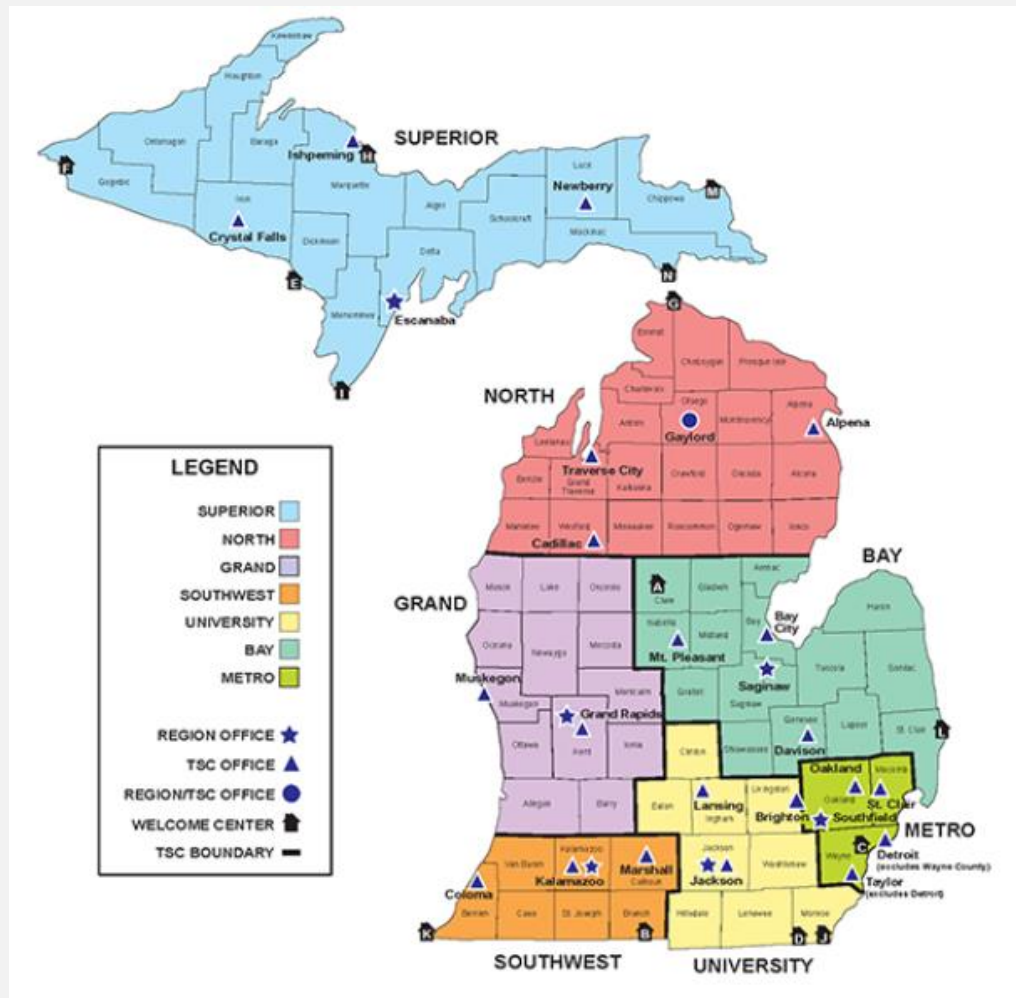
**Tony Kratofil, P.E.
Chief Engineer
& Chief Operating Officer**

February 2, 2021

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



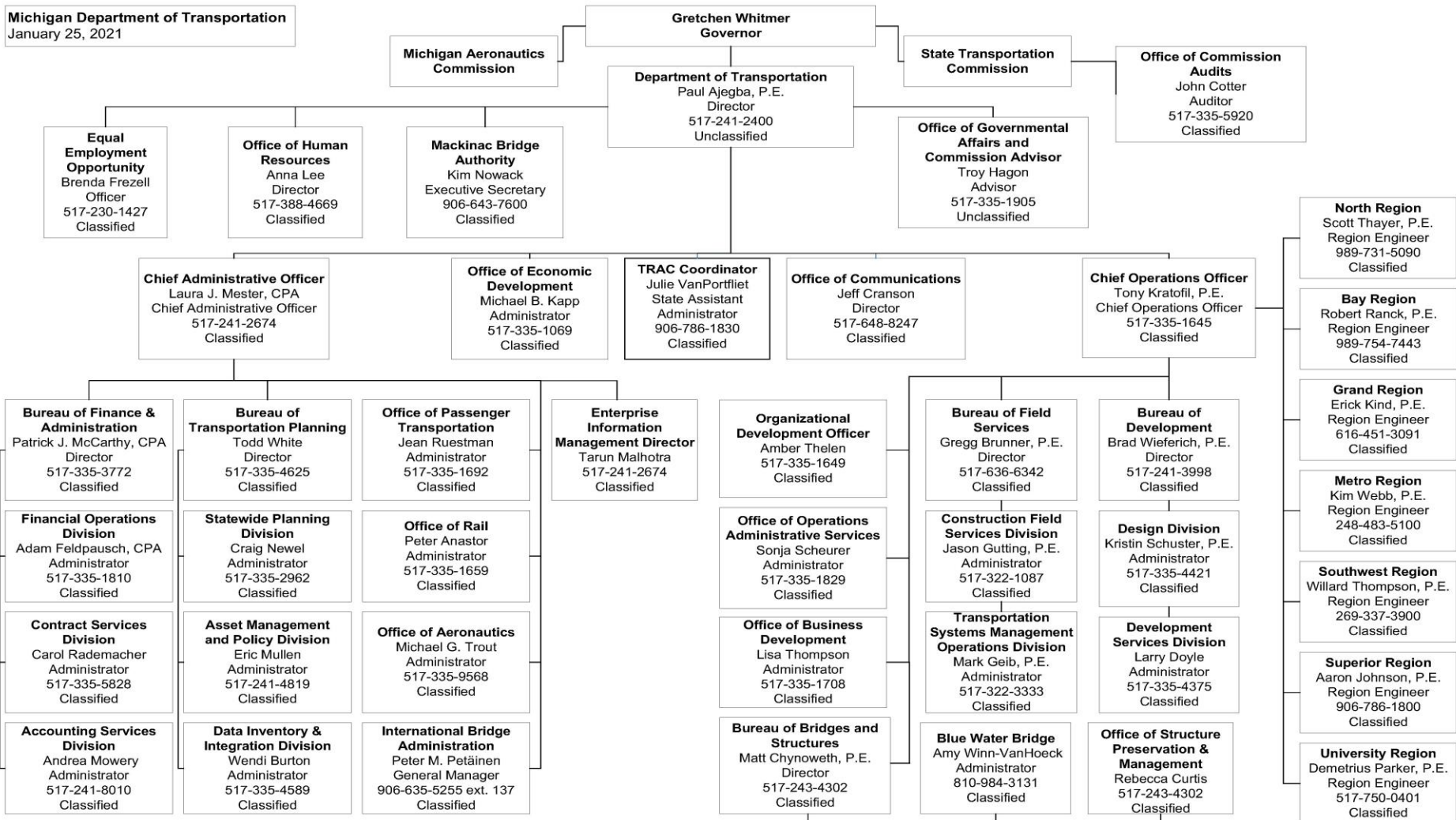
We're Positioned to Serve . . .



www.michigan.gov/mdot

We're Positioned to Serve . . .

Michigan Department of Transportation
January 25, 2021



A Healthy Economy Relies on Good Transportation

- 38% of US/Canada trade value flows through Michigan
- \$861.5 billion in freight is moved each year on Michigan's highways, rail, air, and water ports
- Trucking accounts for 65% of all freight tonnage moved in Michigan
- 80% of Michigan tourism is auto-based



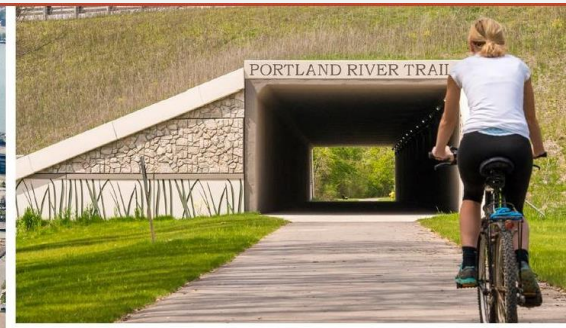
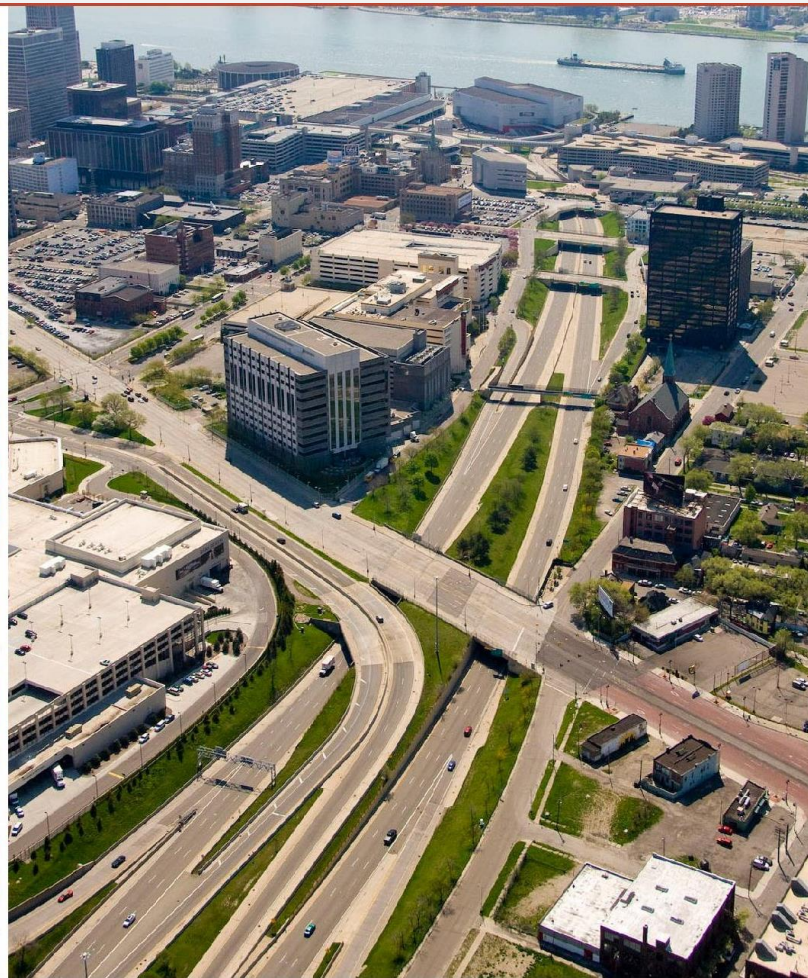
All Transportation Supports the Economy

- Operation of bus transit systems contribute an estimated \$900 million to the economy each year
- Aviation contributes more than \$22 billion/year
- Bicycling provides an estimated \$668 million/year in economic benefit

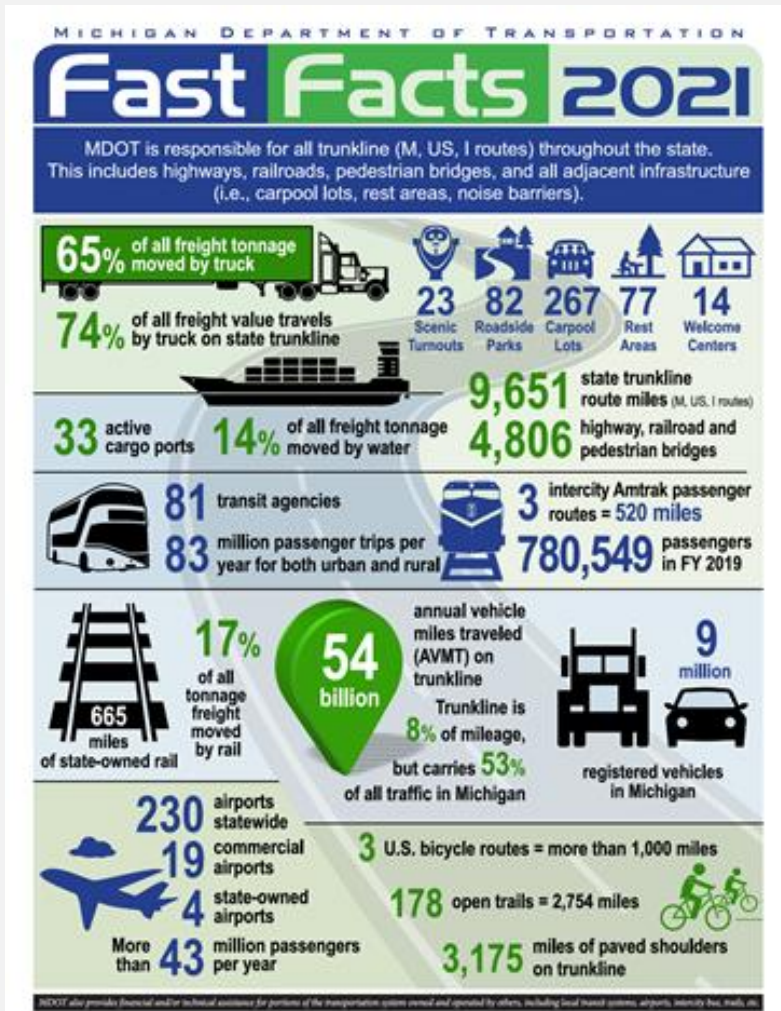


Michigan's Multi-Modal Transportation System

Roads & Bridges ♦ Transit ♦ Non-Motorized ♦ Air ♦ Marine ♦ Rail

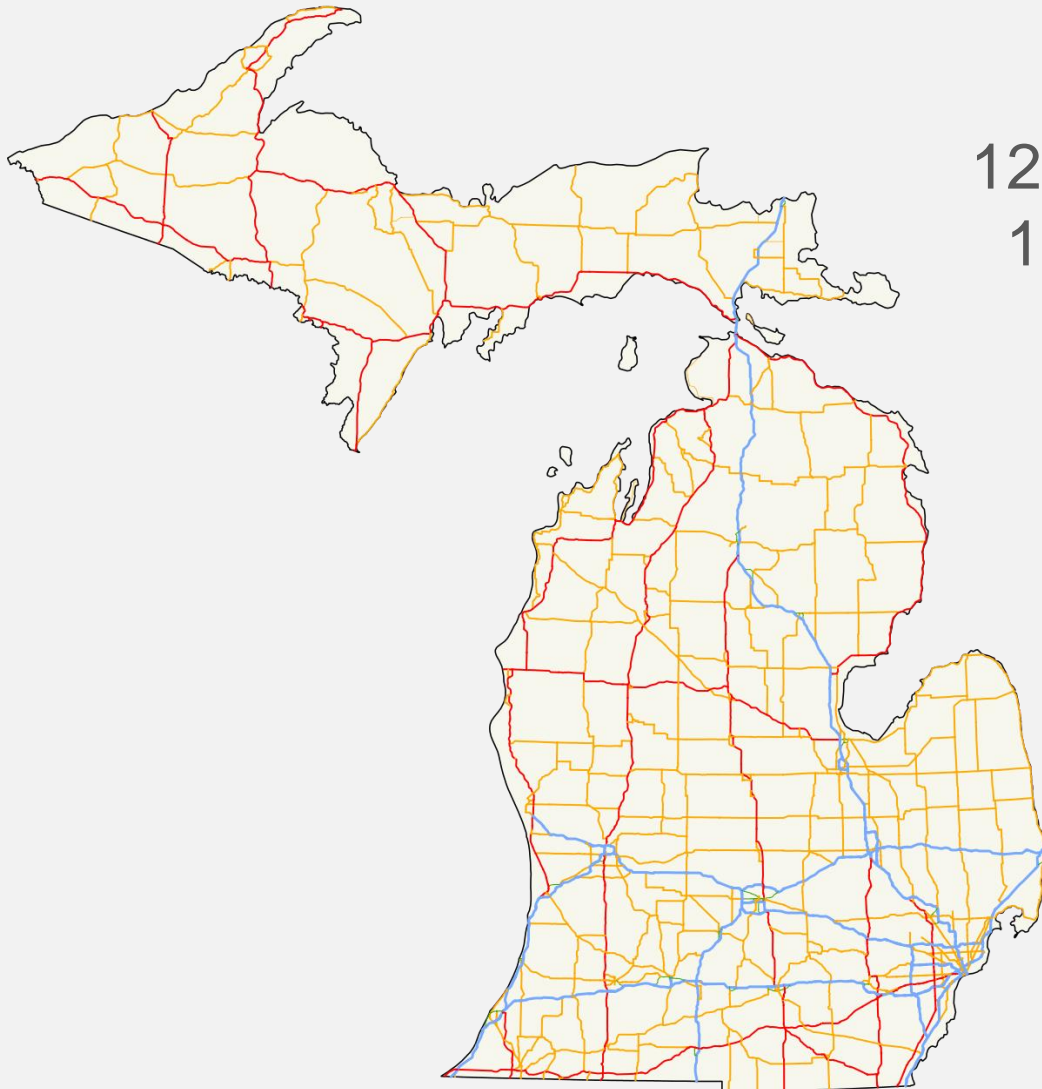


Michigan's Multi-Modal Transportation System



- 9,664 route miles of “I,” “M,” and “U.S.” routes
- 4,806 bridges on state routes
- 665 miles of rail
- 4 state owned airports
- 82 roadside parks
- 77 rest areas
- 135 miles of passenger rail
- 57.7 miles of bike lanes
- 3,175 miles paved shoulders
- 3 U.S. Bike Routes

Roads & Bridges



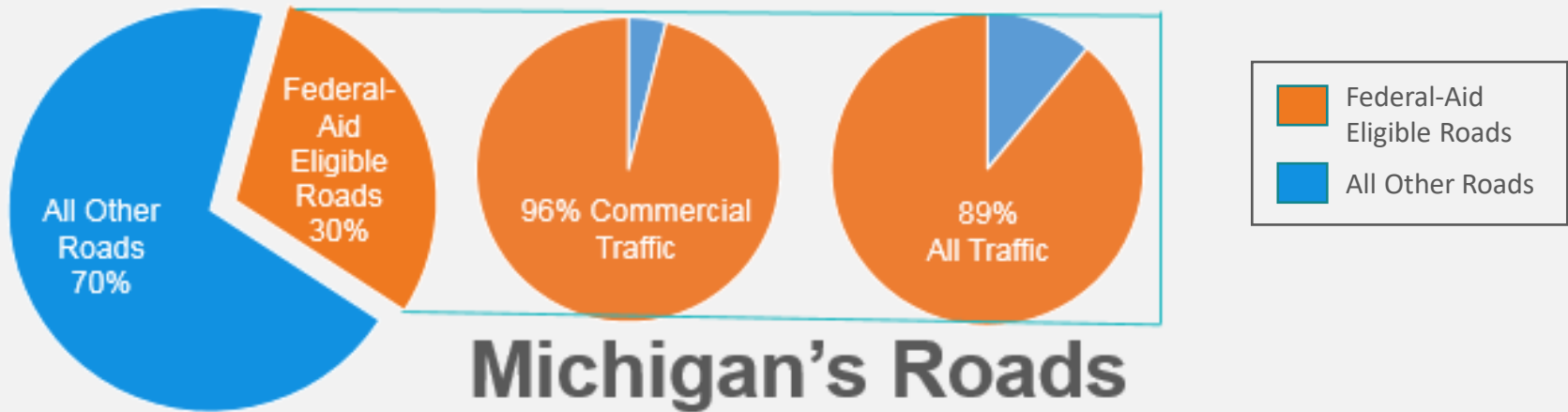
122,000 road miles
11,700 bridges

1 MDOT
83 County Road Agencies
531 Municipal Jurisdictions

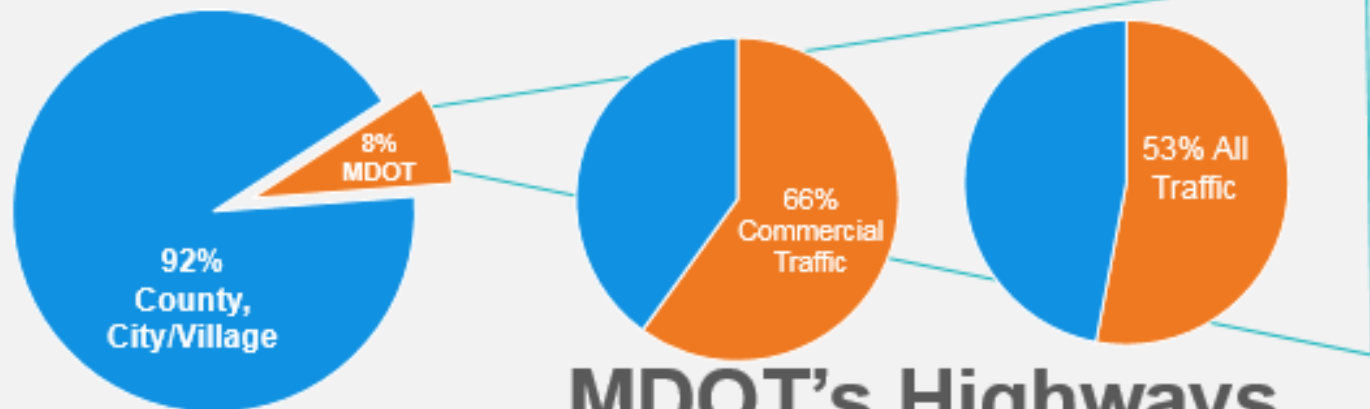
Transportation Asset
Management Council
www.michigan.gov/tamc

Federal Aid Oversight

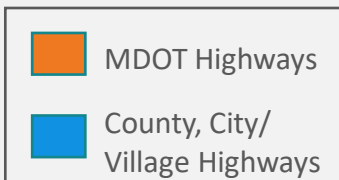
Michigan's Road Network



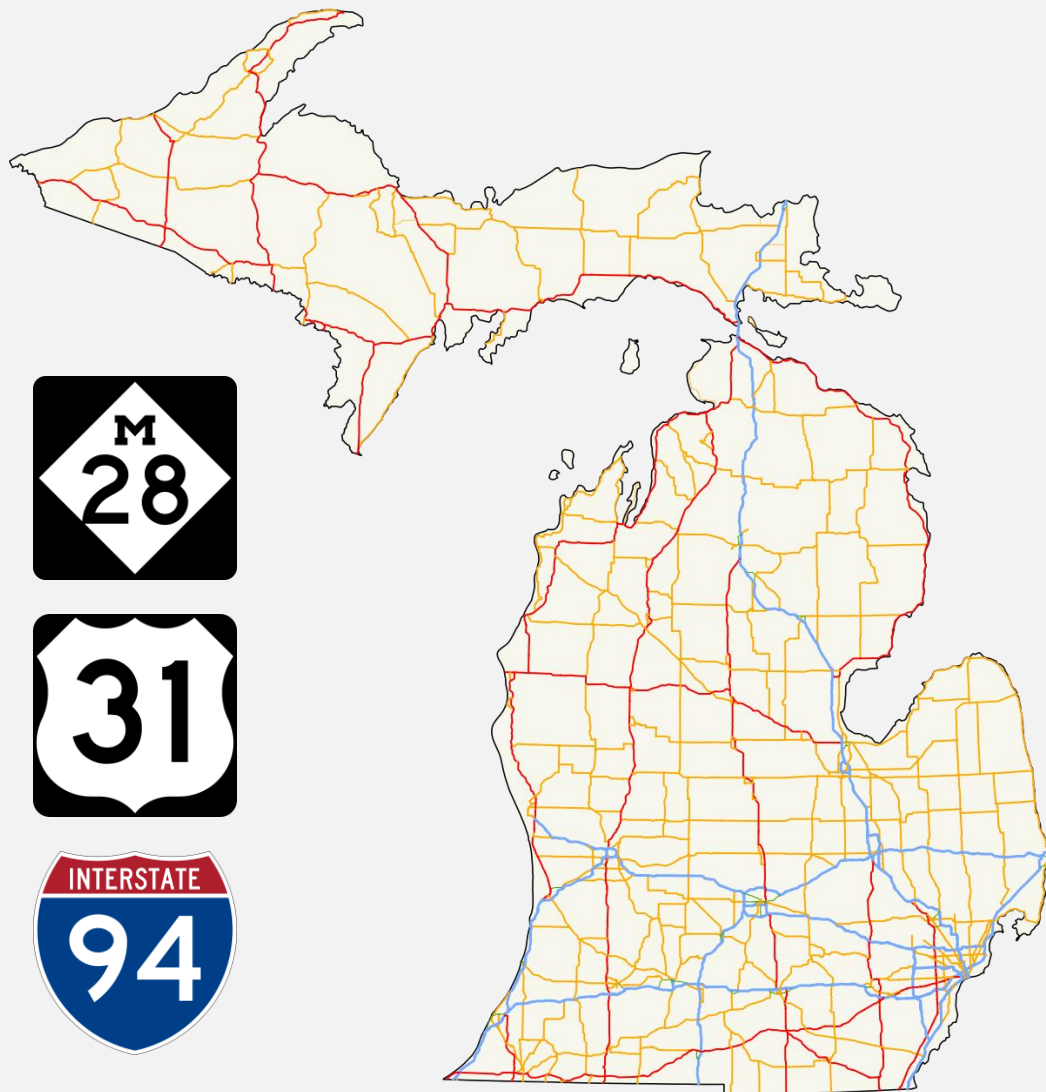
**Michigan's Roads
122,000 Miles**



**MDOT's Highways
9,664 Miles**



State Trunkline Roads & Bridges



9,664 miles

4,811 bridges

82 roadside parks

77 rest areas

Planning ♦ Design
Construction ♦ Operation
Maintenance ♦ Permitting

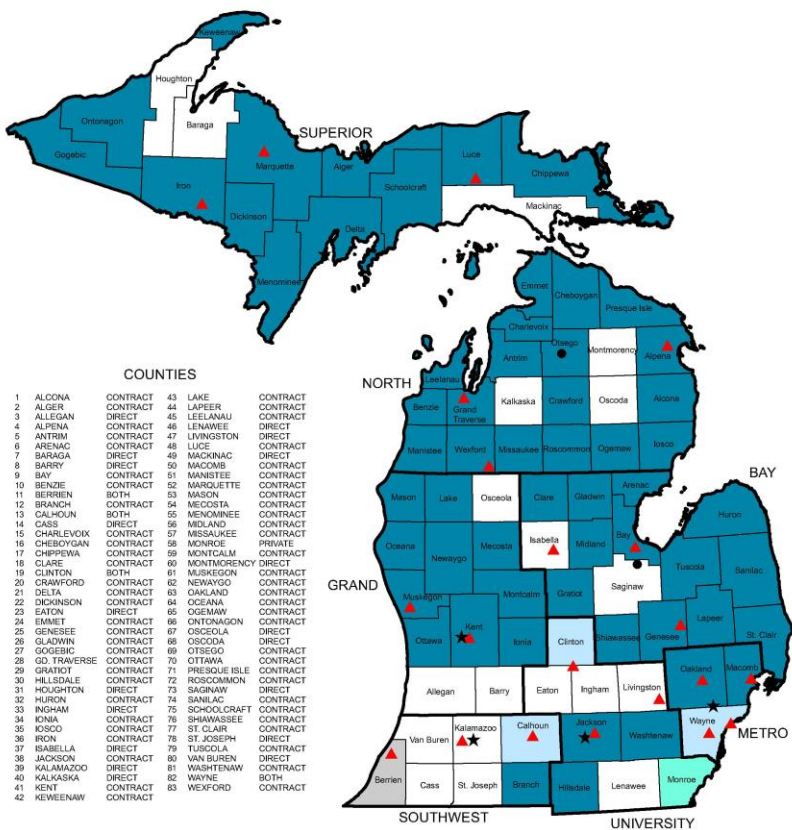
Construction by Low Bid

Consultant Services
(By \$ for projects completed in FY 2020)
Design – 61%
Const. Engineering – 56%

State Trunkline Roads & Bridges - Maintenance



Maintenance Responsibilities by County



County	Maintenance Responsibility
1 ALCONA	CONTRACT
2 ALGER	CONTRACT
3 ALLEGAN	DIRECT
4 ALPENA	CONTRACT
5 ANTRIM	CONTRACT
6 ARENAC	CONTRACT
7 BARAGA	DIRECT
8 BARRY	DIRECT
9 BAY	CONTRACT
10 BENZIE	CONTRACT
11 BERRIEN	BOTH
12 BRANCH	CONTRACT
13 CALHOUN	BOTH
14 CASS	DIRECT
15 CHARLEVOIX	CONTRACT
16 CHEBOYGAN	CONTRACT
17 CHIPPEWA	CONTRACT
18 CLARE	CONTRACT
19 CLINTON	BOTH
20 CRAWFORD	CONTRACT
21 DELTA	CONTRACT
22 DICKINSON	CONTRACT
23 EATON	DIRECT
24 EMMET	CONTRACT
25 GENESSEE	CONTRACT
26 GLADWIN	CONTRACT
27 GOGESIC	CONTRACT
28 GQ TRAVERSE	CONTRACT
29 GRATIOT	CONTRACT
30 HILLSDALE	CONTRACT
31 HOUGHTON	DIRECT
32 HURON	CONTRACT
33 INGHAM	DIRECT
34 IONIA	CONTRACT
35 ISOCO	CONTRACT
36 IRON	CONTRACT
37 ISABELLA	DIRECT
38 JACKSON	CONTRACT
39 KALAMAZOO	DIRECT
40 KALKASKA	DIRECT
41 KENT	CONTRACT
42 KEWEEENAW	CONTRACT
43 LAKE	CONTRACT
44 LAPEER	CONTRACT
45 LEELELANAU	CONTRACT
46 LENAWEE	DIRECT
47 LIVINGSTON	DIRECT
48 LUCE	CONTRACT
49 MACONAC	DIRECT
50 MADONIS	CONTRACT
51 MANISTEE	CONTRACT
52 MARQUETTE	CONTRACT
53 MASON	CONTRACT
54 MECOSTA	CONTRACT
55 MEXICUMINGUE	CONTRACT
56 MIDLAND	CONTRACT
57 MISSISSAUGUE	CONTRACT
58 MONROE	PRIVATE
59 MONTCALM	CONTRACT
60 MONTMORENCY	DIRECT
61 MUSKEGON	CONTRACT
62 NEWAYGO	CONTRACT
63 OAKLAND	CONTRACT
64 OCEANA	CONTRACT
65 OSEMAW	CONTRACT
66 ONTONAGON	CONTRACT
67 OSCEOLA	DIRECT
68 OSCODA	DIRECT
69 OTSEGO	CONTRACT
70 OTTAWA	CONTRACT
71 PRESQUE ISLE	CONTRACT
72 ROSCOMMON	CONTRACT
73 SAGINAW	DIRECT
74 SANILAC	CONTRACT
75 SCHOOLCRAFT	CONTRACT
76 SHIAWASSEE	CONTRACT
77 ST. CLAIR	CONTRACT
78 ST. JOSEPH	DIRECT
79 TUSCULA	CONTRACT
80 VAN BUREN	DIRECT
81 WASHTEENAW	CONTRACT
82 WAYNE	BOTH
83 WEXFORD	CONTRACT

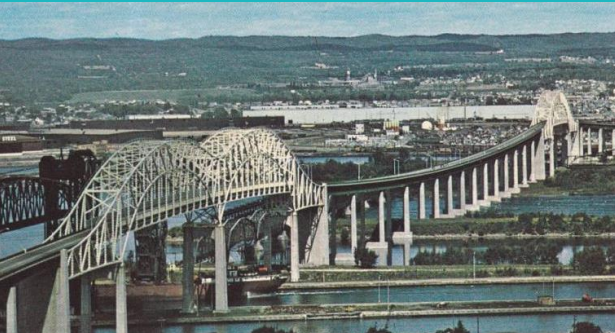
Snow & ice, road surface, bridge, culverts, drains, pump stations, signals, signs, roadside features

29 MDOT maintenance garages
63 County road agency contracts
170 Municipal contracts

Private contracts for maintenance:

- City of Pontiac, Monroe County
- Metro Detroit Freeway Lighting P3
- I-75 P3 (8 Mile to 13 Mile)
- Special Services like ITS devices (cameras, digital signs), fencing, guardrail, & “heavy maintenance”

Big Bridges & Border Crossings



International Bridge
Independent International Authority
MDOT HR & Budget Mgt

Ambassador Bridge
Privately Owned & Operated



Mackinac Bridge
Independent Authority
MDOT HR & Budget Mgt

Detroit-Windsor Tunnel
Municipality Owned, Privately Operated



Blue Water Bridge
US Half Owned by MDOT
MDOT HR & Budget Mgt

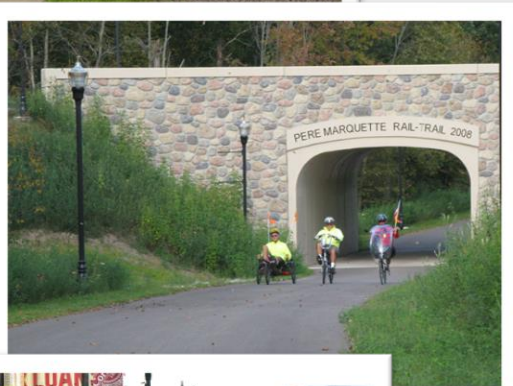
Gordie Howe International Bridge
Independent International Authority
Canadian HR & Budget Mgt



Non-Motorized Transportation



- Sidewalks - municipal
- Independent paths - varies



57 miles of bike lanes
3,168 miles paved shoulders
3 U.S. Bike Routes



Transit & Intercity Passenger Transportation



- 78 transit agencies
- 83 million passenger trips/year
- 6 intercity bus routes
- 4 operators
- MDOT's role:
 - Act 51 Operating Assistance
 - Grant Administration
 - Safety & Regulatory Oversight
 - Supplementing market driven intercity carrier service to improve access & frequency

Aviation



Airport System:

- 234 Public Use airports
 - 18 Commercial Service airports
- 4 state owned airports
- 42 million passengers/year (2019)

MDOT's role:

- Grant Administration
- Regulatory Oversight
- Safety Education

Emerging Issues:

- UAS Integration
- PFAS

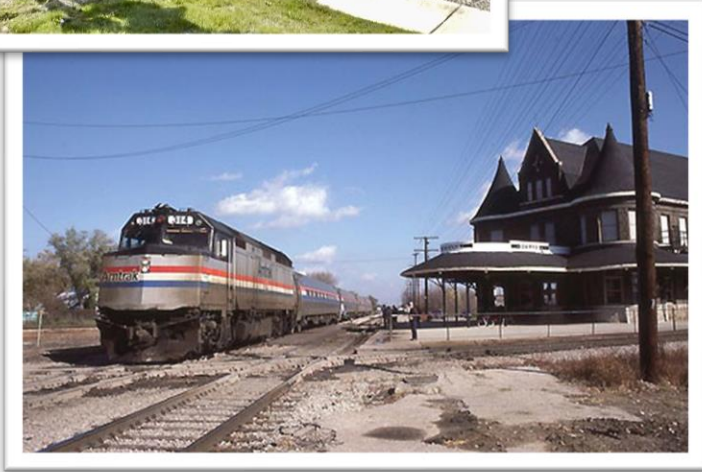


Marine Transportation



- 33 cargo ports
- 7 public passenger ferries
- Soo Locks
- MDOT's role:
 - Act 51 Operating Assistance
 - Grant Administration
 - Safety & Regulatory Oversight

Rail Transport



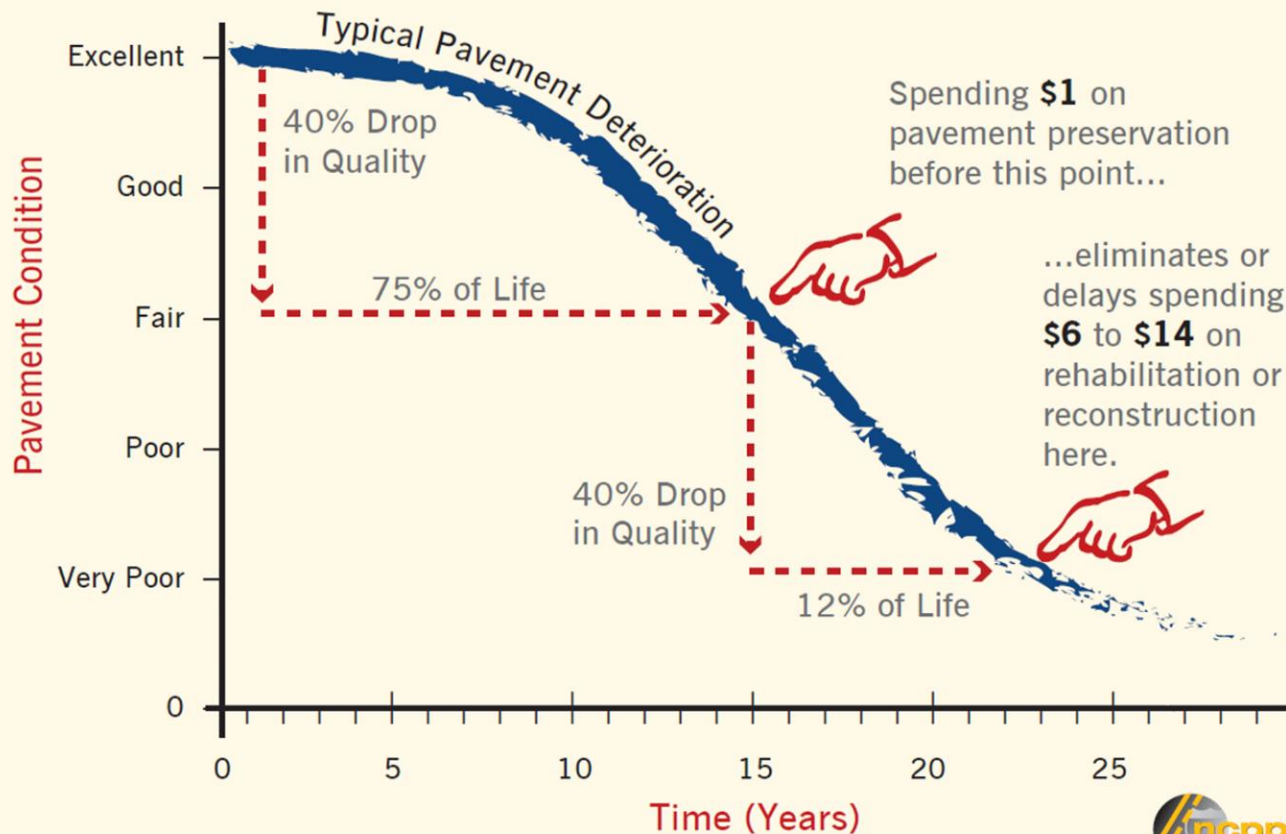
- 4 Class 1 railroads
- 22 Shortline railroads
- 665 miles of state-owned rail

- 3 intercity Amtrak routes
- 780,549 passengers/year

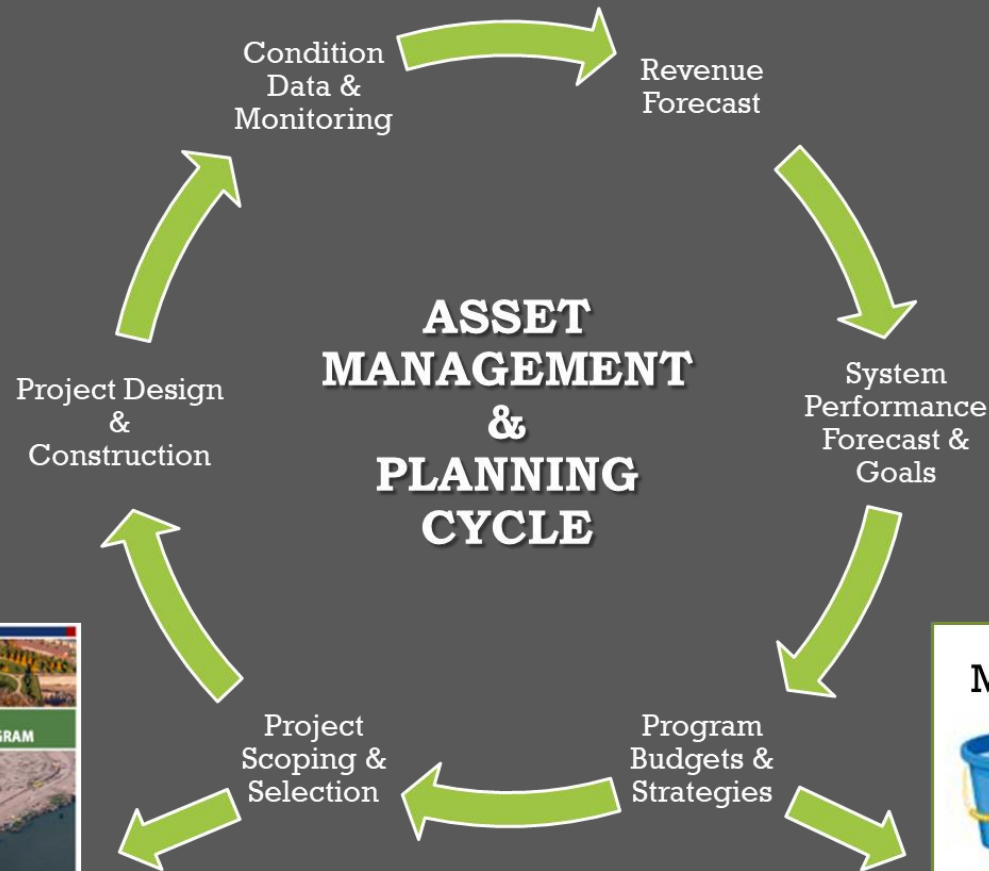
- MDOT's role:
 - Crossing Safety
 - Coordination of services

Michigan is a Pioneer in Asset Management

PAVEMENT PRESERVATION IS COST EFFECTIVE



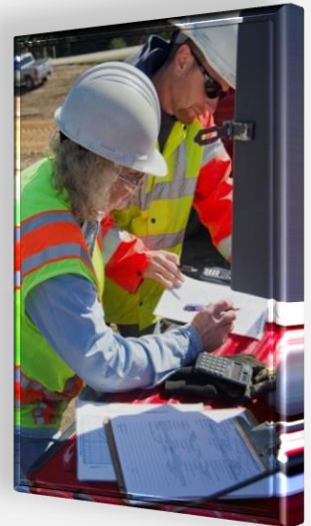
Michigan is a Pioneer in Asset Management



Leaner & Smarter

Leveraging Partnerships

- Contractors/Consultants
- University Research
- Local Agencies
- Other State Agencies
- Other States/Provinces



Michigan is a Transportation Leader

Nationally recognized

- Asset management
- Context-sensitive solutions process
- Performance measurement
- Received 91 national awards since 2011



Michigan is a Transportation Innovator

- Automotive Mobility Innovation
 - Connected & Automated Vehicles Testing
 - M-City
 - American Center for Mobility
 - CAVnue
 - Council on Future Mobility & Electrification
- Advanced technology in design & construction
 - e-Construction
 - 3D models for plans
- Carbon Fiber Reinforcement
- Diverging Diamond Interchanges
- Unmanned Aerial Vehicles (Drones)
- Michigan State Transportation Innovation Council



Transportation Funding

Estimated Transportation Revenue Fiscal 2021

State Road-user Fees

Vehicle registration and title tax	\$1,408 M
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Gasoline tax	\$1,157 M
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Diesel fuel tax	\$238 M
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Total of User Fees	\$2,803 M
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Income, marijuana taxes; other	\$627 M
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Total State MTF Revenue	\$3,430 M
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Federal Aid for Roads	\$1,470 M
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Transportation Funding

Expected Fund Distributions Fiscal 2021

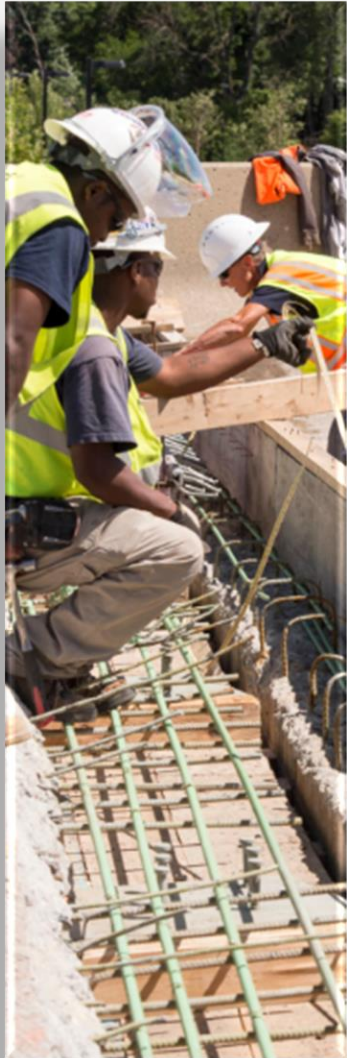
State Restricted Funds

State highways	\$1,256 M
Local roads	\$1,879 M
Public transportation	\$250 M

Federal Aid for Roads

State highways (75%)	\$1,102 M
Local roads (25%)	\$367 M

2015 Revenue Package



Beginning in January, 2017:

- Fuel taxes rose to 26 cents/gallon
- \$400 million/year in additional fuel-tax revenues
- 20% increase in vehicle fees yielding \$197 million/year

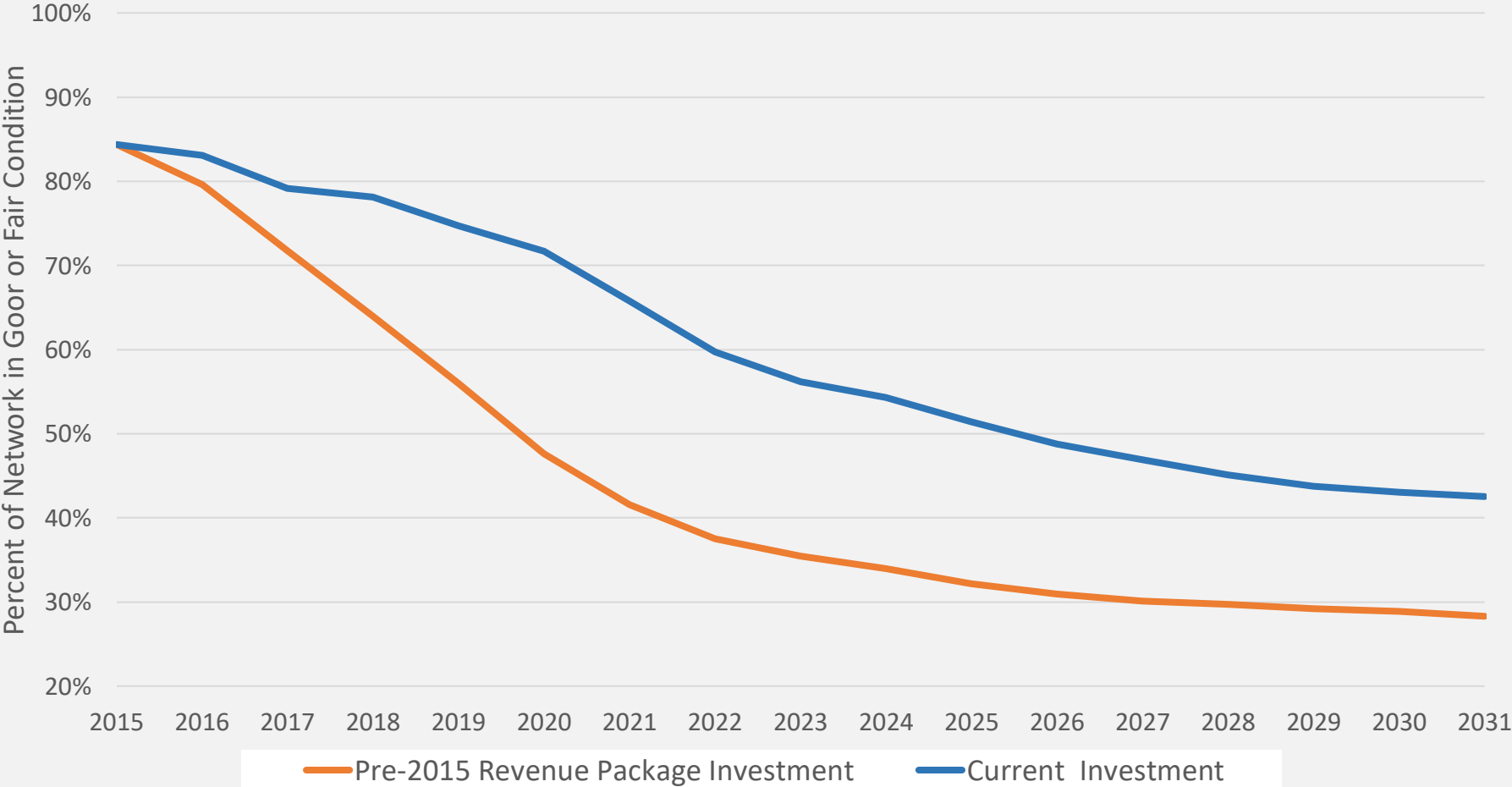
Beginning in Fiscal 2019: Income-tax revenue is distributed to road agencies (60.9% to local agencies & 39.1% to MDOT):

- FY 2019: \$150 M
- FY 2020: \$325 M
- FY 2021 and after: \$600 M

Beginning in 2022, the fuel tax will be indexed to the Consumer Price Index

MDOT State Highway Projected Pavement Condition; Current Investment (Including New Revenue)

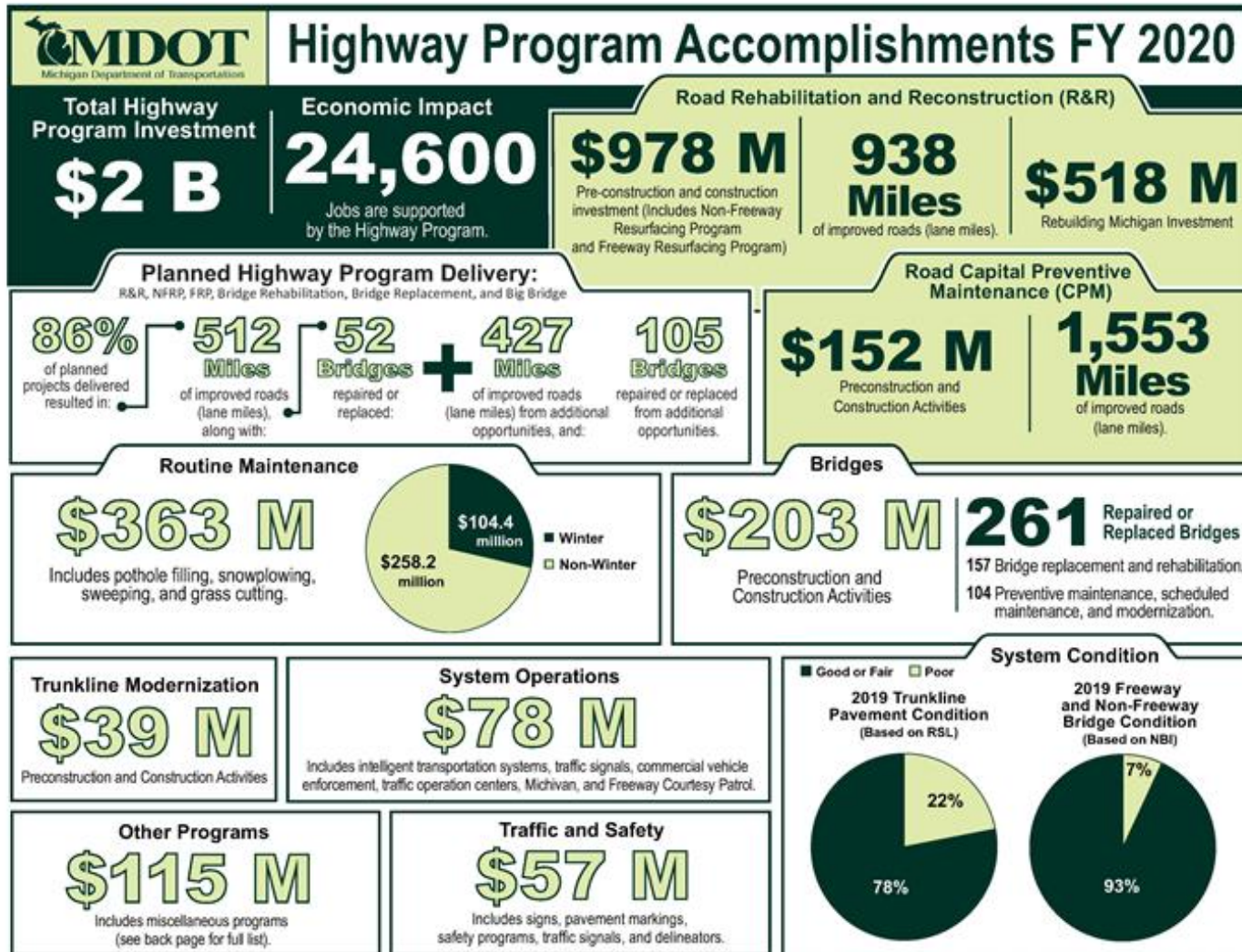
2015-2031



State Revenue Package Non-Monetary Provisions

- MDOT administrative expenses limited to 8% of budget
- Pavement Warranties for projects over \$2 million
- Competitive Bidding: All agencies required to competitively bid projects over \$100,000
- MDOT reported on constructing longer-lived pavements; completed report can be found at:
https://www.michigan.gov/documents/mdot/RoadsInnovationTaskForceReport_515824_7.pdf

Highway Program Accomplishments



Rebuilding Michigan

Construction Expenditures:

- Previous 5 Year Plan \$3.857 Billion
- New 5 Year Plan \$7.300 Billion

(Revised Revenue \$3.78 Billion + Bond Financed \$3.52 Billion)



- 46 projects will be financed with bond proceeds
 - Some projects were converted from rehabilitation to reconstruction
 - Average fix life for these projects is 27.17
- Additional projects will be funded with regular program dollars freed up by bond financing.
 - These projects extend the useful life of the statewide road and bridge system

Rebuilding Michigan



- Focused on rebuilding the state highways and bridges that are critical to the state's economy and carry the most traffic.
- Aimed at fixes that result in longer useful lives and improves the condition of the state's infrastructure.
- Addresses key corridors and rebuilds major segments of highly travelled interstate, as well as several other busy freeways and bridges
- With a corridor approach, MDOT can coordinate bridge projects along with the road projects

Rebuilding Michigan



Benefits of this strategy:

- These are present day needs that will continue to go unaddressed in the near term absent this strategy
- The public will receive the benefit of the long-term fixes sooner – like better condition, better ride, less wear and tear on their vehicles, and supporting the economy
- The ability to advance more long-term fixes will reduce the frequency and intensity of maintenance required over the next decade
- These fixes modernize our transportation system, rather than continuing to cover up old infrastructure with band-aids
- Interest rates are at historic lows

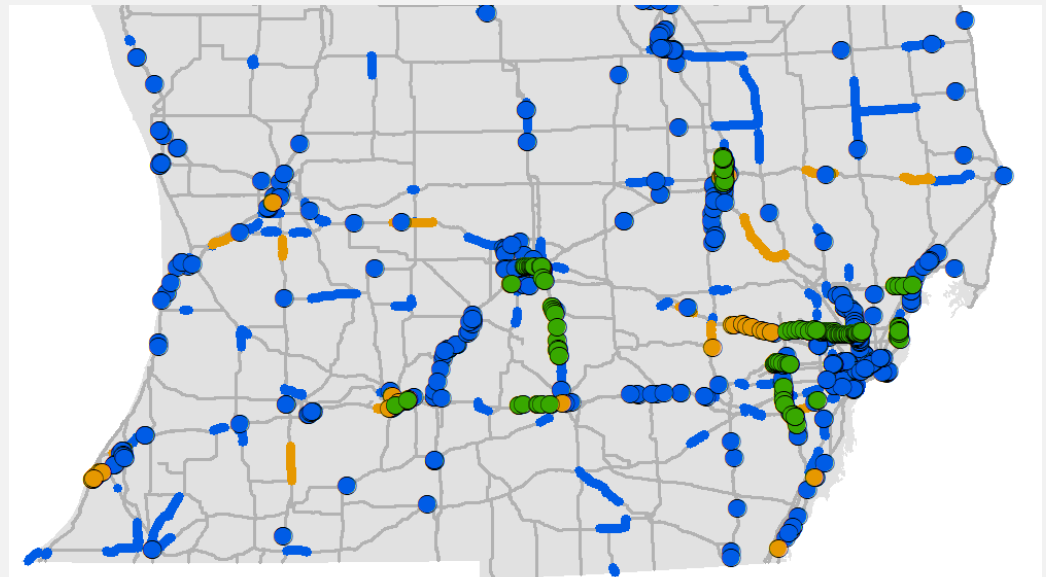
Rebuilding Michigan

Rebuilding Michigan

Revised Five-Year Transportation Program (5YTP)
Road & Bridge Projects

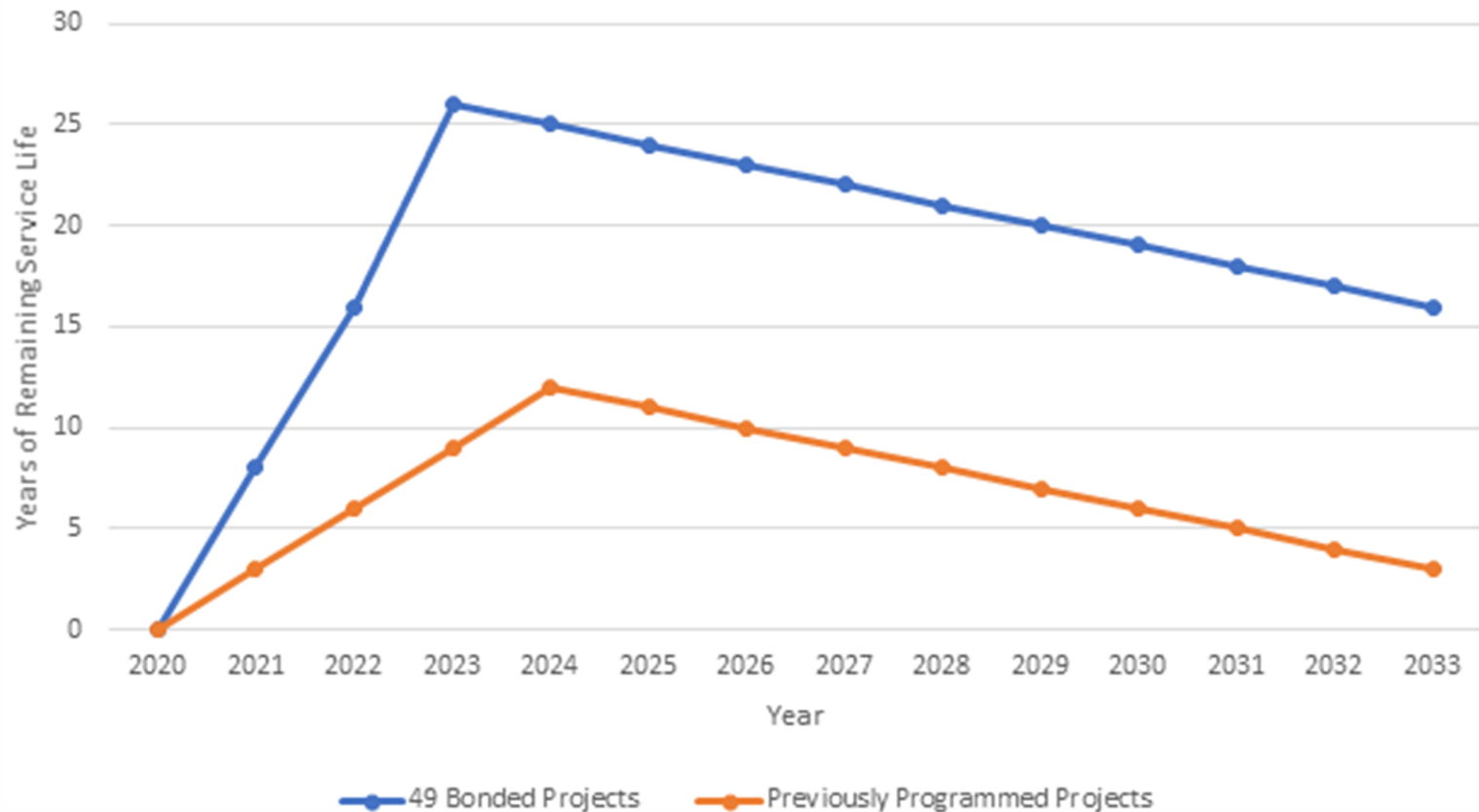


- With bonding, MDOT will rebuild 569 more lane miles than currently planned.
- Benefits on average over 62,000 vehicles per day per project or approximately 3 million vehicles/day (the state trunkline average is 14,400 vehicles/day).



Rebuilding Michigan

Pavement Life Cycle Comparison Rebuilding Bonded Projects vs Previously Programmed Projects
2020-2033



Rebuilding Michigan



What the Rebuilding Michigan does **NOT** do:

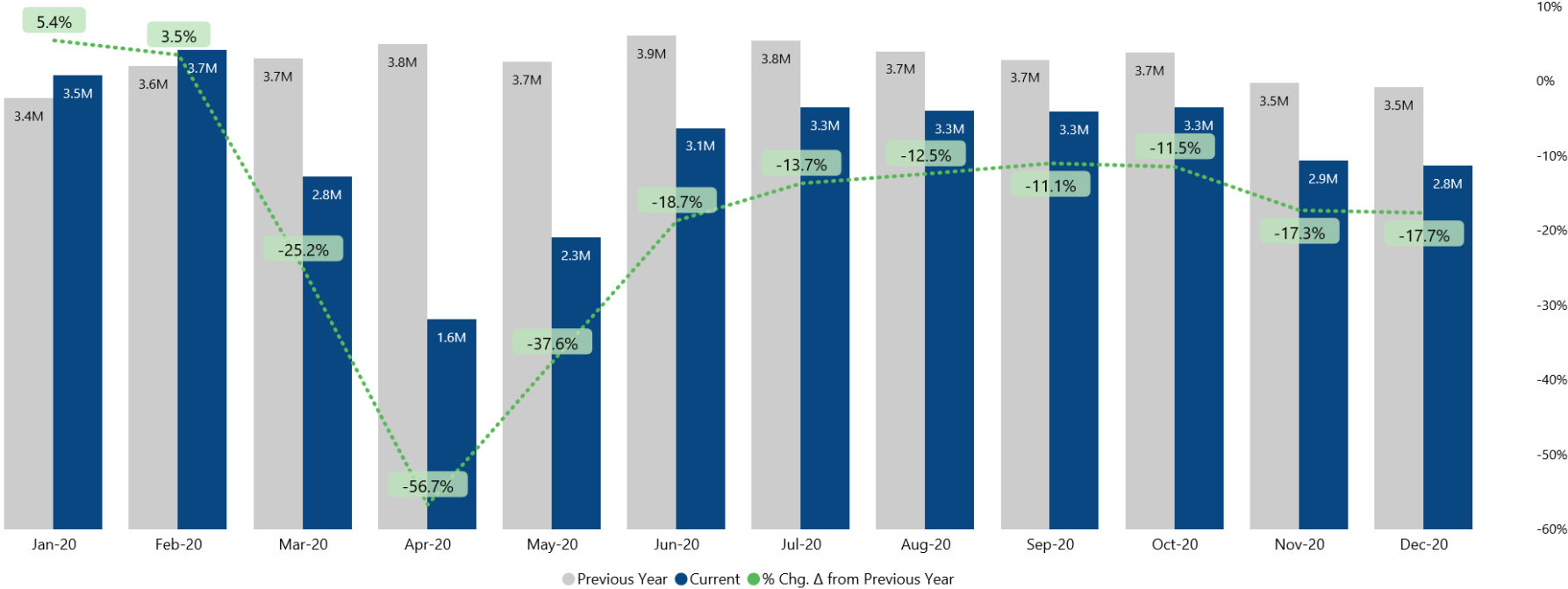
- It does not fix everything nor completely address state trunkline condition needs.
- It does not generate any new revenue to address the chronic underinvestment in transportation in Michigan.
- It does not address the needs of other transportation modes or the local road and bridge systems.



COVID-19 Impacts

[Back to report](#)

MONTHLY ADT AND % CHG. Δ FROM PREVIOUS YEAR



Source: Michigan Department of Transportation, Transportation Data Management System

Other Resources

- www.michigan.gov/mdot
- **Facebook**:
www.facebook.com/MichiganDOT
- **Twitter**: Statewide -
www.twitter.com/MichiganDOT
- **YouTube**: www.youtube.com/MichiganDOT

The Facebook logo, consisting of the word "facebook" in white lowercase letters on a dark blue rectangular background.

facebook®

The Twitter logo, featuring the word "twitter" in a light blue, rounded, lowercase font with a white outline, set against a teal rectangular background.

twitter

The YouTube logo, with the word "You" in black and "Tube" in white, both in a bold sans-serif font, set against a red rounded rectangular background.

You Tube

Questions?

