



Michigan  
Transportation Asset  
Management Council

**2017 RUCUS**  
Roadsoft User Conference of the United States

# Transportation Asset Management Council Updates, Investment Reporting Tool & Roadsoft

***Dave Jennett***

*Transportation Asset Management Council  
MDOT, Asset Management & Policy Division*



# Michigan Transportation Asset Management Council

## TAMC Website Update

Michigan.gov  
TRANSPORTATION ASSET MANAGEMENT COUNCIL  
**TAMC**

HOME | INTERACTIVE MAPS | REPORTING HUB | DASHBOARDS | SEARCH

CONFERENCE | TRAINING | SUPPORT | ABOUT US

### Protecting Michigan Roads

The Michigan Transportation Asset Management Council (TAMC) - A resource for independent, objective data on the condition of Michigan's roads and bridges and a resource for implementing the concepts of Asset Management.

**Interactive Maps**  
Create an up-to-date road and bridge condition map

**Reporting Hub**  
Investment Reporting Tool (IRT), Act 51 Distribution and Reporting System (ADARS), Non-Trunkline Federal Aid (NTFA)

**Dashboards**  
Condition, operation, and investment in Michigan's public road system

**Training**  
Sponsored training, support, and education programs

### NEWS

- 2017 Fall Asset Management Conference
- 2017 TAMC Award - Ann Arbor
- 2017 TAMC Award - International Bridge Authority
- Press Release - 2016 Annual Report
- 2016 TAMC Training Report

[MORE NEWS](#)

### Annual Reports

### EVENTS

<b>FEB 14</b>	<b>PASER Training Webinar</b> See Training Brochure for Details	<b>SEP 14</b>	<b>IRT Training</b> Grand Rapids (Kent County Road Commission) 1500 Scribner Ave NW / Grand Rapids, MI 49504 Diane Martin (KCRC Admin Assistant) / dmartin@kentcountyroads.net
<b>SEP 27</b>	<b>Data Committee</b> MDOT Aeronautics Building, 2nd Floor, 2700 Port Lansing Rd, Lansing, MI (Proposed A ...)	<b>OCT 25</b>	<b>Data Committee</b> MDOT Aeronautics Building, 2nd Floor, 2700 Port Lansing Rd, Lansing, MI (Agenda to be determined)
<b>NOV 01</b>	<b>TAMC Meeting</b> MDOT Aeronautics Building 2nd Floor, 2700 Port Lansing Rd, Lansing, MI 48906	<b>NOV 08</b>	<b>TAMC Bridge Asset Management Workshop</b> Fetzer Center, Western Michigan University, Kalamazoo, MI

[MORE EVENTS](#)

Michigan Transportation Asset Management Council

Home Training Support About Us

Interactive Maps Dashboards Reporting Hub

**What's New**  
News, policies, conference updates and upcoming events

**INTERACTIVE MAPS**  
Create an up-to-date road and bridge condition map

**DASHBOARDS**  
Condition, operation, and investment in Michigan's public road system

**REPORTING HUB**  
Investment Reporting Tool (IRT), Act 51 Distribution and Reporting System (ADARS), Non-Trunkline Federal Aid (NTFA)

**TRAINING**  
Sponsored training, support, and education programs

The Michigan Transportation Asset Management Council (TAMC) - A resource for independent, objective data on the condition of Michigan's roads and bridges and a resource for implementing the concepts of Asset Management.

### MICHIGAN'S ROADS & BRIDGES

122,284 Miles of Roads  
11,072 Bridges

617 Agencies  
83 Counties, 533 Cities and Villages, and MDOT

[Learn More](#)

### NEWS

	2017 Fall Asset Management Conference	(7.5 KB)
	2016 TAMC Training Report - Final	(7.5 KB)
	2017 Spring Asset Management Conference Brochure	(245 KB)
	Press release - 2016 Annual Report	(41 KB)
	2017 TAMC Award Press Release Ann Arbor	(25 KB)
	2017 TAMC Award Press Release International Bridge Authority	(125 KB)
	2017 TAMC Award Press Release O'Rourke	(118 KB)



Michigan  
Transportation Asset  
Management Council

The New is Now Here...

## Investment Reporting Tool - IRT 2.0 & 2.1 (August and September)

- ✓ New technology & increased stability
- ✓ Responsive Design – Desktop, Tablet, Phone
- ✓ New Home page and Feedback on Compliance
- ✓ New Reports
- ✓ Modernized Intuitive Layout
- ✓ Map Printing – PDF & light customization
- ✓ ADA Compliant



# Michigan Transportation Asset Management Council

## The Old IRT...

Investment Reporting ▾ Data Access ▾ Admin ▾

Search:  Enter a document or meeting name.

Internet Explorer 11 Users may have issues logging in and will need to use a different web browser such as Chrome or Firefox

### Status

Status for: Oakland

Update Finished

### Data Completion Status

Reporting Year	Road Data	Bridge Data	HPMS Data
2016	Not Complete	Not Complete	Not Complete
2015	Complete	Complete	Complete
2014	Complete	Complete	Complete
2013	Complete	Complete	Complete
2012	Complete	Complete	Complete
2011	Complete	Complete	Complete
2010	Not Complete	Not Complete	Not Complete
2009	Not Complete	Not Complete	Not Complete
2008	Not Complete	Not Complete	Not Complete
2007	Complete	Not Complete	Complete
2006	Not Complete	Not Complete	Not Complete
2005	Not Complete	Not Complete	Not Complete

### Road Investments

Treatment Year	Project Class	Miles
2005	SI	0.32
2006	CPM	0.256
2006	SI	26.281
2007	CPM	12.48
2007	SI	22.307
2008	SI	6.44
2011	MSI	10.398
2012	MSI	10.655
2013	MCPM	4.967
2013	MSI	18.95
2014	MCPM	13.334
2014	MSI	60.142
2015	MSI	40.445
2016	MCPM	4.956
2016	MSI	10.959

### Filters

Jurisdiction: Select Treatment Year: Select Project Classification: Select Improvement Type: Select

2 10

Date Open to Traffic:

11/15/2015

Multi-Year Plan:

Yes

Project Classification:

MSI

Life Expectancy in Years:

15

Improvement Type:

Major Rehabilitation

Project ID/Name:

50181

Surface Type After Treatment:

Asphalt

Comments:

Clyde Road from east of Hickory Ridge to Strathcona, pave gravel.

Road Name	Treatment Length	# Lanes	PR Ref #	BMP	EMP	Ref. Length	Required HPMS
Clyde Rd	1.821	2	648706	0.884	2.705	1.821	Yes

Date Open to Traffic:

11/15/2015

Multi-Year Plan:

Yes

Project Classification:

MSI

Life Expectancy in Years:

10

Improvement Type:

Resurf, Mill & Pulver

Project ID/Name:

51561

Surface Type After Treatment:

Asphalt

Comments:

S. Milford Road from Pontiac Trail to Village limits, mill and overlay.

Road Name	Treatment Length	# Lanes	PR Ref #	BMP	EMP	Ref. Length	Required HPMS
S Milford Rd	3.768	2	656804	4.189	7.957	3.768	No

Date Open to Traffic:

11/15/2015

Multi-Year Plan:

Yes

Project Classification:

MSI

Life Expectancy in Years:

15

Improvement Type:

Major Rehabilitation

Project ID/Name:

51682

Surface Type After Treatment:

Asphalt

Comments:

Griswold Road from 8 Mile to 9 Mile, pave gravel.

Road Name	Treatment Length	# Lanes	PR Ref #	BMP	EMP	Ref. Length	Required HPMS
Griswold Rd	0.996	2	634406	0.000	0.996	0.996	Yes





# Michigan Transportation Asset Management Council

## The New IRT...

Michigan Transportation Asset Management Council - Internet Explorer

Michigan.gov

TAMC ABOUT TAMC Dave Jenni

### Investment Reporting Tool (IRT)

Projects + Add Map Reports

Welcome

## Marquette

Total Road Miles: 91.054  
Total Bridges: 5  
ADARS Fiscal Year: July 1, 2017 - June 30, 2018  
Please submit new Asset Management Information.  
Submit Asset Management Information

128 Entered Projects Calendar Years 2015 - 2017

17 Planned Projects Calendar Years 2018 - 2020

Currently showing Overview data as Calendar Years  
Change to display as Fiscal Years

#### Reporting Status

Update View All

Fiscal Year	Road	Bridge	Asset Management
2017	Not Completed	Not Completed	Not Completed
2016	Completed	Completed	Completed
2015	Completed	Completed	Completed

#### Road Project Summary

View All

Calendar Year	Heavy CPM	Light CPM	Reconstruction	Rehabilitation	Total
2018	2.02 mi (12)	0.00 mi (0)	1.25 mi (5)	0.00 mi (0)	3.26 mi (17)
2017	3.16 mi (16)	0.00 mi (0)	1.61 mi (7)	0.64 mi (2)	5.40 mi (25)
2016	2.59 mi (16)	8.98 mi (39)	0.51 mi (3)	0.00 mi (0)	12.08 mi (58)
2015	3.97 mi (13)	24.09 mi (31)	0.00 mi (0)	0.03 mi (1)	28.08 mi (45)
2014	2.49 mi (8)	10.38 mi (38)	0.57 mi (5)	0.00 mi (0)	13.44 mi (51)

### Investment Reporting Tool (IRT)

Projects + Add Cut Segment Clear All Print

#### Add Road Project

< Back x

\* = Required

Project ID/Name \* MDOT Job ID  
Project Name MDOT Job ID

Planned Start Date Open to Traffic Date \*  
mm/dd/yyyy mm/dd/yyyy

Life Expectancy \* Project Cost  
Years Project Cost

Project Classification \*  
Select a Project Classification

Improvement Type \*  
Select an Improvement Type

Surface Type Before Treatment  
Select the Surface Type before Treatment

Surface Type After Treatment \*  
Select the Surface Type after Treatment

Clear Save Project



# Michigan Transportation Asset Management Council

## The New...

Michigan Transportation Asset Management Council - Google Chrome

Secure | <https://miloginworkerqa.michigan.gov/tamcIRT/default.aspx#/files...>

Michigan.gov

TAMC IRT

Projects + Add Map Reports

### Roadsoft File Upload

Past Files

Select a Roadsoft File

Please select the Roadsoft XML file you wish to import.

This file should be an export from the [Roadsoft software](#). For instructions on how to export a compatible file, please read the Roadsoft tutorial on "Exporting Roadsoft Project Data to TAMC's Investment Reporting Tool."

File

Choose File No file chosen

Comment

Comments regarding this Roadsoft File

Cancel Upload

Michigan Transportation Asset Management Council - Google Chrome

Secure | <https://miloginworkerqa.michigan.gov/tamcIRT/default.aspx#/files...>

Michigan.gov

TAMC IRT

Projects + Add Map Reports

### Roadsoft File Upload

+ New File

Past Files		Download All	Download All (all Jurisdictions)
Filename	Upload Date	User	Comments
City of Grand Rapids - 2016 Bridge Data.xml	09/21/2017	RizikL	
City of Grand Rapids - 2016 Bridge Data.xml	09/21/2017	RizikL	
City of Grand Rapids - 2016 Bridge Data.xml	09/14/2017	EwaldN	
City of Grand Rapids 2017 - 2019 3 Year Planned Data - Framework 16 - INVALID.xml	09/14/2017	EwaldN	
City of Grand Rapids - 2016 Bridge Data - UNIQUE(1).xml	07/31/2017	EwaldN	



# Michigan Transportation Asset Management Council

## The New...

Michigan Transportation Asset Management Council - Google Chrome

Secure | <https://miloginworkerqa.michigan.gov/tamcIRT/default.aspx#/files/roadsoft>

Michigan.gov TAMC ABOUT TAMC Dave Jennett - City of Troy

TAMC IRT Projects + Add Map Reports

### Roadsoft File Upload

Past Files

#### Roadsoft Validation Results

Invalid (198) Valid (24)

Invalid Projects

You have invalid treatments, please review the Feedback and correct as required before submission. **These treatments can not be saved to the TAMC database.**

Project ID	Project Date	PR	BMP	EMP	Surface	Treatment	Project Classification
318	03/18/2015	681204	0.276	1.278	Concrete	Troy Industrials Slab Replacement	REHAB

Troy+2016+Projec....xml Bay+County+++....xml Show all

Michigan Transportation Asset Management Council - Google Chrome

Secure | <https://miloginworkerqa.michigan.gov/tamcIRT/default.aspx#/files/roadsoft>

Michigan.gov TAMC ABOUT TAMC Dave Jennett - City of Troy

TAMC IRT Projects + Add Map Reports

### Roadsoft Validation Results

Invalid (198) Valid (24)

Valid Projects

You have treatments that can be loaded into the TAMC database. **Click the Next button to save the treatments.**

Project ID	Project Date	PR	BMP	EMP	Surface	Treatment	Project Classification
826	08/26/2015	607105	0	0.118	Concrete	Troy Locals Slab Replacement	REHAB
826	08/26/2015	693304	0	0.073	Concrete	Troy Locals Slab Replacement	REHAB
826	08/26/2015	694707	0.481	0.703	Concrete	Troy Locals Slab Replacement	REHAB
826	08/26/2015	1848606	0.142	0.324	Concrete	Troy Locals Slab Replacement	REHAB
826	08/26/2015	4416132	0	0.033	Concrete	Troy Locals Slab	REHAB

Troy+2016+Projec....xml Bay+County+++....xml Show all



Michigan  
Transportation Asset  
Management Council

The New is Now Here...

## IRT 2.2 & 2.3 (October & November)

- ❑ Improvements for Regional Coordinators
- ❑ Added Reports
- ❑ Improvements on PASER submissions review
- ❑ User Feedback



# Michigan Transportation Asset Management Council

## The New...

Michigan Transportation Asset Management Council - Google Chrome

Secure | <https://miloginworkerqa.michigan.gov/tamclIRT/default.aspx#/files/paser>

Michigan.gov TAMC ABOUT TAMC Dave Jennett - City of Troy

TAMC IRT Projects + Add Map Reports

### PASER File Upload

+ New File

Past Files

No files uploaded.

Download All Download All (all Jurisdictions)

TAMC Roger A. Belknap  
TAMC Coordinator  
517-373-2249  
belknapr@michigan.gov

TAMC Help Desk  
517-373-7910

Michigan.gov  
Feedback  
NTFA Submit Tool

Troy+2016+Projec....xml Bay+County+++....xml Show all

Michigan Transportation Asset Management Council - Google Chrome

Secure | <https://miloginworkerqa.michigan.gov/tamclIRT/default.aspx#/files/paser>

Michigan.gov TAMC ABOUT TAMC Dave Jennett - City of Troy

TAMC IRT Projects + Add Map Reports

- Road Project
- Bridge Project
- Roadsoft Upload
- PASER Ratings**
- Asset Management

### PASER File Upload

Select a PASER File

Please select the PASER file you wish to upload.

File  
Choose File No file chosen

Comment  
Comments regarding this PASER File

Cancel Upload

Troy+2016+Projec....xml Bay+County+++....xml Show all



# Michigan Transportation Asset Management Council

## User Feedback Matters

Michigan.gov

TAMC

Investment Reporting

Welcome  
**Marquette**  
Total Road Miles: 91.054  
Total Bridges: 5  
ADARS Fiscal Year: July 1, 2017 - June 30, 2018  
Please submit new Asset Management Information.  
[Submit Asset Management Information](#)

TAMC

ABOUT TAMC

Dave Jennett - City of Marquette

+ Add

Map

Reports

Reporting Status Reminder

In order to be Act 51 compliant, remember to update **Reporting Status** on the IRT home page to being "**Completed**"  
Even if there were no road or bridge projects for the current fiscal year, completing your status indicate that you have finished your reporting to TAMC.  
[Close](#)

17  
Planned Projects  
Calendar Years  
2018 - 2020

Currently showing Overview data as **Calendar Years**  
[Change to display as Fiscal Years](#)

Reporting Status

[Update](#) [View All](#)

Fiscal Year	Road	Bridge	Asset Management
2017	Not Completed	Not Completed	Not Completed
2016	Completed	Completed	Completed





# Michigan Transportation Asset Management Council

## User Feedback Matters

Michigan Transportation Asset Management Council - Internet Explo...

Michigan.gov

TAMC ABOUT TAMC Dave Jannett "City of Marquette"

Investment Reporting Tool (IRT)

Projects + Add Map Reports

< Back

OWNER: CITY OF MARQUETTE

2015 Poor **3**

W Fair Ave

Road Projects

Year	Project ID/Name
2017	17-03

Classification: Reconstruction

Improvment Type: Bituminous Reconstruction

PASER Road Rating

YEAR	RATING	SURFACE	LANES
2015	<b>3-Poor</b>	Asphalt	2
2014	<b>3-Poor</b>	Asphalt	2
2013	<b>3-Poor</b>	Asphalt	2

Map showing road network with W Fair Ave highlighted.

Michigan Transportation Asset Management Council - Intern...

Michigan.gov

TAMC ABOUT TAMC Dave Jannett "City of Marquette"

Detailed Project Information

Update / Delete

Project ID/Name	Treatment Calendar Year	Status	Planned Start Date	Date Open to Traffic	Life Expectancy in Years
17-03	2017	Planned		10/31/2017	25

Project Cost	Project Classification	Improvment Type	Surface Type After Treatment	MDOT ID	Reactionary
	Reconstruction	Bituminous Reconstruction	Asphalt		No

Comments: Fair Avenue from McClellan Avenue to City Limits

Description: Complete reconstruction of street and utilities. Sidewalk addition to north side.

Warrantied: No

Road Segments (1)

Road Name	# Lanes	Actual Length	PR Ref #	BMP	EMP	Ref. Length
W Fair Ave	3	0.355	1566304	0.967	1.322	0.355

Close



# Michigan Transportation Asset Management Council

## Support and Training

Michigan.gov

HOME INTERACTIVE MAPS REPORTING HUB DASHBOARDS

**TAMC**

CONFERENCE TRAINING **SUPPORT** ABOUT

TAMC / SUPPORT

### SUPPORT

#### PASER

- Funding Local PASER Data Collection
- PASER Training
- PASER Regional Team Management (Scheduling Annual Road Ratings)
- PASER Data Analysis
- PASER Data Collection

#### LOCAL ASSET MANAGEMENT

- Elected Officials Training
- Local Asset Management Plan Development
- Funding Local Asset Management Plans
- Sample Plans, Reports & Guides

#### ROADSOFT

- RoadSoft/PASER Data Transmittal to TAMC
- Accessing RoadSoft Data for Local Use
- RoadSoft Annual Software Release/Updates
- RoadSoft Laptop Data Collector (LDC) Software Updates
- RoadSoft Software Issues
- RoadSoft Training

#### TAMC

- TAMC Board Agendas
- TAMC Annual Report
- TAMC IRT (Investment Reporting Tool)
- TAMC Dashboards
- Previous TAMC Conferences
- TAMC Annual Conference(s) Planning
- TAMC Monthly Meeting Facilitation
- TAMC Website Management
- TAMC Annual Conference Registration
- TAMC Awards Criteria

Michigan.gov

HOME INTERACTIVE MAPS REPORTING HUB DASHBOARDS SEARCH

**TAMC**

CONFERENCE **TRAINING** SUPPORT ABOUT

TAMC / TRAINING

### TRAINING

#### TRAINING OPPORTUNITIES

##### INVESTMENT REPORTING TOOL (IRT) TRAINING

The Investment Reporting Tool (IRT) is the procedure developed by the TAMC to allow public road agencies to comply with two of the reporting...

##### ACT 51 DISTRIBUTION AND REPORTING SYSTEM (ADARS) TRAINING

MDOT ADARS - Act 51 Distribution and Reporting System is the system used by MDOT to distribute the monthly Michigan Transportation Fund (MTF)...

##### PAVEMENT SURFACE EVALUATION AND RATING (PASER) TRAINING

Since 2003 the TAMC has required road agencies to collect and submit roadway condition information based on PASER. That information has been used to...

##### BRIDGE TRAINING & RESOURCES

Maintaining bridges in good condition has proven to extend service life and to be more cost effective than allowing deterioration to progress...

##### ASSET MANAGEMENT FOR ELECTED OFFICIALS TRAINING

Local elected/appointed officials play a key role in deciding what types of transportation projects are funded since they are the stewards of your

#### REQUEST A NEW TRAINING OPPORTUNITY

#### TRAINING DATES

FEB 14	PASER Training Webinar	FEB 21	PASER Training Webinar
FEB 16	Transportation Asset Management for Local Elected Officials	FEB 22	Transportation Asset Management for Local Elected Officials
FEB 21	Transportation Asset Management for Local Elected Officials	FEB 28	PASER Classroom Session

ALL TRAINING DATES



# Michigan Transportation Asset Management Council

## Videos & User Guide

http://www.michigan.gov/t

Edit View Favorites Tools Help

TRANSPORTATION ASSET MANAGEMENT COUNCIL TAMC

CONFERENCE TRAINING SUPPORT ABOUT US

### VIDEOS

- IRT 2.0 Overview
- TAMC IRT Homepage and Status
- IRT: Viewing Project Status and Asset Manage...
- Adding a Road Project
- IRT: Adding a Bridge Project
- IRT: Uploading Roadsoft and PASER Files

http://www.michigan.gov/c

File Edit Go to Favorites Help



## Investment Reporting Tool (IRT)

### Training Manual/Users Guide

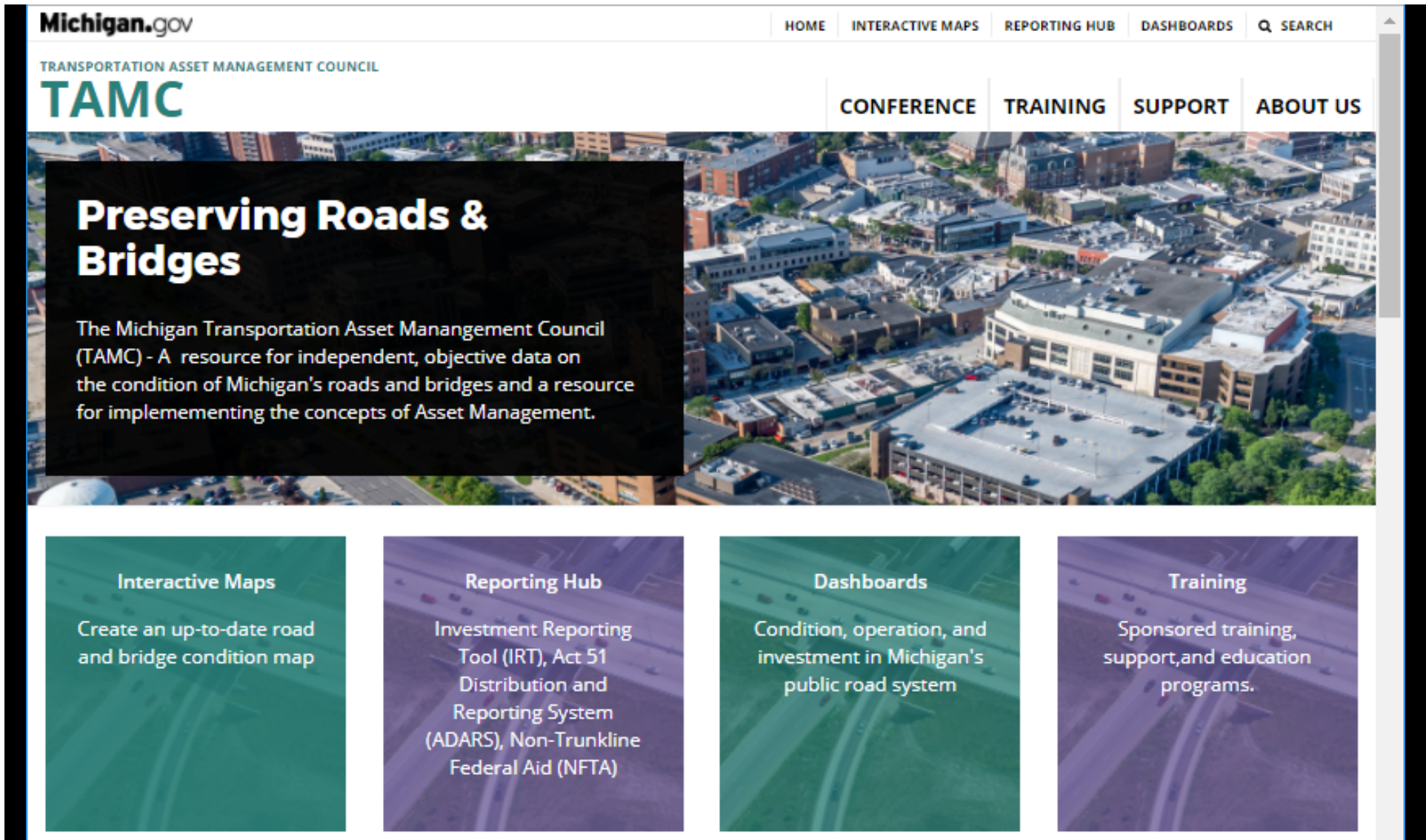
IRT Version 2.0, August 9, 2017

TAMC Helpdesk 517-373-7910



## Michigan Transportation Asset Management Council

## Other TAMC Efforts

A screenshot of the Michigan.gov Transportation Asset Management Council (TAMC) website. The header includes the Michigan.gov logo, navigation links (HOME, INTERACTIVE MAPS, REPORTING HUB, DASHBOARDS, SEARCH), and the TAMC logo. A large banner image shows an aerial view of a city street with a dark overlay containing the text 'Preserving Roads & Bridges' and a description of TAMC. Below the banner are four colored boxes with icons and text: Interactive Maps (green), Reporting Hub (purple), Dashboards (teal), and Training (purple).

**Michigan.gov**

TRANSPORTATION ASSET MANAGEMENT COUNCIL  
**TAMC**

HOME INTERACTIVE MAPS REPORTING HUB DASHBOARDS Q SEARCH

CONFERENCE TRAINING SUPPORT ABOUT US

### Preserving Roads & Bridges

The Michigan Transportation Asset Management Council (TAMC) - A resource for independent, objective data on the condition of Michigan's roads and bridges and a resource for implementing the concepts of Asset Management.

#### Interactive Maps

Create an up-to-date road and bridge condition map

#### Reporting Hub

Investment Reporting Tool (IRT), Act 51 Distribution and Reporting System (ADARS), Non-Trunkline Federal Aid (NFTA)

#### Dashboards

Condition, operation, and investment in Michigan's public road system

#### Training

Sponsored training, support, and education programs.





Statewide

☐ All Revenue (\$) ☐ All Revenue (%) ☐ State Sources (\$) ☒ Total Revenue (\$)

**Total Revenue (\$)**


☒ 2006 ☒ 2007 ☒ 2008 ☒ 2009 ☒ 2010 ☒ 2011 ☒ 2012 ☒ 2013 ☒ 2014 ☒ 2015

Year	Total Revenue (\$)
2006	1,800,000,000
2007	1,900,000,000
2008	1,950,000,000
2009	1,800,000,000
2010	1,780,000,000
2011	1,750,000,000
2012	1,750,000,000
2013	1,720,000,000
2014	2,000,000,000
2015	2,200,000,000



# Michigan Transportation Asset Management Council

## Interactive Map...The Old



### Transportation Asset Management Council







MI Transportation Reporting Portal

Michigan.gov

The Official State of Michigan Website

Investment Reporting ▾ Data Access ▾









search address, city, zip, and more 🔍



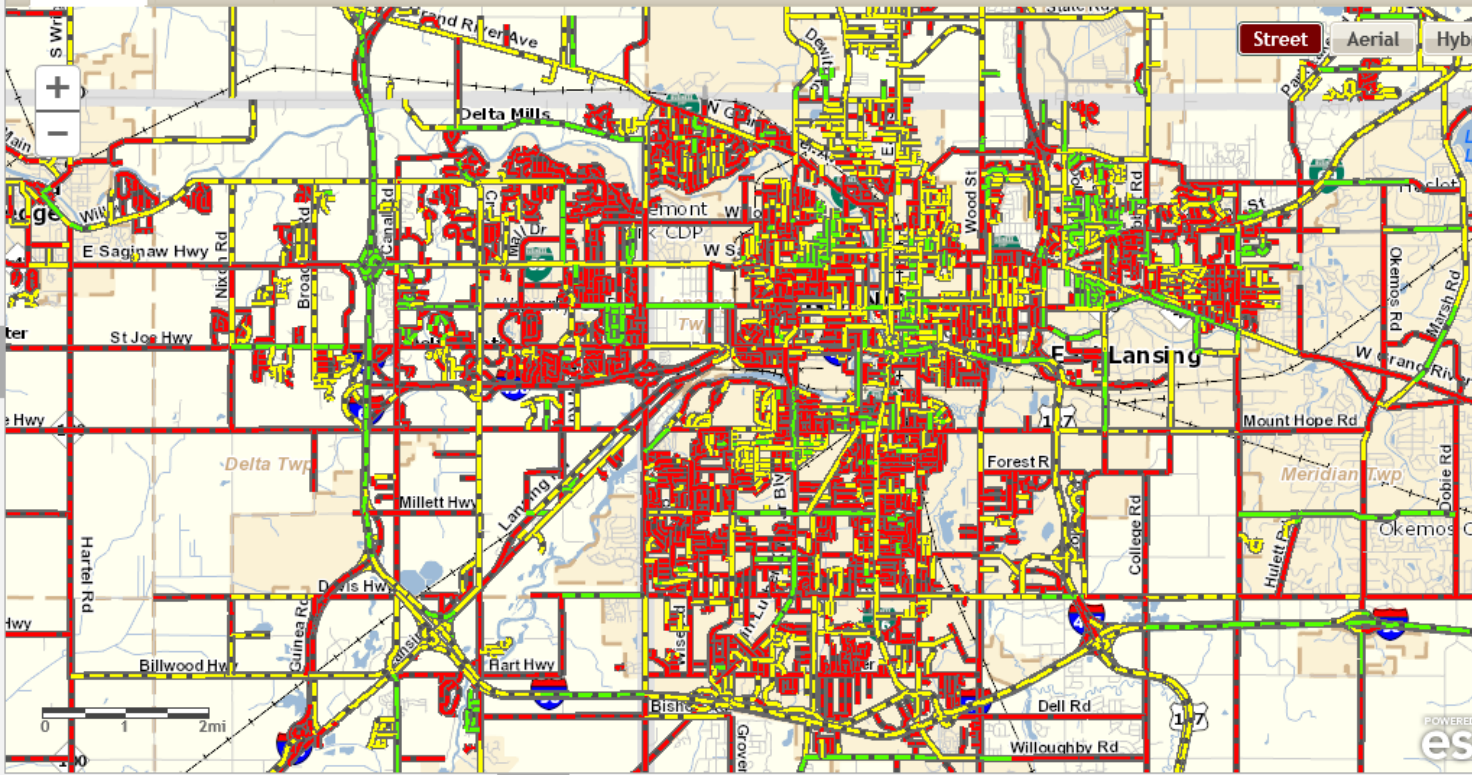
#### Welcome to the Basic Map

Welcome to the Asset Management Road and Bridge Condition Interactive Map

#### Instructions


-  Quickly zoom the map.
-  Click a point on the map to view \_\_\_\_ information
-  Select Points and Segments to \_\_\_\_
-  Choose features you want to view on the map.
-  A key to symbolism used on a map, containing swatches of symbols with descriptions.
-  View results from the place search when more than one result is found.
-  Navigate full, previous or next extent.
-  Review standard map navigation


Map Results



Navigation In

Street Aerial Hyb



[Michigan.gov](#) |  Feedback

[Privacy Policy](#) | [Link Policy](#) | [Accessibility Policy](#) | [Security Policy](#)

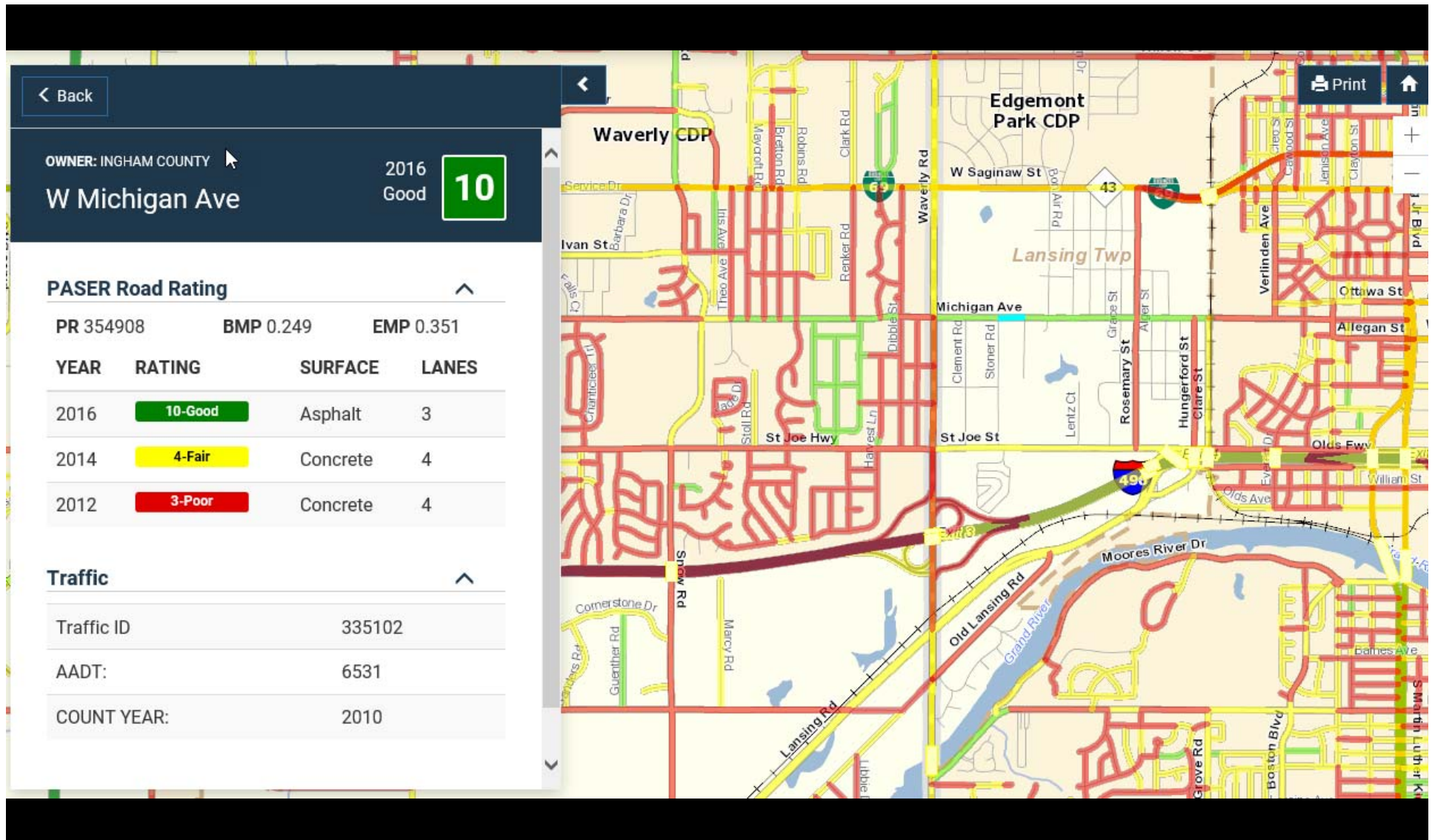
Copyright © 2001-2017 State of Michigan





# Michigan Transportation Asset Management Council

## Interactive Map 2.0





Michigan  
Transportation Asset  
Management Council

## Interactive Map 2.0

### **Interactive Map 2.0 (October)**

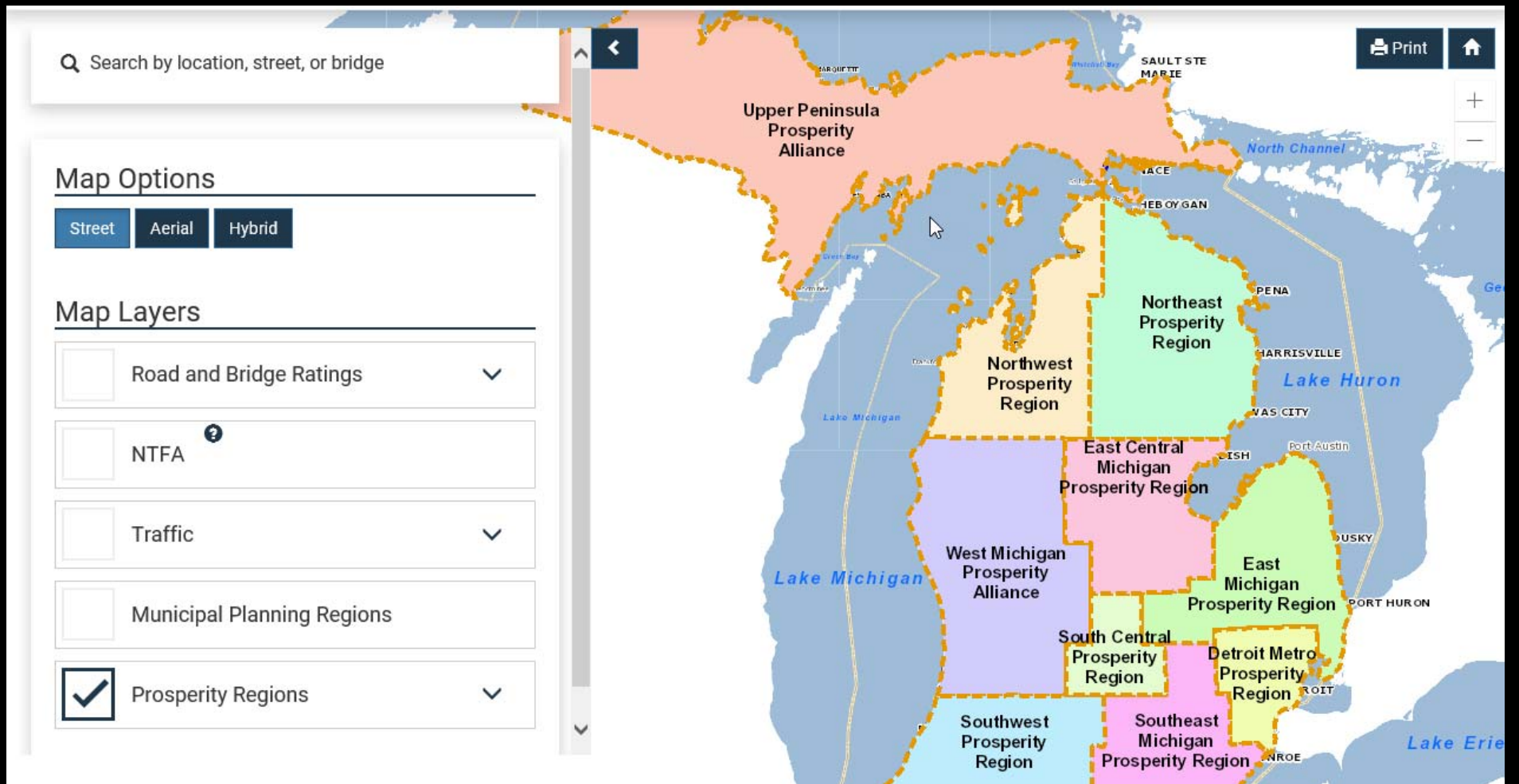
- Fully Responsive Design – Desktop, Tablet, Phone
- Intuitive Layout - no longer buried items
- Added Layers – Prosperity Regions
- Print Features – PDF, other options & light customization



Michigan  
Transportation Asset  
Management Council

# Interactive Map 2.0

## Modern look and added features



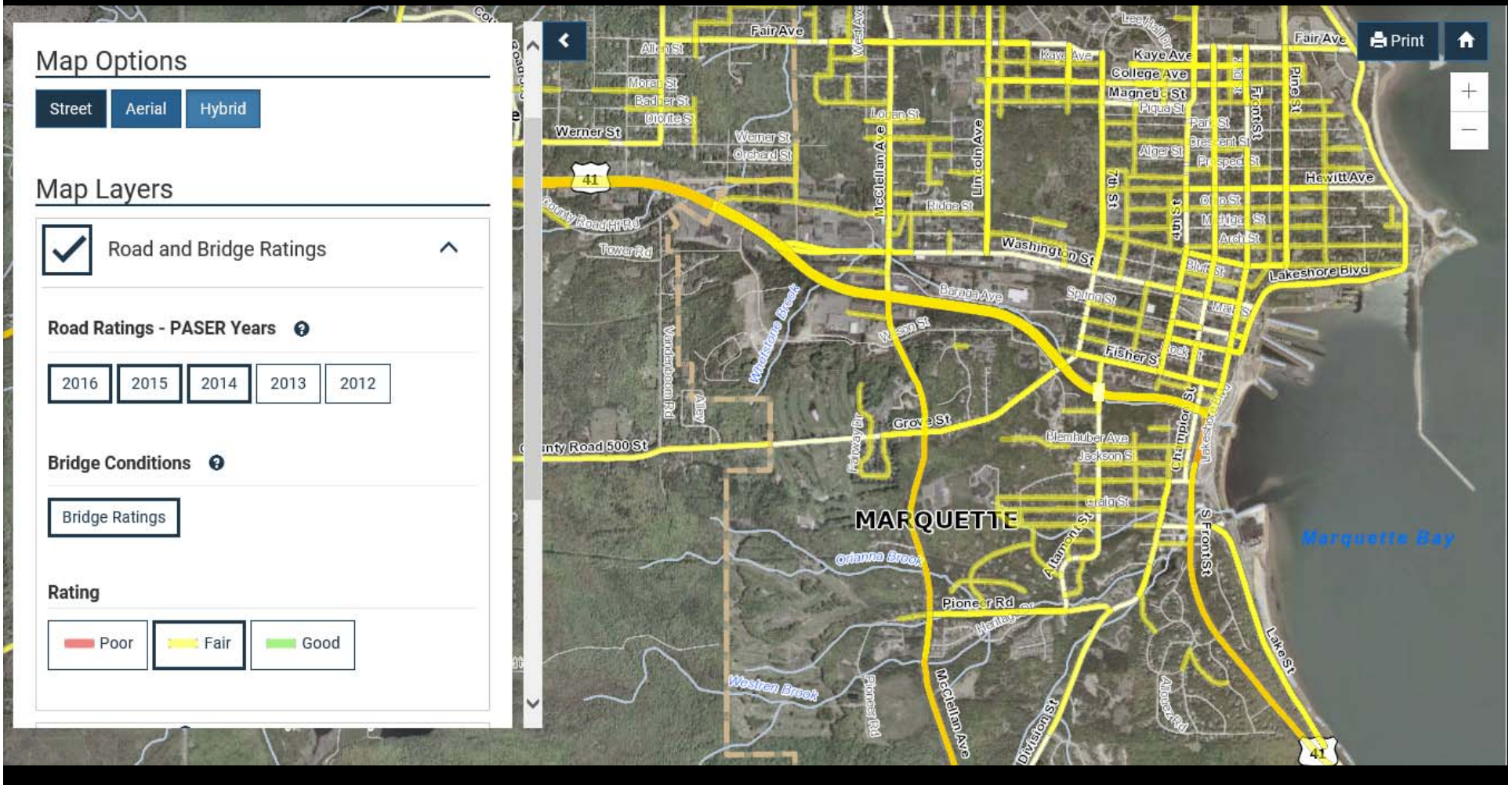




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Management Council

# Interactive Map 2.0

## Filter on PASER and Bridge Ratings





Michigan  
Transportation Asset  
Management Council

## Interactive Map 2.1

### **Interactive Map 2.1 (November/December)**

- Exporting of PASER data – Excel, Shape File
- Layers – +/- transparency can be misleading – what's an orange rating(?)
- User Feedback
- IRT Project Data Details







Michigan  
Transportation Asset  
Management Council

## Questions & Feedback

Roger Belknap – TAMC  
Coordinator

- [BelknapR@michigan.gov](mailto:BelknapR@michigan.gov)
- (517) 373-2249

Dave Jennett – TAMC, AMPD

- [JennettD@michigan.gov](mailto:JennettD@michigan.gov)
- (517) 335-4583

Bill McEntee – TAMC Council  
Vice-Chair

- [BMcEntee@rcoc.org](mailto:BMcEntee@rcoc.org)
- County Road Association

TAMC IRT Helpdesk – CSS

- [CSS-TAMC@mi.gov](mailto:CSS-TAMC@mi.gov)
- (517) 373-7910

TAMC Website: [www.Michigan.gov/TAMC](http://www.Michigan.gov/TAMC)



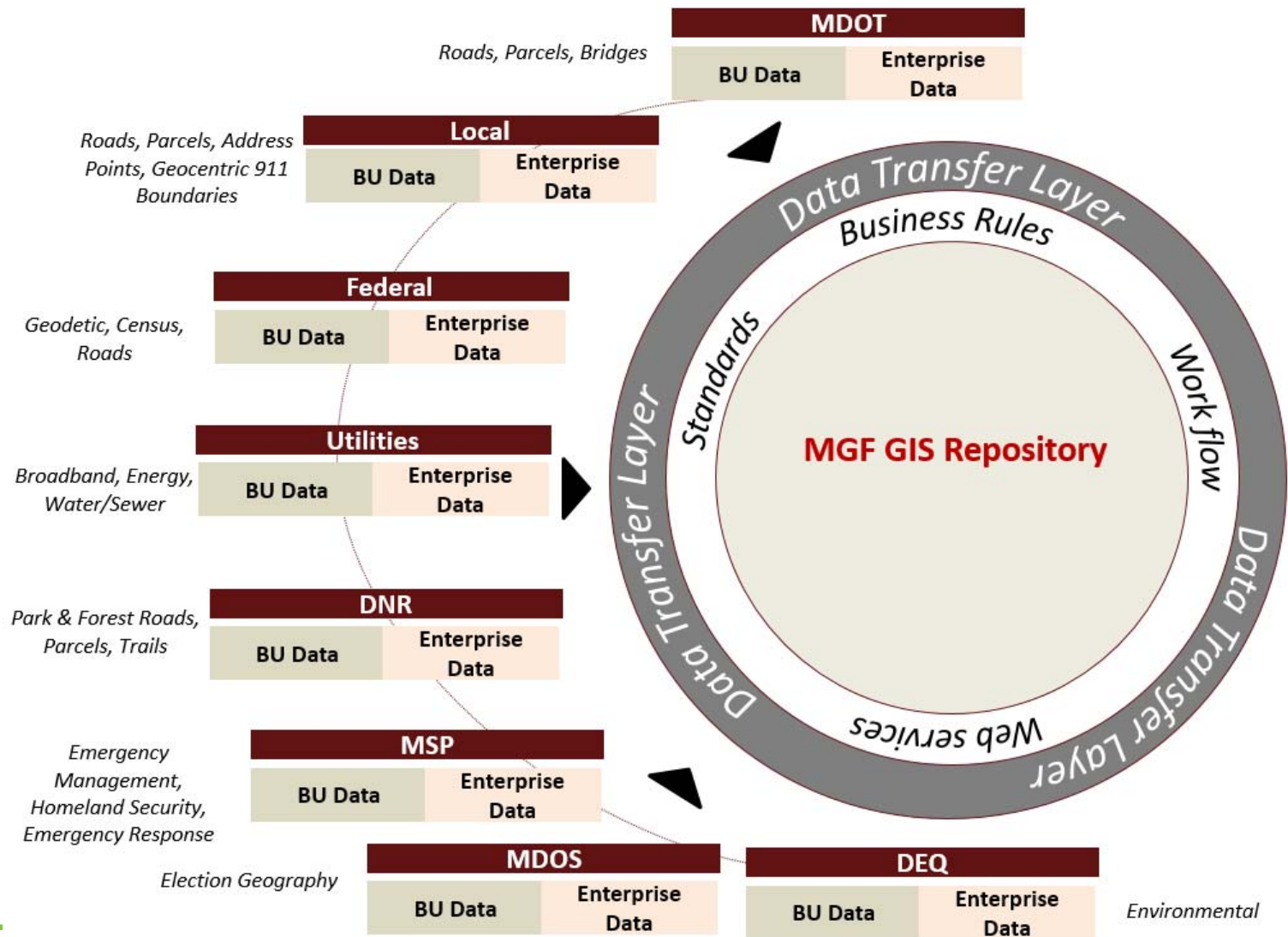
# The Next Generation of the Michigan Geographic Framework

Mark Holmes, GISP

# Reasons for Change

- Current MGF technology is end of life
  - Older programming technology
  - No longer being supported through new version releases
  - Delivery generation tools use old technology and data formats
- Data stewards use their own editing tools to manage their authoritative data then provide changes back to MGF GIS repository
  - E.G. MDOT implementing ESRI Roads and Highways
  - E.G. ArcGIS Editing, Collector App
- Leverage Server Oriented Architecture to provide access to MGF data more frequently

# MGF Federated System

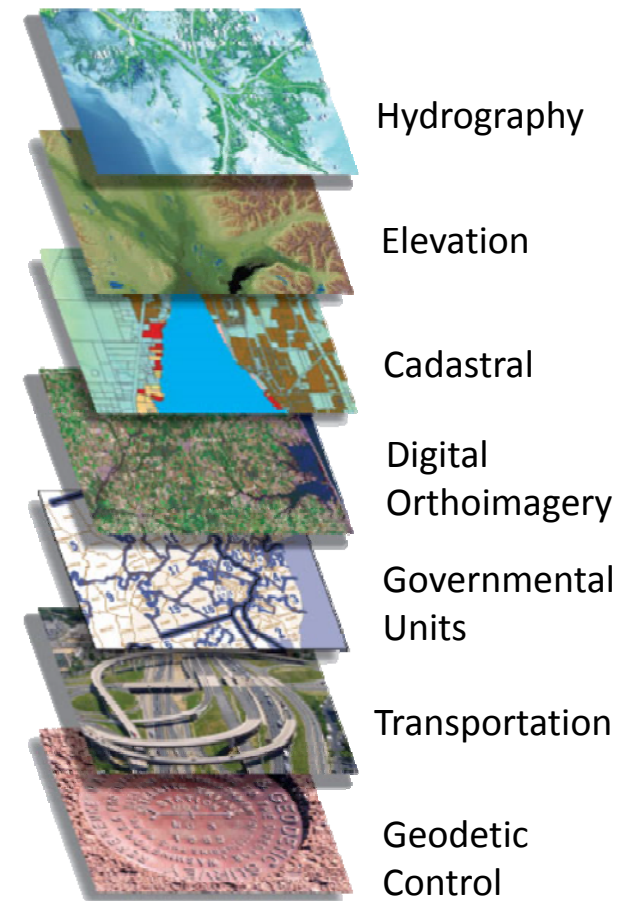


**EIM - Governance, Data Classification, Data Sharing**

# National Spatial Data Infrastructure

- MGF Modeled on National Spatial Data Infrastructure (NSDI) framework
- NSDI 7 key data themes
- Addresses added as 8<sup>th</sup> in 2016
- National State Geographic Information Council Key Initiative – Local-State-Federal Authoritative Data Flow
- Data quality and consistency

FGDC.GOV  
FEDERAL GEOGRAPHIC DATA COMMITTEE



# Key Requirements

- Business Rule Engine
  - Validation of topology across geodatabases
  - Detect change in geometry and attributes
  - Validate attribute requirements
  - Business rules can be executed from multiple editing platforms
- Workflow Management
  - Notify data stewards of edits that could affect their data
  - Notify approvers of needed review
  - Flag standardization errors – route back to data steward
  - Track data validation and approvals through process to publication



# Today and Tomorrow

MGF Today	MGF Next
One editing environment	Distributed editing
Annual versions	More frequent versions
Cannot load bulk features	Can integrate bulk uploads
Data products are produced as exported files	Service oriented architecture – connect to a service to get updates
Highly customized	COTS
MGF data layers publicly available	Geospatial repository to manage publication version of data based on data classification, open and internal

# Vendors



## Technology



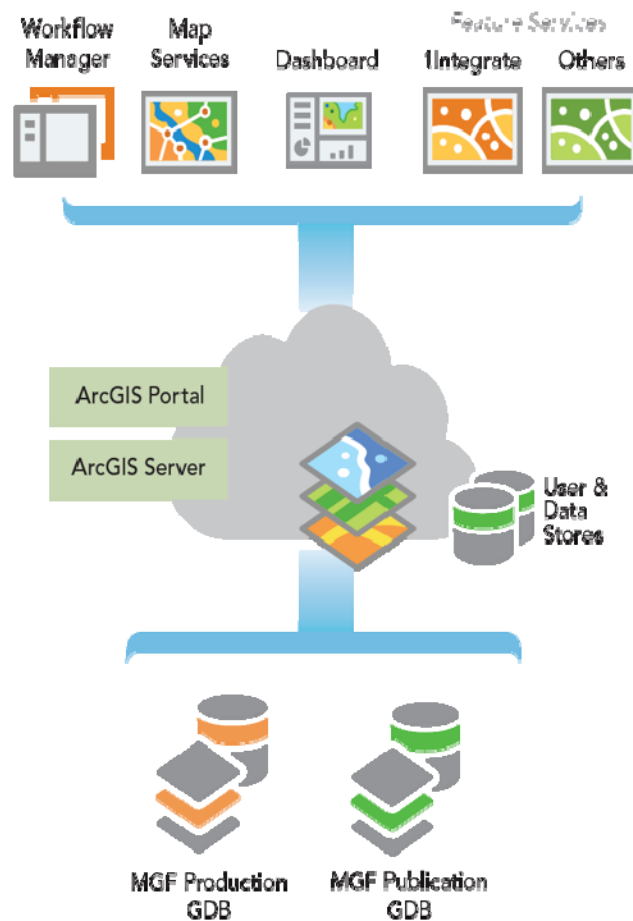
ArcGIS Workflow  
Manager

# Project Tasks

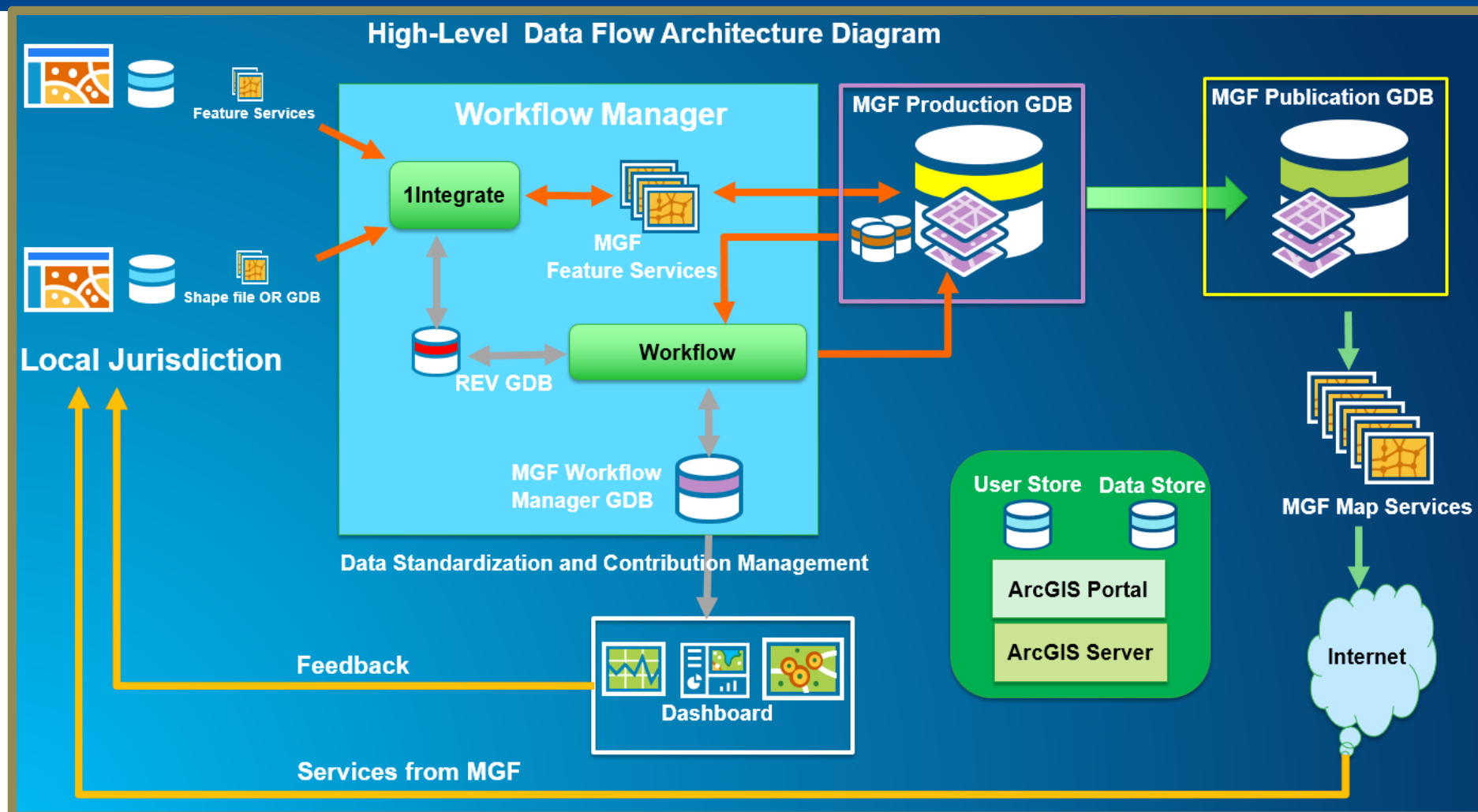
- July 2017 – Summer/Fall 2018
  - Geodatabase Model Design
  - Business Rules Design
  - Workflow Management Design
  - System Architecture Design
  - Installation and Configuration
  - Training
  - Documentation
  - Maintenance and Support
  - Knowledge Transfer

# High-Level System Design

State of Michigan Geographic Framework Update—Conceptual Platform Diagram

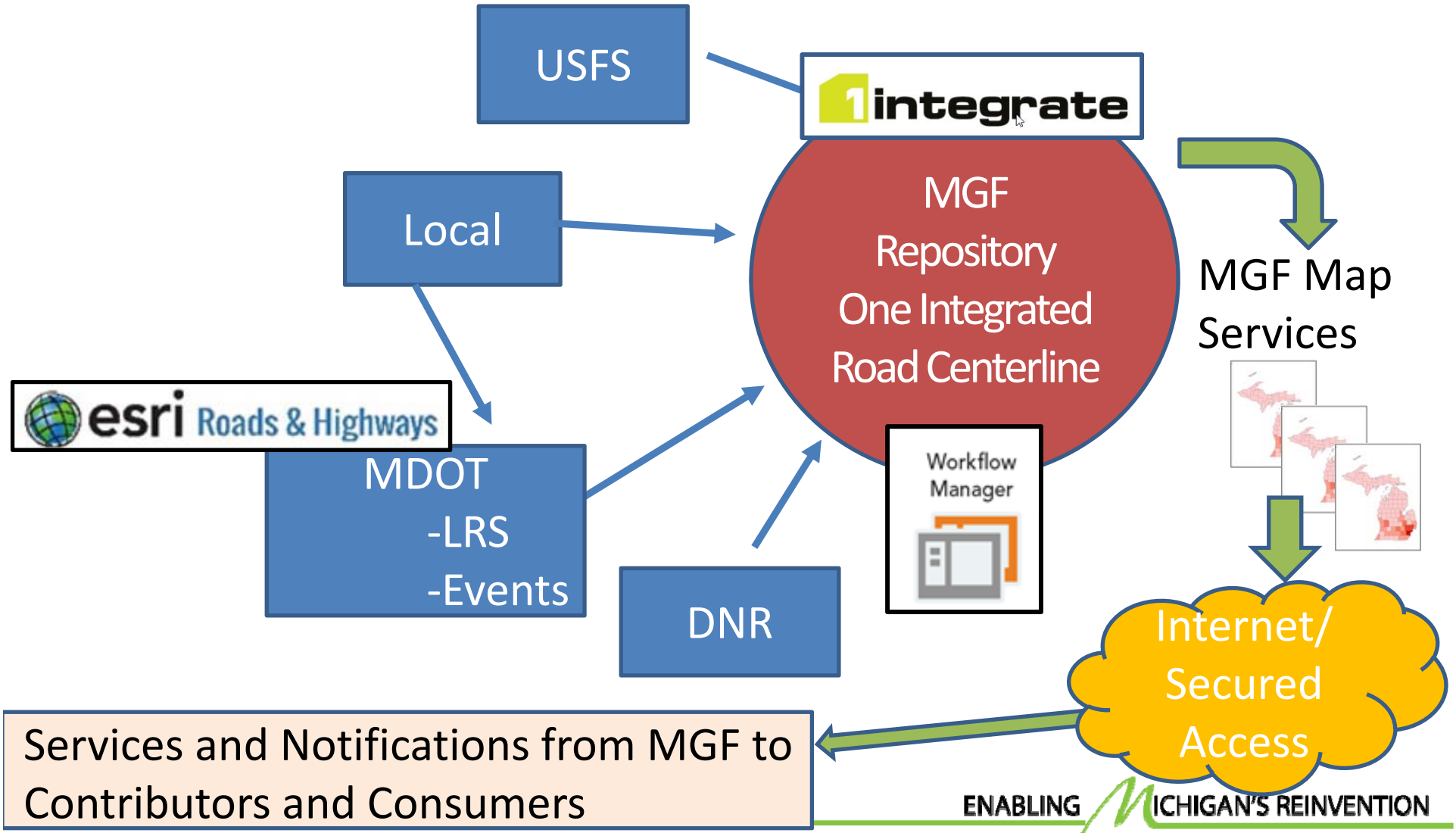


# Automated Data Upload Process

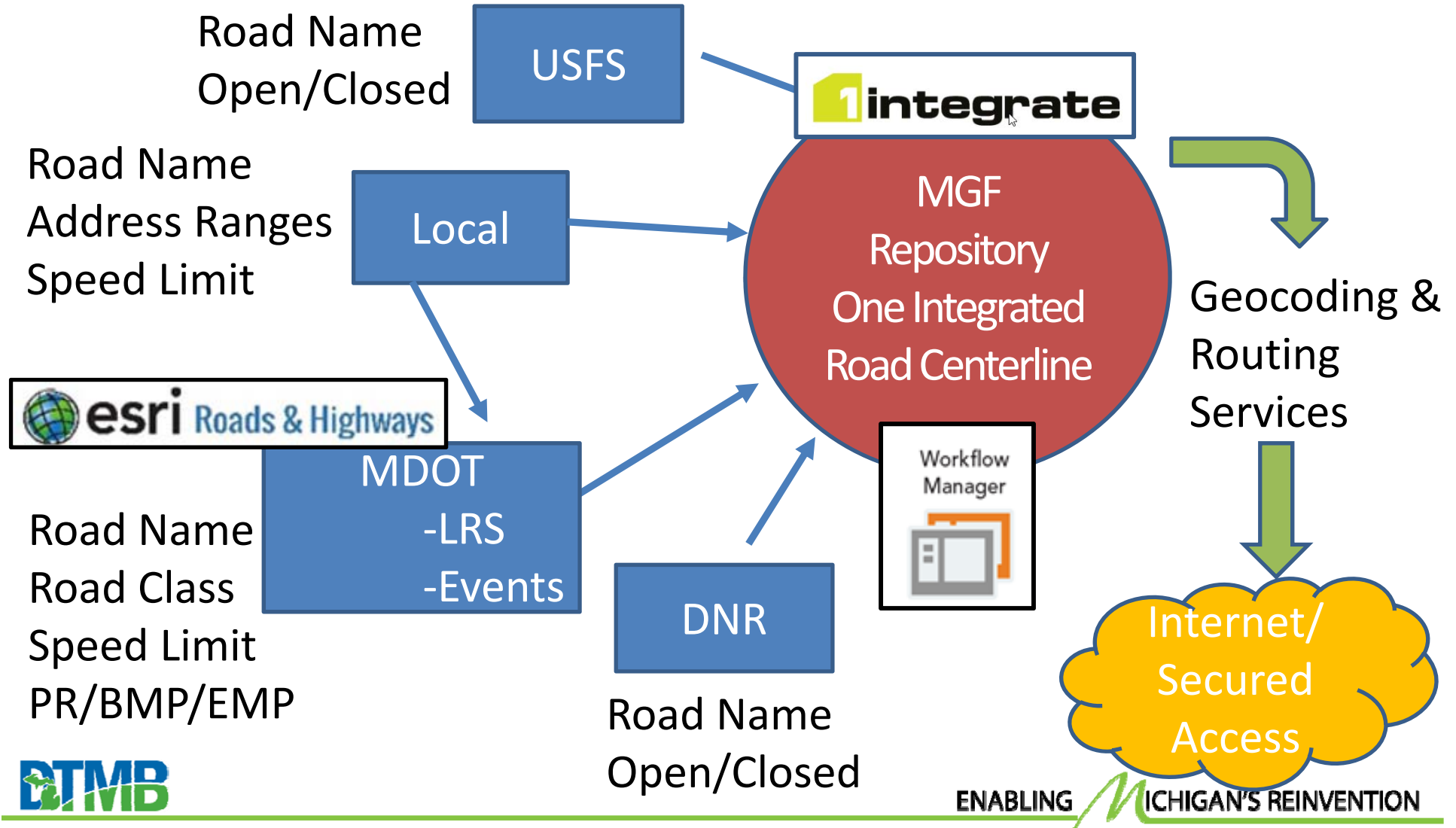




# MGF Road Centerline Data Flow



# MGF Road Centerline Data Flow



# On-Boarding Contributors/Authoritative Data

- New Layer/Attributes
- Establish Data Design Considerations
- Establish Data Classification
- Metadata
- Determine Business Rules
- Determine Workflows
- Notifications

# New Features/Benefits

- Streamlined processes to integrate data
- Validation tools and reporting
- Validate against data managed by others
- Nightly updates
- Access to other data and web services
- Opportunity for geocoding and routing services
- Overall data accuracy
- Reduce number of requests for data and time to gather data (e.g. Census Programs) – push to systems

# Thank you!

Mark Holmes [holmesm3@Michigan.gov](mailto:holmesm3@Michigan.gov)

517-373-7910



# Traffic Monitoring

**Melissa Carswell**

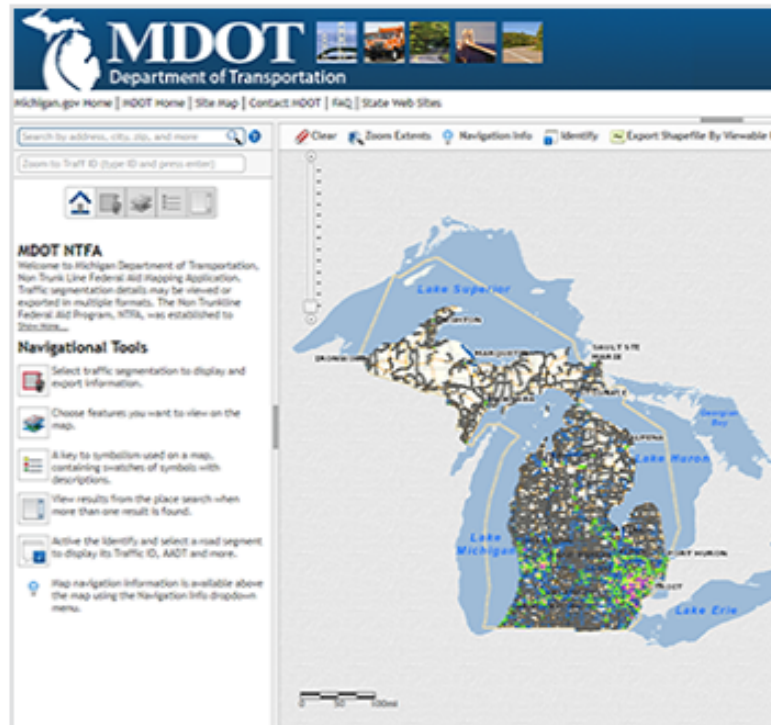
Supervisor of the Travel Information Unit

# Average Annual Daily Traffic (AADT)

## Annual Average Daily Traffic (AADT) Maps



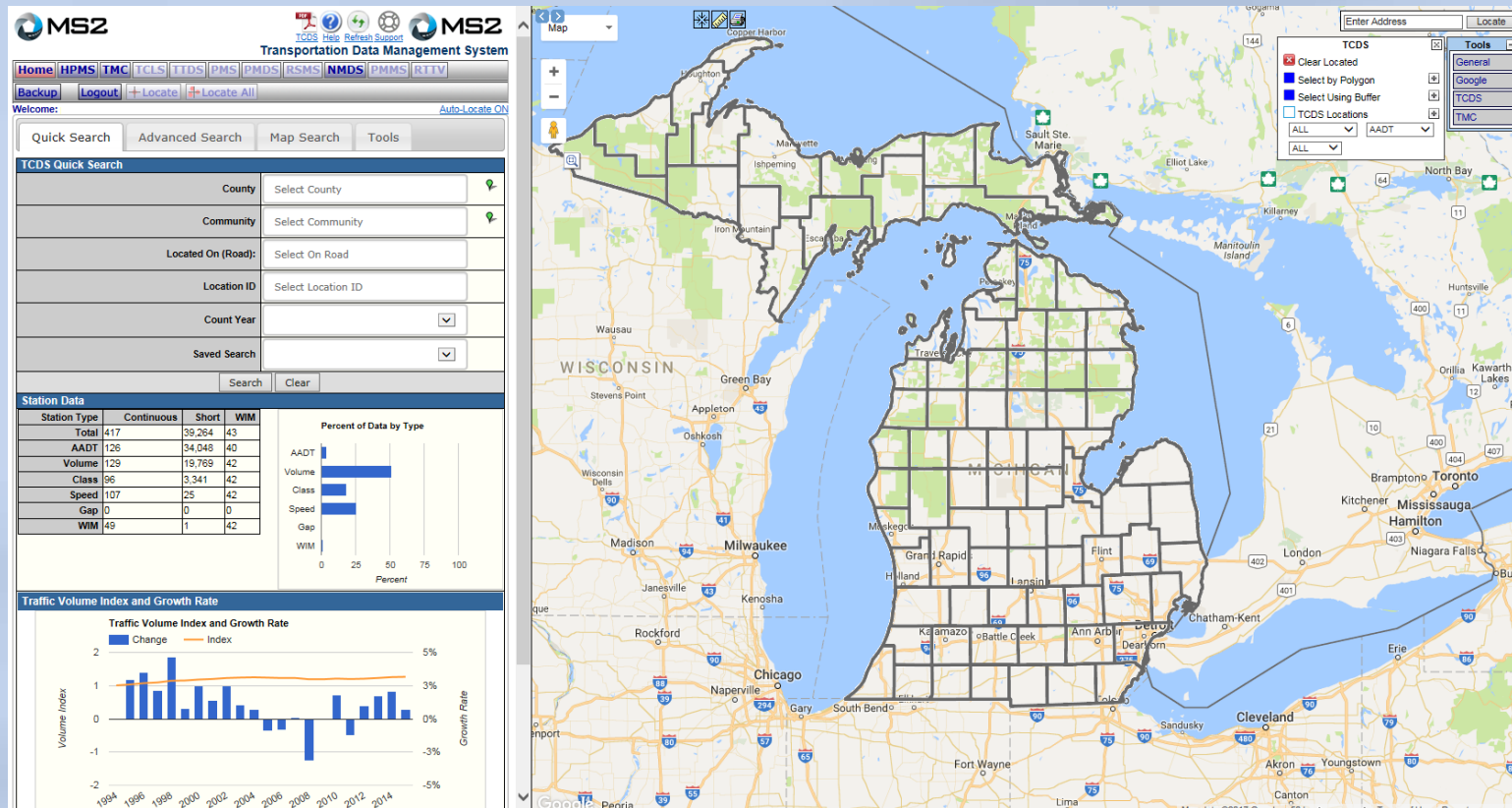
Click to view interactive Trunkline AADT map



Click to view interactive Non-trunkline AADT map

[www.Michigan.gov/adtdmaps](http://www.Michigan.gov/adtdmaps)

# Traffic Data Management System (TDMS)



Available soon

# Traffic Data Management System (TDMS)



Traffic Volume Index and Growth Rate

# Traffic Data Management System (TDMS)

Record 1 of 1 Goto Record

Location ID	25-2077	MPO ID	
Type	SPOT	HPMS ID	
On NHS	No	On HPMS	
LRS ID	0566510	LRS Loc PT	10.163
SF Group	1	Route Type	
AF Group	1	Route	
GF Group		Active	Yes
Class Dist Grp		Category	
WIM Group			
QC Group	Default		
Functl Class	(4) Minor Arterial	Milepost	
Located On	MA-100		
Loc On Alias	0.1 MILE NORTH OF MCMILLAN STREET		
PR	MP	PT	
566510	10.163		
More Detail			

STATION DATA

Directions: 2-WAY NB SB

Year	AADT	DHV 30	K %	D %	PA	BC	Sec
2017	7,194						
2015	6,876		12	65			MDOT
2013	7,013	842	12	65			CNT
2012	6,923	831	12	65			CNT
2011	7,071	806	11	65			CNT

1-5 of 22

Travel Demand Model

Model Year	Model AADT	AM PPV	AM PPV	MD PPV	MD PPV	PM PPV	PM PPV	NT PPV	NT PPV

VOLUME COUNT

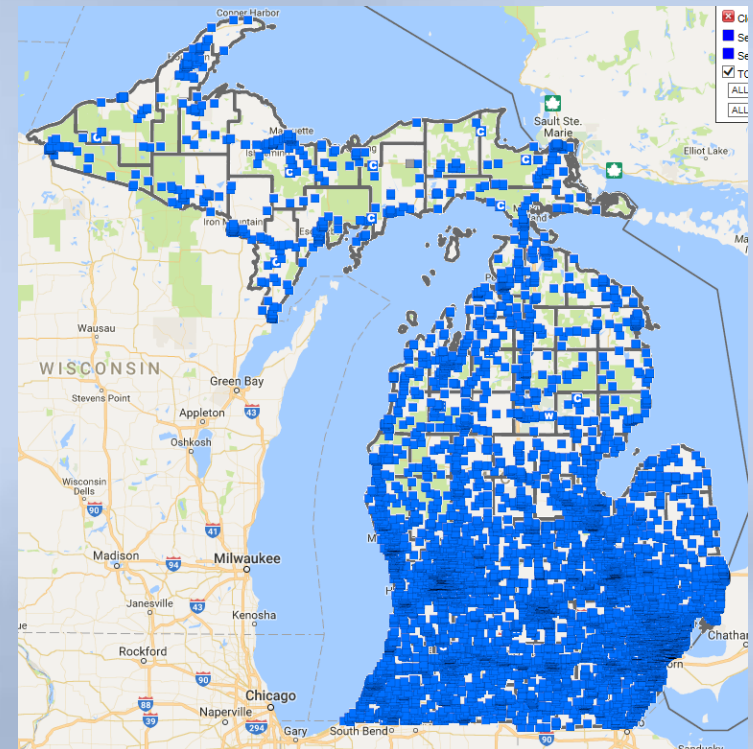
Date	Int	Total	Status
Tue 5/2/2017	15	8,271	✓
Mon 5/1/2017	15	7,840	✓
Wed 10/1/2014	60	6,328	✓
Tue 9/30/2014	60	7,644	✓
Wed 5/16/2012	60	8,078	✓
Tue 5/15/2012	60	8,035	✓
Wed 5/20/2009	60	8,186	✓
Tue 5/16/2009	60	8,141	✓
Wed 6/27/2007	60	7,649	✓
Tue 6/26/2007	60	7,648	✓

1-10 of 17

VOLUME TREND

Year	Annual Growth
2017	2%
2015	-14%
2014	14%
2013	1%
2012	-2%
2011	-2%
2010	3%
2009	17%
2008	-5%
2007	-11%













1-10 of 22






## Additional Features and Layout



# Traffic Data Management System (TDMS)

VOLUME COUNT				View All	Graphs/Rpts
	Date	Int	Total	Status	
	Tue 5/2/2017	15	8,271	✓	
	Mon 5/1/2017	15	7,840	✓	
	Wed 10/1/2014	60	8,328	✓	
	Tue 9/30/2014	60	7,644	✓	
	Wed 5/16/2012	60	8,078	✓	
	Tue 5/15/2012	60	8,035	✓	
	Wed 5/20/2009	60	8,195	✓	
	Tue 5/19/2009	60	8,141	✓	
	Wed 6/27/2007	60	7,649	✓	
	Tue 6/26/2007	60	7,648	✓	
				1-10 of 17	

VOLUME TREND 		 Graph
Year	Annual Growth	
2017	2%	
2015	-14%	
2014	14%	
2013	1%	
2012	-2%	
2011	-2%	
2010	3%	
2009	17%	
2008	-5%	
2007	-11%	
		1-10 of 22

New Volume Counts and Trends

# Thank You & Contacts

Melissa Carswell – supervisor of Travel Information Unit  
[carswellm@Michigan.gov](mailto:carswellm@Michigan.gov) (517) 373-2662

Kevin Krzeminski – trunkline traffic  
[krzeminskik@Michigan.gov](mailto:krzeminskik@Michigan.gov) (517) 335-2274

Ed Potter – ramp and non-motorized traffic  
[pottere@Michigan.gov](mailto:pottere@Michigan.gov) (517) 335-2942

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# Model Inventory of Roadway Elements Fundamental Data Elements and Roadsoft

Presenter: Mike Toth, MDOT  
System Monitoring and Reporting Unit  
November 1, 2017

# What is MIRE FDE?

Model  
Inventory of  
Roadway  
Elements (202)  
  
Fundamental  
Data  
Elements (38 of 202)

The screenshot displays the official website of the Federal Highway Administration's Roadway Safety Data Program. The header includes the FHWA logo and navigation links such as 'About', 'Programs', 'Resources', 'Briefing Room', 'Contact', and 'Search FHWA'. Below the header, a 'Safety' banner is visible. The main content area is titled 'ROADWAY SAFETY DATA PROGRAM' and includes a breadcrumb trail: 'FHWA Home / Safety / Roadway Safety Data Program (RSDP)'. Four circular icons represent key goals: 'Improved Data Collection and Analysis', 'More Informed Decision Making', 'Better Targeted Investments', and 'Fewer Fatalities & Serious Injuries'. The central section, 'What is MIRE?', explains that MIRE is a recommended listing of roadway inventory and traffic elements critical to safety management. It states that MIRE is intended as a guideline to help transportation agencies improve their roadway and traffic data inventories. The text further mentions that MAP-21 reauthorizing legislation identifies the need for improved and more robust safety data for better safety analysis to support the development of State's Strategic Highway Safety Plans (SHSPs) and their Highway Safety Improvement Programs (HSIPs). Among these new analytic tools are the Highway Safety Manual, the Interactive Highway Safety Design Model (IHSDM), AASHTO's Safety Analyst™, and AASHTO's NCHRP Series 500 Data and Analysis Guide, which all require crash, roadway, and traffic data to achieve the most accurate results. To the right of the text is a photograph of a road with a yellow diamond-shaped warning sign. Below the text, a link with a plus-minus icon invites users to 'Click to expand and learn more'. A table of contents follows, listing 'About MIRE', 'MIRE Data Elements', 'Integrating MIRE', 'Resources', and 'Contact Us', each with a corresponding plus-minus icon for expandability.

U.S. Department of Transportation  
Federal Highway Administration

About Programs Resources Briefing Room Contact Search FHWA

Safety

About Office of Safety Programs Initiatives Resources Contact

Search Safety

FHWA Home / Safety / Roadway Safety Data Program (RSDP) eSubscribe

ROADWAY SAFETY DATA PROGRAM

RSDP Home | About RSDP | Program Contact

Improved Data Collection and Analysis

More Informed Decision Making

Better Targeted Investments

Fewer Fatalities & Serious Injuries

### What is MIRE?

MIRE, the Model Inventory of Roadway Elements, is a recommended listing of roadway inventory and traffic elements critical to safety management. MIRE is intended as a guideline to help transportation agencies improve their roadway and traffic data inventories. It provides a basis for a standard of what can be considered a good/robust data inventory and helps agencies move towards the use of performance measures to assess data quality. The Moving Ahead for Progress in the 21st Century (MAP-21) reauthorizing legislation identifies the need for improved and more robust safety data for better safety analysis to support the development of State's [Strategic Highway Safety Plans \(SHSPs\)](#) and their [Highway Safety Improvement Programs \(HSIPs\)](#). Among these new analytic tools are: the [Highway Safety Manual](#), the [Interactive Highway Safety Design Model \(IHSDM\)](#), [AASHTO's Safety Analyst™](#), as well as [AASHTO's NCHRP Series 500 Data and Analysis Guide](#), which all require crash, roadway, and traffic data to achieve the most accurate results.

Click to expand and learn more

About MIRE	
MIRE Data Elements	
Integrating MIRE	
Resources	
Contact Us	

**TABLE 1—MIRE FUNDAMENTAL DATA ELEMENTS FOR NON-LOCAL (BASED ON FUNCTIONAL CLASSIFICATION) PAVED ROADS**

<b>MIRE name (MIRE No.)<sup>1</sup></b>	
<b>Roadway segment</b>	<b>Intersection</b>
Segment Identifier (12)	Unique Junction Identifier (120).
Route Number (8) <sup>2</sup>	Location Identifier for Road 1 Crossing Point (122).
Route/street Name (9) <sup>2</sup>	Location Identifier for Road 2 Crossing Point (123).
Federal Aid/Route Type (21) <sup>2</sup>	Intersection/Junction Geometry (126).
Rural/Urban Designation (20) <sup>2</sup>	Intersection/Junction Traffic Control (131).
Surface Type (23) <sup>2</sup>	AADT (79) [for Each Intersecting Road].
Begin Point Segment Descriptor (10) <sup>2</sup>	AADT Year (80) [for Each Intersecting Road].
End Point Segment Descriptor (11) <sup>2</sup>	
Segment Length (13) <sup>2</sup>	
Direction of Inventory (18)	Unique Approach Identifier (139).
Functional Class (19) <sup>2</sup>	
Median Type (54)	
Access Control (22) <sup>2</sup>	
One/Two-Way Operations (91) <sup>2</sup>	Interchange/Ramp.
Number of Through Lanes (31) <sup>2</sup>	Unique Interchange Identifier (178).
Average Annual Daily Traffic (79) <sup>2</sup>	Location Identifier for Roadway at Beginning Ramp Terminal (197).
AADT Year (80) <sup>2</sup>	Location Identifier for Roadway at Ending Ramp Terminal (201).
Type of Governmental Ownership (4) <sup>2</sup>	Ramp Length (187).
	Roadway Type at Beginning Ramp Terminal (195).
	Roadway Type at Ending Ramp Terminal (199).
	Interchange Type (182).
	Ramp AADT (191). <sup>2</sup>
	Year of Ramp AADT (192). <sup>2</sup>
	Functional Class (19). <sup>2</sup>
	Type of Governmental Ownership (4). <sup>2</sup>

<sup>1</sup>Model Inventory of Roadway Elements—MIRE, Version 1.0, Report No. FHWA-SA-10-018, October 2010, [http://safety.fhwa.dot.gov/tools/data\\_tools/mirereport/mirereport.pdf](http://safety.fhwa.dot.gov/tools/data_tools/mirereport/mirereport.pdf).



# Why?



# USC Title 23 CFR Part 924

- Federal Legislation
- MAP-21 - Moving Ahead for Progress in the 21<sup>st</sup> Century
- FAST Act - Fixing Americas Surface Transportation Act
- § 924.17 MIRE FDE
  - Have access to a complete collection of MIRE FDE on all public roads by September 30, 2026

# How were the MIRE FDE Chosen?

## Key Principles in MAP-21 & FAST Act

- Highway Safety Improvement Program (HSIP):
  - The goal is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. **“The Benefit!”**
  - Requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

# Why Roadsoft as a tool?

## Goals

- Agency access to a familiar tool
- A tool to collect MIRE FDE data
- Store, query, and report data on the road network
- Safety analysis with data at state and local level
- Exchange and transfer data to a data repository

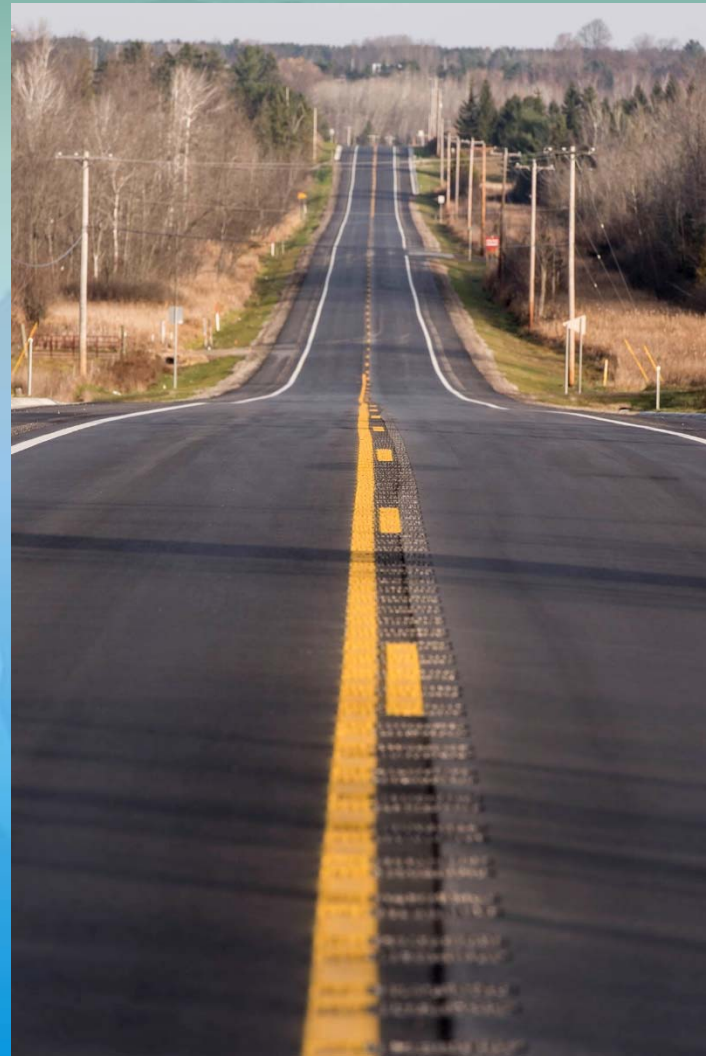
## Roadsoft

- Used by over 400 road agencies and TAMC
- Roadsoft has this ability, **modify for MIRE FDE**
- Roadsoft has this ability, **modify for MIRE FDE**
- **Performs safety analysis at state and local levels**
- **Research and modify Roadsoft**

# Good News, We Have Most MIRE FDE

## Data Still Needed

- Route
- Surface type
- Direction of Inventory
- Median Type
- Access control
- One/Two Way
- Through Lanes
- AADT and year
- Intersection geometry
- Intersection control

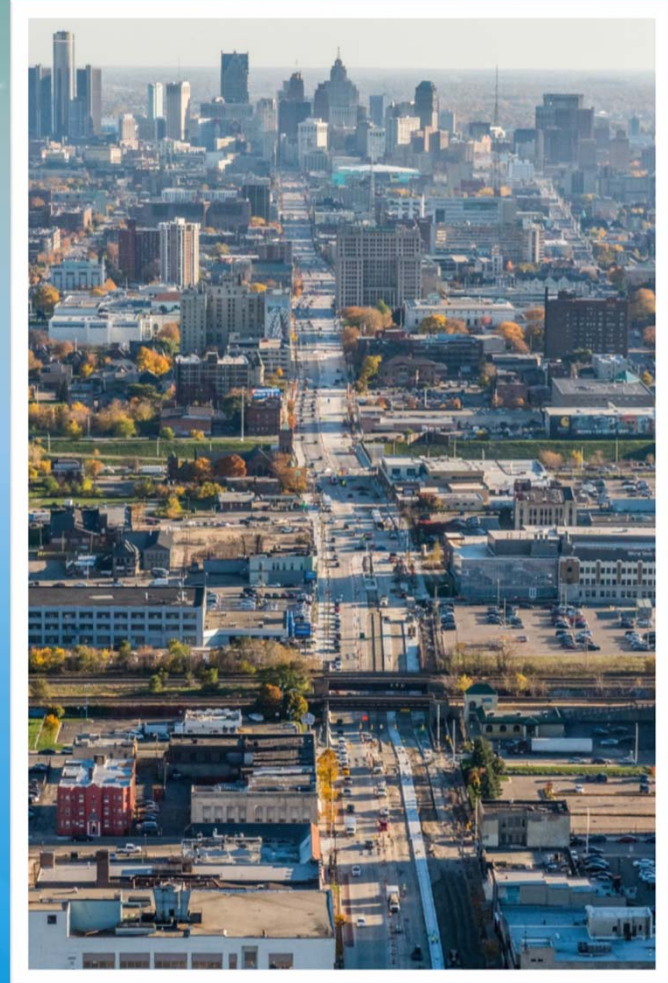




# Modifications to Roadsoft for MIRE FDE

## Roadsoft modification

- Surface type
- Median Type
- Access Control
- One/Two Way
- Through Lanes
- Intersection geometry
- Intersection control





# Modifications to the Roadsoft Tool in Collection

**Surface**

Surface SubType	Asphalt-Standard (Asphalt)
<b>MIRE Surface Type</b>	Bituminous
Current PASER Rating	Undefined
RSL	Unpaved
Confidence	Bituminous
YLR	JPCP - Jointed Plain Concrete Pavement
<b>PASER Rating/Treat</b>	JRCP - Jointed Reinforced Concrete
	CRCP - Continuously Reinforced Concrete
	Asphalt-Concrete Overlay over Existing AC
	AC Overlay over Existing Jointed Concrete
	Bit Overlay over Existing CRCP
	Unbonded Jointed Concrete Overlay on PCC
	Unbonded CRCP Overlay on PCC
	Bonded PCC Overlays on PCC
	9 - Excellent
	6 - Good
	2 - Very Poor

**MIRE Surface Type**  
Model Inventory of Roadway Elements (MIRE) Surface Type

**Edit Surface Subtype**

**Surface Subtype Details**

Surface Subtype	Concrete-Standard
<b>MIRE Surface Type</b>	JPCP - Jointed Plain Concrete Pavement
Abbreviation	Undefined
Road Width	Unpaved
Left Shoulder Width	Bituminous
Right Shoulder Width	JPCP - Jointed Plain Concrete Pavement
Curve	JRCP - Jointed Reinforced Concrete
	CRCP - Continuously Reinforced Concrete
	Asphalt-Concrete Overlay over Existing ...
	AC Overlay over Existing Jointed Concrete
	Bit Overlay over Existing CRCP
	Unbonded Jointed Concrete Overlay on ...
	Unbonded CRCP Overlay on PCC
	Bonded PCC Overlays on PCC

# Modifications to the Roadsoft Tool in Collection

Intersection Legs

Dir	MRNo	Bmp	Emp	Name	CtrlSec	CSBmp	CSEmp
NW	4709	0.000	0.215	Howard St	0	0.000	0.000
SE	4709	0.215	0.566	Howard St	0	0.000	0.000
NE	3391454	0.000	0.098	Valley Dr	0	0.000	0.000
N	3392989	0.000	0.213	Howard St	0	0.000	0.000

Current Intersection

Intersection Name	Valley Dr & Howard St
Pt ID	39007045
Geometry	T-Intersection
Traffic Control	Undefined
Maintained By	No
Memo	
Legacy Data	
Intersection Type	Three Leg



# Modifications to the Roadsoft Tool in Intersection for Safety Analysis

Share - Nick Koszykowski

Roadsoft v2017.11 \*\*\*PRE RELEASE\*\*\* : Alcona (County)

File TAMC Asset Management Safety Analysis Reporting LDC Tools Settings Help

Connection: [RS\_AlconaDEMO] on [WEBINAR-LEFT\TDG2014] as Admin (FW17)

Map Intersection Module Road Module

**Selected Intersections**

Intersection Name	Pt ID	Type	Traffic Control
US 23 & E Trask Lake Rd	1004129	Cross-Intersection (4 legs)	Undefined

**Intersection Legs**

Dir	PRNo	Bmp	Emp	Name	OrtSec	CSBmp	CSEmp
S	1725704	11.990	12.494	US 23	1052	1.564	2.068
N	1725704	12.494	13.081	US 23	1052	2.068	2.432
W	1728506	0.000	0.700	E Trask Lake Rd	0	0.000	0.000
E	1728506	0.700	0.901	E Trask Lake Rd	0	0.000	0.000

**Current Intersection**

Intersection Name: US 23 & E Trask Lake Rd  
Pt ID: 1004129  
Geometry: Cross-Intersection (4 legs)  
Traffic Control: Undefined  
Maintained By: T-Intersection  
Memo: Y-Intersection  
Cross-Intersection (4 legs)  
5+ Legs  
Roundabout  
Other circular (rotaries, traffic circles)

**Legacy Data**

Intersection Type

Geometry: Cross-Intersection (4 legs)  
Traffic Control: Undefined  
Maintained By: Undefined  
Memo: Uncontrolled  
2-Way Stop  
All-Way Stop  
Yield Sign  
Signalized (with ped signal)  
Signalized (without ped signal)  
Railroad crossing, gates and flashing lights  
Railroad crossing, flashing lights only  
Railroad crossing, stop-sign  
Railroad crossing, crossbucks only  
Other

**Mini-Map**

Selection Information : Road

PRNo	RoadName	Bmp	Emp	Length	SegmentName	FromDesc	ToDesc
1728506	E Trask Lake Rd	0.000	0.700	0.700	E Trask Lake Rd	Dist. To 1st. Int.	US-23
1728506	E Trask Lake Rd	0.700	0.899	0.199	E Trask Lake Rd	US-23	R x R Crossing
1725704	US 23	11.990	12.494	0.504	US 23	E Medor Rd	Trask Lake Rd.
1725704	US 23	12.494	12.881	0.387	US 23	Trask Lake Rd.	MDOT Sufficiency Split

4 selections shown on Road (1.790 centerline miles selected, 3.580 lane miles selected)

# Modifications to the Roadsoft Tool in Reporting MIRE FDE Data

## Detailed Road and Segment



Segment Name	From/To	Surface Subtype	Legal System	NFC	Seg Length (mi)		Lanes	Surface Width	Divided Dir	MIRE			
					Ctrline	Lane				Access Control	Median Type	Traf Ops	
10th St NW (426504)													
10th St NW	[0.000 - 0.073] Oakhurst to Charlotte	Asp	CtyMinSt	Local	0.073	0.146	2	28.00	Und	No Ctrl	Undivided	TwoWay	
					Total Mileage for Road: 0.073		0.146						
10th St NW (429506)													
10th St NW	[0.000 - 0.061] Broadway to Turner	Asp	CtyMinSt	Local	0.061	0.122	2	30.00	Und	No Ctrl	Undivided	TwoWay	
					Total Mileage for Road: 0.061		0.122						
10th St NW (429707)													
10th St NW	[0.000 - 0.051] Scribner to Front	Asp	CtyMinSt	Local	0.051	0.102	2	40.00	Und	No Ctrl	Undivided	TwoWay	
					Total Mileage for Road: 0.051		0.102						
11th St NW (428402)													
11th St NW	[0.184 - 0.247] Pine Ave NW to Tamarack Ave NW	Asp	CtyMinSt	Local	0.063	0.126	2	27.00	Und	No Ctrl	Undivided	TwoWay	
11th St NW	[0.308 - 0.329] Widdicomb Ave NW to Fremont Ave NW	Asp	CtyMinSt	Local	0.021	0.042	2	27.00	Und	No Ctrl	Undivided	TwoWay	
11th St NW	[0.329 - 0.370] Fremont Ave NW to Fremont Ave NW	Asp	CtyMinSt	Local	0.041	0.082	2	27.00	Und	No Ctrl	Undivided	TwoWay	
11th St NW	[0.370 - 0.415] Fremont Ave NW to Jennette Ave NW	Asp	CtyMinSt	Local	0.045	0.090	2	27.00	Und	No Ctrl	Undivided	TwoWay	
11th St NW	[0.496 - 0.557] Alpine Ave NW to McReynolds Ave NW	Asp	CtyMinSt	Local	0.061	0.122	2	27.00	Und	No Ctrl	Undivided	TwoWay	



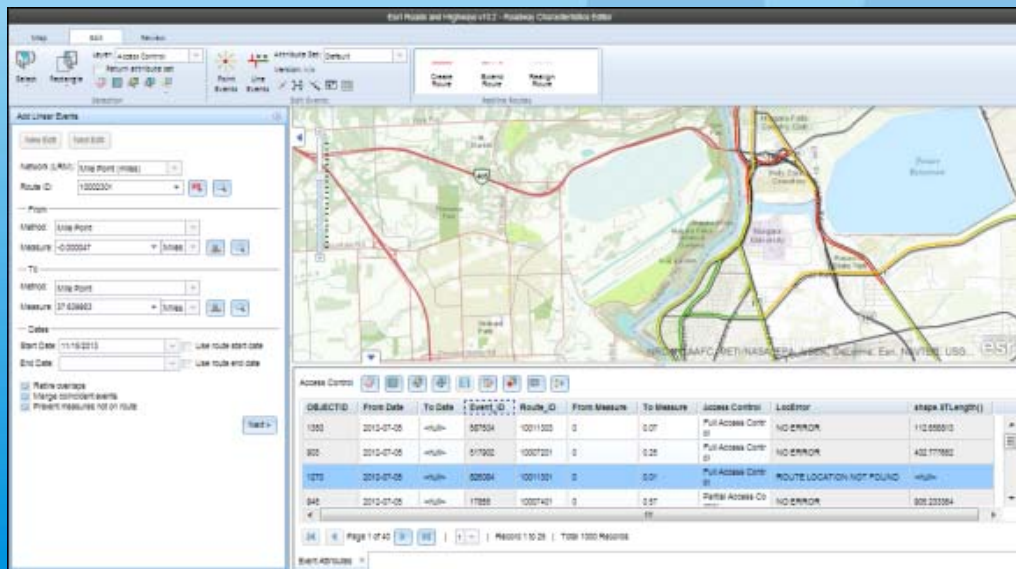
# Funds used to modify Roadsoft for MIRE FDE

- Highway Safety Improvement Program (HSIP) provides the funds through a grant process.
- In Michigan, the Traffic Records Coordinating Committee (TRCC) processes the grant(s) that meet HSIP approval. The funds are required to improve speed, accuracy, integration, accessibility, and usability of roadway data for meaningful crash analysis.



# MDOT MIRE FDE data Repository Plan

- MDOT is implementing ESRI Roads & Highways (R&H) technology
- Center for Shared Solutions (CSS) will maintain road line work
- MDOT will maintain the Advanced Linear Referencing System and Road Agency Attributes
- R&H technology will be used to create a MIRE FDE data repository that can exchange data with Roadsoft users





# MIRE FDE Oversight Group

- Jim Snell – MPO, RPO
- Jason Nordberg – MPO, MTPA
- Jon Start – MPO, TAMC
- John Egelhaaf – MPO, MAR
- Mike Toth – MDOT
- Dave Berridge – MDOT
- Andrew Netter – MDOT

# MIRE FDE Oversight Group Input

- MPO and RPO Participation should not be a given, they want inclusion in planning
- Determination of time and costs early on
- Factor in lack of resources, people, and counters
- Concern of excessive processes
- Training and jurisdictional agency participation
- Integrate collections efforts: HPMS, PASER, MIRE FDE
- Survey – data, format, completeness, counters



# Original MIRE FDE Reporting Plan Timeline

	Jan - Mar	Apr - June	July - Sep	Oct - Dec	Jan - Mar	Apr - June	July - Sep	Oct - Dec	Jan - Mar	Apr - June	July - Sep	Oct - Dec	Jan - Mar	Apr - June	July - Sep	Oct - Dec	6 years
Calendar Year	2017				2018				2019				2020				2021-2026
Fiscal Year	FY '17			FY '18				FY '19				FY '20				FY '21 - '26	
Tools and Repository:																	
Roadsoft	basic tool complete ✓																
Repository				Data Repository				Pilot and Tool/Repository Enhancements									
Pilot																	
Collection												Collection and training starts				Collection Cont.	
Pilot group activities												Determine needs, training materials, time and costs, etc.					
Survey of locals on MIRE FDE			survey														
Internal MDOT Tasks			Determine scope, vendors, contracts														

# Modified MIRE FDE Reporting Plan Timeline

	Jan - Mar	Apr - June	July - Sep	Oct - Dec	Jan - Mar	Apr - June	July - Sep	Oct - Dec	Jan - Mar	Apr - June	July - Sep	Oct - Dec	Jan - Mar	Apr - June	July - Sep	Oct - Dec	6 years
Calendar Year	2017				2018				2019				2020				2021-2026
Fiscal Year	FY '17			FY '18				FY '19				FY '20				FY '21 - '26	
Tools and Repository:																	
Roadsoft	Basic Tool Complete ✓																
Repository				Data Repository Development													
Pilot								Pilot and Tool/Repository Enhancements									
Collection												Collection and training starts				Collection Cont.	
Pilot group activities	Determine needs, training materials, time and costs, etc. →																
Survey of locals on MIRE FDE				Survey													
Internal MDOT Tasks				Determine scope, vendors, contracts													



# Questions?



# Thank you.