

# 2016 PASER Survey of Genesee County



Prepared by the Genesee County Metropolitan Planning Commission  
[www.gcmnpc.org](http://www.gcmnpc.org) | October 2016



## Table of Contents

<b>Project Overview.....</b>	<b>1</b>
PASER Road Rating System.....	1
Computer Equipment and Software.....	2
Staff Time and Training.....	3
<b>Overview of the Federal Aid Network.....</b>	<b>3</b>
Federal Aid Lane Miles by Jurisdiction.....	3
2016 Federal Aid PASER Ratings.....	4
<b>Comparison of 2012-2016 PASER Ratings.....</b>	<b>4</b>
Average PASER Rating Comparison.....	5
Major Trends.....	5
<b>PASER Ratings and Maps by Jurisdiction.....</b>	<b>6</b>
All Federal Aid Roads.....	7
Local Federal Aid Roads.....	9
State Trunklines (MDOT).....	11
Cities & Villages.....	13
Townships.....	41
<b>Asset Management Plans.....</b>	<b>77</b>
<b>Summary Charts.....</b>	<b>78</b>
PASER Ratings by Jurisdiction.....	78
PASER Ratings by Surface Type.....	78
PASER Ratings by City/Village.....	79
PASER Ratings by Township.....	80
<b>Appendix A: Additional 2015/2016 Non-Federal Aid PASER Ratings</b>	
<b>Appendix B: Concrete PASER Rating System Manual</b>	
<b>Appendix C: Asphalt PASER Rating System Manual</b>	





**The State of Michigan  
Transportation Asset Management Council  
2016 PASER Road Survey  
Genesee County**

**Project Overview:**

On July 6 through July 26, 2016, GCMPC staff, along with representatives of the Genesee County Road Commission (GCRC), City of Burton, City of Flushing, City of Mt. Morris, and the Michigan Department of Transportation (MDOT) assessed the condition of Genesee County federal aid eligible roads using the PASER road rating system as requested by the State of Michigan Transportation Asset Management Council.

**PASER Road Rating System:**

The Pavement Surface Evaluation and Rating (PASER) System was developed by the University of Wisconsin-Madison Transportation Information Center to be used as the State of Wisconsin's standard road rating system. PASER is a "windshield" road rating system that uses a 1 to 10 rating scale, with a value of 10 representing a new road and a value of 1 representing a failed road. Condition ratings are assigned by monitoring the type and amount of visual defects along a road segment while driving the segment. PASER rating charts for asphalt and concrete roads have been included with this report.

The State of Michigan Transportation Asset Management Council has requested that the information gathered in this survey be reported using the following categories:

- **PASER rating of 8-10, "Good" condition, requires Routine Maintenance.** Routine maintenance is the day-to-day maintenance activities that are scheduled, such as street sweeping, drainage clearing, gravel shoulder grading and sealing cracks to prevent standing water and water penetration.



- PASER rating of 5-7, “Fair” condition, requires Capital Preventive Maintenance.** Capital preventive maintenance (CPM) is a planned set of cost effective treatments to an existing roadway system that protect the pavement structure, slow the rate of pavement deterioration and/or correct pavement surface deficiencies. Surface treatments are targeted at pavement surface defects primarily caused by the environment and by pavement material deficiencies. Potential treatments include partial depth joint repairs, seal coating, and resurfacing.



- PASER rating of 1-4, “Poor” condition, requires Structural Improvements.** This category includes work which addresses the structural integrity of a road, such as full depth repairs, a major overlay or reconstruction.



### Computer Equipment and Software:

Staff collected data using a laptop computer with the RoadSoft GIS Laptop Data Collector 7.10 software loaded. RoadSoft GIS is an asset management software package created and distributed free of charge by the Michigan Technological University’s Center for Technology and Training. The current version of the program was designed with a special module to collect PASER rating data. A GPS unit was connected to the laptop to track position and locate road segments.

### Staff Time and Training:

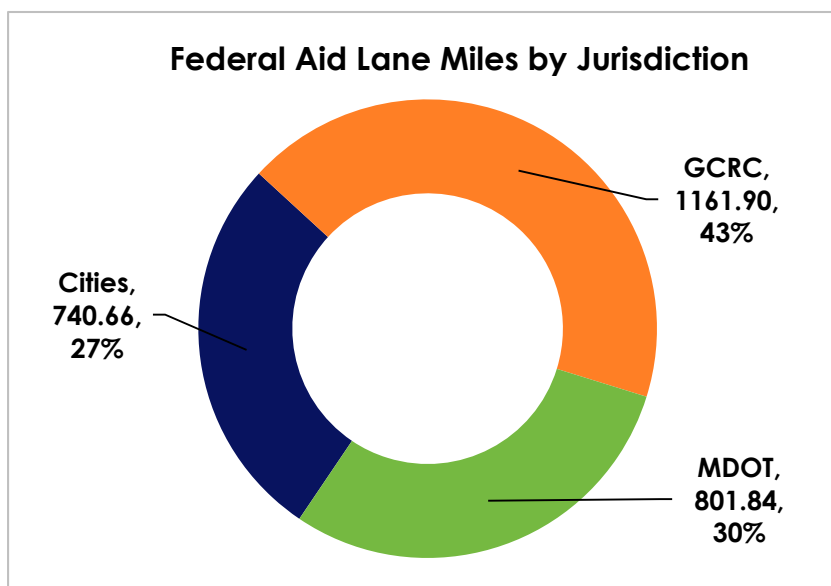
Three staff members is the optimal amount to use for collecting PASER data. One drives, one rates the roads, and the third staff member enters information into the computer. For the Genesee County road rating project there was always one GCMPC representative, one GCRC or City representative and one MDOT representative present. It took 57.5 hours to rate 1,031.3 linear miles of road, averaging approximately 18 miles per hour. This report provides information in lane miles which is linear miles multiplied by the number of lanes. Lane mile calculations provide a better representation of the condition of the system and what it may take to maintain the system.

All participants in the survey were required to attend a day long training session hosted by the Michigan Transportation Asset Management Council. Participants received an overview of the project and were given instruction on how to use the RoadSoft software and the PASER road rating system for data collection. Once out in the field, experienced staff members taught new participants how to use the RoadSoft program and guided them through the rating process.

### Overview of the Federal Aid Network:

The Genesee County Federal Aid network is comprised of approximately 2,704.40 lane miles. Of the total, 1,161.90 (43%) lane miles are within Townships, which are under the jurisdiction of the Genesee County Road Commission (GCRC), 740.66 lane miles (27%) are located within cities and villages, and approximately 801.84 lanes miles (30%) of roadway are state trunklines, which are maintained by the Michigan Department of Transportation (MDOT). Federal aid eligible roads include those classified as Interstates, Other Freeways, Other Principal Arterials, Minor Arterials, Major Collectors, and Urban Minor Collectors. Rural Minor Collectors are only eligible for limited federal funding, and are not included in the PASER survey.

The following chart shows a breakdown of the Federal Aid Network in lane miles by jurisdiction. The second chart on the following page displays a summary of the 2016 PASER ratings collected on the Federal Aid Network.

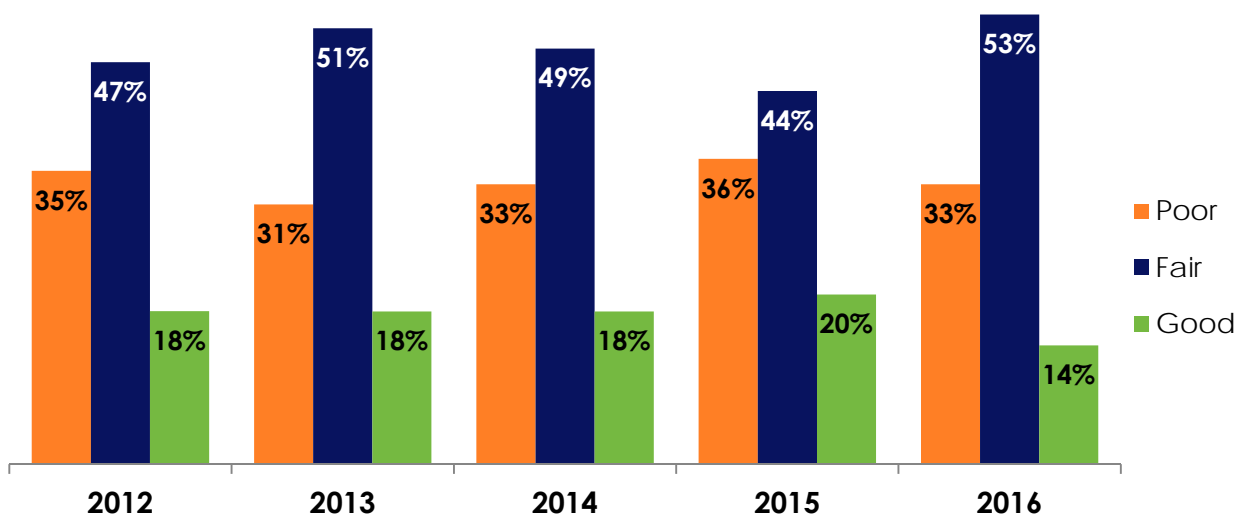


Genesee County 2016 PASER Ratings			
PASER Rating	Prescribed Fix	Total Lane Miles	Percentage of PASER Lane Miles
1 to 4	Structural Improvements	897.47	33%
5 to 7	Capital Preventative Maintenance	1422.58	53%
8 to 10	Routine Maintenance	384.35	14%

### Comparison of 2012 to 2016 Genesee County PASER Surveys

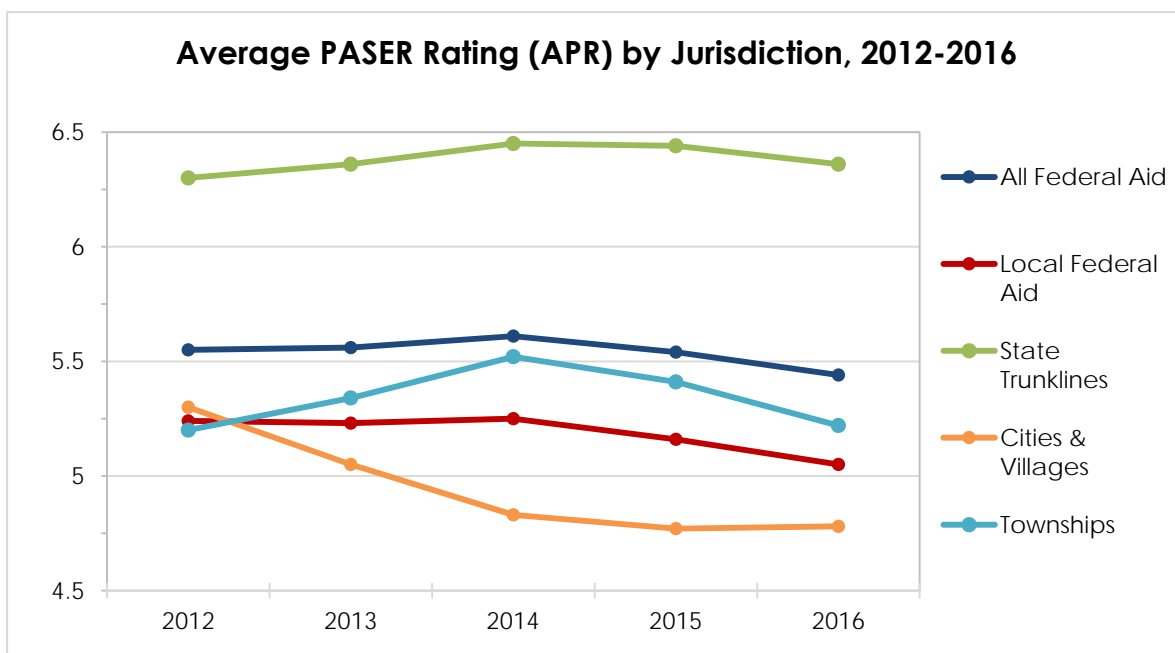
The following section compares data from PASER surveys conducted between 2012 and 2016 for all Federal Aid Roads in Genesee County. The data is provided in lane miles and as percent of lane miles for a given year.

- In 2016, approximately 33% (897.47 lane miles) of the Federal Aid System received a PASER rating between 1 and 4. This represents a decrease of 2% as compared to the 2012 rating distribution in the same category.
- In 2016, approximately 53% (1422.58 lane miles) of the Federal Aid System received a PASER rating between 5 and 7. This represents an increase of 6% as compared to the 2012 rating distribution in the same category.
- In 2016, approximately 14% (384.35 lane miles) of the Federal Aid System received a PASER rating between 8 and 10. This represents a decrease of 4% as compared to the 2012 rating distribution in the same category.



### Average PASER Rating (APR) Comparison:

Average PASER Rating, or APR, is an average of the ratings collected for a jurisdiction weighted by lane miles for each road segment. APR is a useful measure because it can be easily tracked and compared year-to-year. Up to this point, the information provided in this report has been on the full Federal Aid Network. This section also includes the Local Federal Aid Network, which does not include state trunklines maintained by MDOT. Using the Local Federal Aid Network allows for a more accurate analysis of roads maintained by Genesee County's local road agencies. The following chart shows a comparison of the Average PASER Ratings (APR) for the most recent 5-year period, 2012-2016:



### Major Trends:

- Both the overall Federal Aid network and the Local Federal Aid network saw a slight improvement between 2012 and 2014, followed by a slight decline between 2014 and 2016.
- State Trunklines in Genesee County, maintained by MDOT, saw an improvement between 2012 and 2014, followed by a decline between 2015 and 2016. Overall, state-maintained roads are in better condition than township or city roads.
- Township roads, maintained by the Genesee County Road Commission (GCRC), saw a significant improvement between 2012 and 2014, followed by a decline in 2015 and 2016.
- Pavement conditions on city and village Federal Aid roads have seen a significant decline each year between 2012 and 2015, while leveling off in 2016. Overall, city and village roads are in worse condition than state trunklines and township roads.



The overall condition of the Genesee County federal aid road network continued to improve up until 2014, when the trend began to reverse. The improvement seen between 2012 and 2014 was likely due to an increase in preventative and routine maintenance treatments. For example, the Genesee County Road Commission (GCRC) substantially increased its primary road chip seal program during this time period.

This improvement was followed by a decline in overall conditions between 2014 and 2016. The most significant decline during this period occurred with state trunklines and township roads; while city and village roads stayed about the same between 2014 and 2016. The decline can most likely be attributed to colder than average temperatures during the last two winters, and a lack of available funding to adequately maintain pavements. Even with new programs put in place by the various road agencies in Genesee County, staff still anticipates the condition of the network to continue to deteriorate unless additional funding is provided. Road preservation techniques such as the chip seal program may temporarily increase PASER ratings, but more costly reconstruction will eventually be required.

A deterioration trend was analyzed during the development of the 2040 Genesee County Long Range Transportation Plan. As part of the analysis, staff used the RoadSoft program to evaluate several different maintenance scenarios and found that the only way to improve the overall condition of the system is to provide at least 3 times the current level of funding for road improvements. This is a trend that is seen in similar analysis statewide. As part of a pavement management program, an increased level of funding would help to stabilize roads that require routine and preventative maintenance and would also be able to incrementally improve roads that require more costly structural repairs.

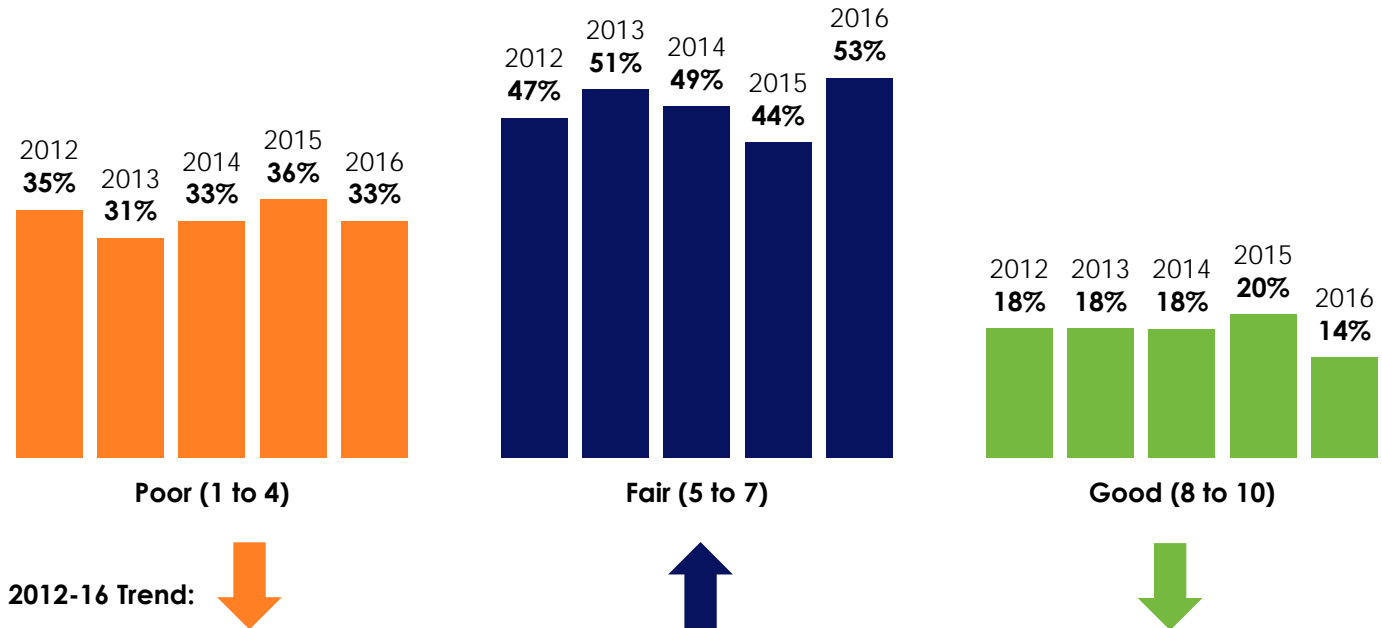
*Local Road Agencies (LRA) may obtain a digital copy of the data collected during the survey by submitting a written request to GCMPC staff. The data will be distributed as a RoadSoft GIS file, so each LRA must also obtain a copy of the latest RoadSoft GIS program from Michigan Tech prior to using the data.*

## **PASER Ratings by Jurisdiction**

The following pages provide an overview of Federal aid pavement conditions for each city, village and township in Genesee County. On each page, you will find a history of PASER ratings collected between 2012 and 2016, Average PASER Rating trend, and the percentage of lane miles that improved, declined, or remained unchanged between 2012 and 2016. Included on the back of each agency's page is a map of the federal aid ratings collected.

# 2016 PASER Survey of Genesee County All Federal Aid Roads

## PASER Ratings 2012-2016



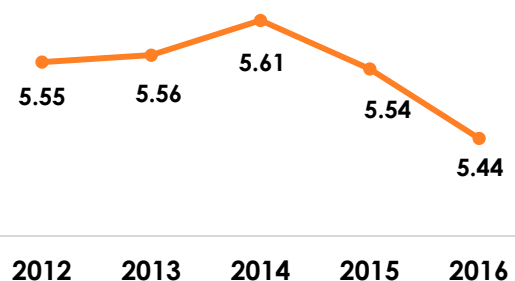
**2,704** lane miles of Federal Aid roads;  
ranked **#5** out of 83 counties statewide,  
with #1 having the highest lane mileage

Flint and the surrounding urbanized area ranked **#1**  
of 63 Medium-Sized Urban Areas in the U.S. with the  
most roads in poor condition (2015 *TRIP* Report)

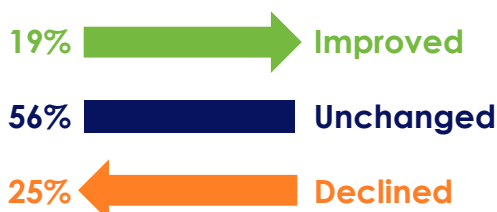
Genesee County ranked **#48** out of 83 counties in  
the state comparing the percentage of poor roads,  
with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. comparing the  
percentage of poor roads, #1 being the worst  
(2015 *TRIP* Report)

## Genesee County Average PASER Rating (APR)



## Genesee County Trend 2012-2016



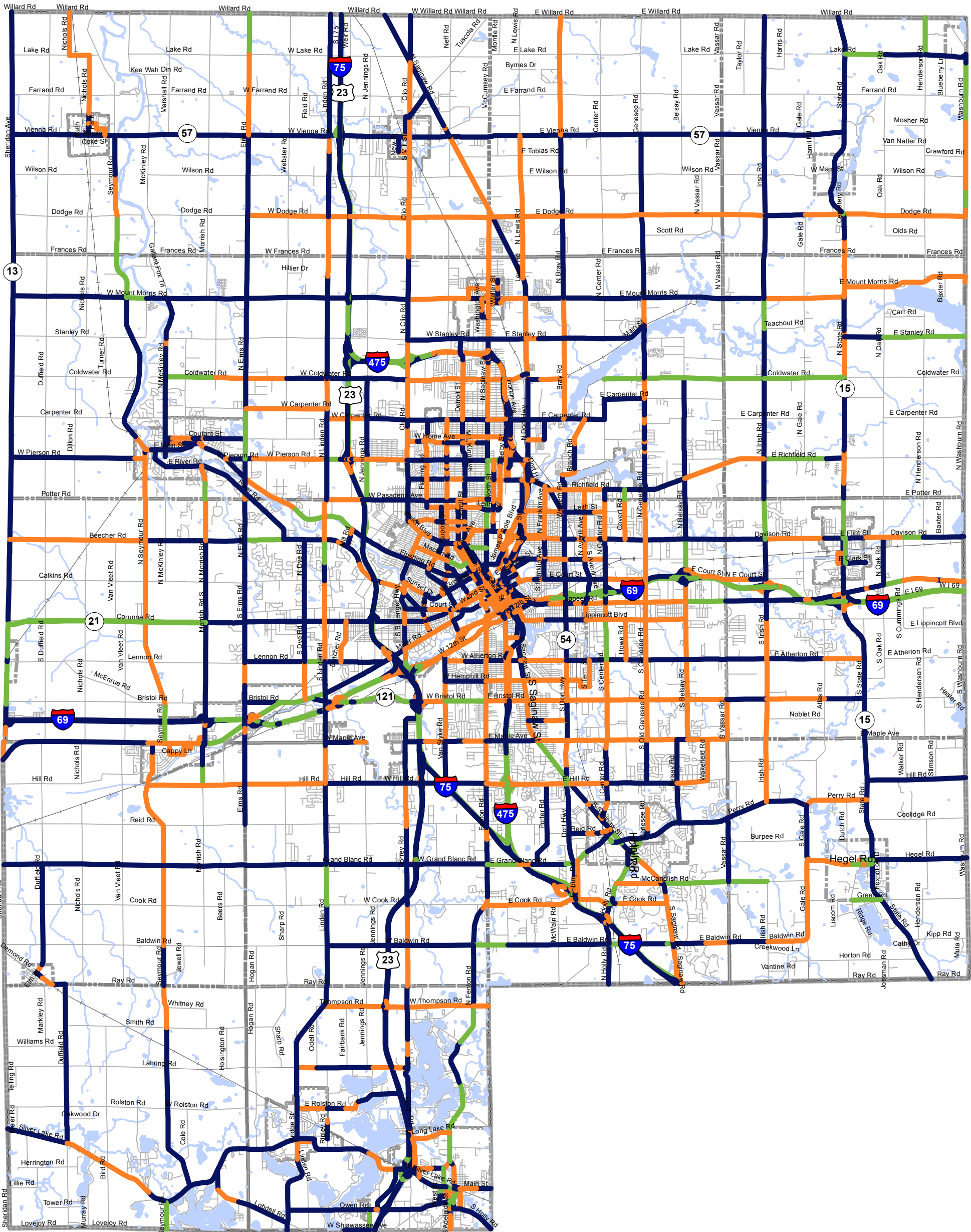
**Genesee County** allocates an average of **\$7.1 million** in  
federal funds per year to improve the local federal aid network.  
**Genesee County Road Agencies** spend an additional  
**\$9.5 million** per year on road surface improvements using state  
Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation  
Plan, **2** times the current funding is needed to maintain existing  
conditions; **3** times the current funding is needed to see  
improvement.

# 2016 PASER Survey of Genesee County

## All Federal Aid Roads

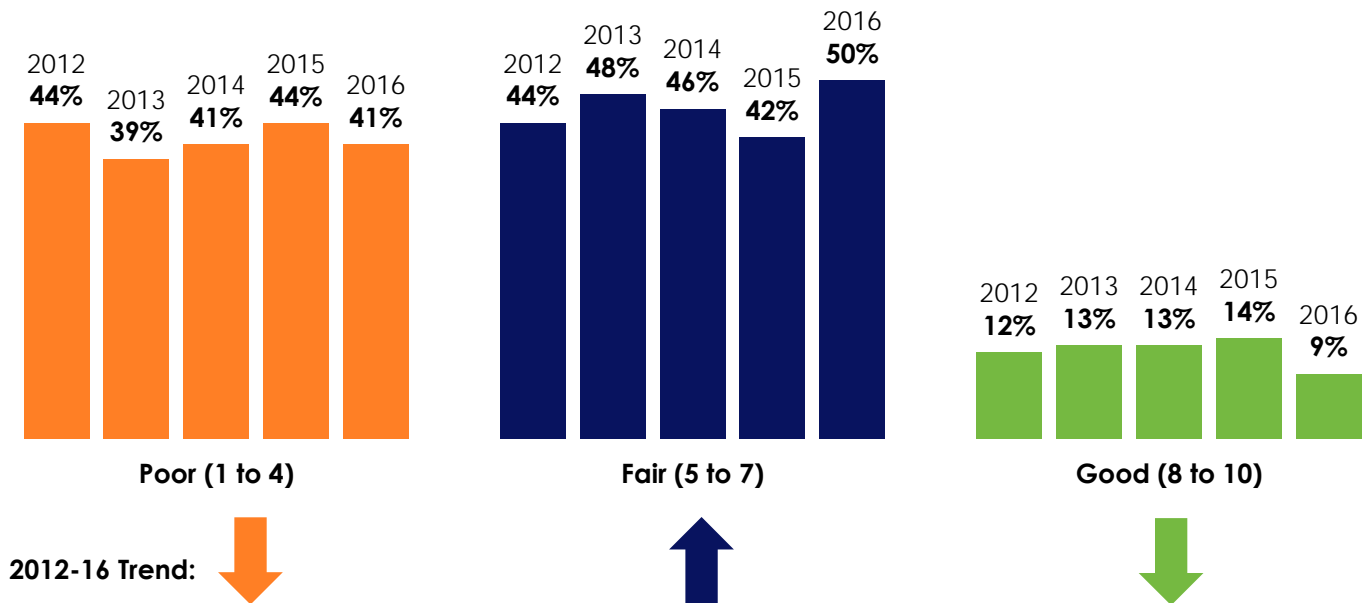
- Rating 8-10 (Good, 14%, 384.35 lane miles)
- Rating 5-7 (Fair, 53%, 1,422.58 lane miles)
- Rating 1-4 (Poor, 33%, 897.47 lane miles)
- Local Road (Not Rated)





# 2016 PASER Survey of Genesee County Local Federal Aid Roads

## PASER Ratings 2012-2016



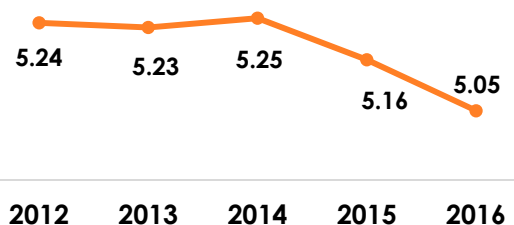
**1,902** lane miles of Federal Aid roads not including state trunklines; ranked **#5** out of 83 counties statewide (#1 having highest lane mileage)

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

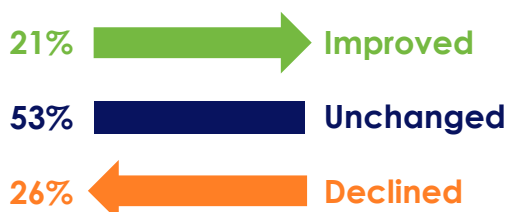
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Local Federal Aid Roads Average PASER Rating (APR)



## Local Federal Aid Roads Trend 2012-2016



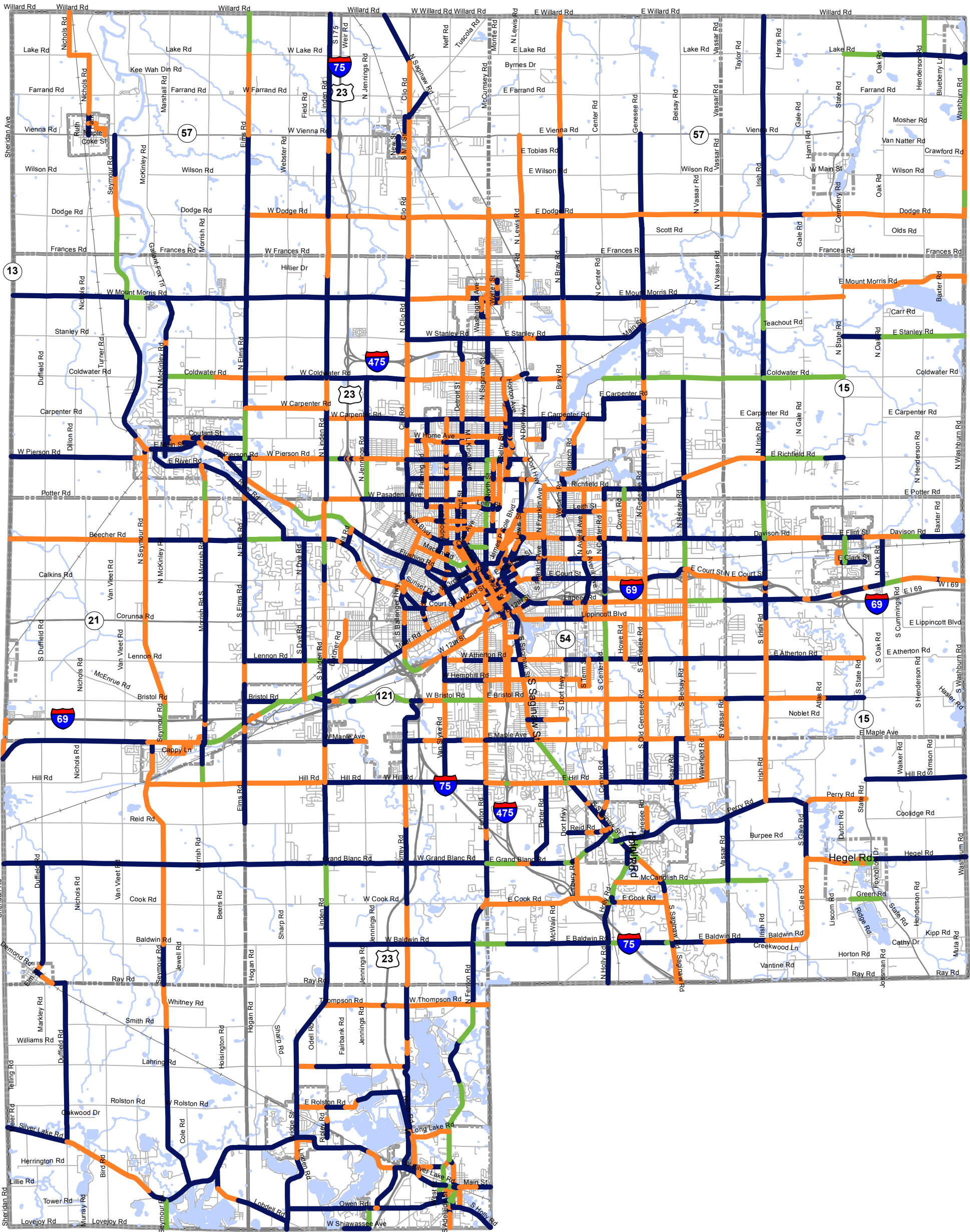
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

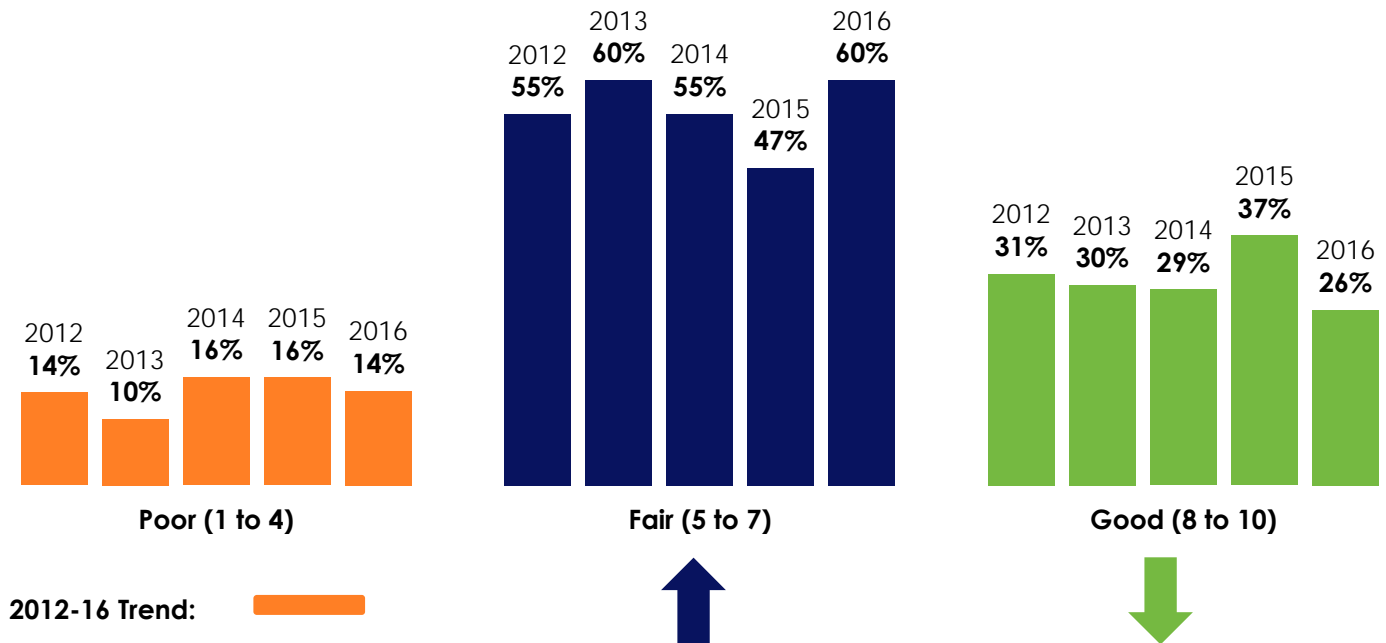
2016 PASER Survey of Genesee County

Local Federal Aid Roads

- Rating 8-10 (Good, 9%, 171.37 lane miles)
- Rating 5-7 (Fair, 50%, 942.95 lane miles)
- Rating 1-4 (Poor, 41%, 788.24 lane miles)
- Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



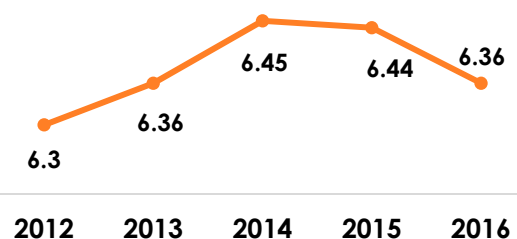
**801.8** lane miles of Federal Aid state trunklines owned by the Michigan Department of Transportation (MDOT)

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

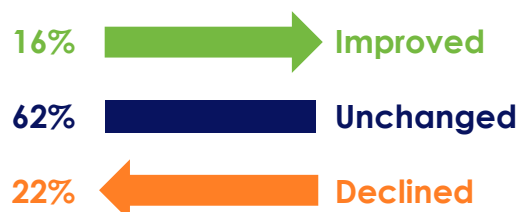
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## State Trunkline Average PASER Rating (APR)

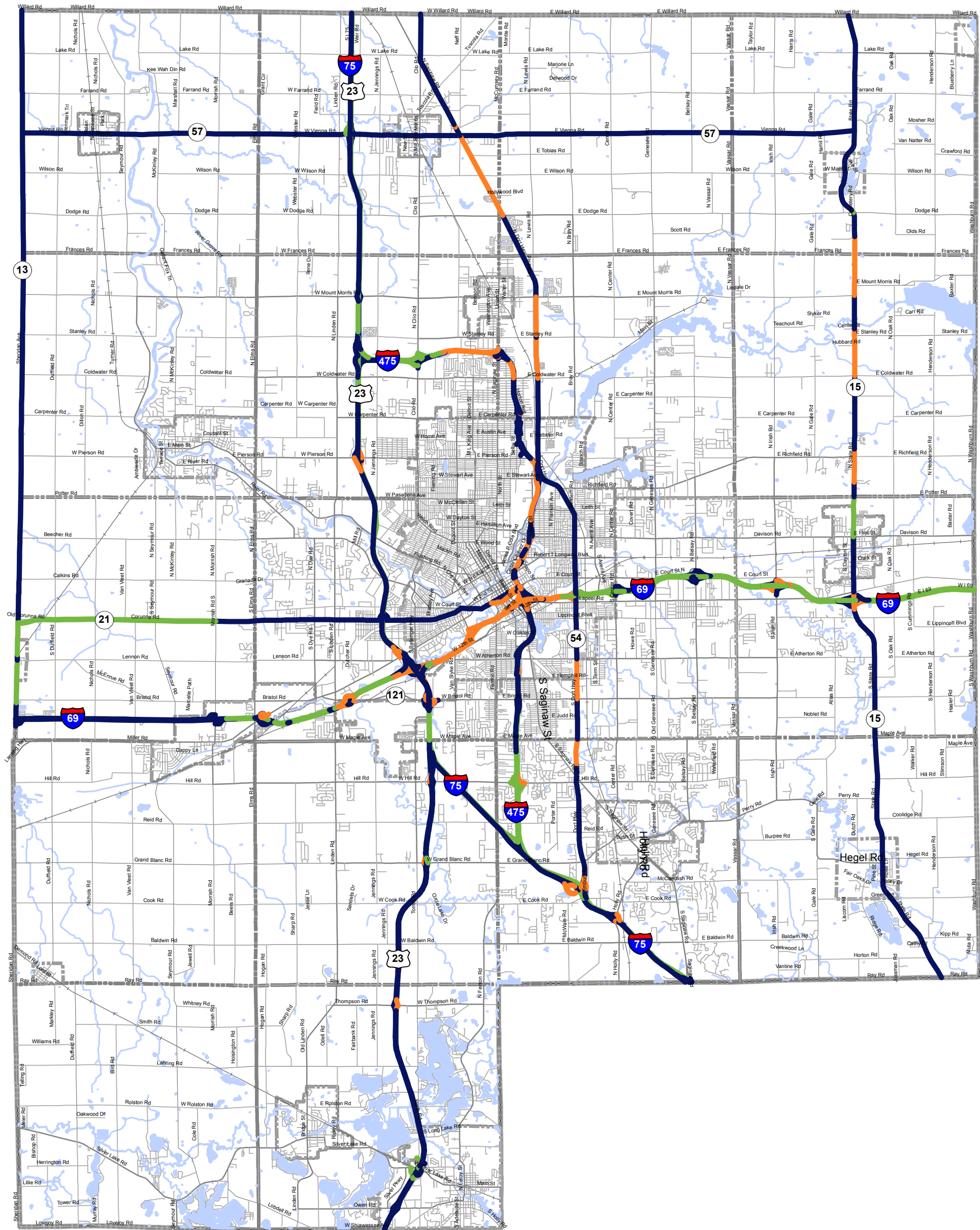


## State Trunkline Trend 2012-2016

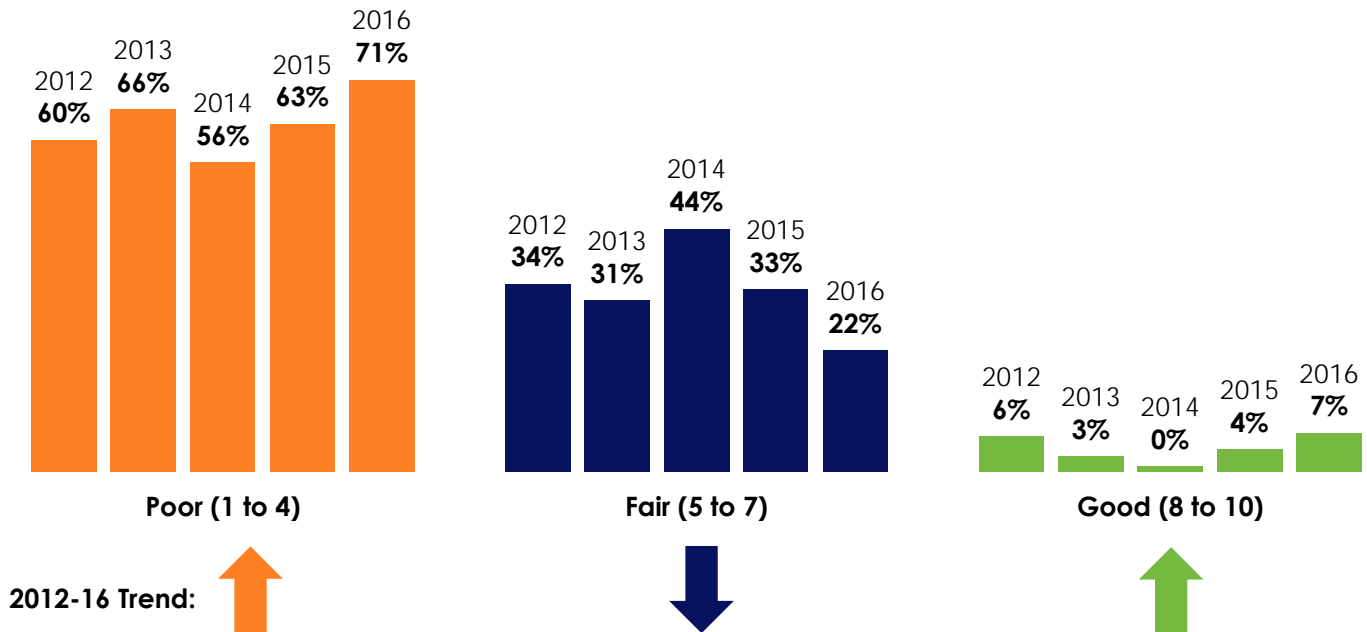




- Rating 8-10 (Good, 26%, 212.98 lane miles)
- Rating 5-7 (Fair, 60%, 479.63 lane miles)
- Rating 1-4 (Poor, 14%, 109.23 lane miles)
- Other Federal Aid Road
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#12** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

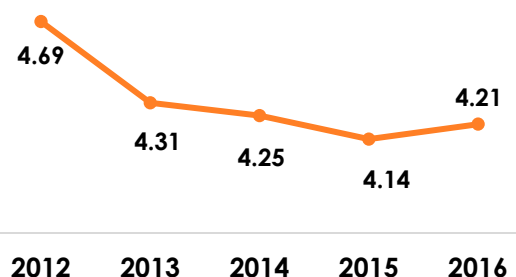
**158.4** lane miles of Federal Aid roads; ranked **#2** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Burton Average PASER Rating (APR)



## City of Burton Trend 2012-2016

11% Improved

64% Unchanged

25% Declined


**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

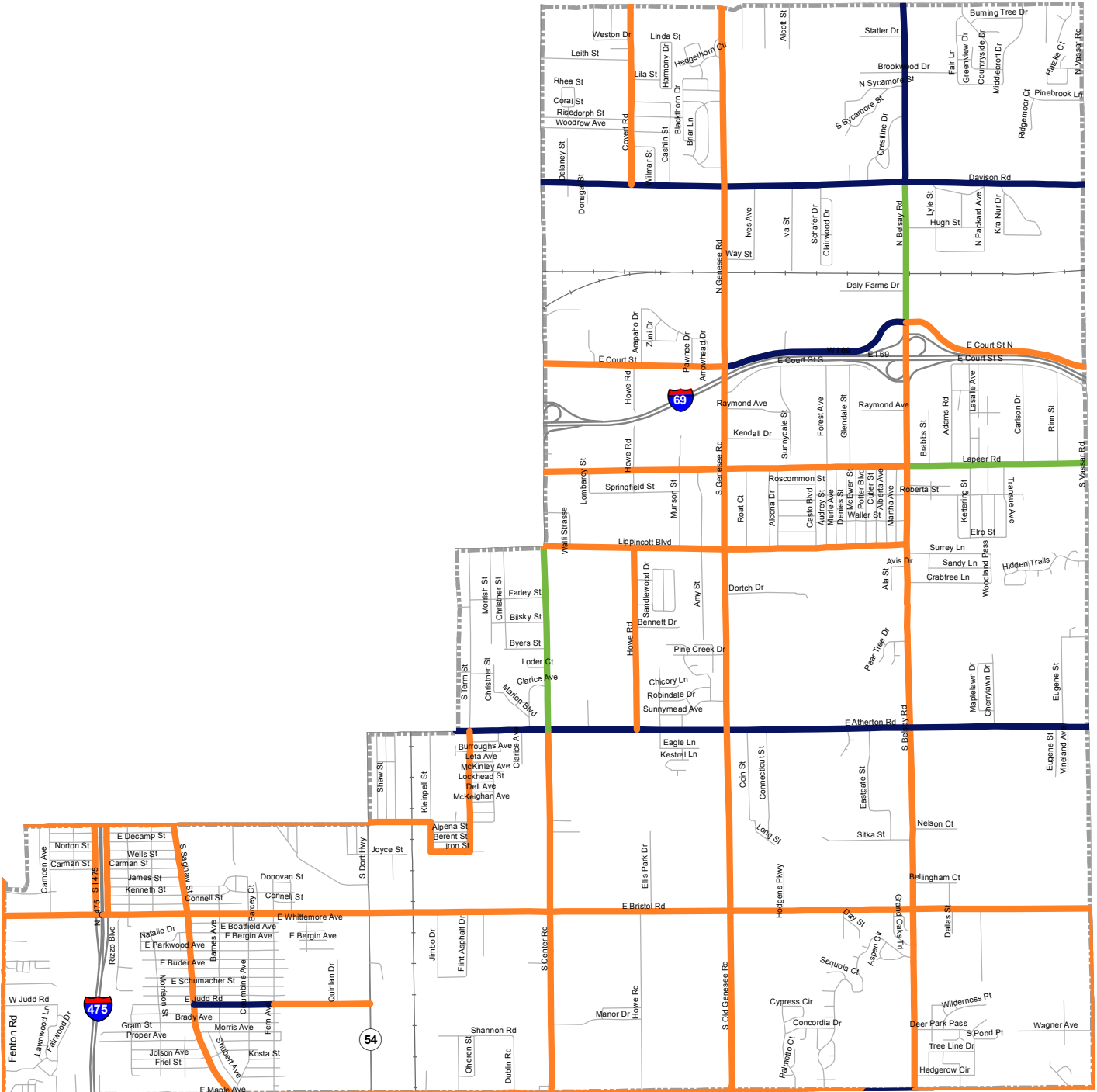
According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# 2016 PASER Survey

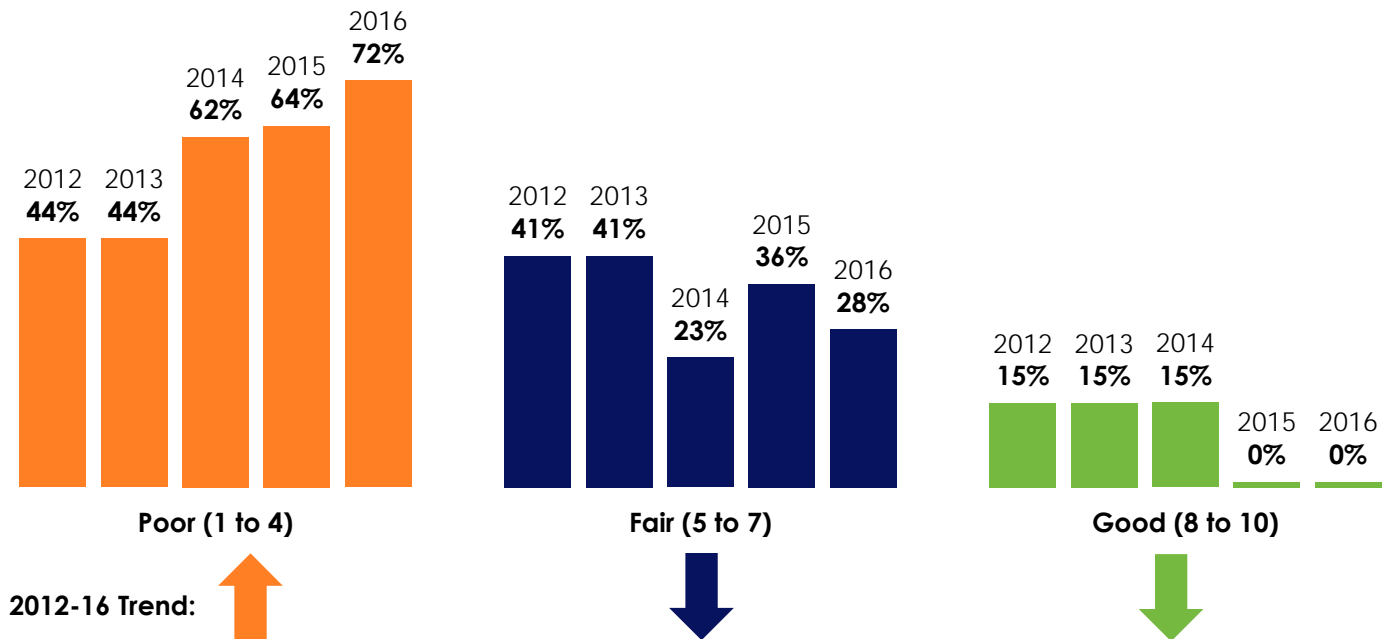
## City of Burton



- Rating 8-10 (Good, 7%, 10.91 lane miles)
- Rating 5-7 (Fair, 22%, 35.07 lane miles)
- Rating 1-4 (Poor, 71%, 112.45 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#13** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

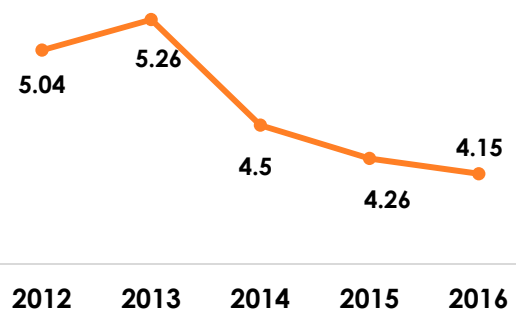
**6.1** lane miles of Federal Aid roads; ranked **#10** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

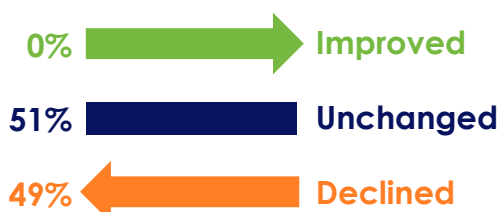
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Clio Average PASER Rating (APR)




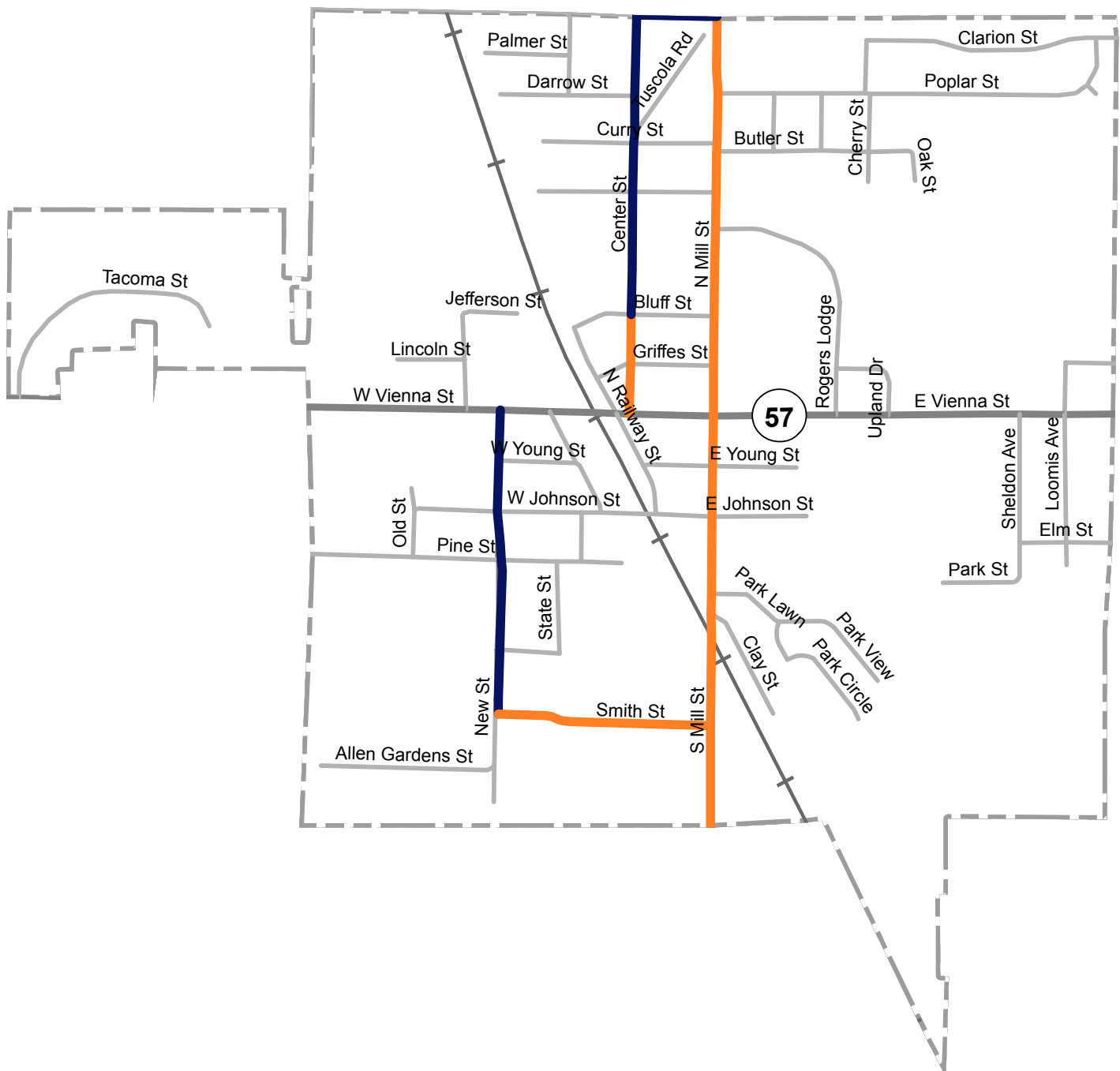
## City of Clio Trend 2012-2016



**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

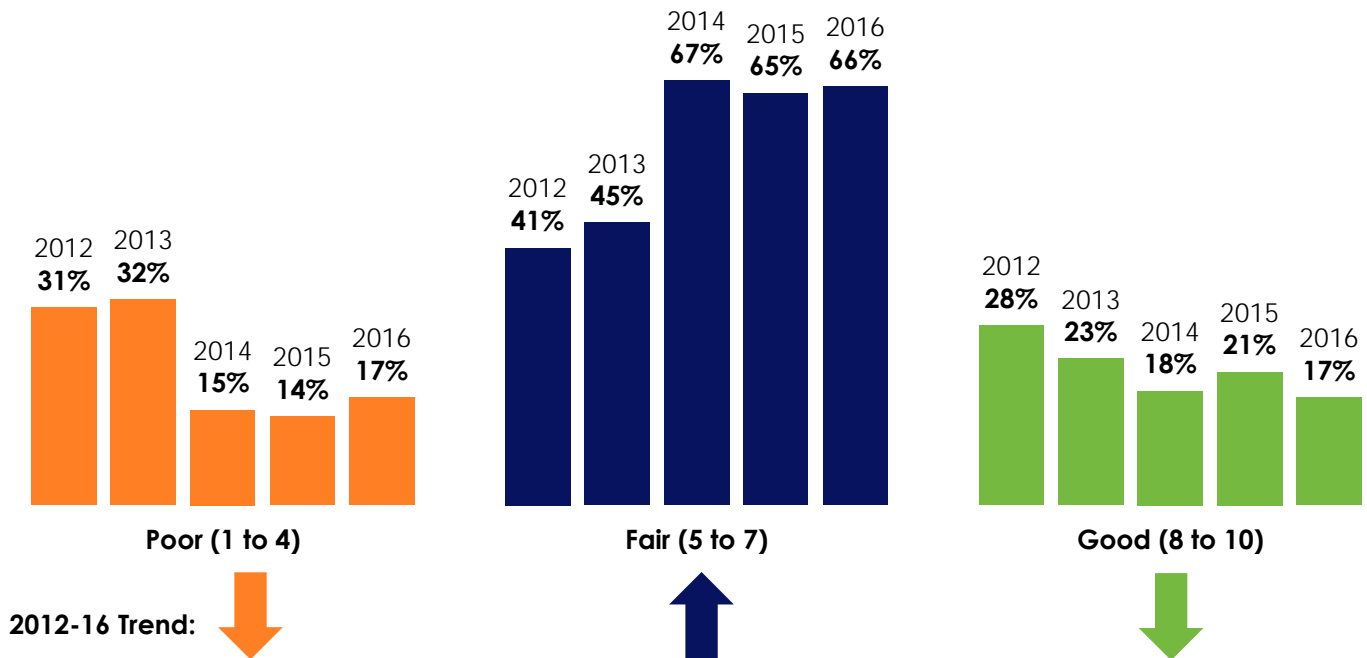
According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 28%, 1.71 lane miles)
- Rating 1-4 (Poor, 72%, 4.40 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#3** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

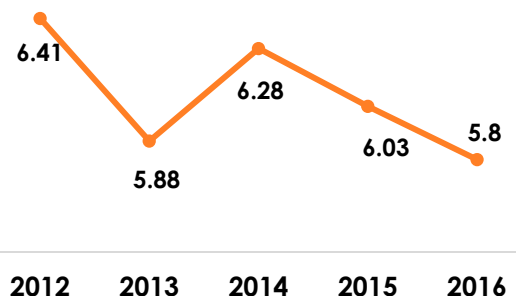
**7.4** lane miles of Federal Aid roads; ranked **#9** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

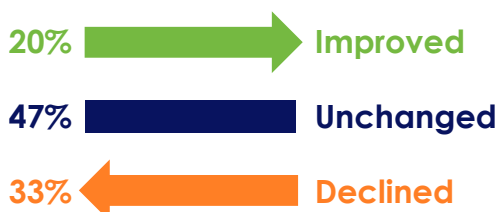
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Davison Average PASER Rating (APR)




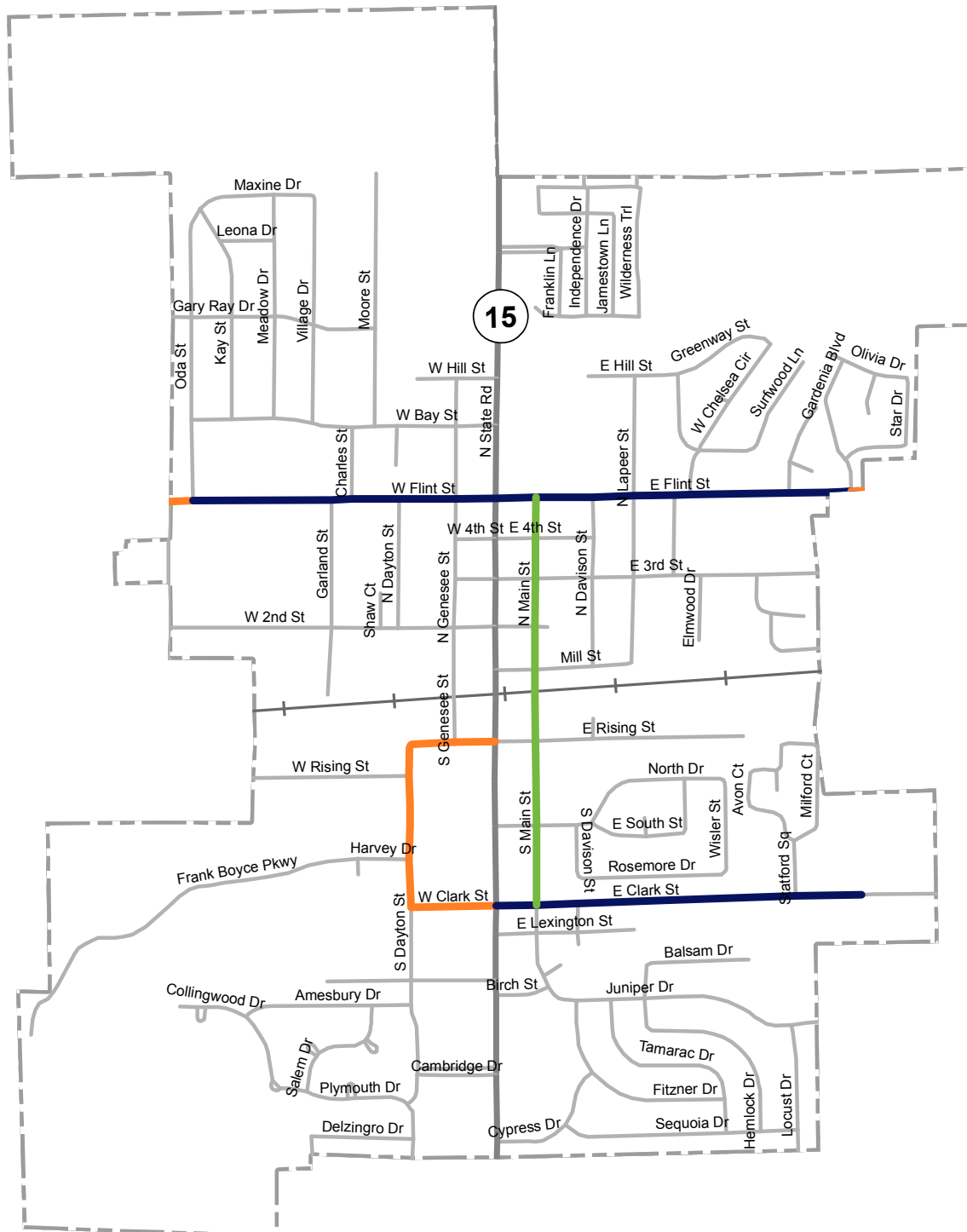
## City of Davison Trend 2012-2016



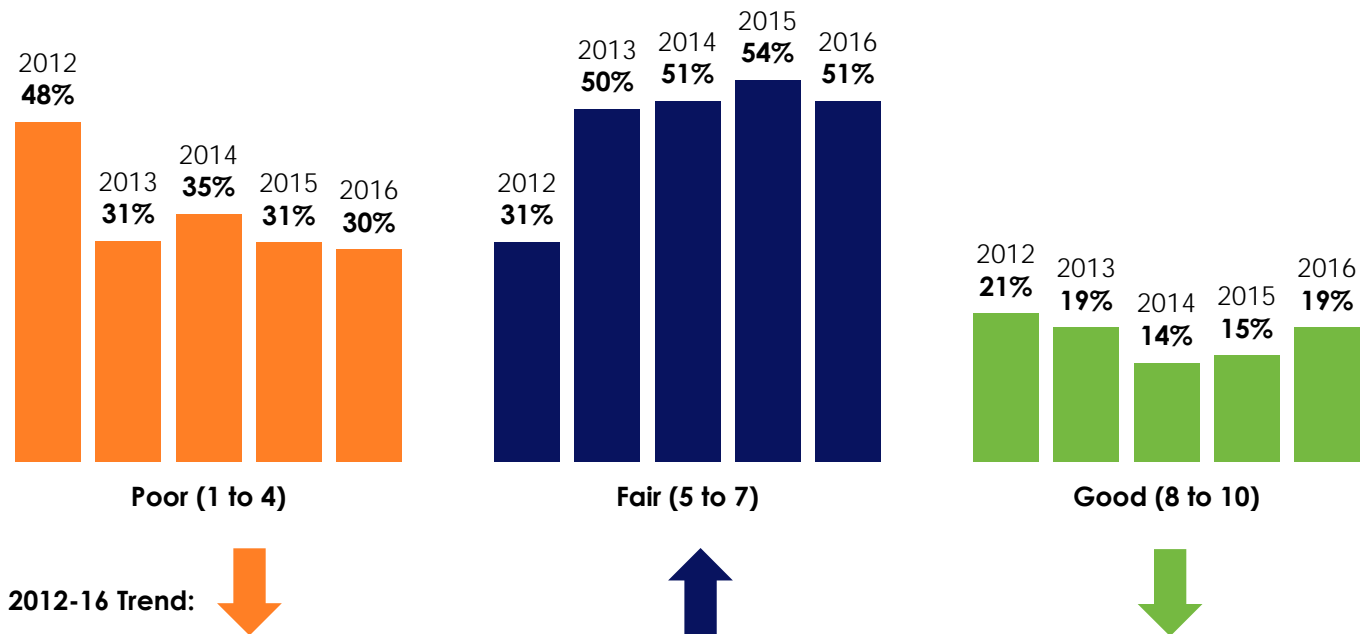
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 17%, 1.26 lane miles)
- Rating 5-7 (Fair, 66%, 4.83 lane miles)
- Rating 1-4 (Poor, 17%, 1.26 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#6** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

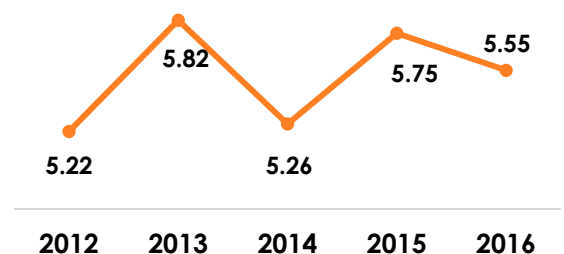
**47.5** lane miles of Federal Aid roads; ranked **#3** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

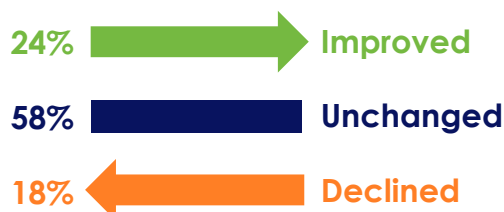
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Fenton Average PASER Rating (APR)



## City of Fenton Trend 2012-2016



**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

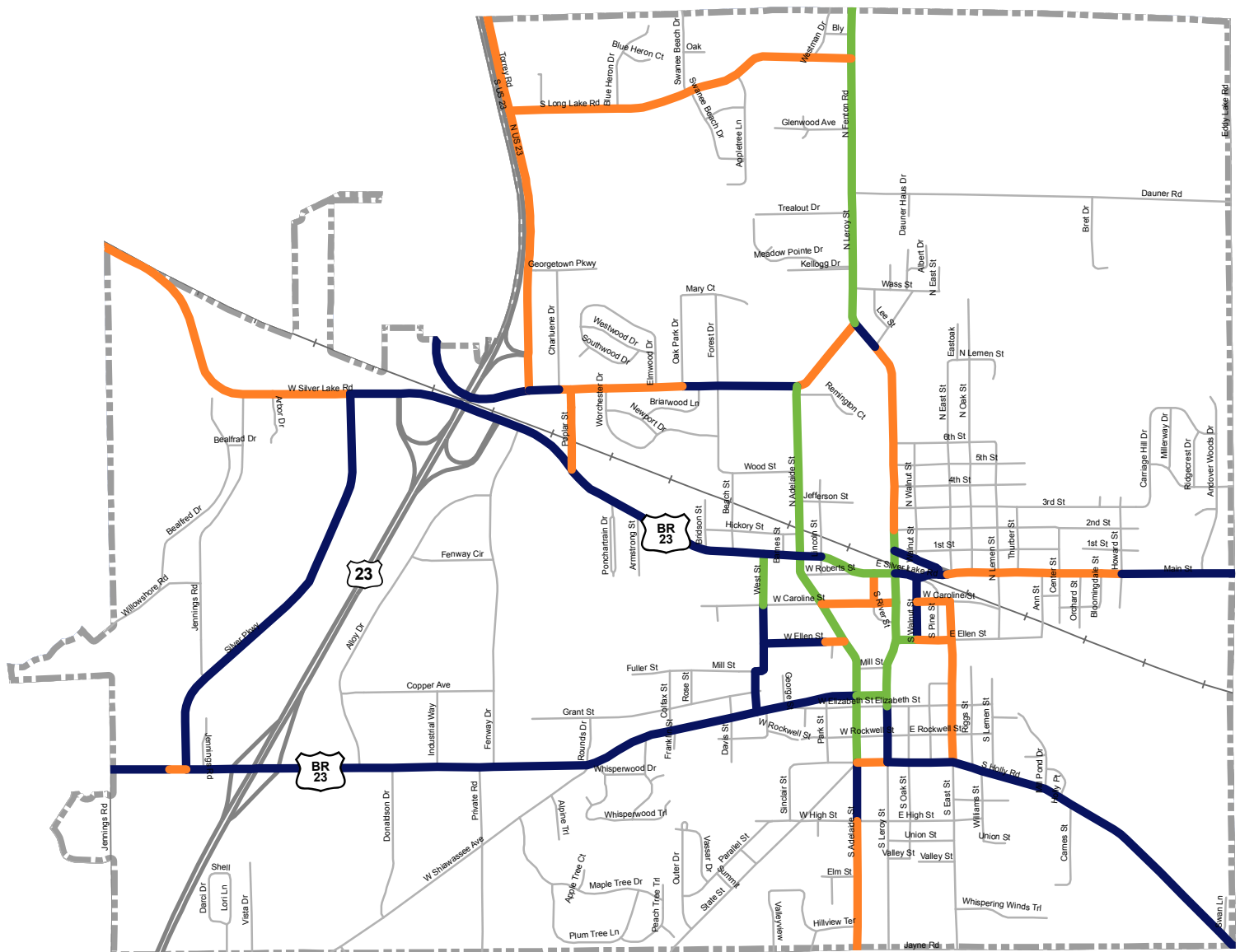
Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# 2016 PASER Survey

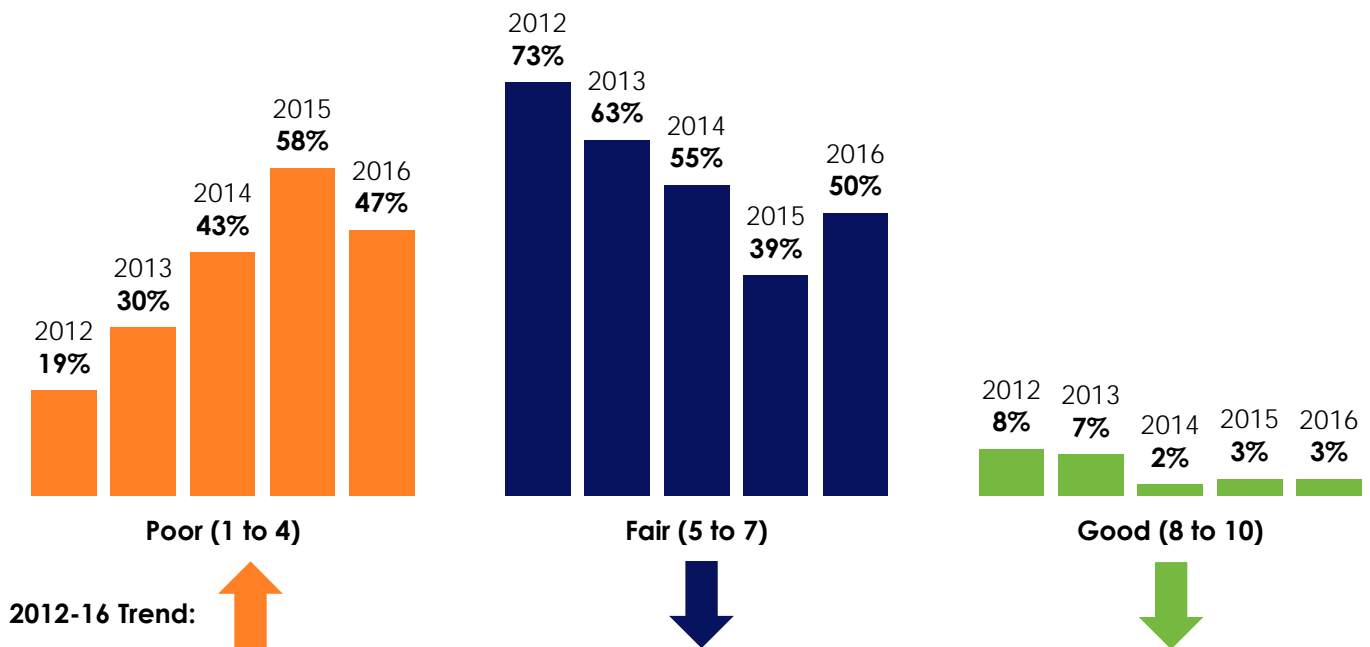
## City of Fenton



- Rating 8-10 (Good, 19%, 9.02 lane miles)
- Rating 5-7 (Fair, 51%, 24.09 lane miles)
- Rating 1-4 (Poor, 30%, 14.39 lane miles)
- Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#10** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

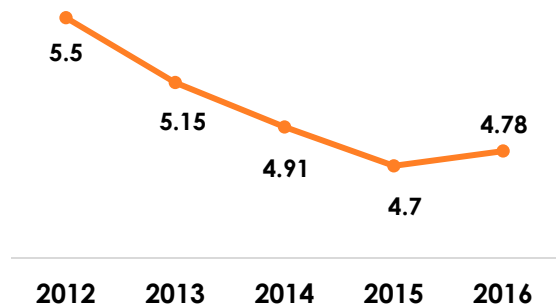
**413.7** lane miles of Federal Aid roads; ranked **#1** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

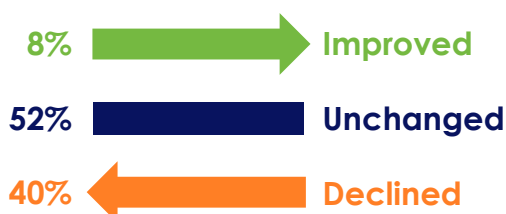
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Flint Average PASER Rating (APR)




## City of Flint Trend 2012-2016

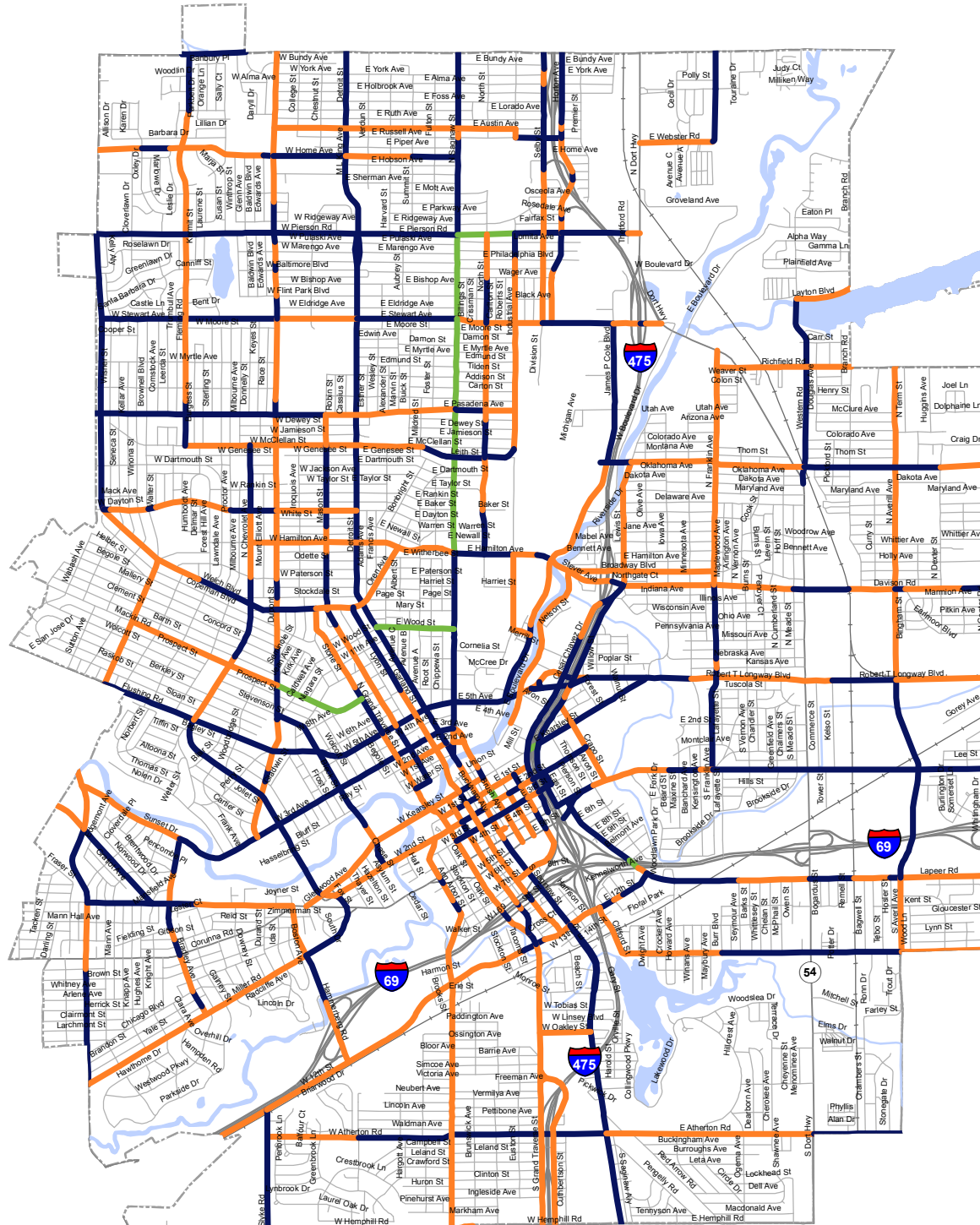
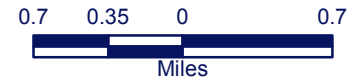


Genesee County allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. Genesee County Road Agencies spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

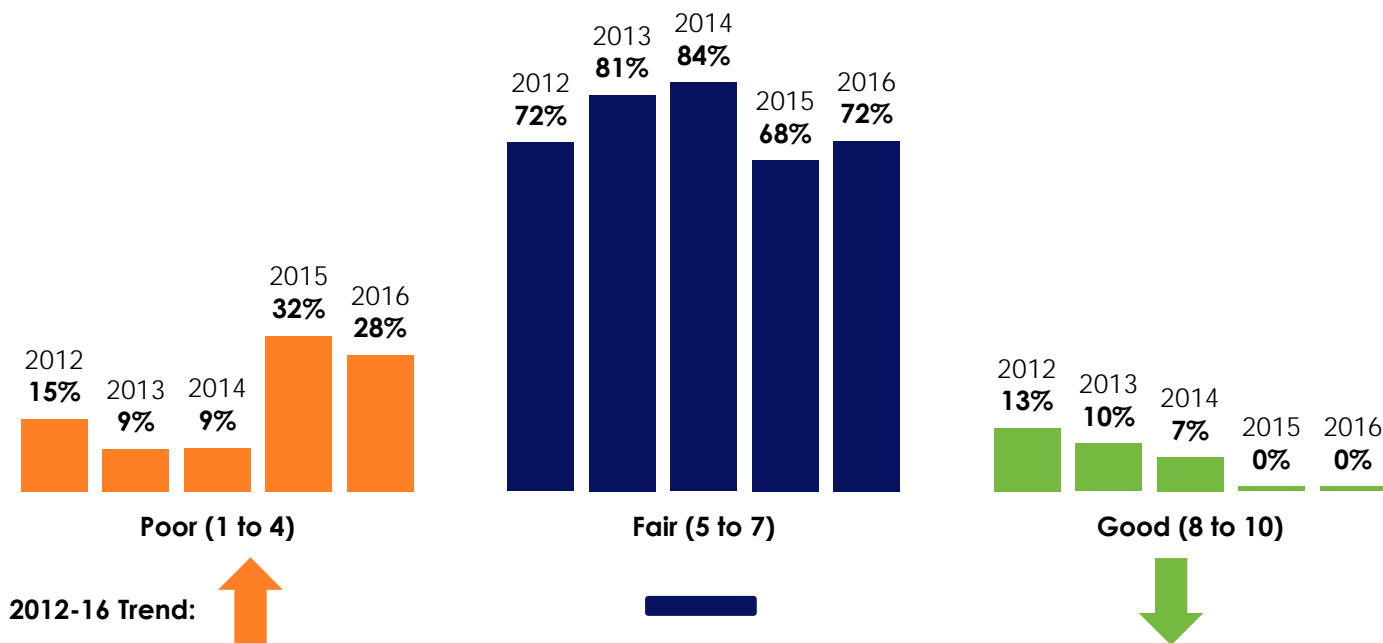
According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 3%, 13.29 lane miles)
- Rating 5-7 (Fair, 50%, 205.23 lane miles)
- Rating 1-4 (Poor, 47%, 195.17 lane miles)

-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#8** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

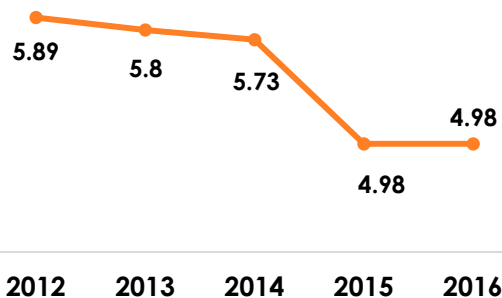
**24.4** lane miles of Federal Aid roads; ranked **#5** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Flushing Average PASER Rating (APR)



## City of Flushing Trend 2012-2016

6% **Improved**

66% **Unchanged**

28% **Declined**

**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network.

**Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

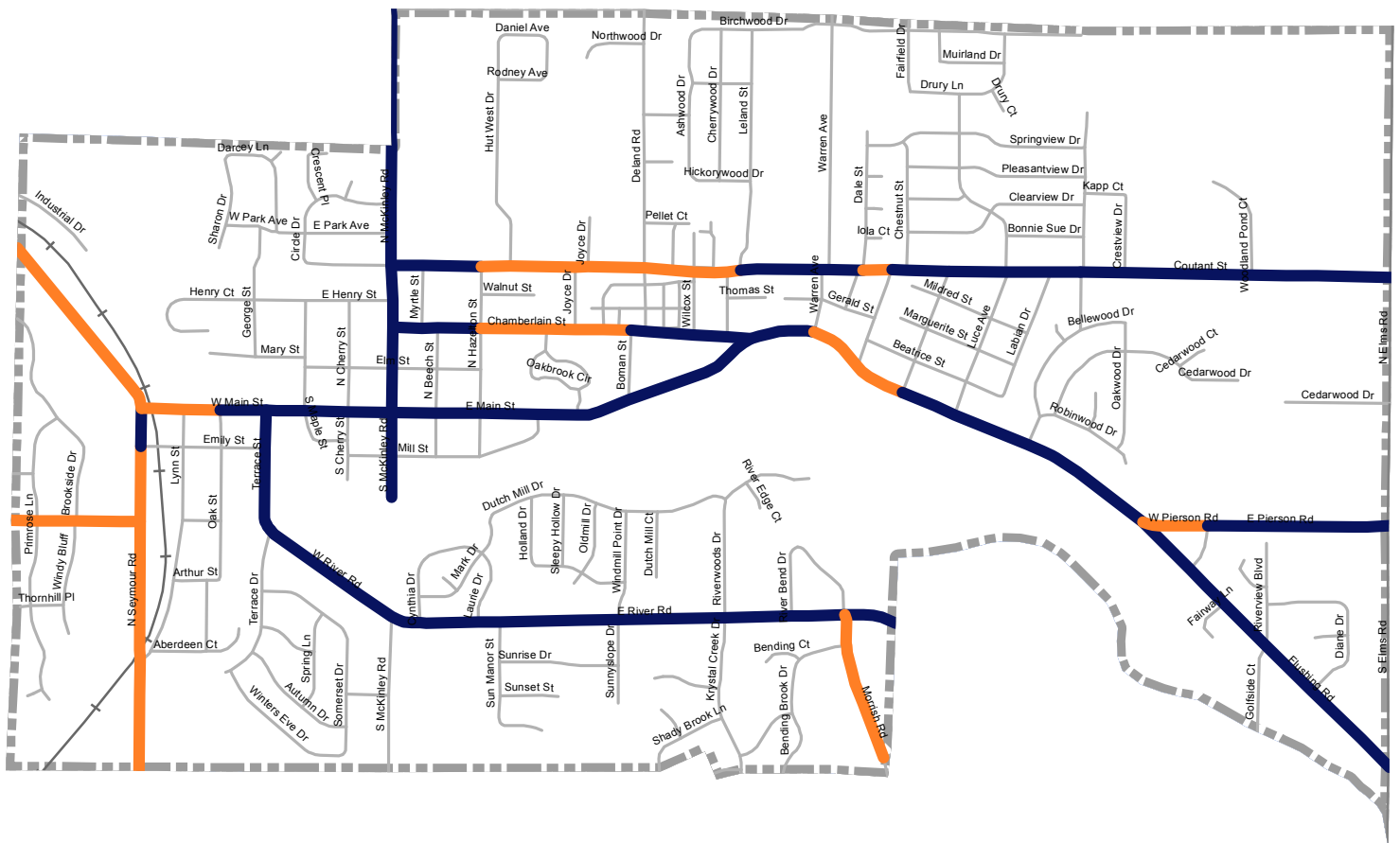
According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.



# 2016 PASER Survey

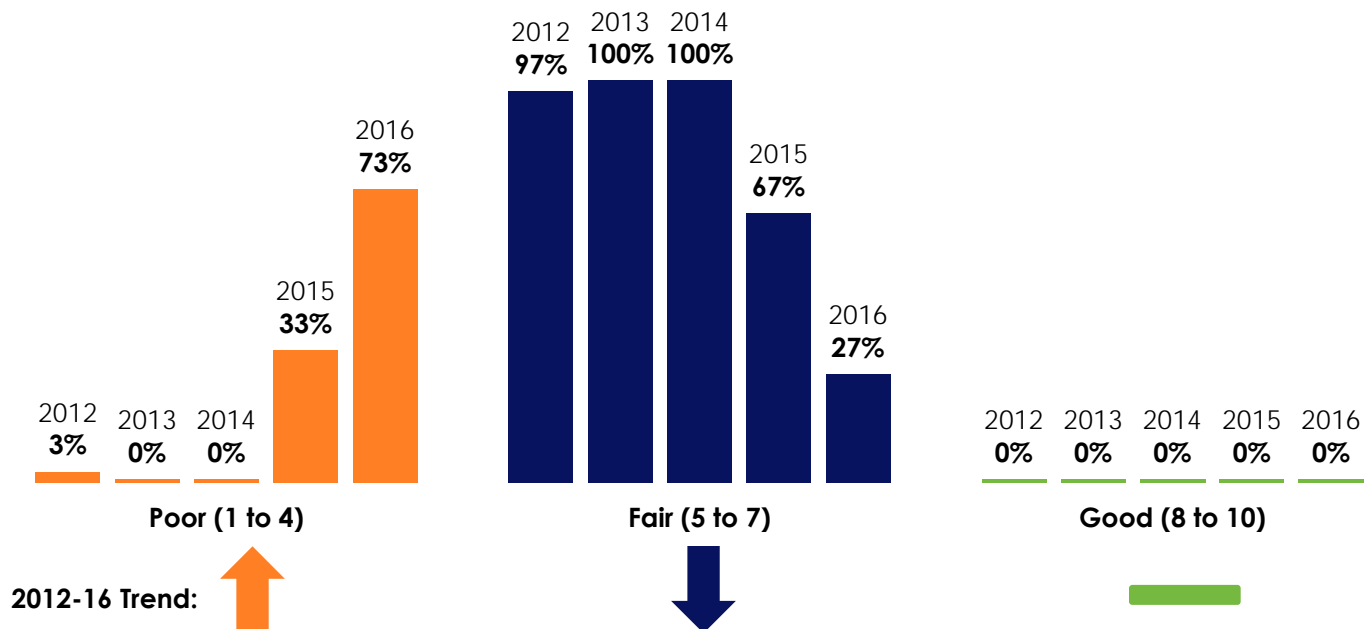
## City of Flushing

- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 72%, 17.66 lane miles)
- Rating 1-4 (Poor, 28%, 6.73 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#11** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

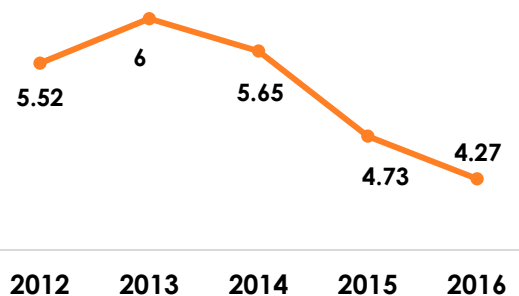
**1.6** lane miles of Federal Aid roads; ranked **#13** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

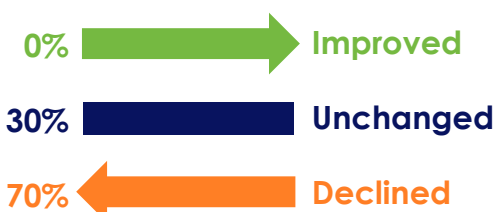
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Village of Gaines Average PASER Rating (APR)




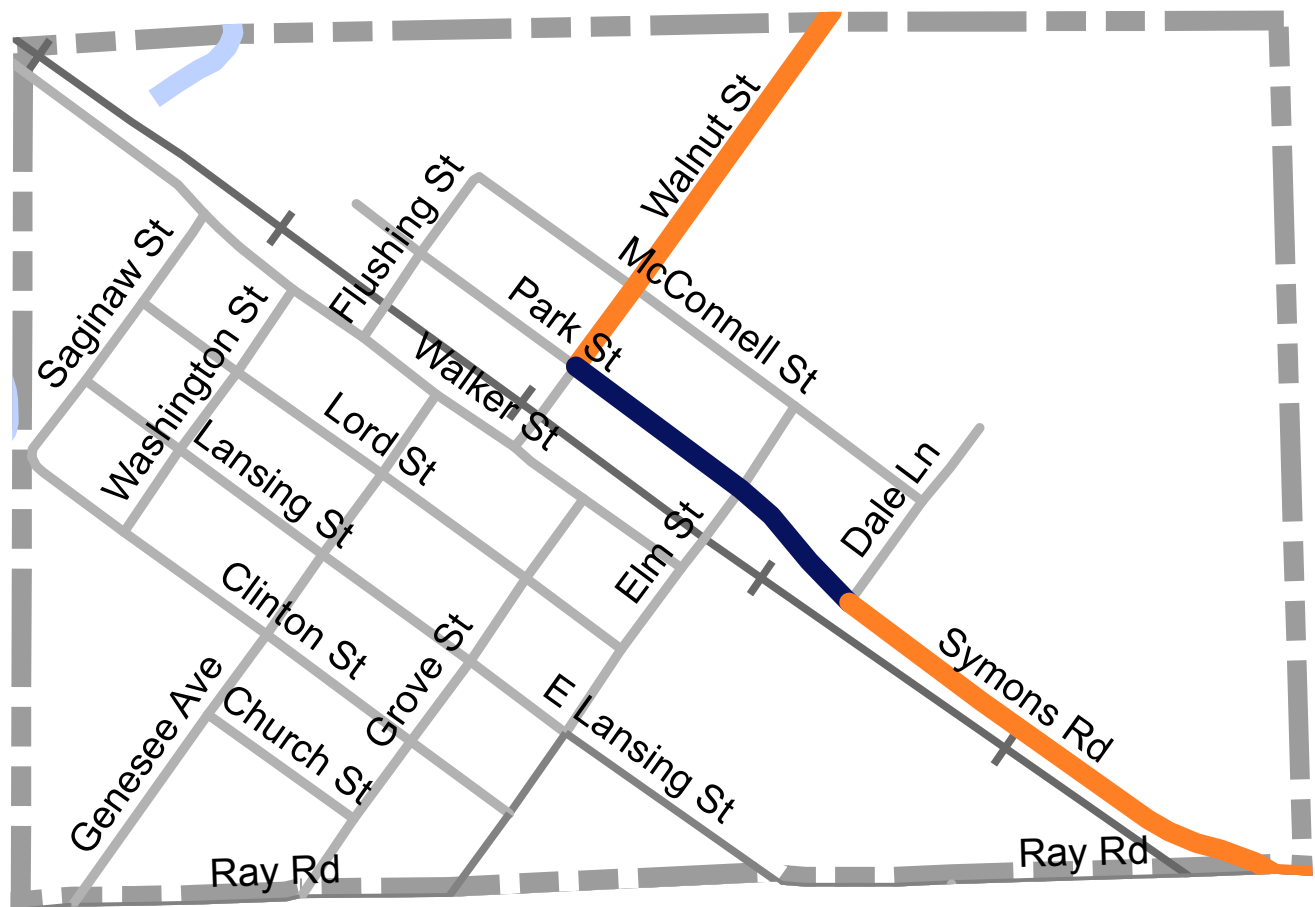
### Village of Gaines Trend 2012-2016



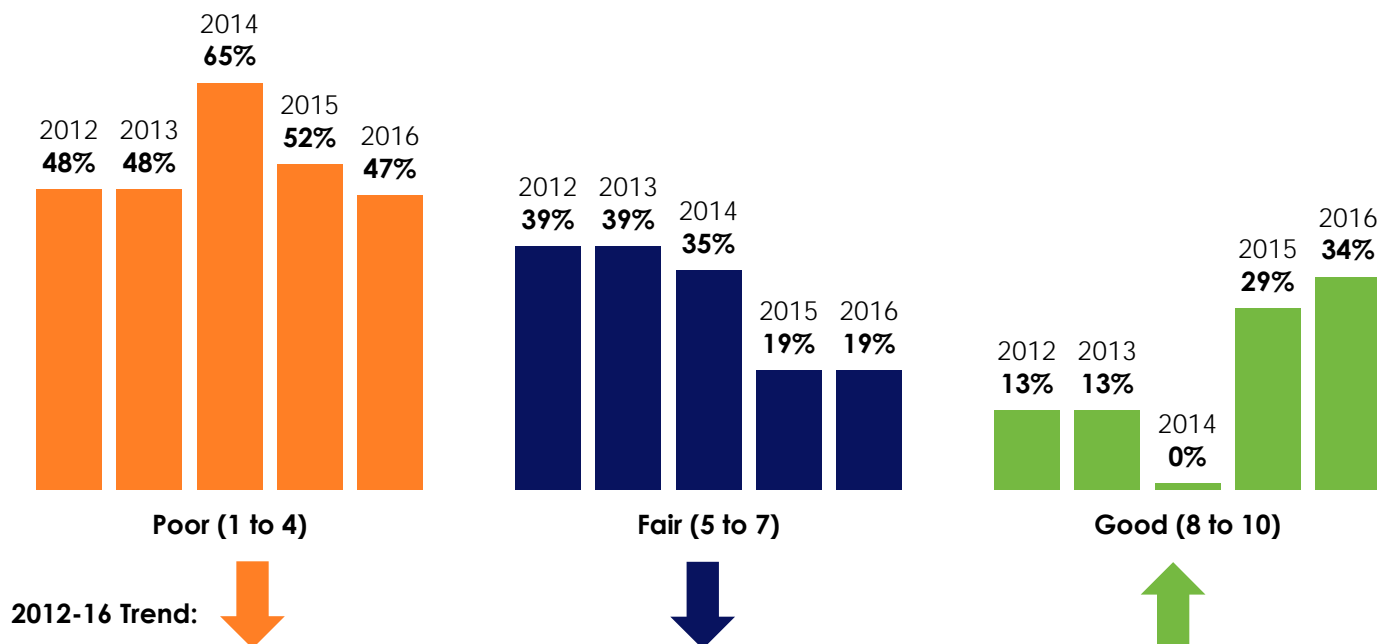
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 27%, 0.42 lane miles)
- Rating 1-4 (Poor, 73%, 1.13 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#4** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

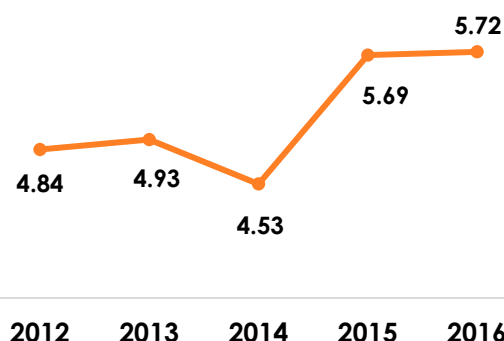
**3.9** lane miles of Federal Aid roads; ranked **#11** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

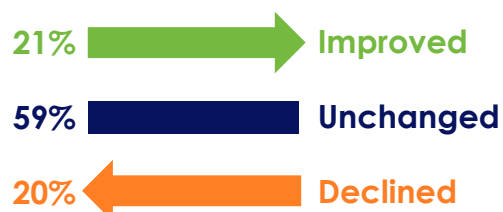
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Village of Goodrich Average PASER Rating (APR)



## Village of Goodrich Trend 2012-2016

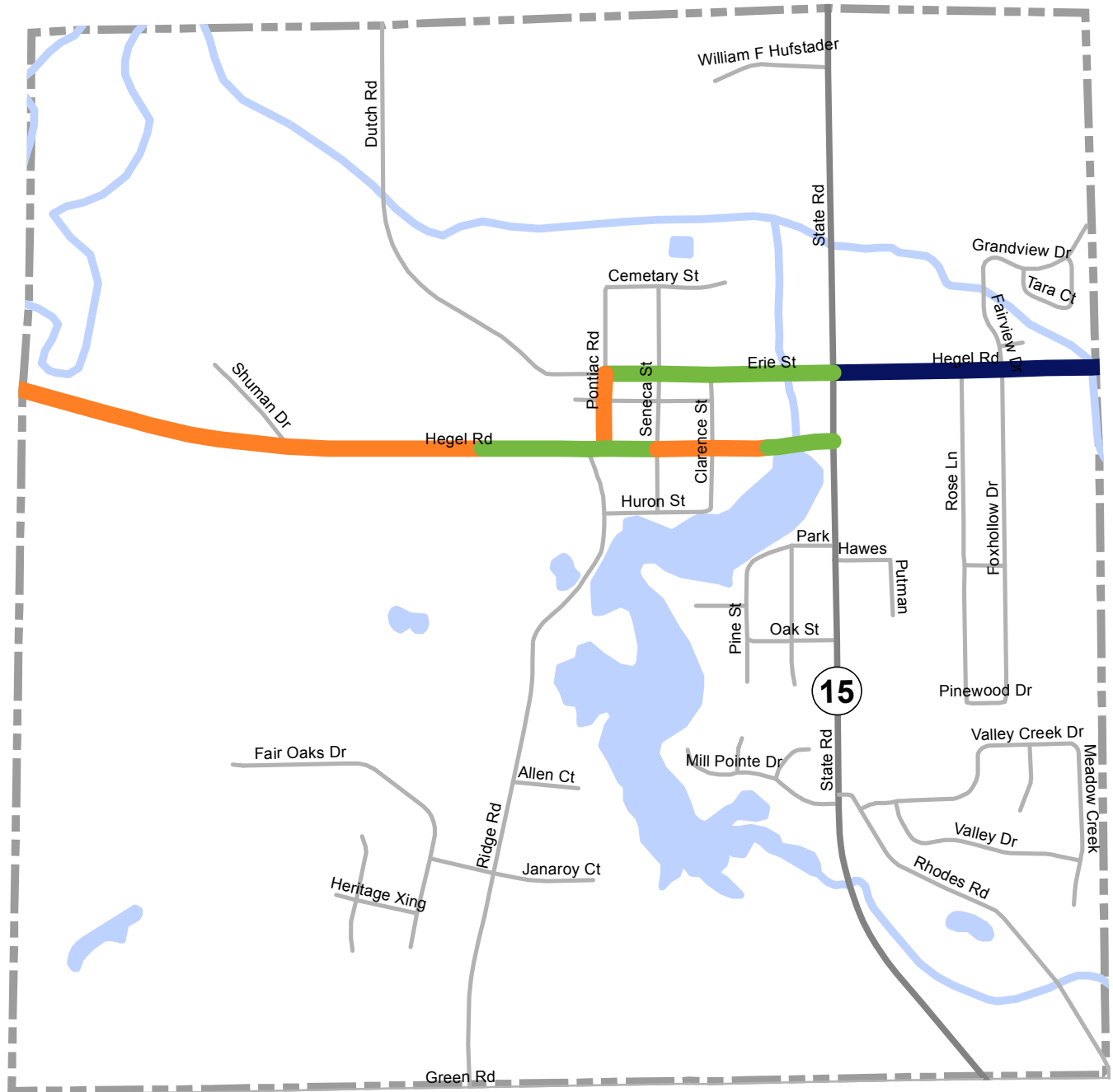


**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

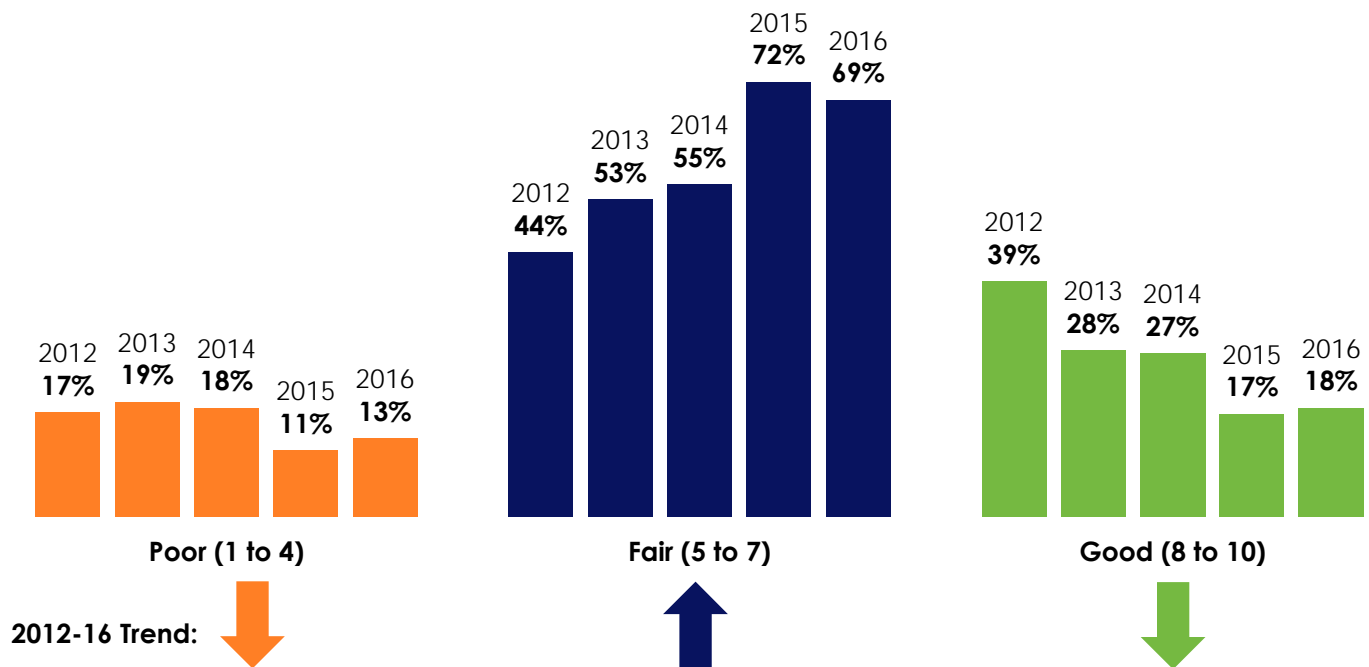
Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# Village of Goodrich

- Rating 8-10 (Good, 34%, 1.31 lane miles)
- Rating 5-7 (Fair, 19%, 0.74 lane miles)
- Rating 1-4 (Poor, 47%, 1.83 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#2** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

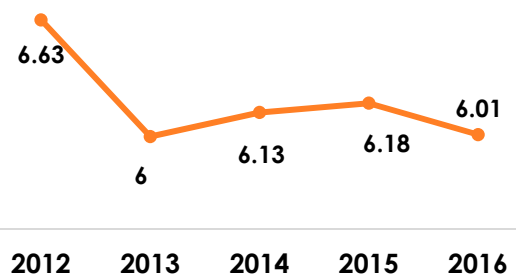
**22.3** lane miles of Federal Aid roads; ranked **#6** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

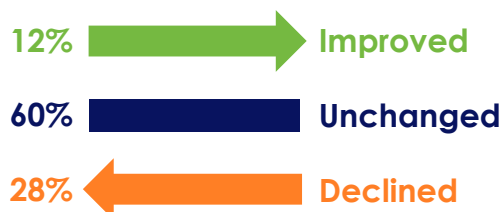
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### City of Grand Blanc Average PASER Rating (APR)



### City of Grand Blanc Trend 2012-2016



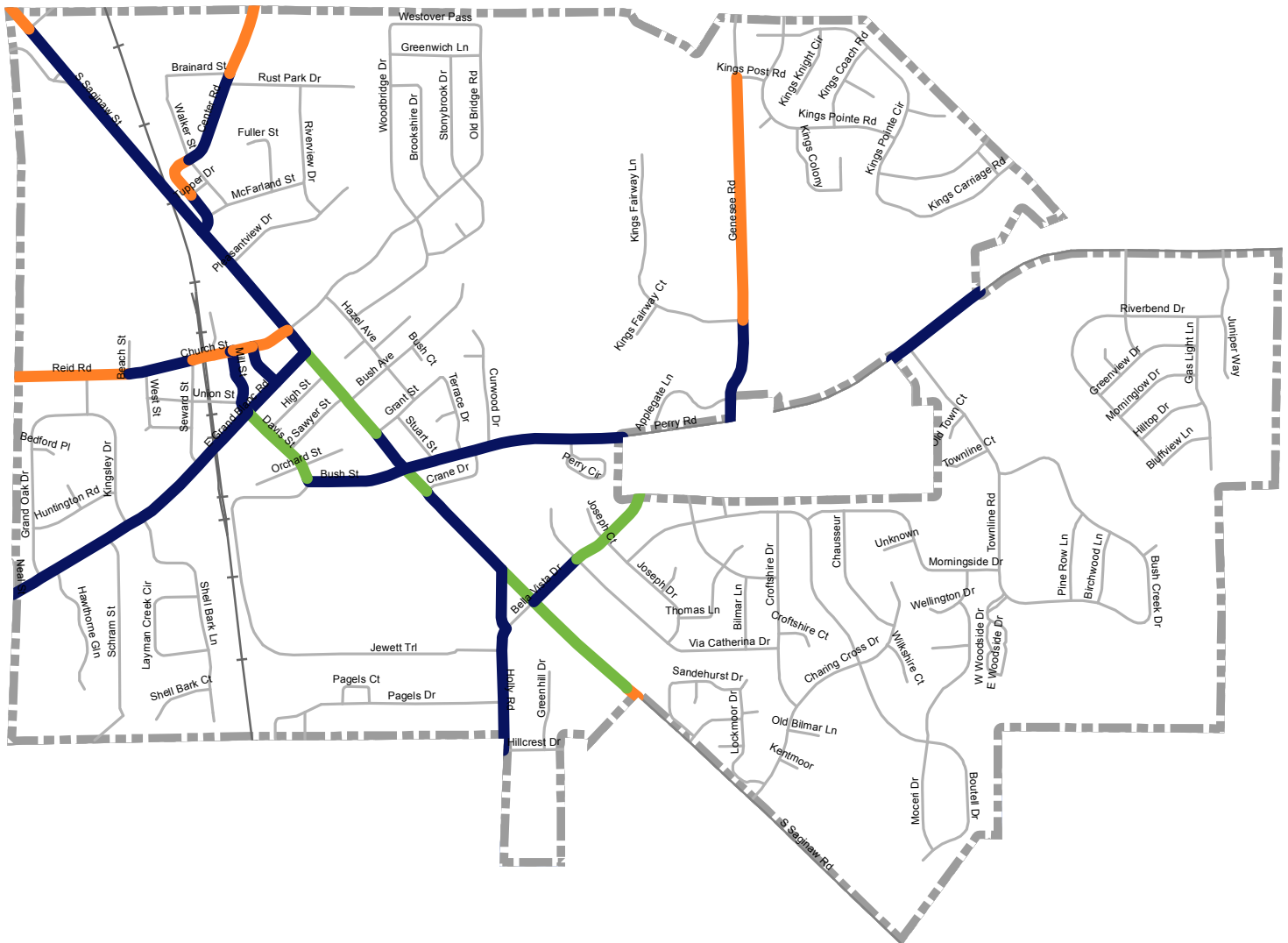
Genesee County allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. Genesee County Road Agencies spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

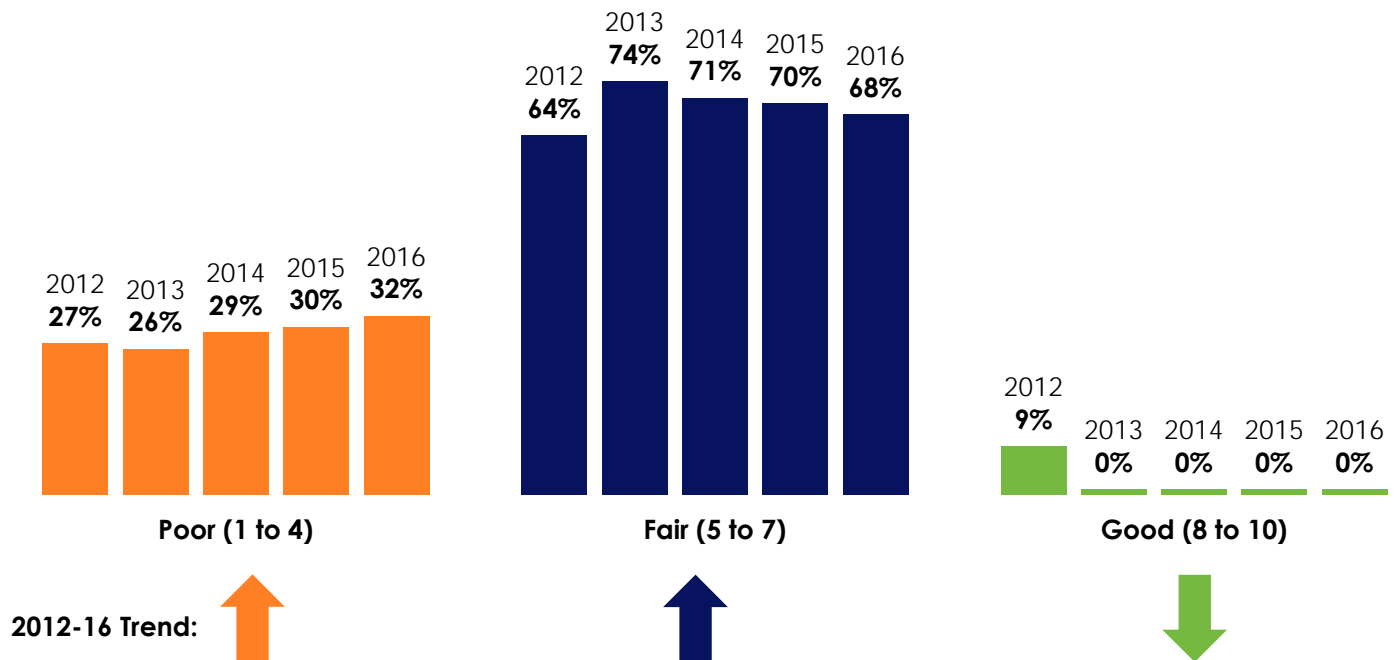
# City of Grand Blanc



- Rating 8-10 (Good, 18%, 3.97 lane miles)
- Rating 5-7 (Fair, 69%, 15.46 lane miles)
- Rating 1-4 (Poor, 13%, 2.86 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#7** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

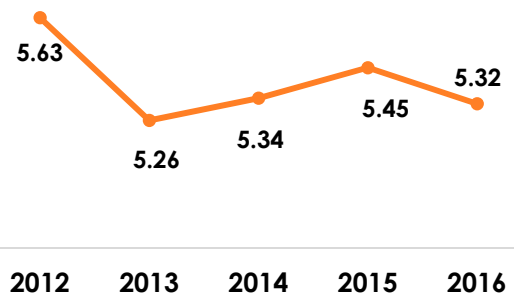
**11.0** lane miles of Federal Aid roads; ranked **#8** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Linden Average PASER Rating (APR)



## City of Linden Trend 2012-2016

1% **Improved**

85% **Unchanged**

14% **Declined**

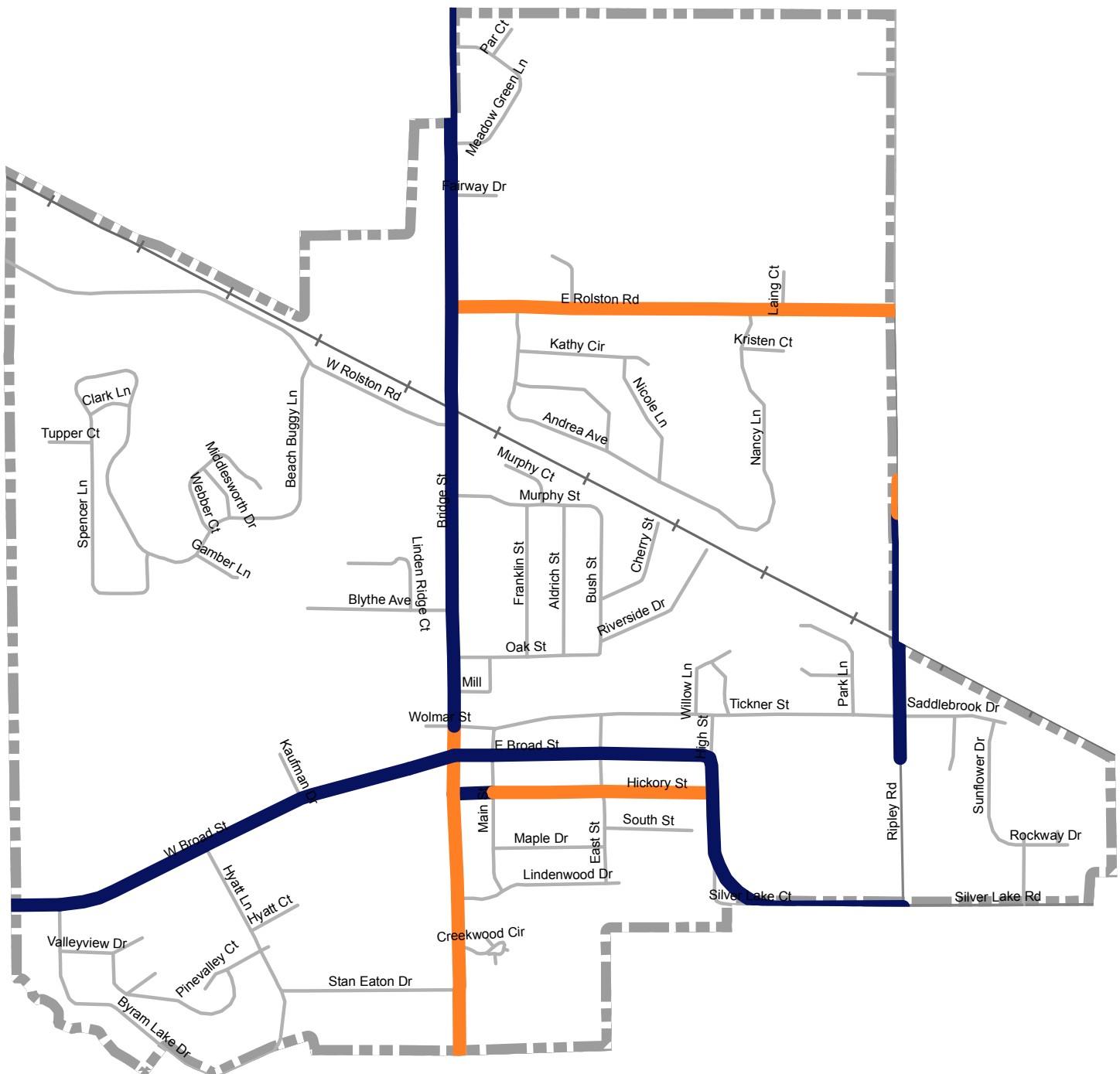
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# 2016 PASER Survey

## City of Linden

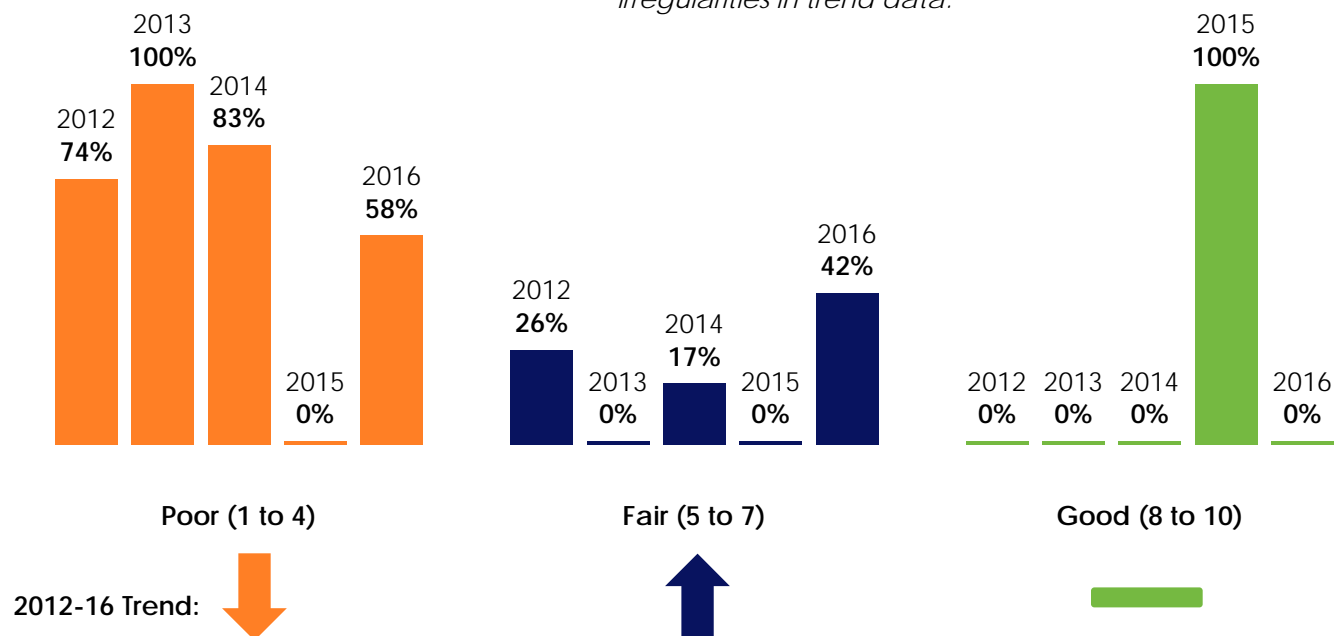
- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 68%, 7.53 lane miles)
- Rating 1-4 (Poor, 32%, 3.49 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016

*Note: 1.3 lane miles of Federal-Aid roads were added in 2016, causing irregularities in trend data.*



Ranked **#9** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

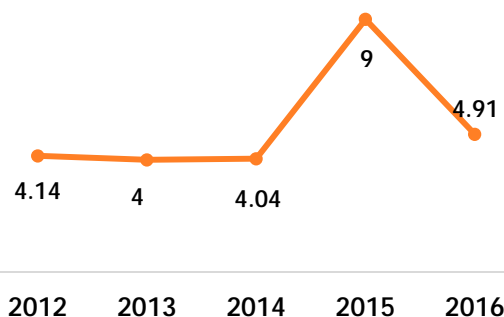
**2.3** lane miles of Federal Aid roads; ranked **#12** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

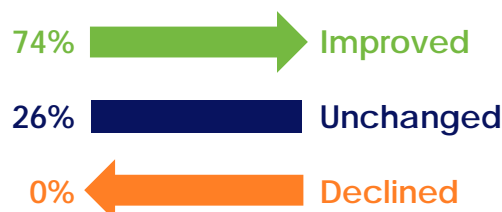
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Montrose Average PASER Rating (APR)



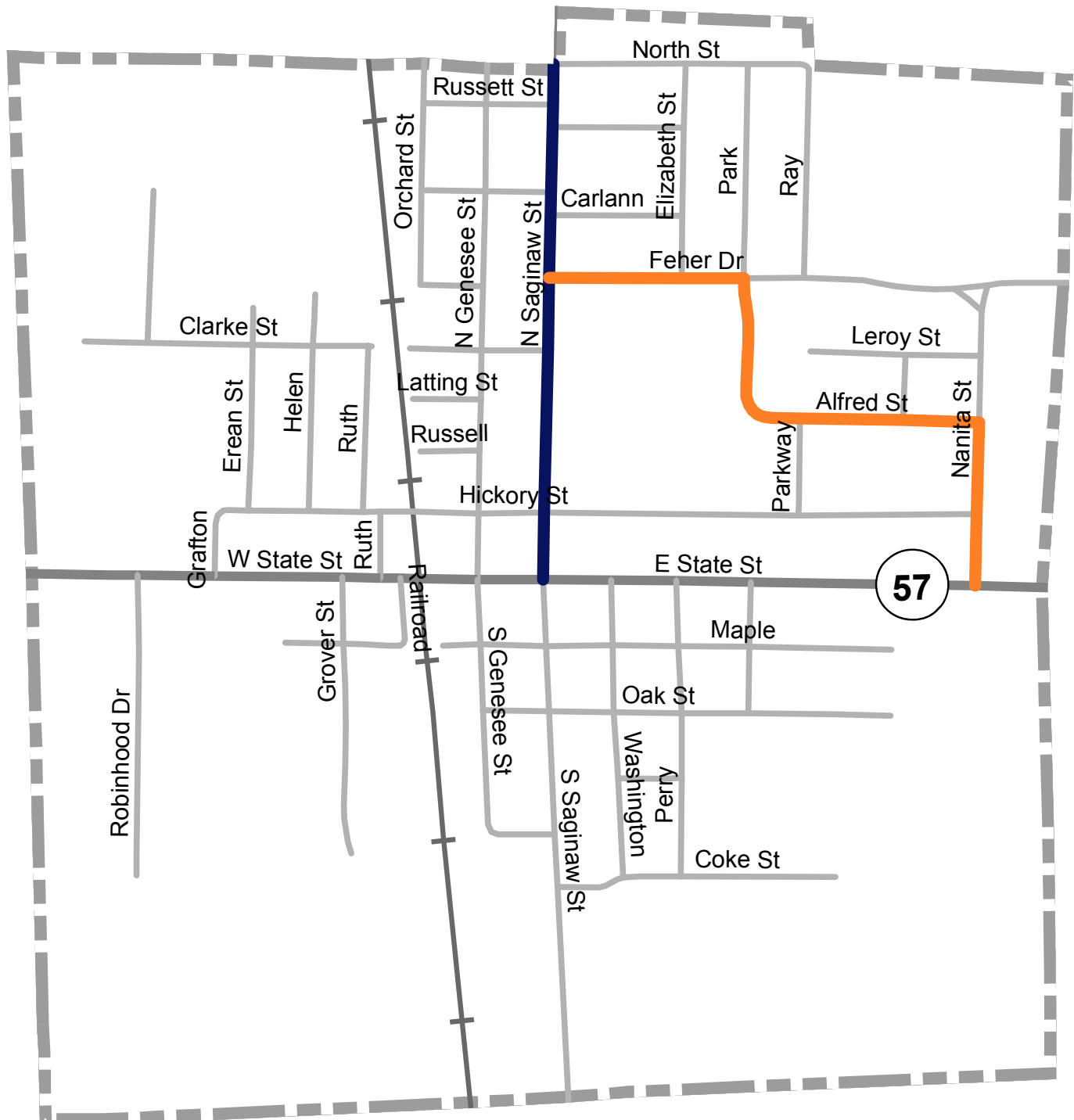
## City of Montrose Trend 2012-2016



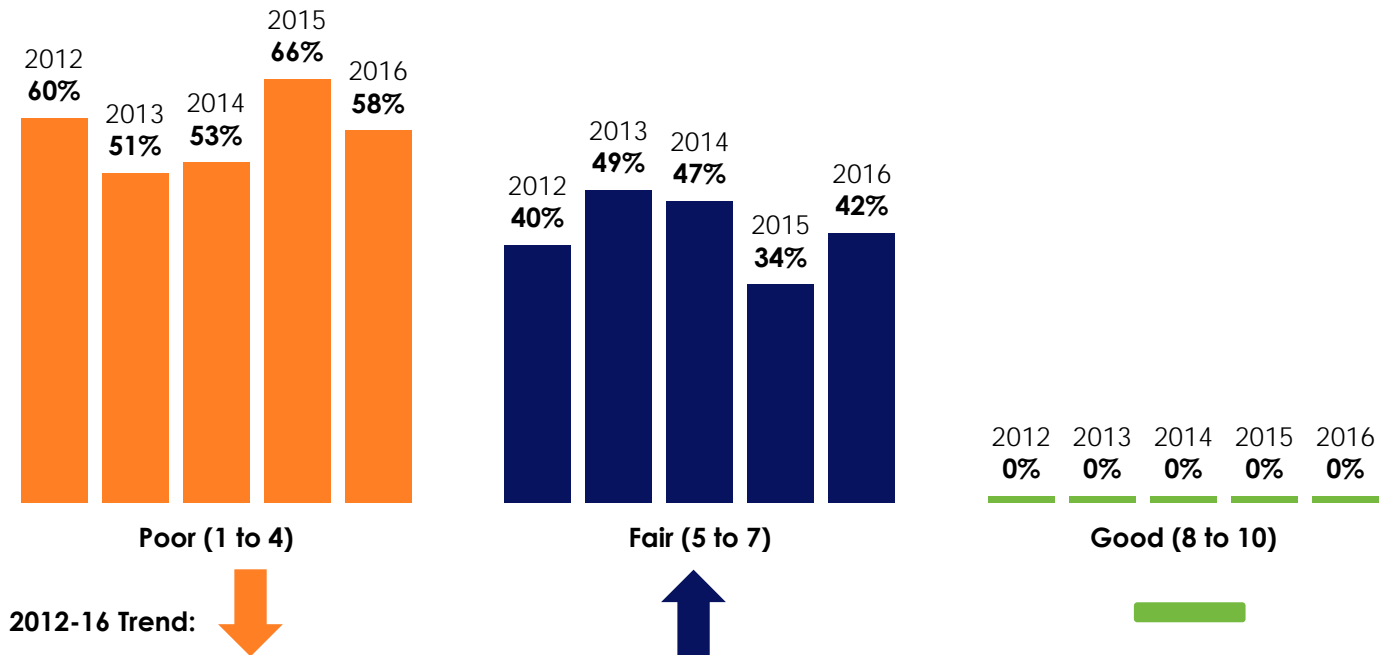
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 42%, 0.98 lane miles)
- Rating 1-4 (Poor, 58%, 1.36 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#14** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

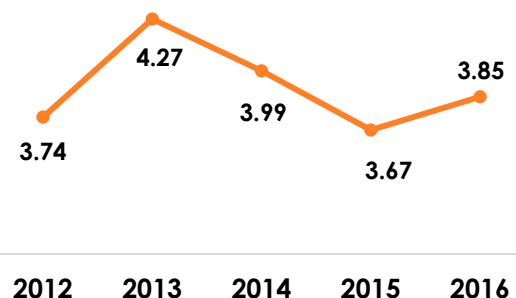
**13.2** lane miles of Federal Aid roads; ranked **#7** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

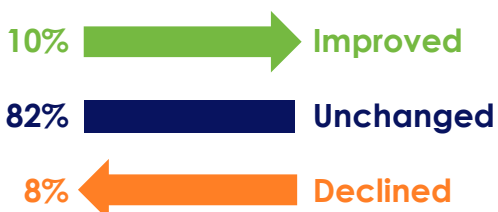
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## City of Mt. Morris Average PASER Rating (APR)




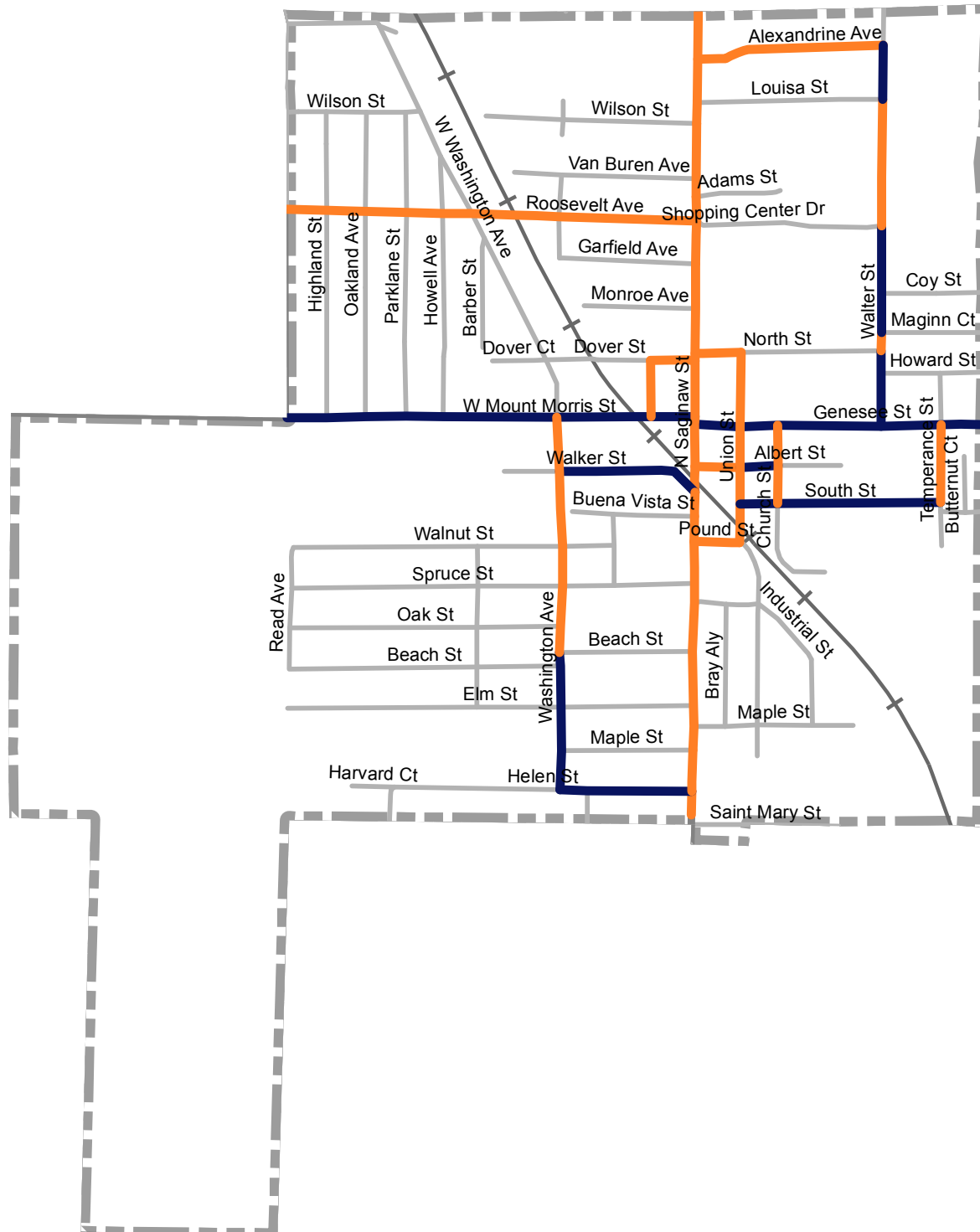
## City of Mt. Morris Trend 2012-2016



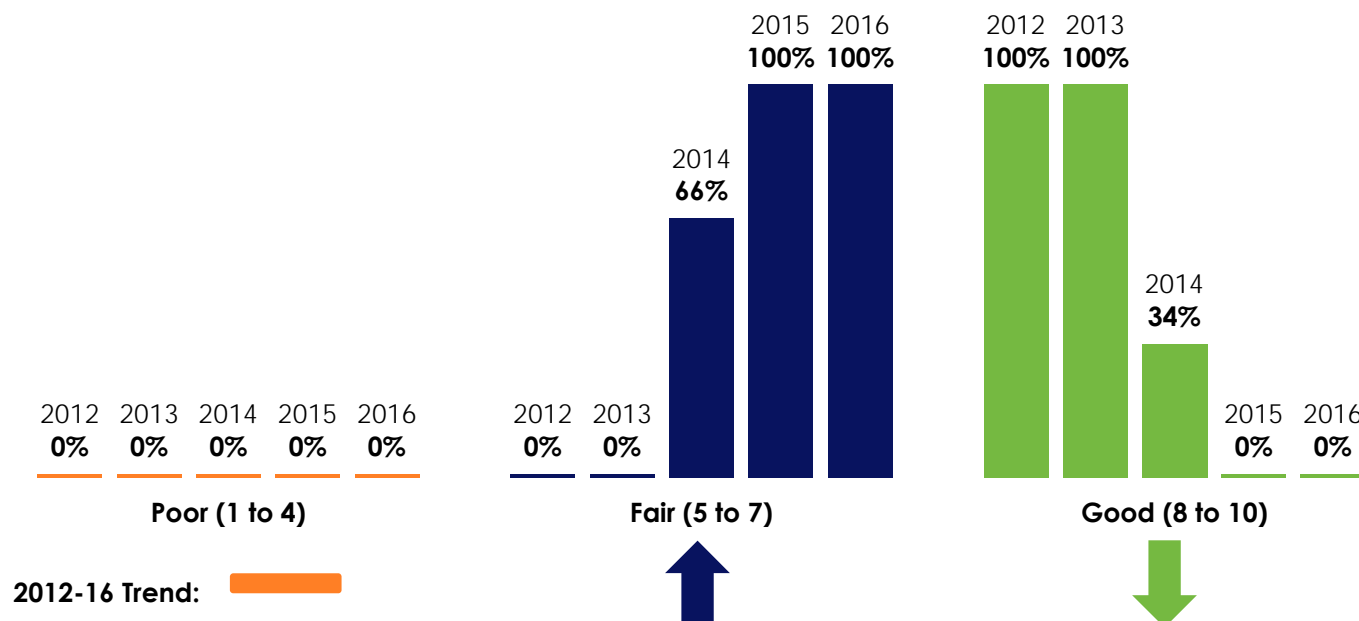
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 42%, 5.60 lane miles)
- Rating 1-4 (Poor, 58%, 7.62 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#1** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

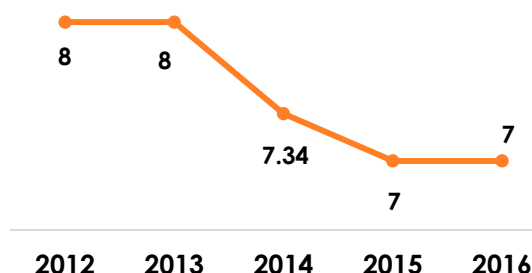
**0.5** lane miles of Federal Aid roads; ranked **#14** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

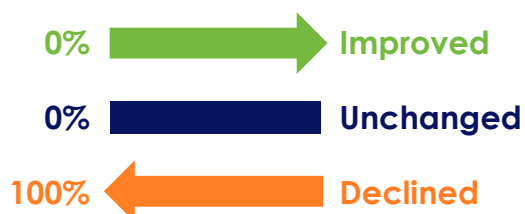
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Village of Otter Lake Average PASER Rating (APR)



## Village of Otter Lake Trend 2012-2016



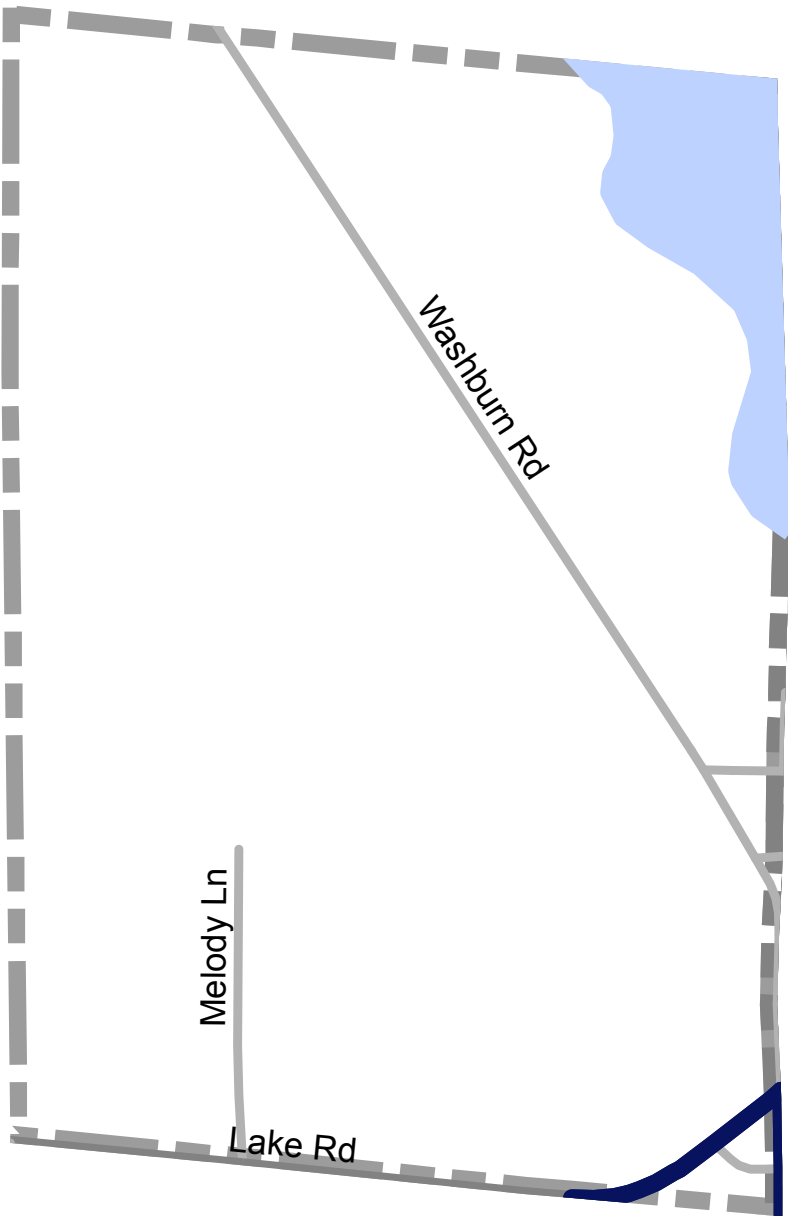
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network.

**Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

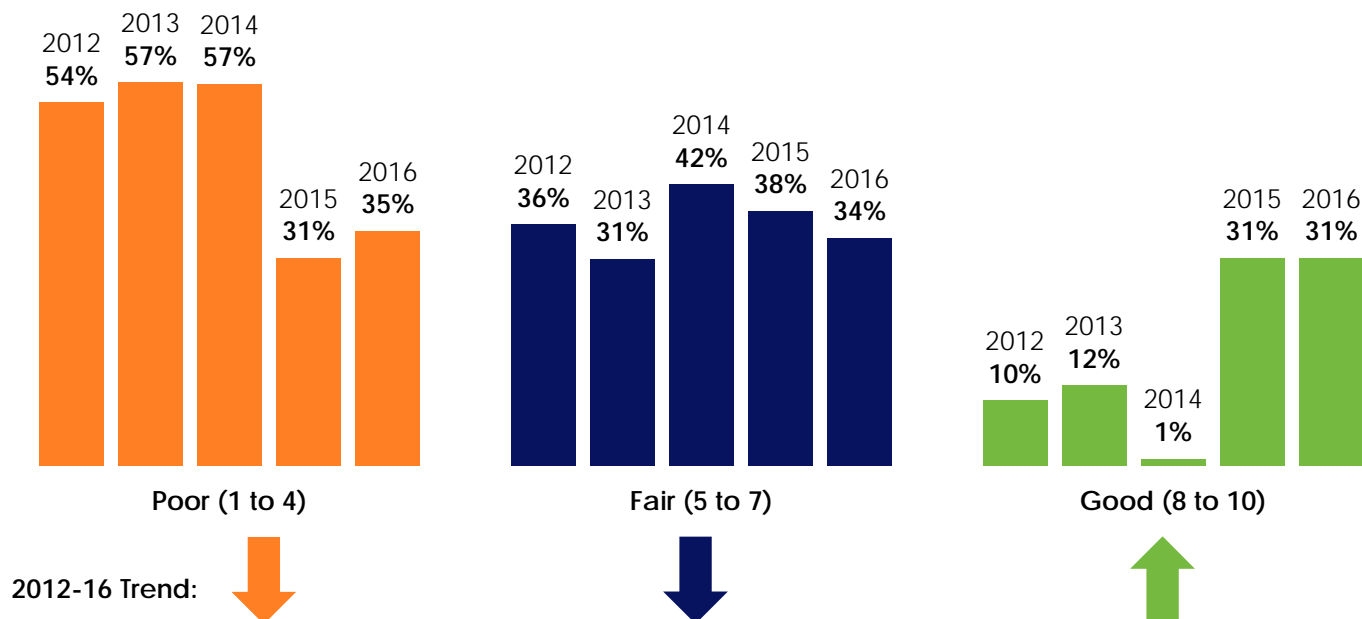
Village of Otter Lake

- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 100%, 0.49 lane miles)
- Rating 1-4 (Poor, 0%, 0.0 lane miles)
- Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#5** out of 14 cities & villages in Genesee County by Average PASER Rating, #14 being the worst

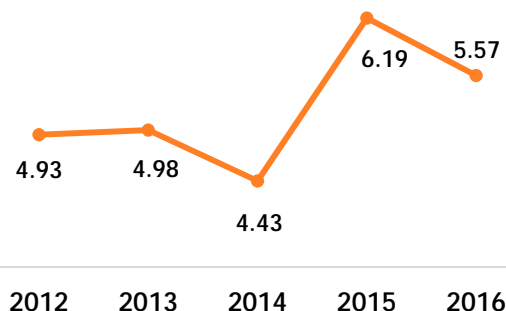
**28.4** lane miles of Federal Aid roads; ranked **#4** out of 14 cities & villages, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

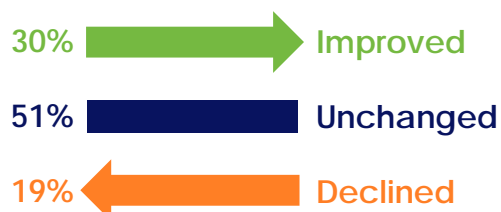
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### City of Swartz Creek Average PASER Rating (APR)



### City of Swartz Creek Trend 2012-2016



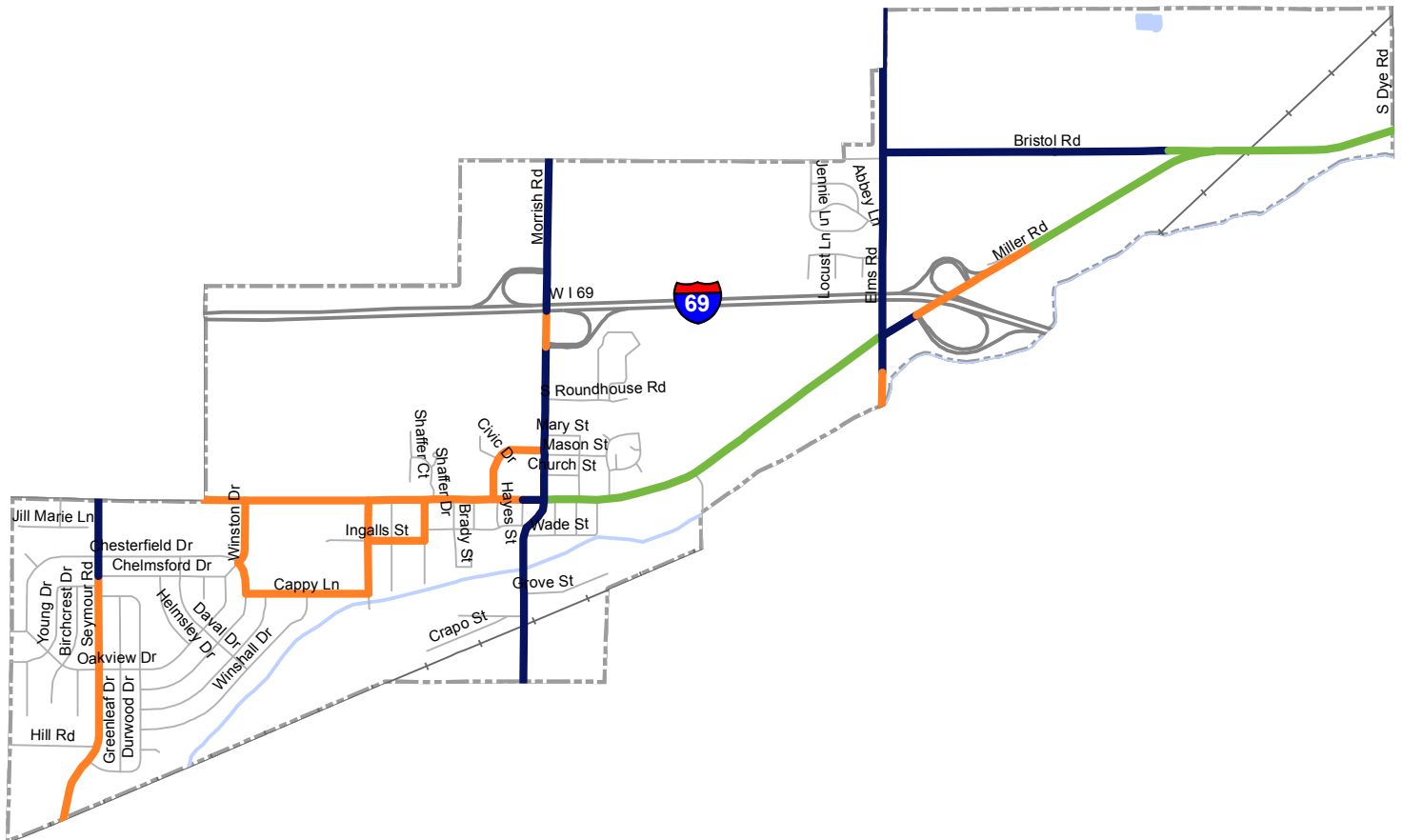
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds. Swartz Creek approved a road millage in May 2016, expecting to raise \$616,000 in its first year.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

## 2016 PASER Survey

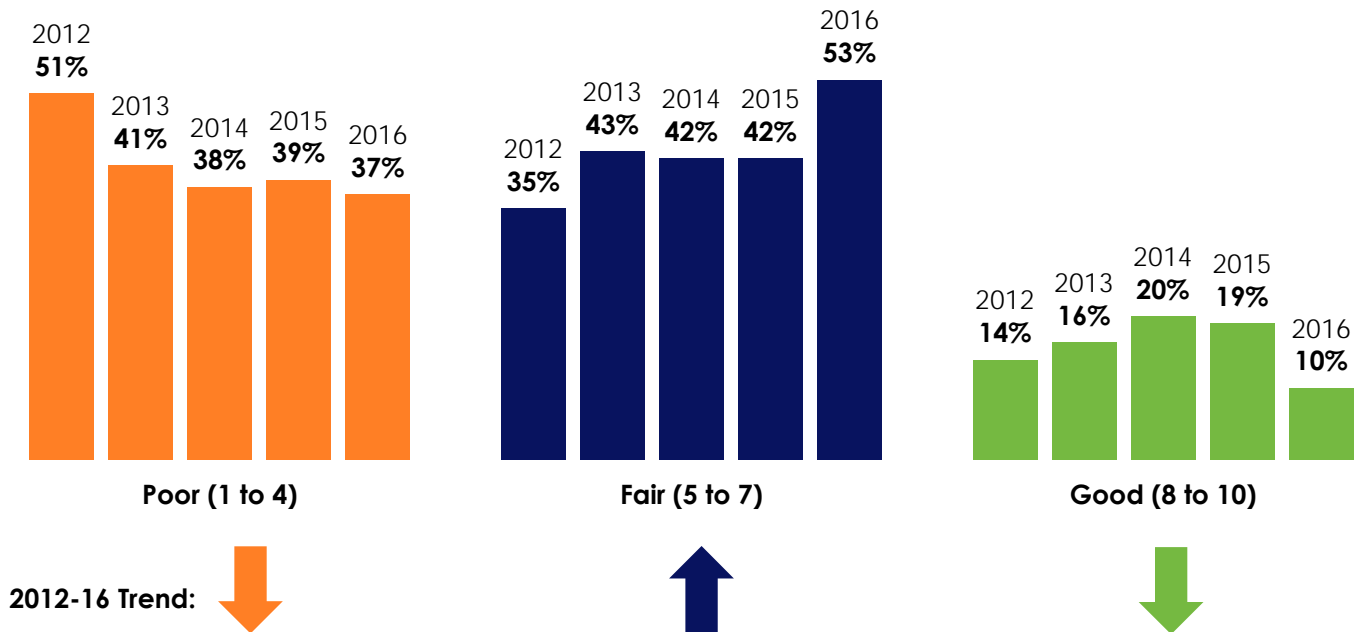
# City of Swartz Creek

- Rating 8-10 (Good, 31%, 8.67 lane miles)
- Rating 5-7 (Fair, 34%, 9.73 lane miles)
- Rating 1-4 (Poor, 35%, 10.03 lane miles)
-  Roads Under State Jurisdiction
-  Local Road (Not Rated)



# 2016 PASER Survey Township Roads – Genesee County Road Commission (GCRC)

## PASER Ratings 2012-2016



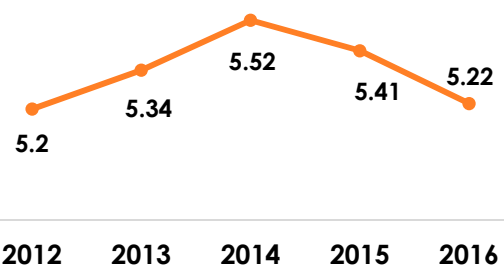
**1,161.9** lane miles of Federal Aid roads located in townships, maintained by the Genesee County Road Commission (GCRC)

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

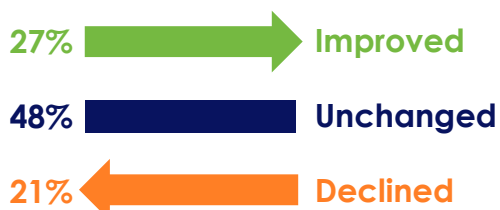
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## GCRC Average PASER Rating (APR)



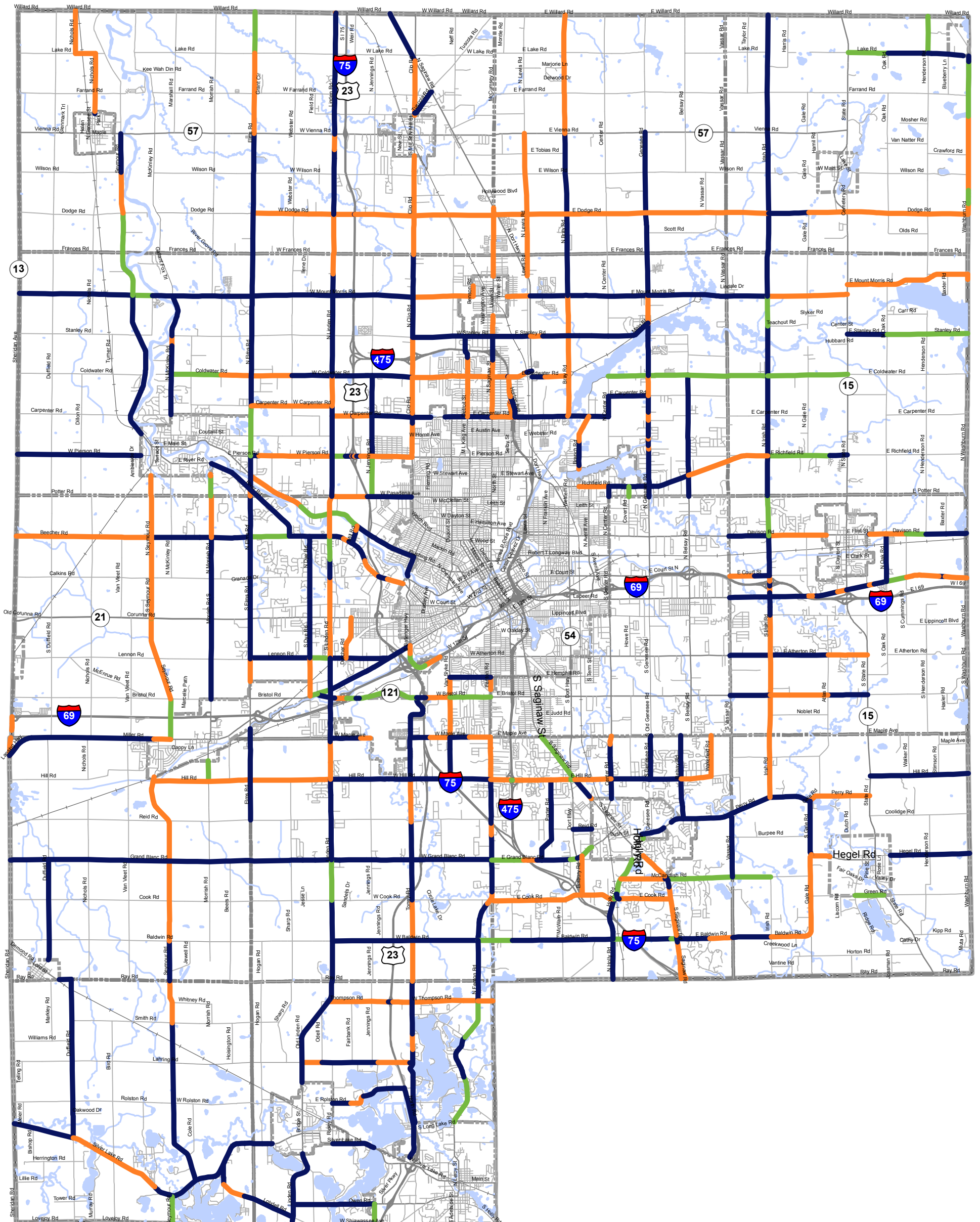
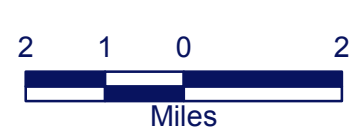
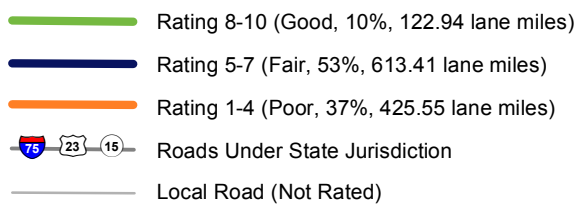
## GCRC Trend 2012-2016



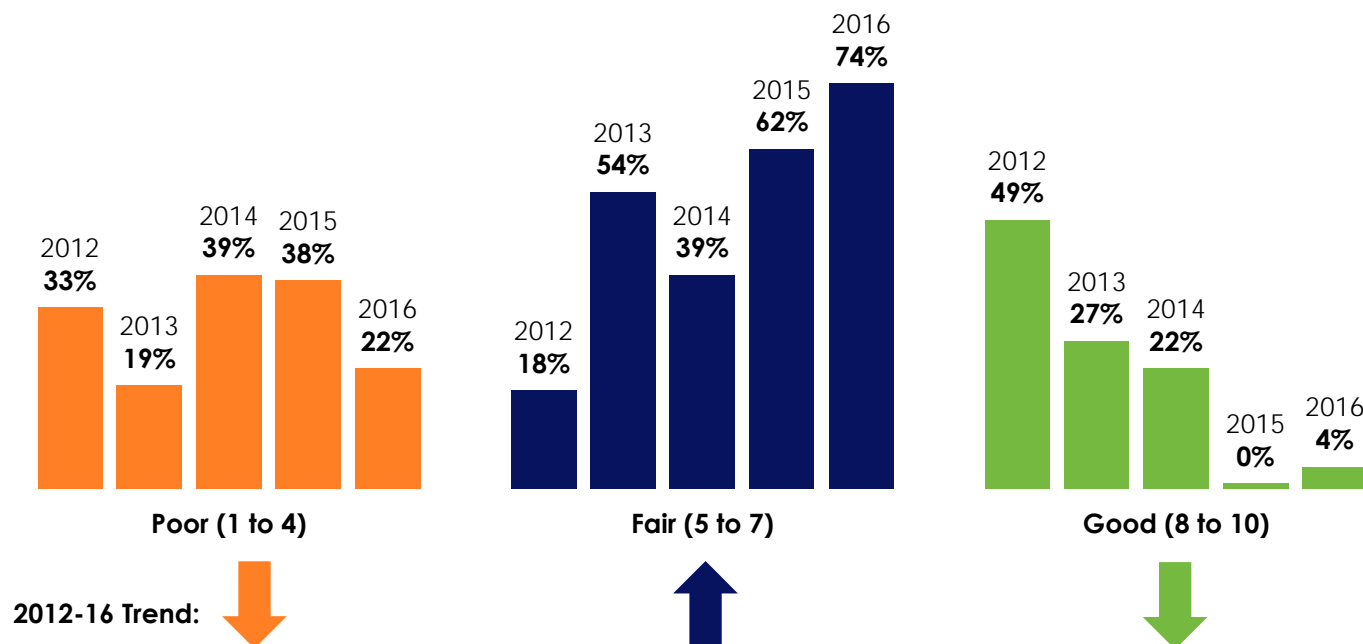
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# Genesee County Road Commission



## PASER Ratings 2012-2016



Ranked **#6** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

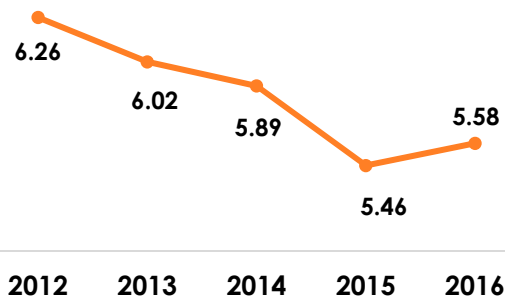
**36.6** lane miles of Federal Aid roads; ranked **#15** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

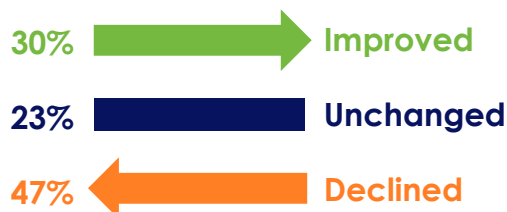
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Argentine Township Average PASER Rating (APR)



### Argentine Township Trend 2012-2016



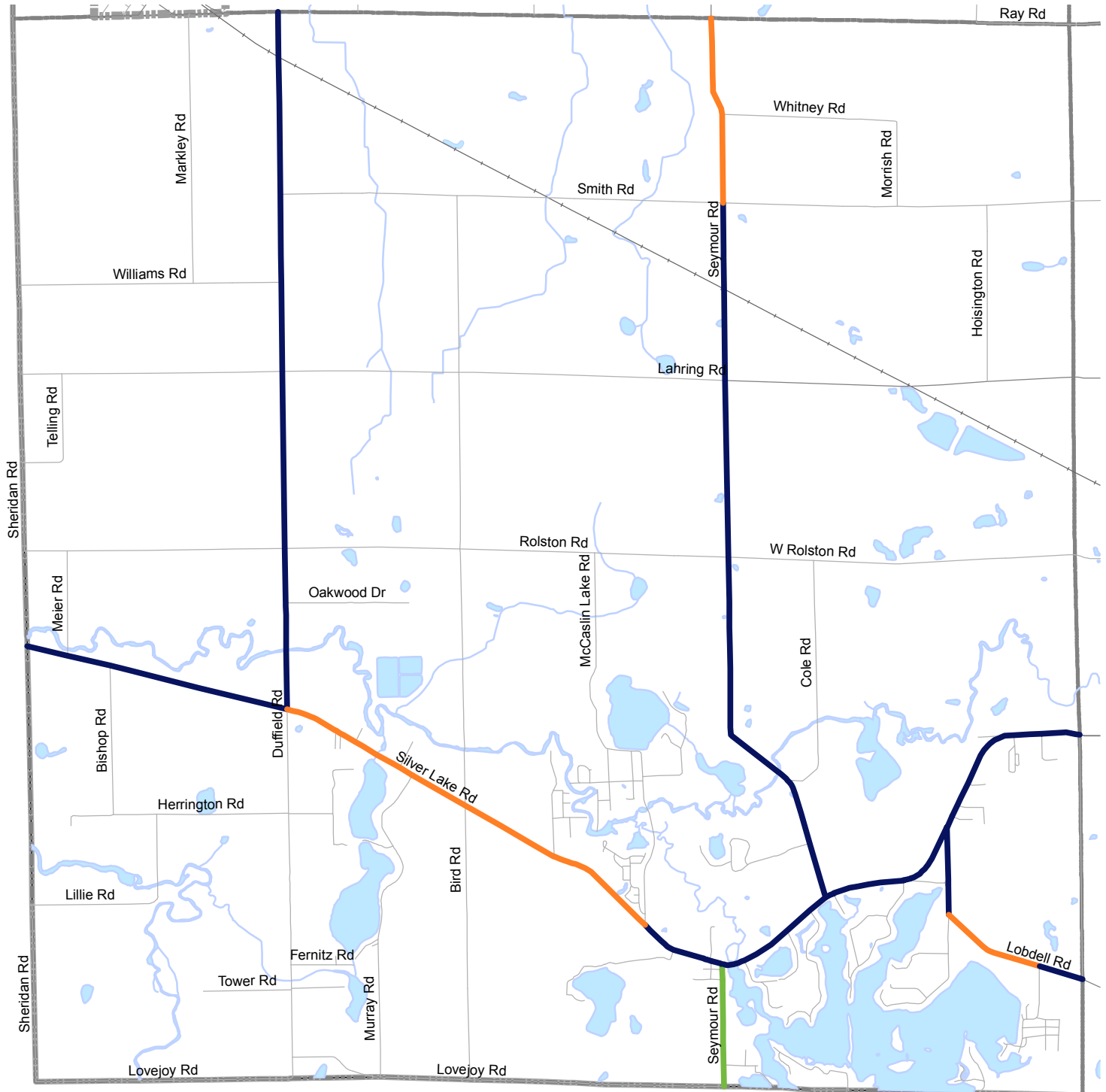
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.



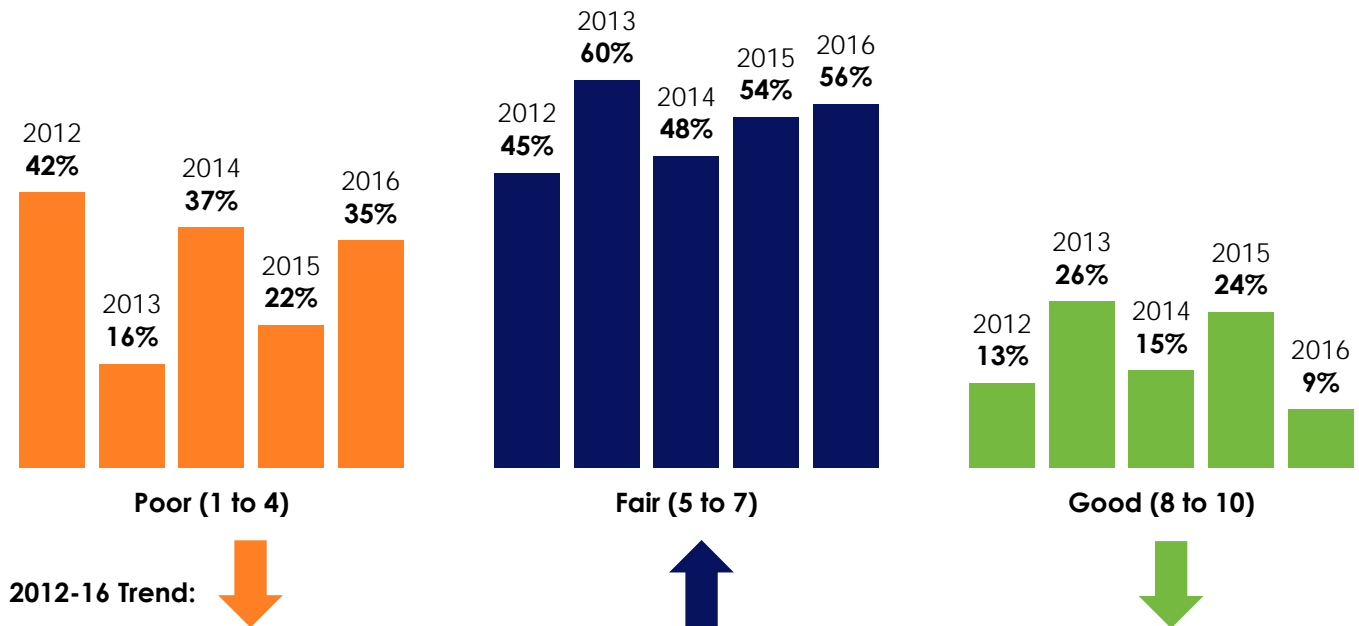
# Argentine Township

- Rating 8-10 (Good, 4%, 1.39 lane miles)
- Rating 5-7 (Fair, 74%, 27.06 lane miles)
- Rating 1-4 (Poor, 22%, 8.13 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#9** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

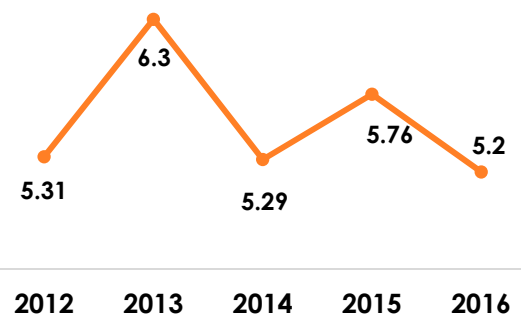
**37.1** lane miles of Federal Aid roads; ranked **#14** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

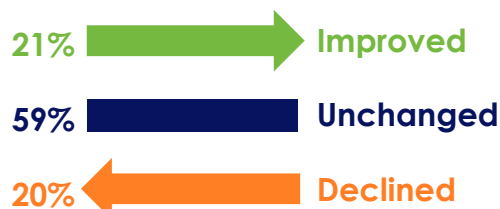
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Atlas Township Average PASER Rating (APR)



## Atlas Township Trend 2012-2016



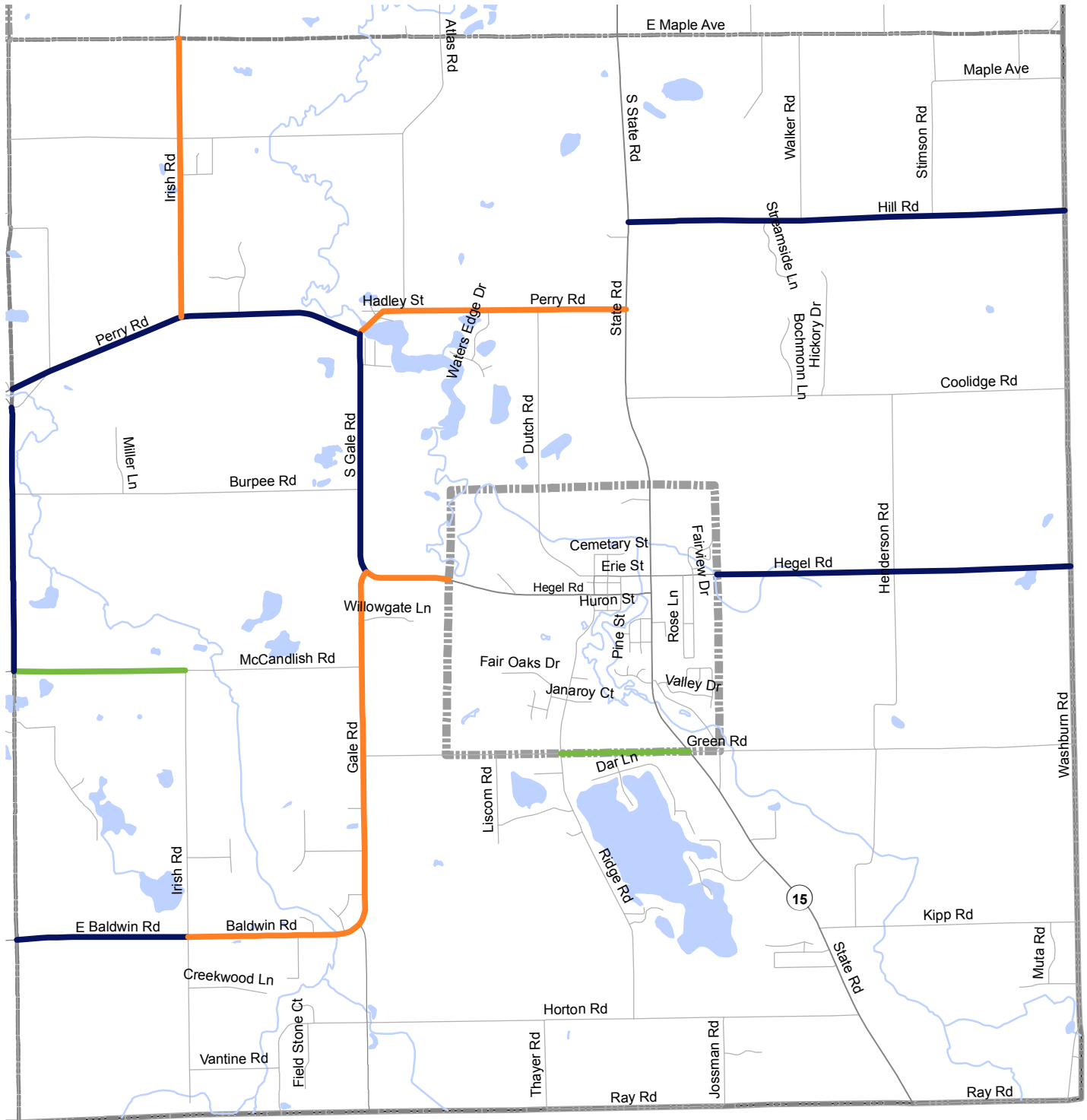
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

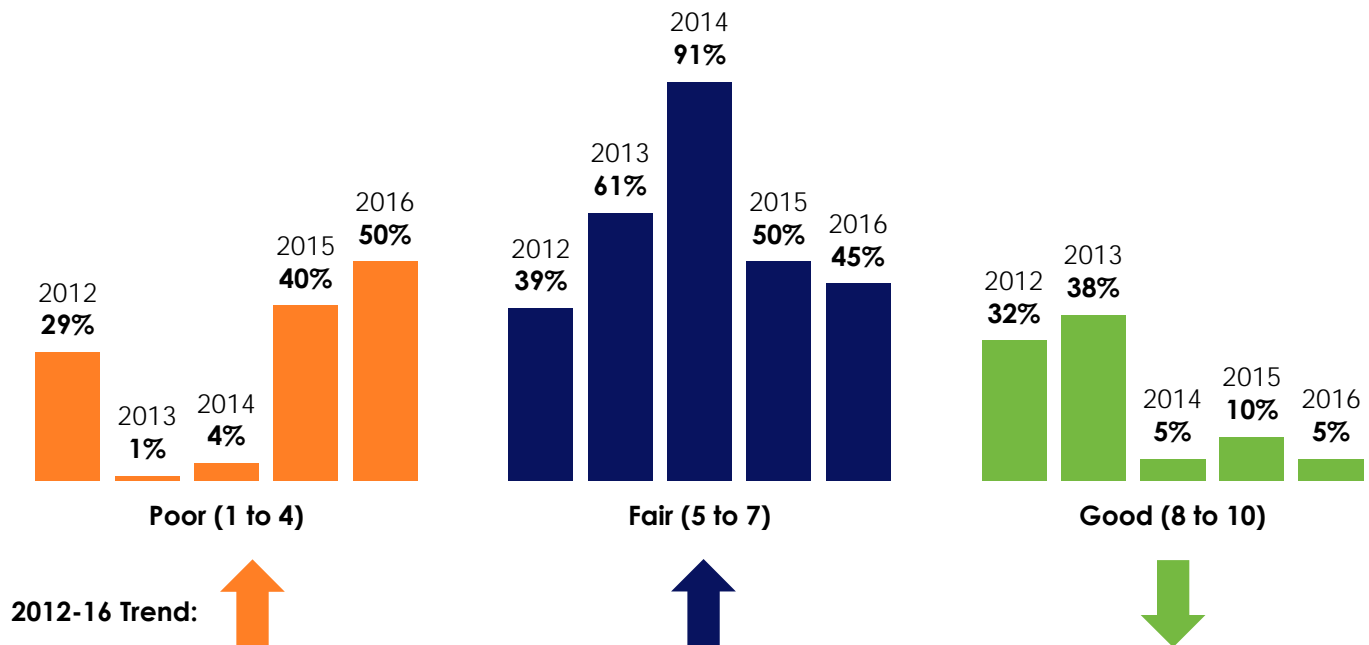
# Atlas Township



-  Rating 8-10 (Good, 9%, 3.37 lane miles)
-  Rating 5-7 (Fair, 56%, 20.59 lane miles)
-  Rating 1-4 (Poor, 35%, 13.14 lane miles)
-  Roads Under State Jurisdiction
-  Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#12** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

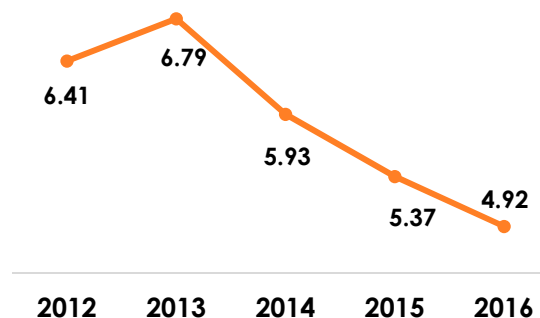
**42.6** lane miles of Federal Aid roads; ranked **#10** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

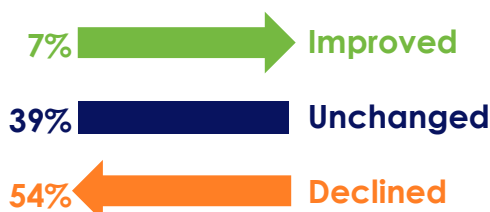
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Clayton Township Average PASER Rating (APR)



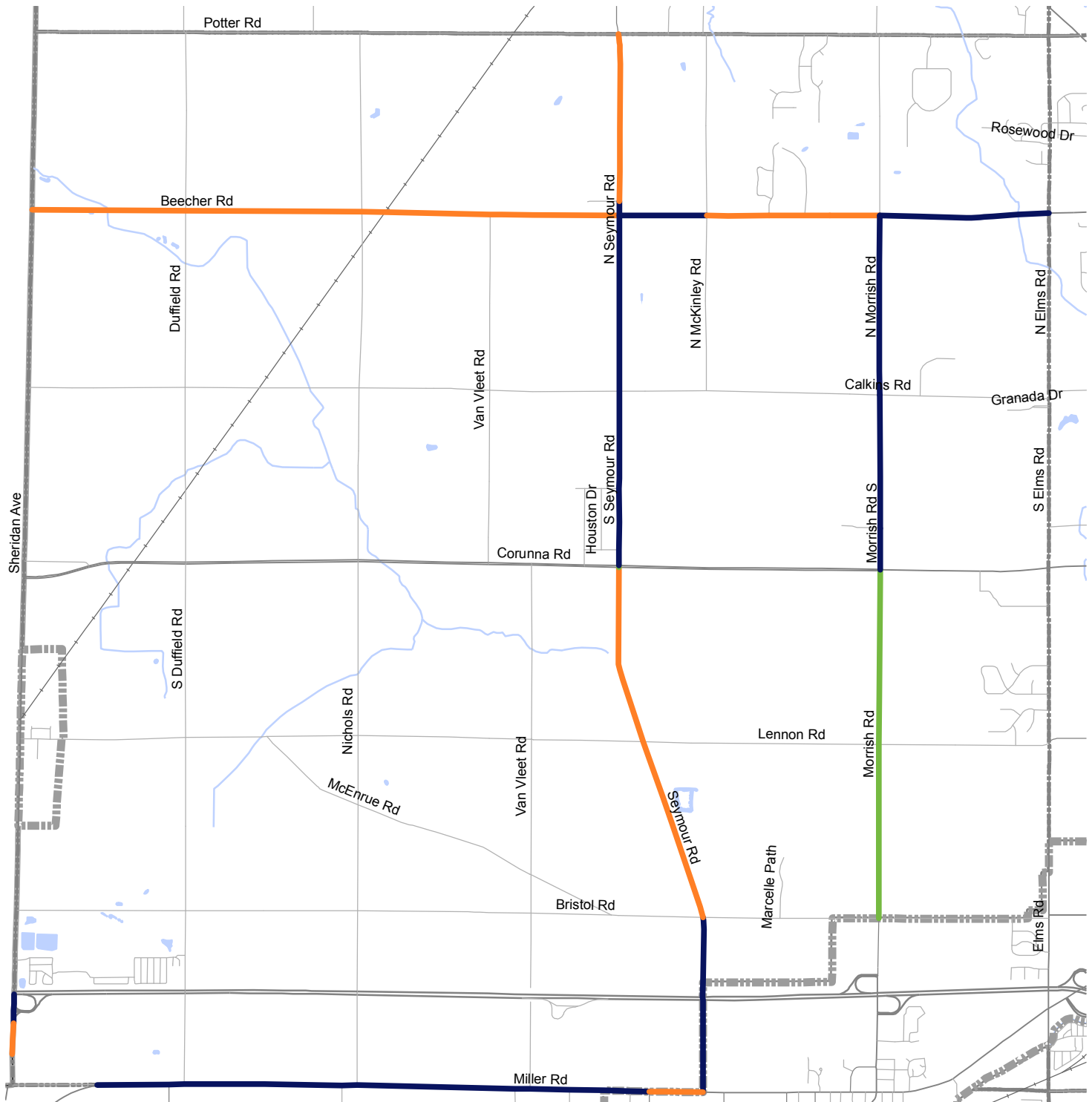
### Clayton Township Trend 2012-2016



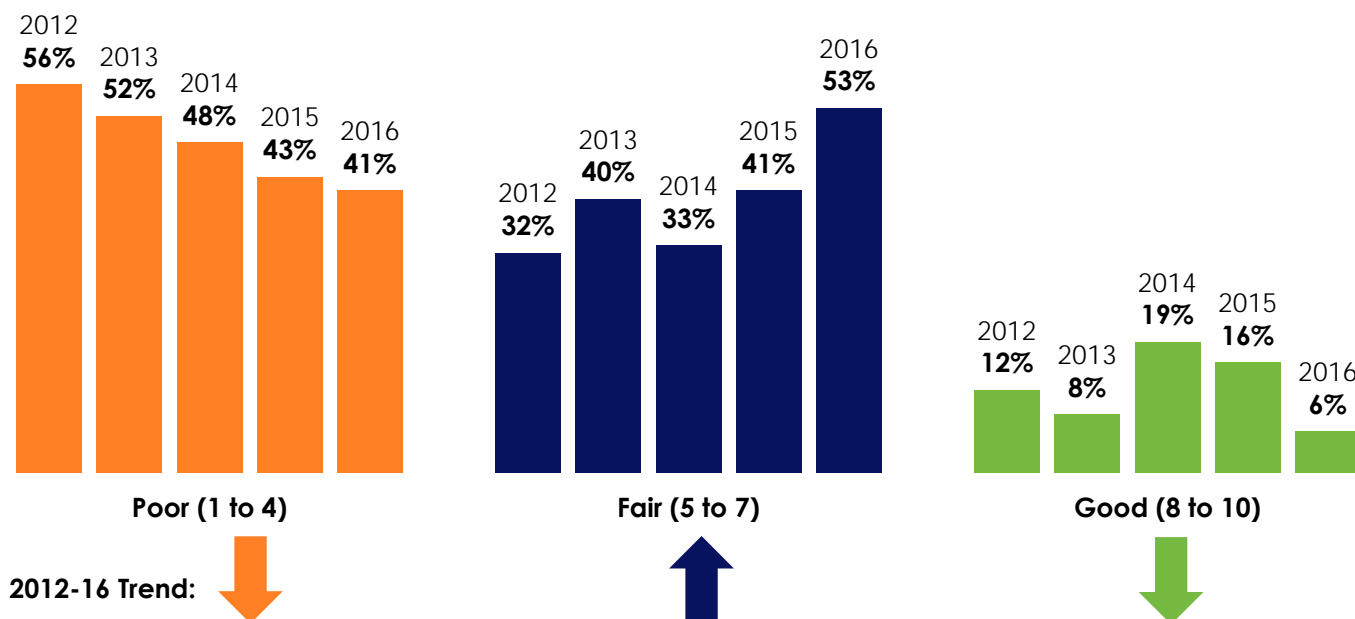
Genesee County allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. Genesee County Road Agencies spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 5%, 2.03 lane miles)
- Rating 5-7 (Fair, 45%, 19.18 lane miles)
- Rating 1-4 (Poor, 50%, 21.37 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#11** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

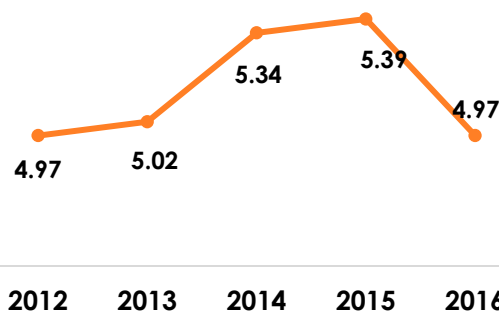
**64.7** lane miles of Federal Aid roads; ranked **#6** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

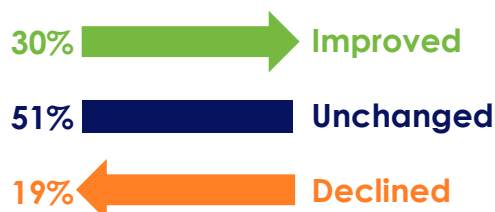
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Davison Township Average PASER Rating (APR)



### Davison Township Trend 2012-2016

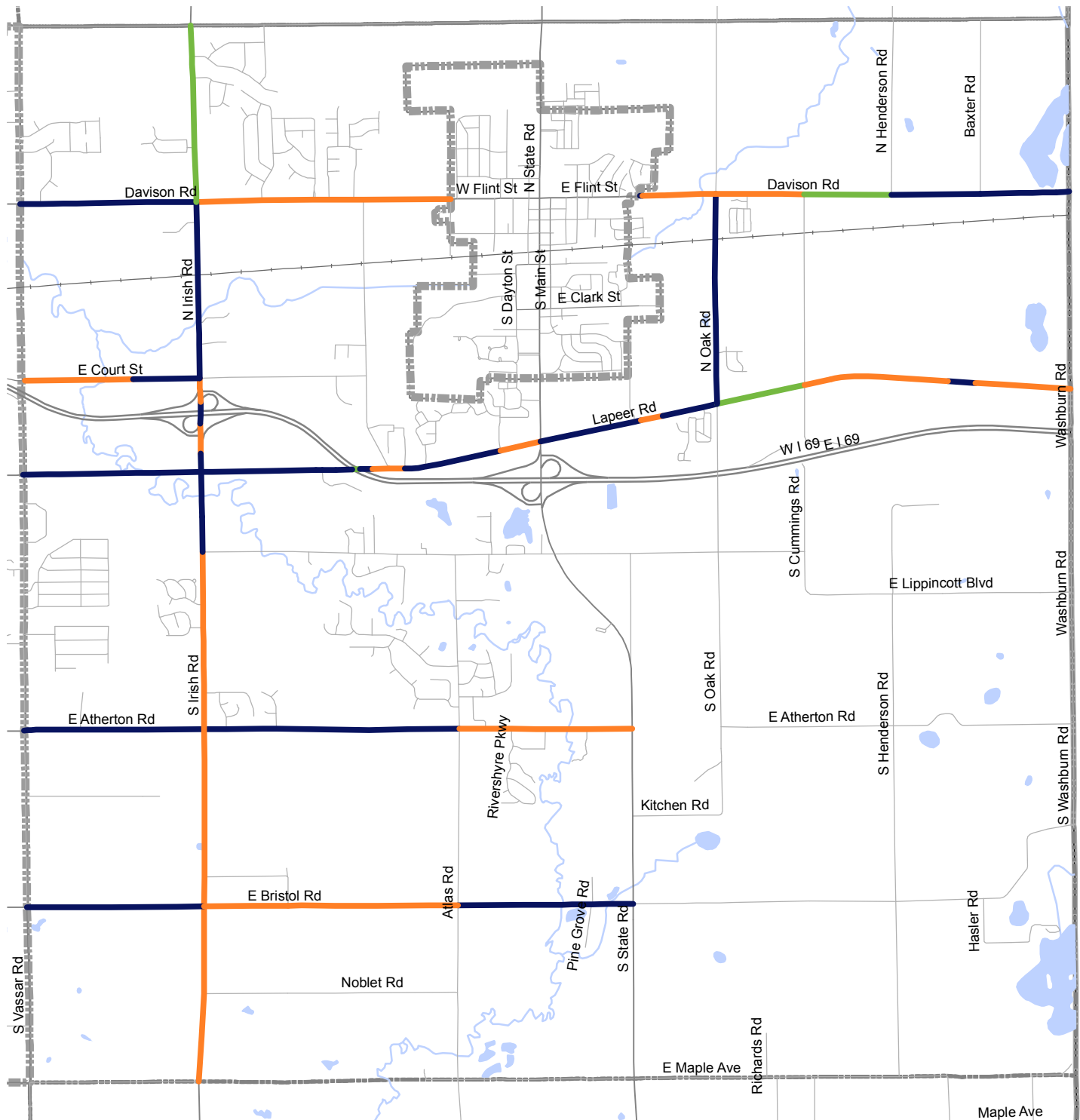


**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

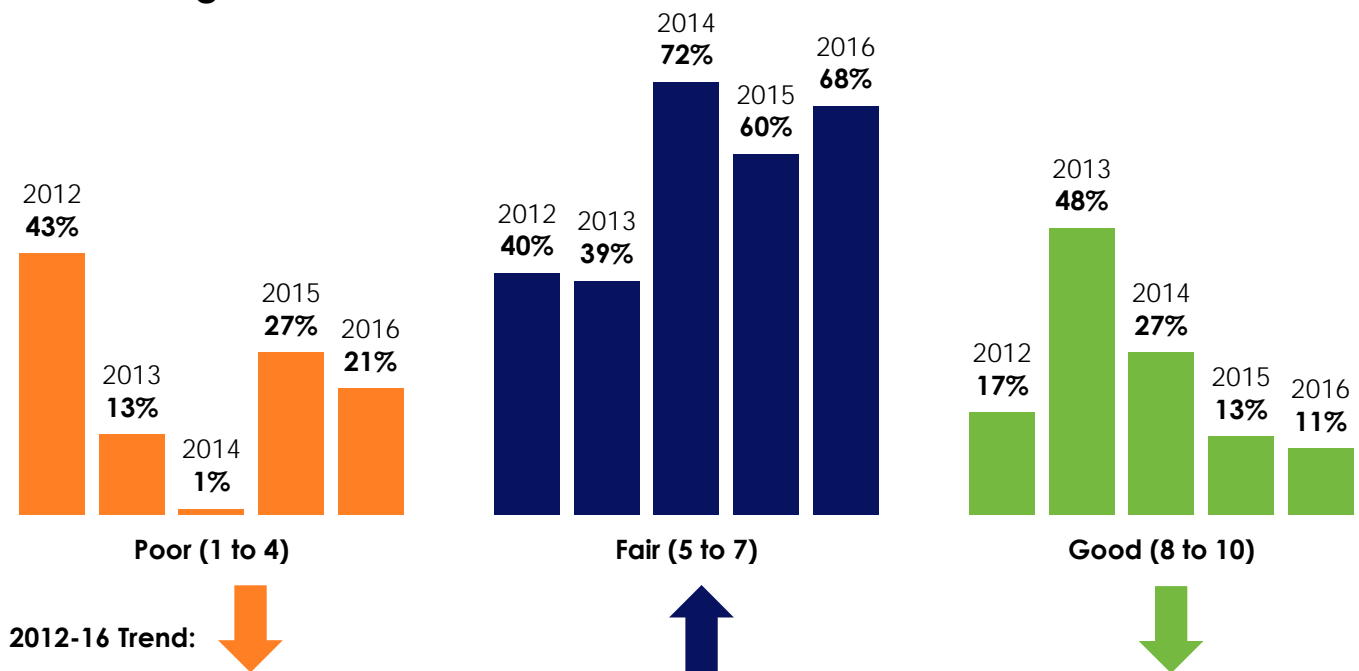
# Davison Township

- Rating 8-10 (Good, 6%, 4.10 lane miles)
- Rating 5-7 (Fair, 53%, 34.50 lane miles)
- Rating 1-4 (Poor, 41%, 26.13 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#4** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

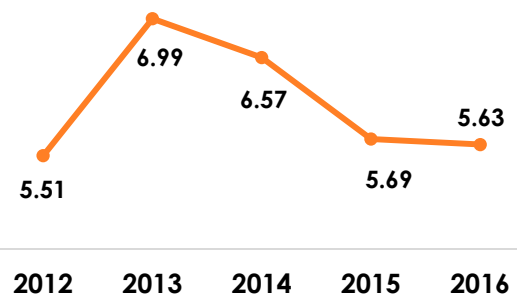
**59.1** lane miles of Federal Aid roads; ranked **#7** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

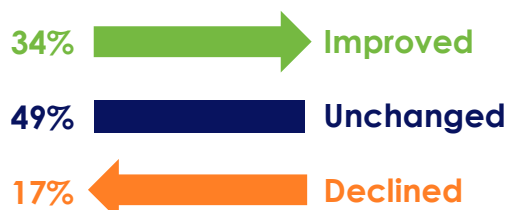
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Fenton Township Average PASER Rating (APR)



### Fenton Township Trend 2012-2016

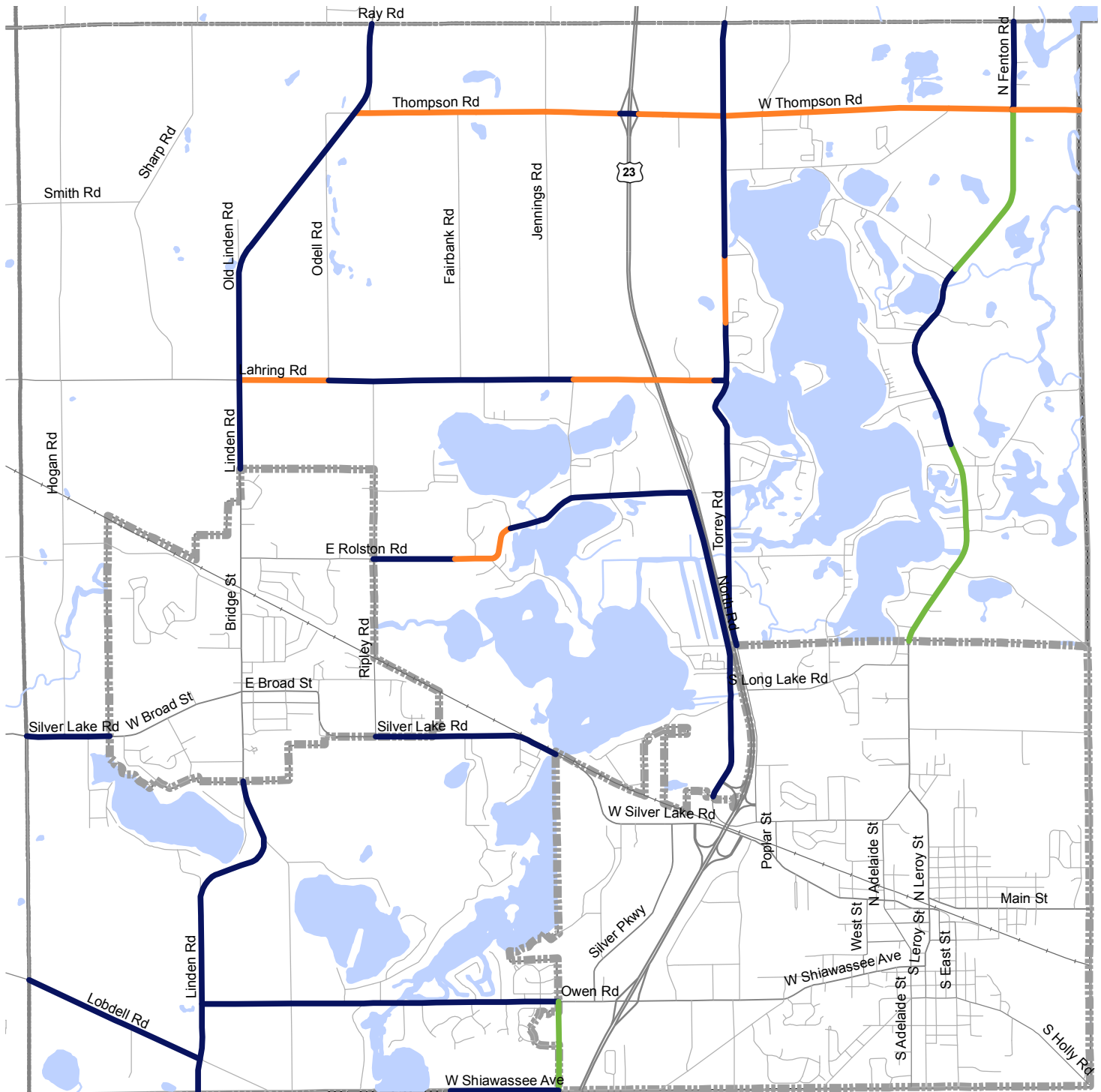


**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

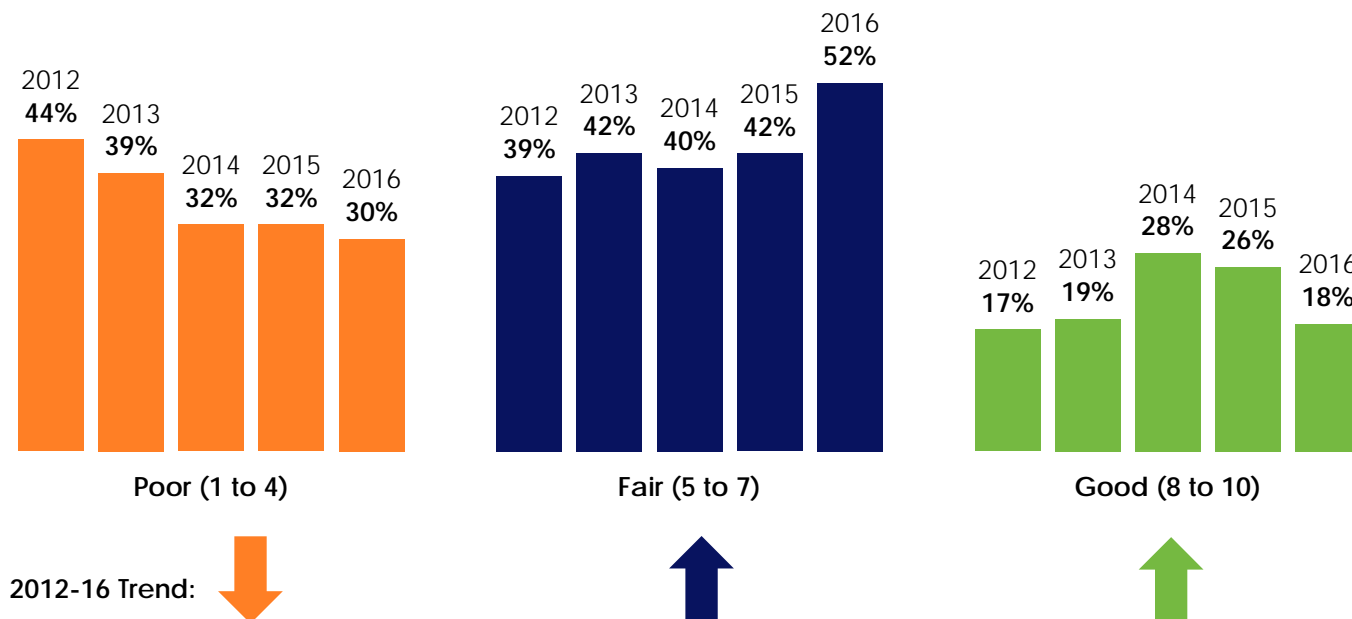
Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# Fenton Township

- Rating 8-10 (Good, 11%, 6.75 lane miles)
- Rating 5-7 (Fair, 68%, 40.01 lane miles)
- Rating 1-4 (Poor, 21%, 12.30 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#5** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

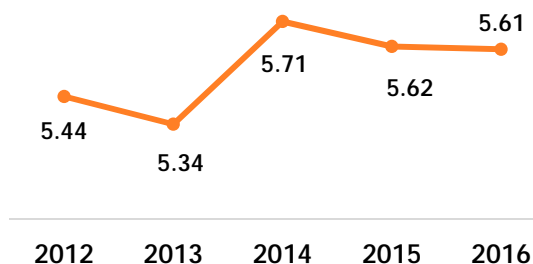
**168.3** lane miles of Federal Aid roads; ranked **#1** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

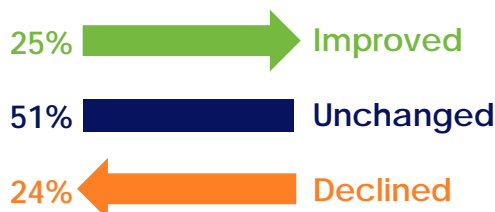
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Flint Township Average PASER Rating (APR)



### Flint Township Trend 2012-2016




**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

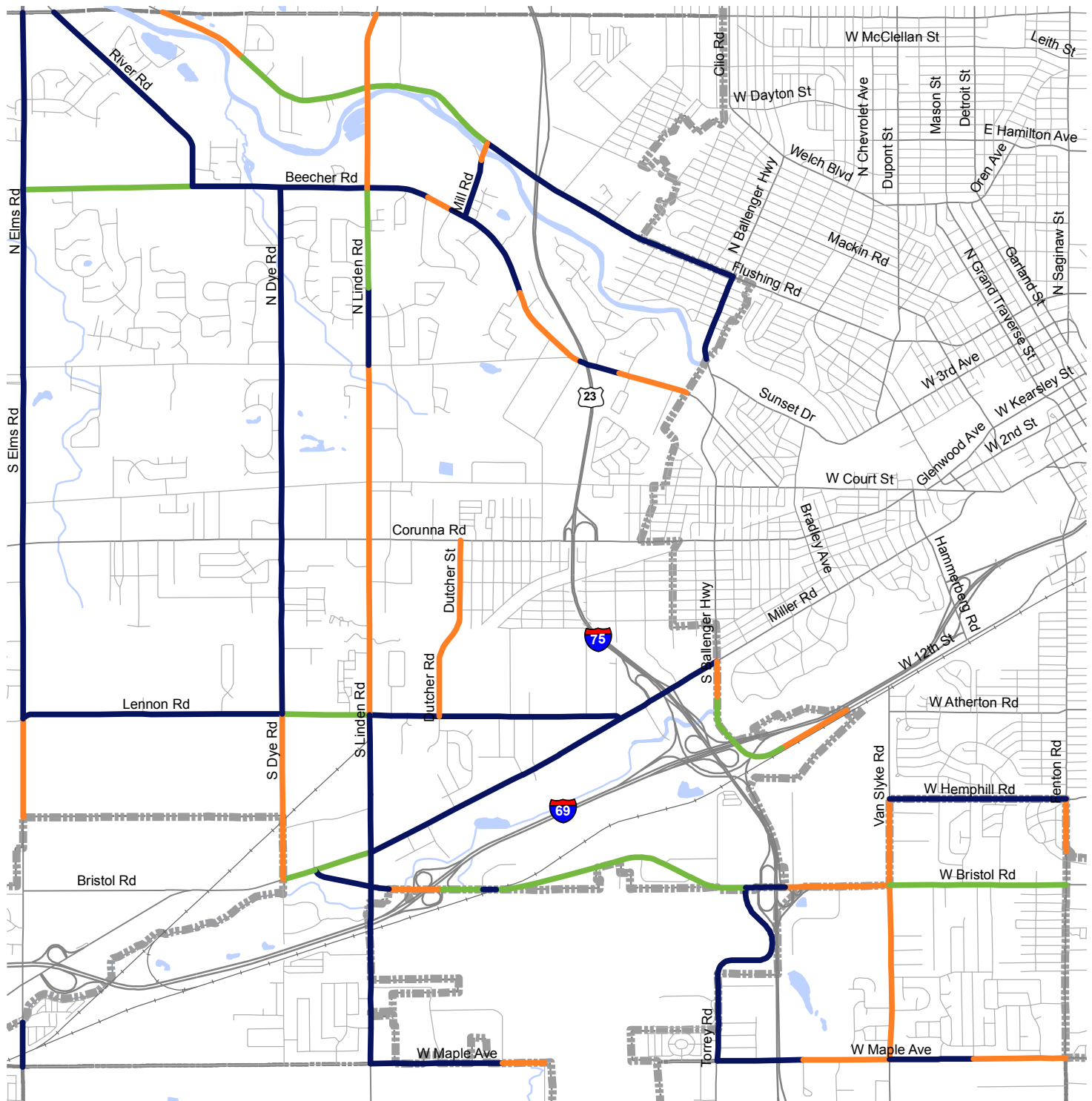
Flint Township raises approximately \$400,000 per year through a road millage.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

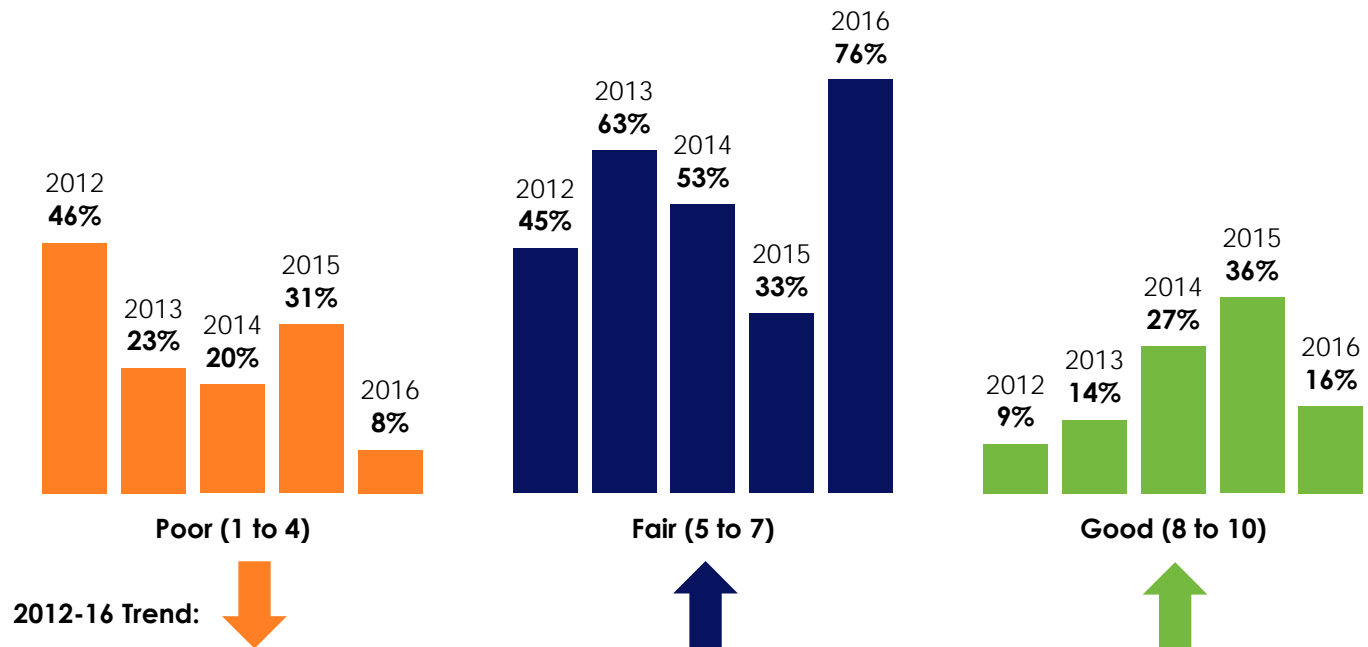
# 2016 PASER Survey

## Flint Township

- Rating 8-10 (Good, 18%, 31.21 lane miles)
- Rating 5-7 (Fair, 52%, 86.77 lane miles)
- Rating 1-4 (Poor, 30%, 50.31 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#1** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

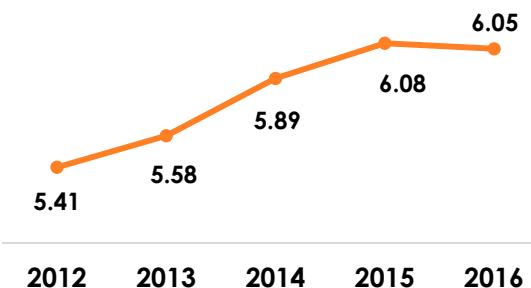
**42.0** lane miles of Federal Aid roads; ranked **#11** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

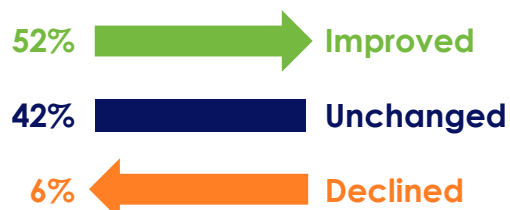
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Flushing Township Average PASER Rating (APR)



### Flushing Township Trend 2012-2016

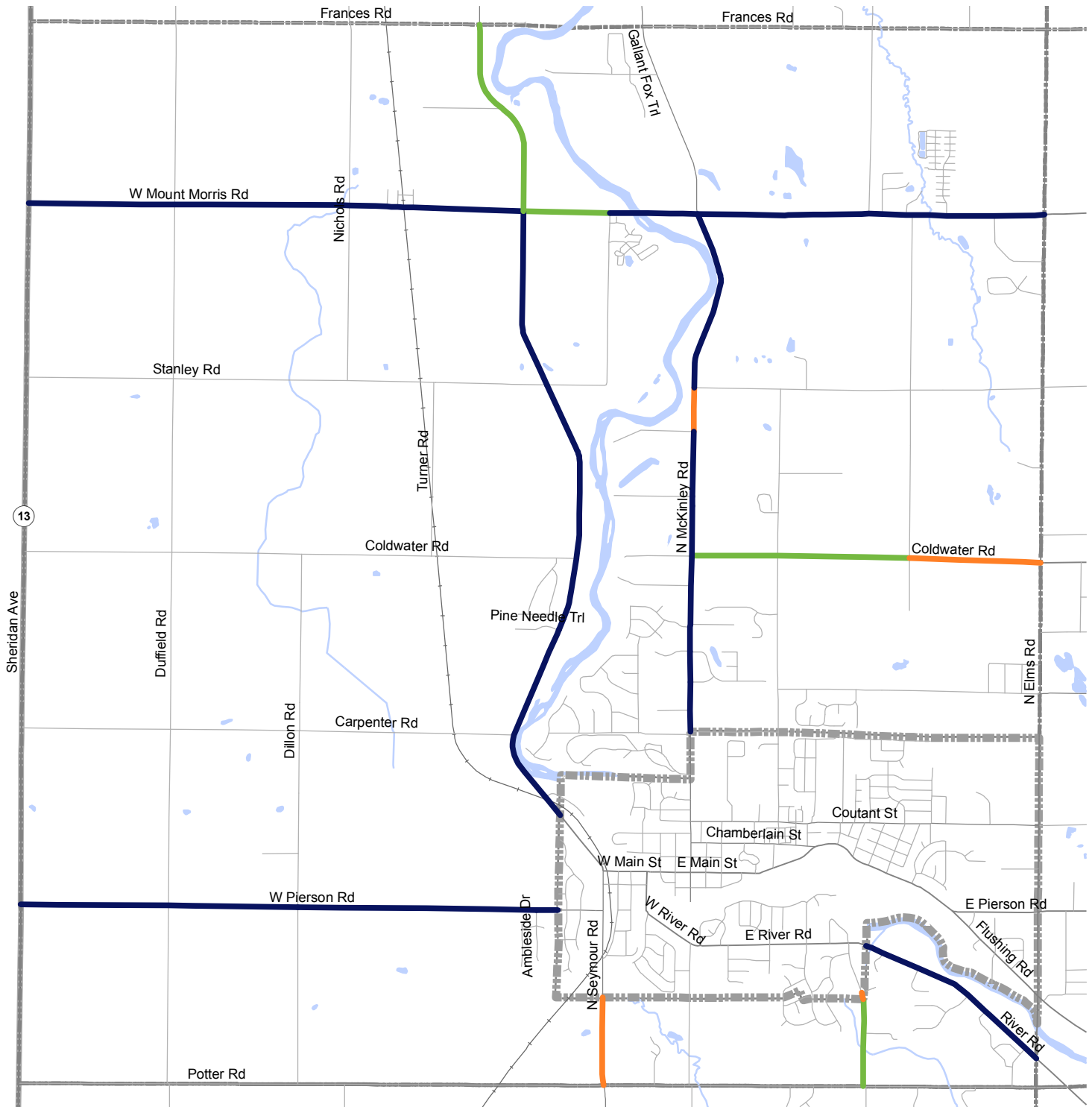


**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

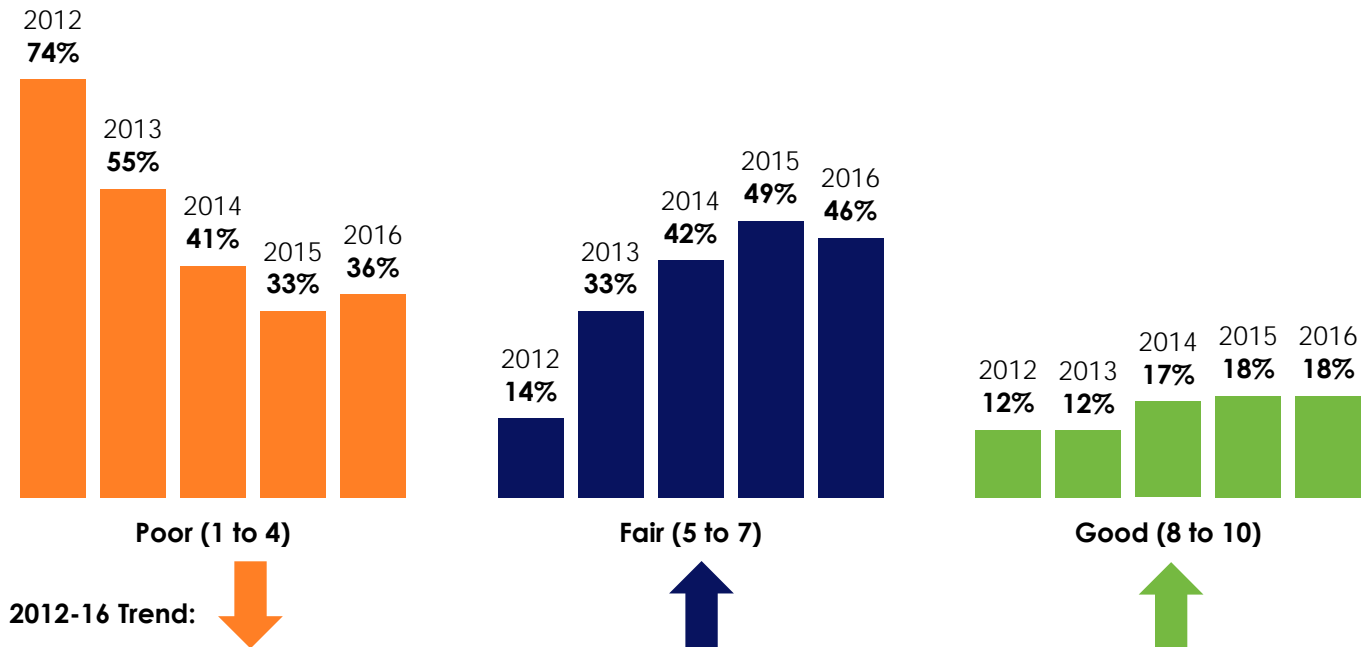
# Flushing Township

- Rating 8-10 (Good, 16%, 6.80 lane miles)
- Rating 5-7 (Fair, 76%, 32.13 lane miles)
- Rating 1-4 (Poor, 8%, 3.10 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#10** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

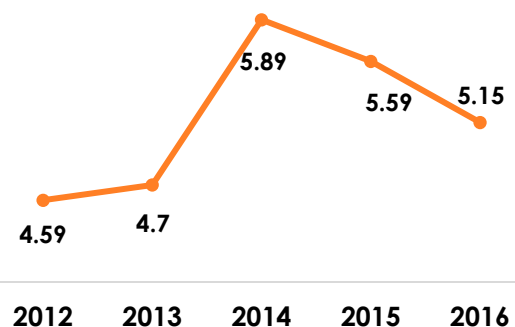
**39.5** lane miles of Federal Aid roads; ranked **#13** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

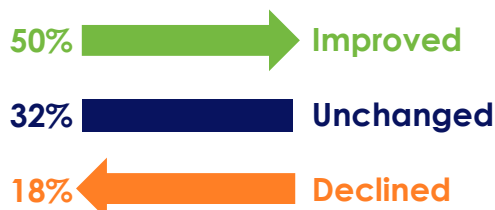
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Forest Township Average PASER Rating (APR)



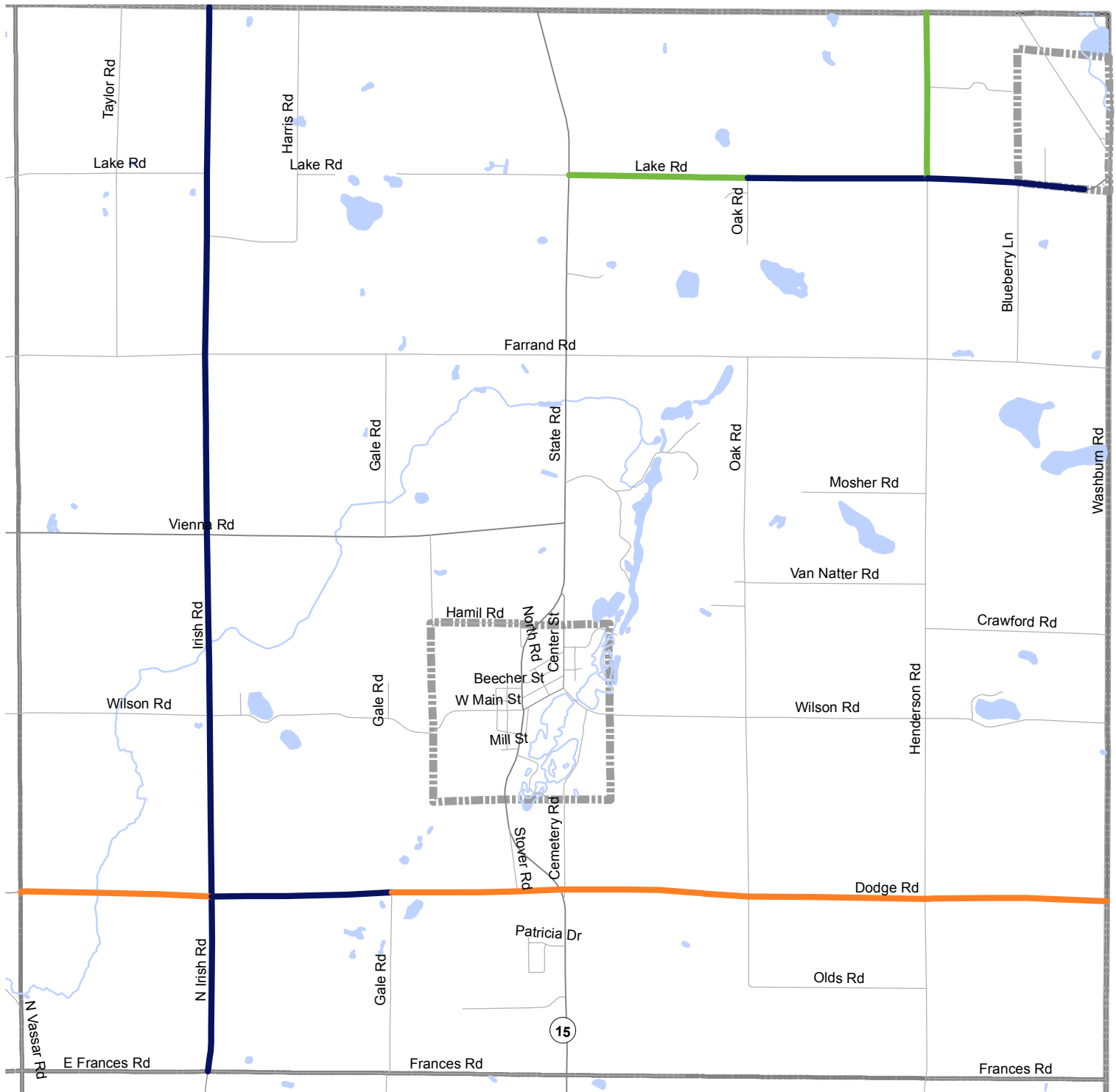
## Forest Township Trend 2012-2016



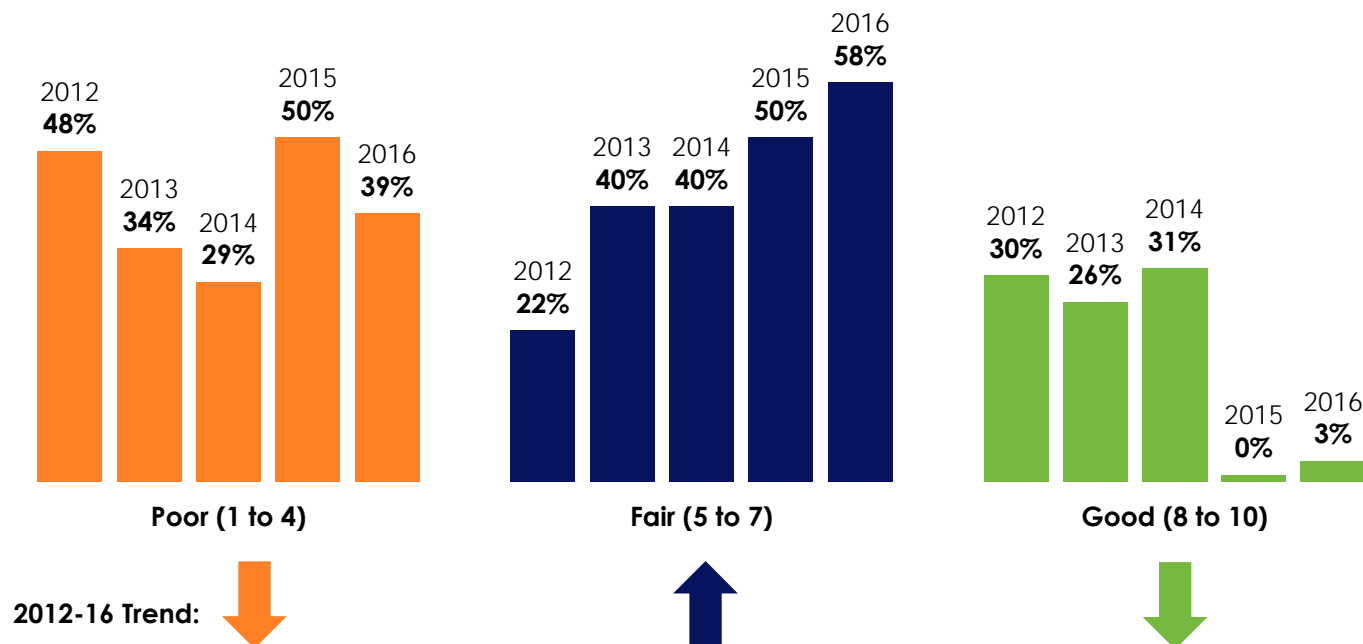
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 18%, 7.25 lane miles)
- Rating 5-7 (Fair, 46%, 17.93 lane miles)
- Rating 1-4 (Poor, 36%, 14.36 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#7** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

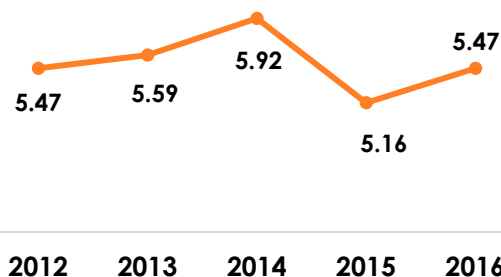
**36.5** lane miles of Federal Aid roads; ranked **#16** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

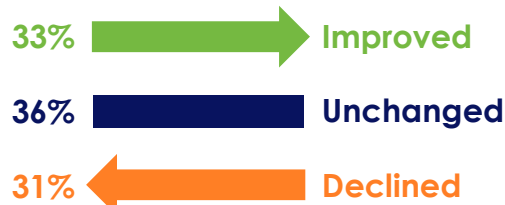
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Gaines Township Average PASER Rating (APR)



## Gaines Township Trend 2012-2016

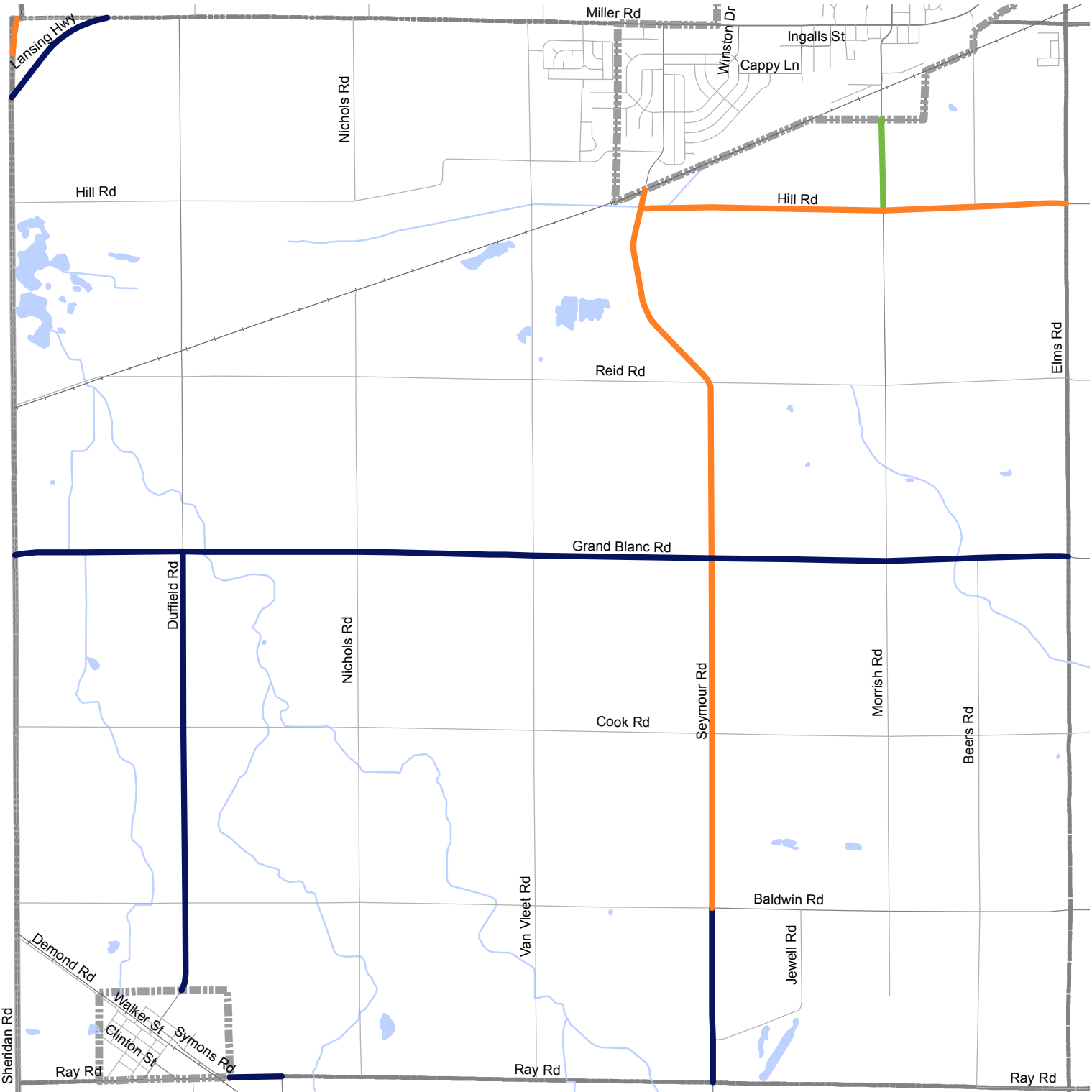


**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

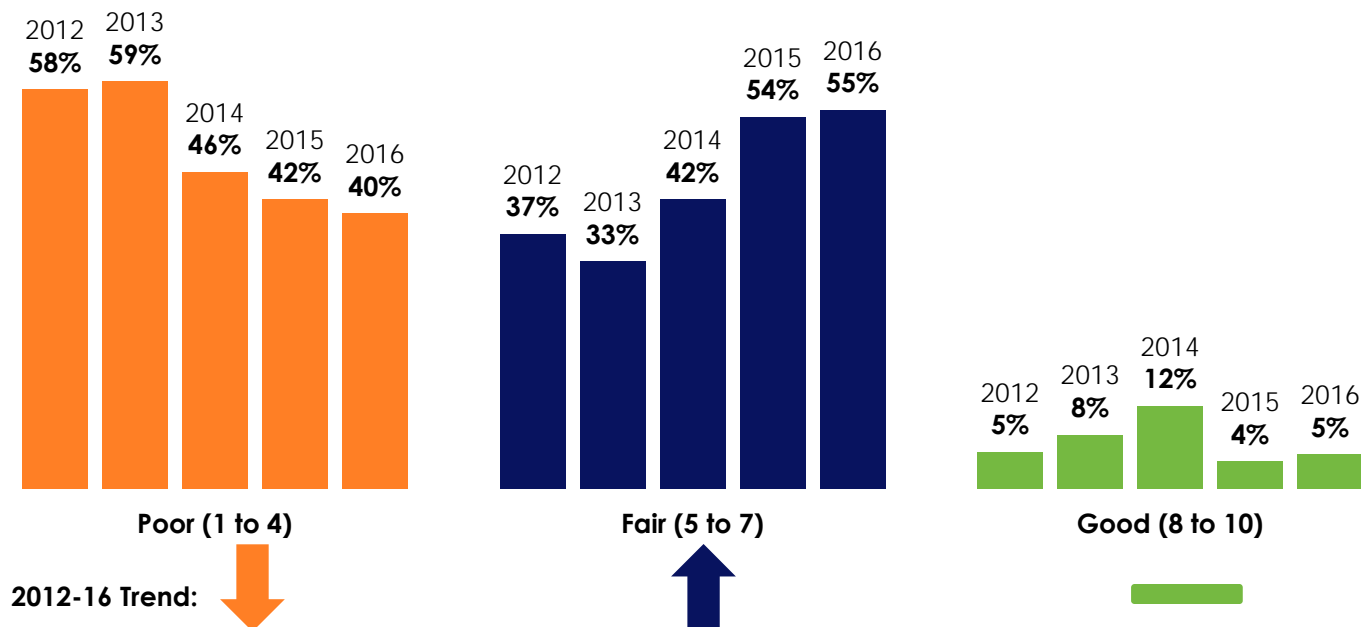
Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# Gaines Township

- Rating 8-10 (Good, 3%, 1.04 lane miles)
- Rating 5-7 (Fair, 58%, 21.12 lane miles)
- Rating 1-4 (Poor, 39%, 14.29 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#15** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

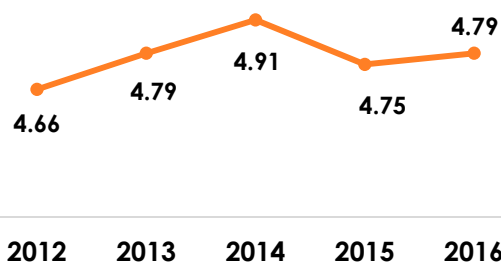
**121.5** lane miles of Federal Aid roads; ranked **#4** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

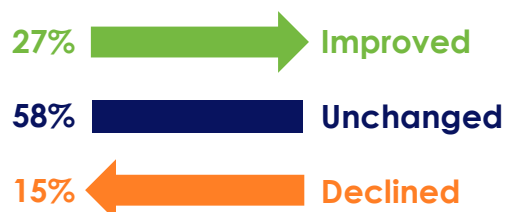
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Genesee Township Average PASER Rating (APR)



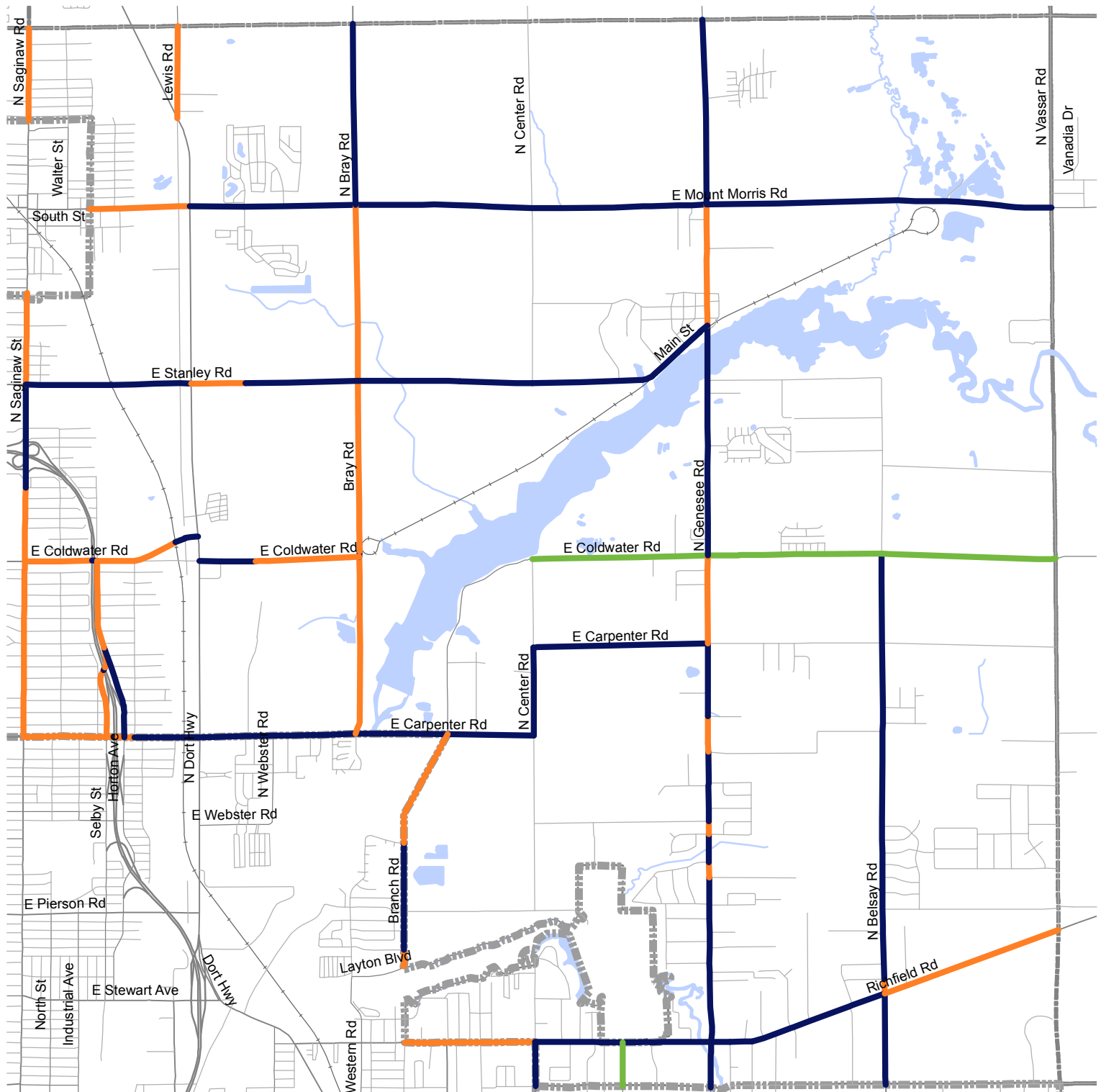
## Genesee Township Trend 2012-2016



**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

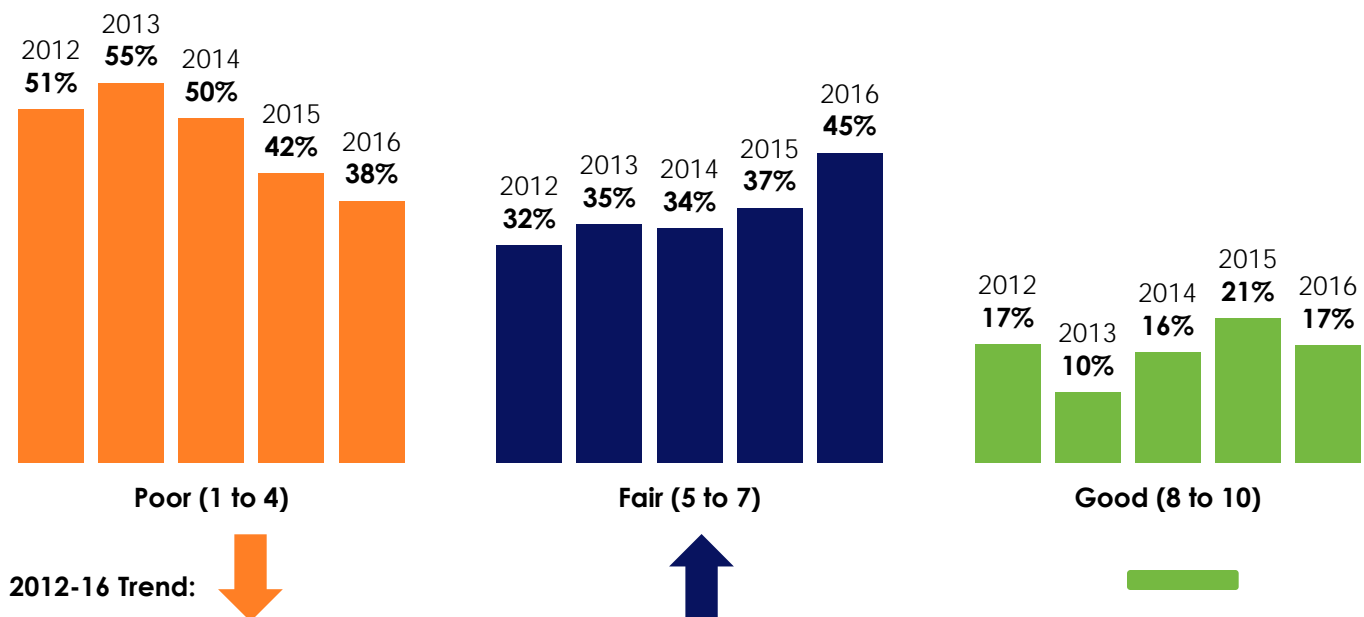
Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 5%, 6.47 lane miles)
- Rating 5-7 (Fair, 55%, 66.21 lane miles)
- Rating 1-4 (Poor, 40%, 48.78 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#8** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

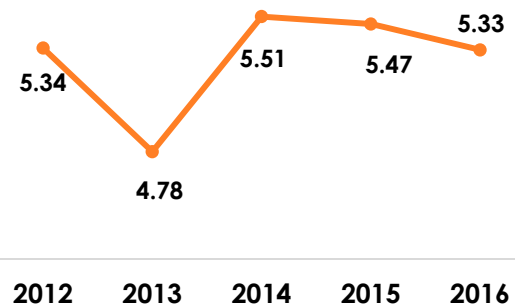
**129.5** lane miles of Federal Aid roads; ranked **#3** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

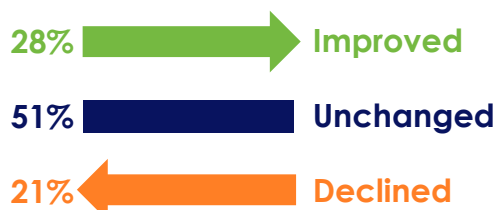
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Grand Blanc Township Average PASER Rating (APR)



## Grand Blanc Township Trend 2012-2016




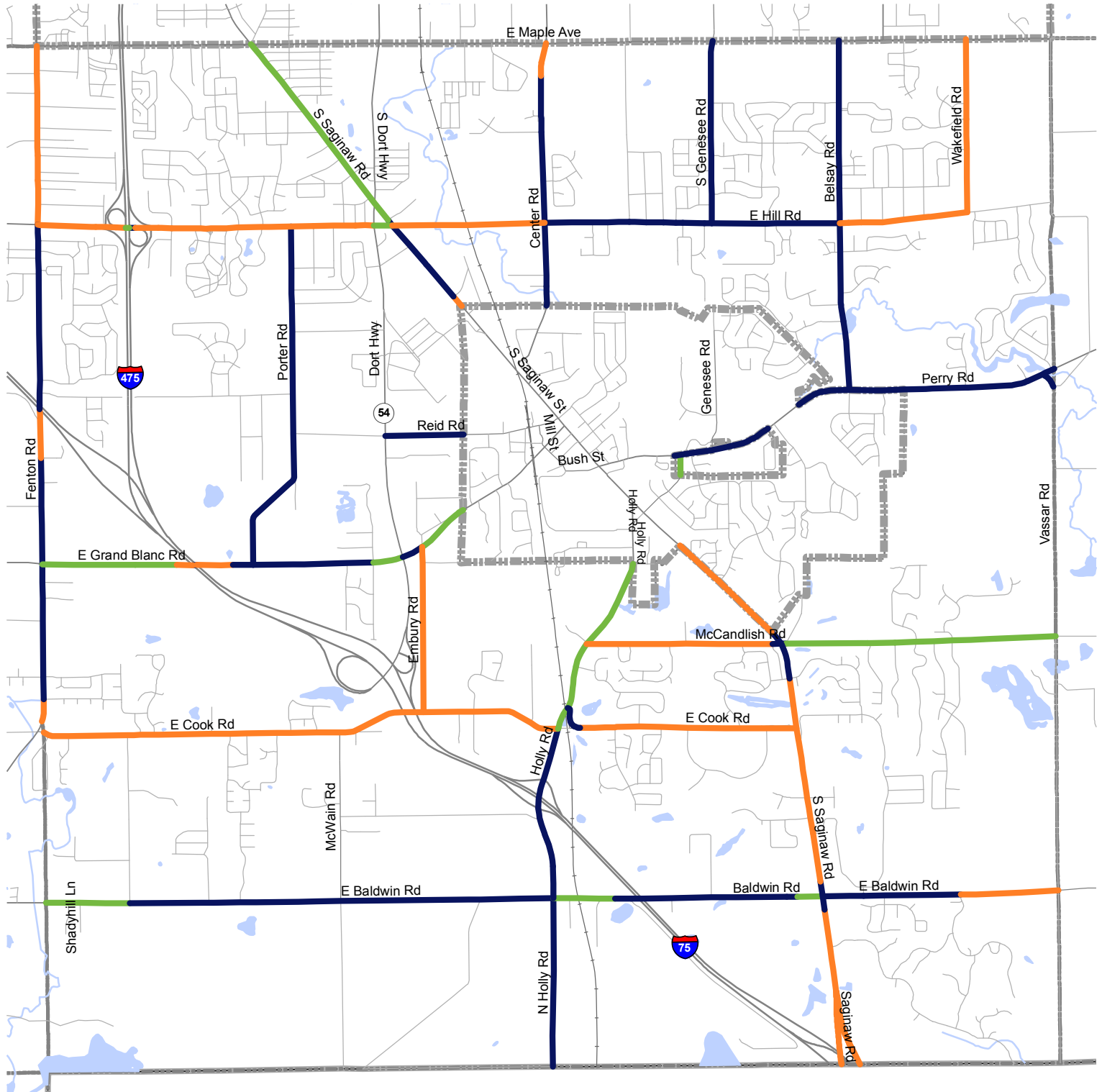
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

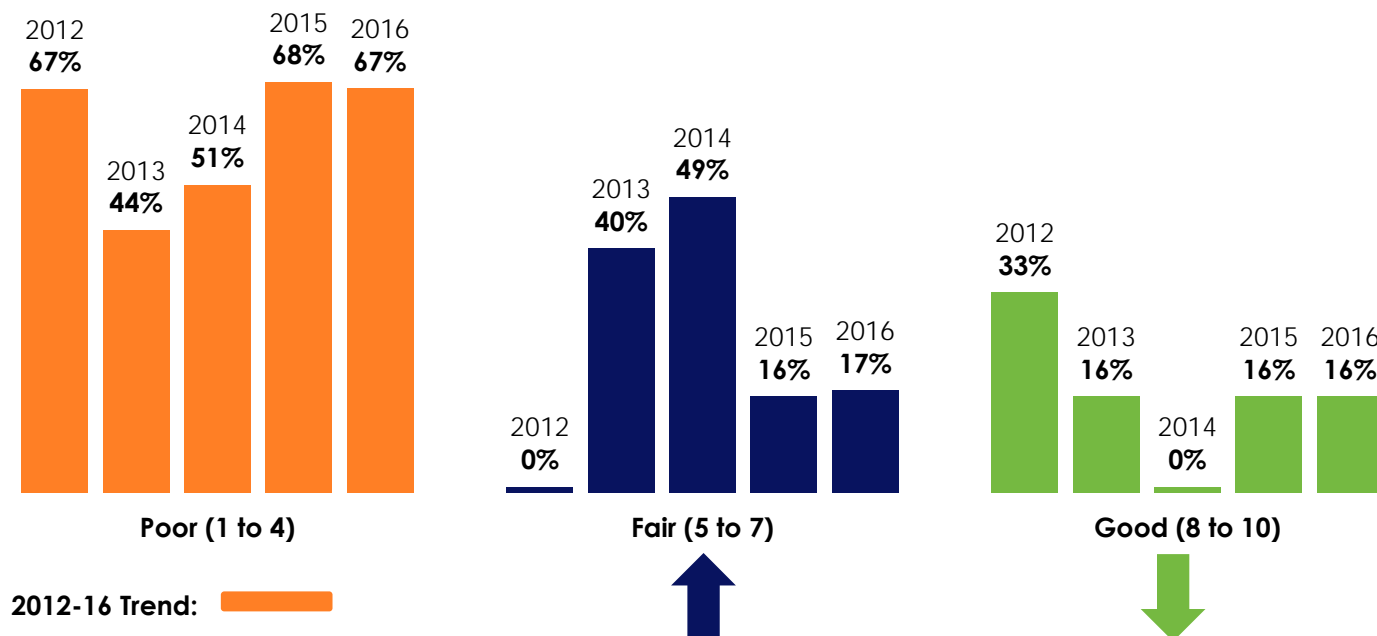
# 2016 PASER Survey

## Grand Blanc Township

- Rating 8-10 (Good, 17%, 22.62 lane miles)
- Rating 5-7 (Fair, 45%, 58.17 lane miles)
- Rating 1-4 (Poor, 38%, 48.68 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#13** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

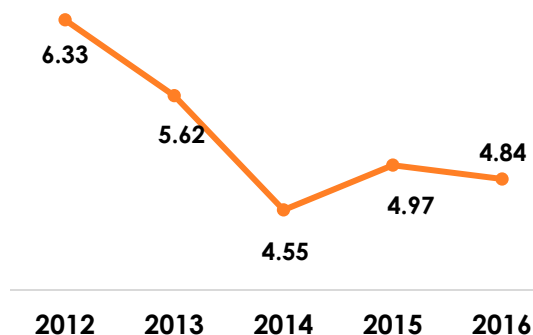
**12.1** lane miles of Federal Aid roads; ranked **#17** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

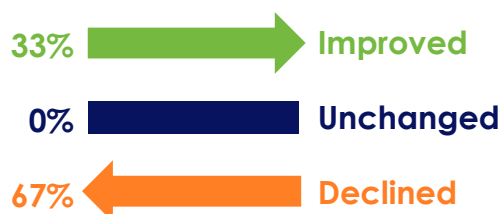
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Montrose Township Average PASER Rating (APR)



### Montrose Township Trend 2012-2016



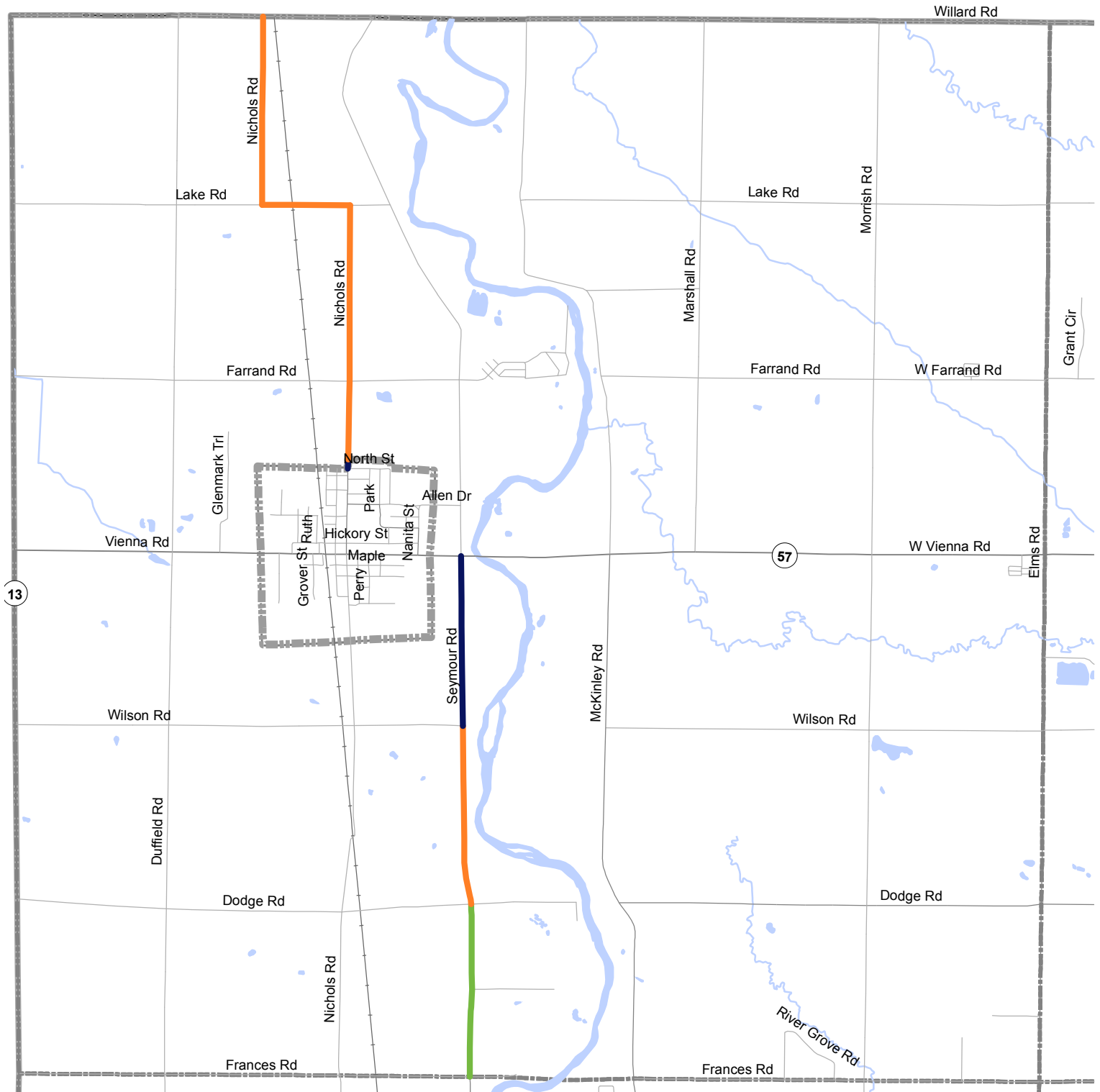
Genesee County allocates an average of **\$7.1 million** in federal

funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

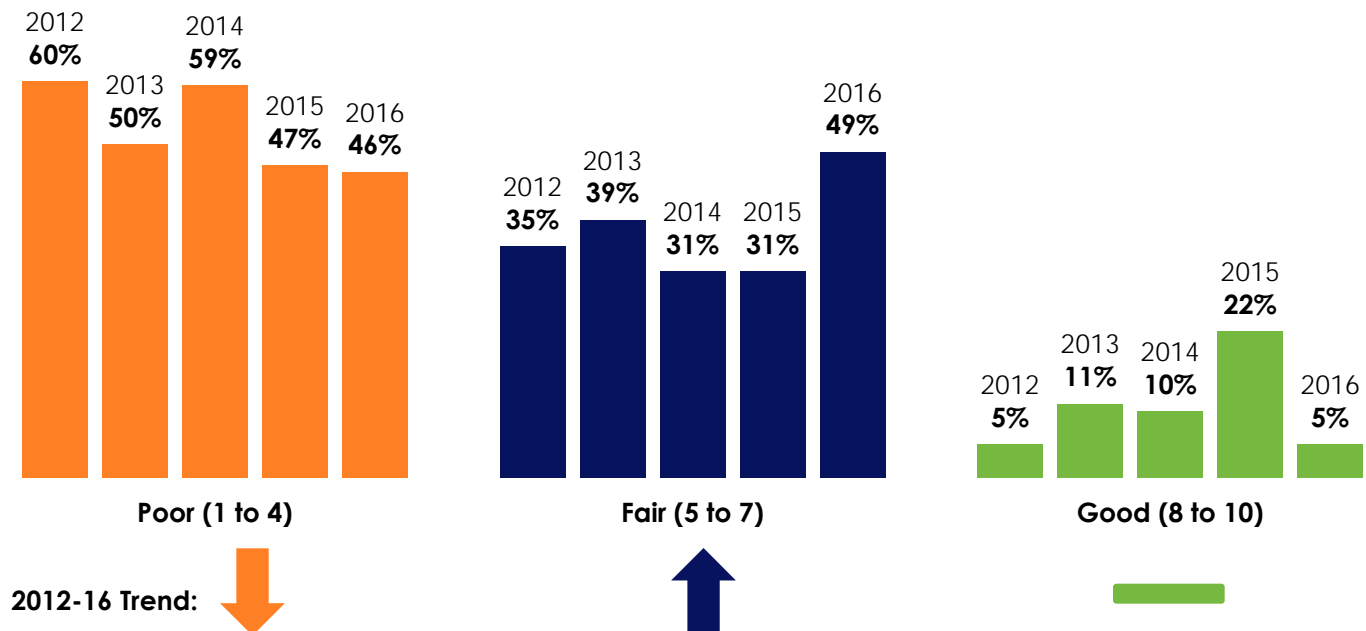
According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# Montrose Township

- Rating 8-10 (Good, 16%, 1.97 lane miles)
- Rating 5-7 (Fair, 17%, 2.05 lane miles)
- Rating 1-4 (Poor, 67%, 8.11 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#14** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

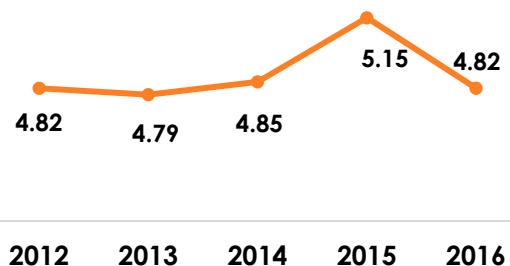
**145.6** lane miles of Federal Aid roads; ranked **#2** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

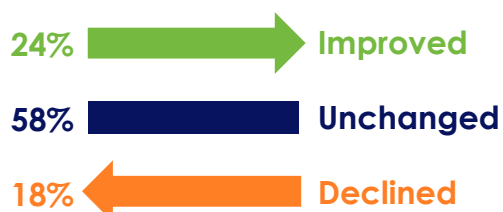
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Mt. Morris Township Average PASER Rating (APR)



## Mt. Morris Township Trend 2012-2016



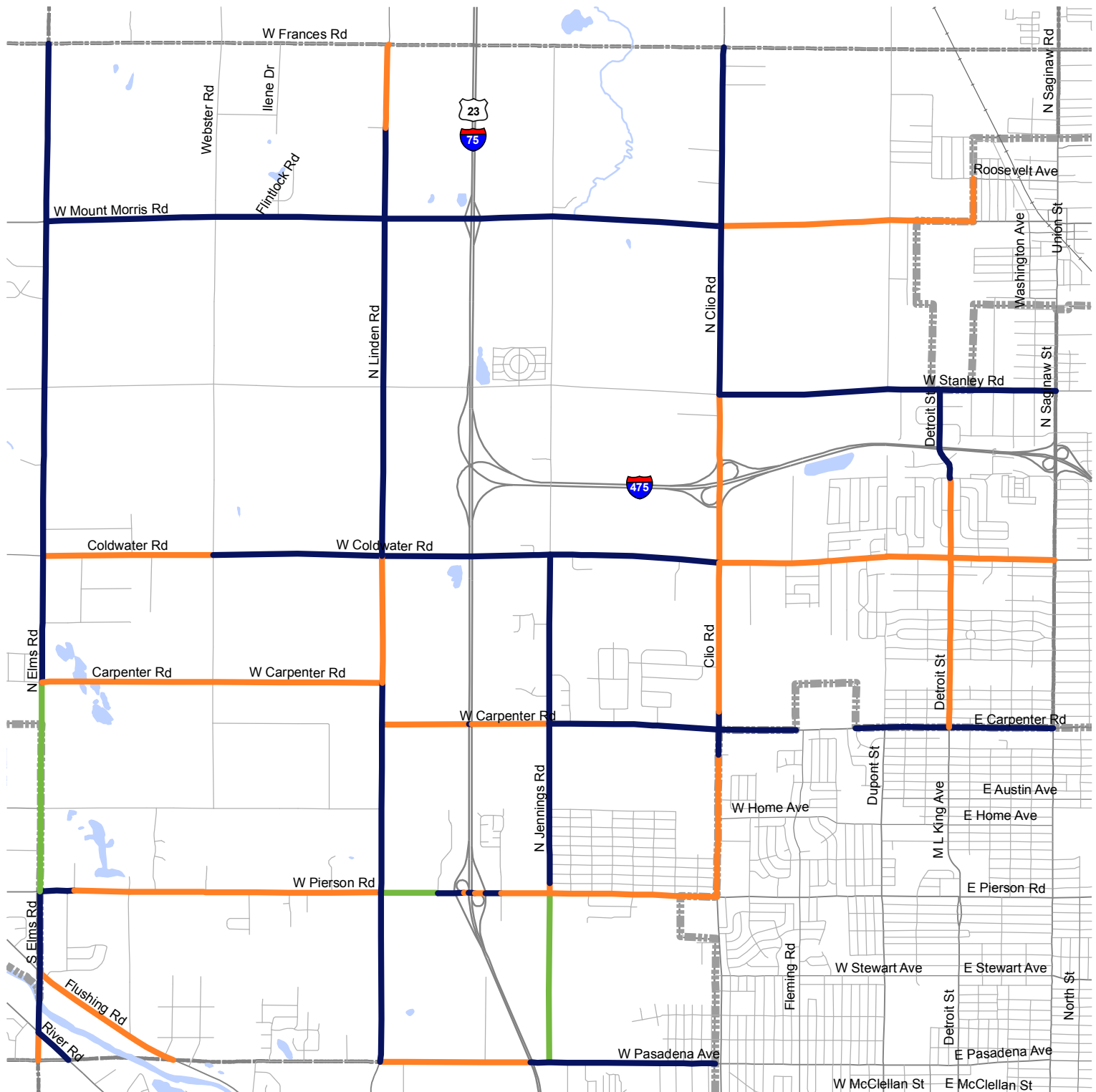
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# 2016 PASER Survey

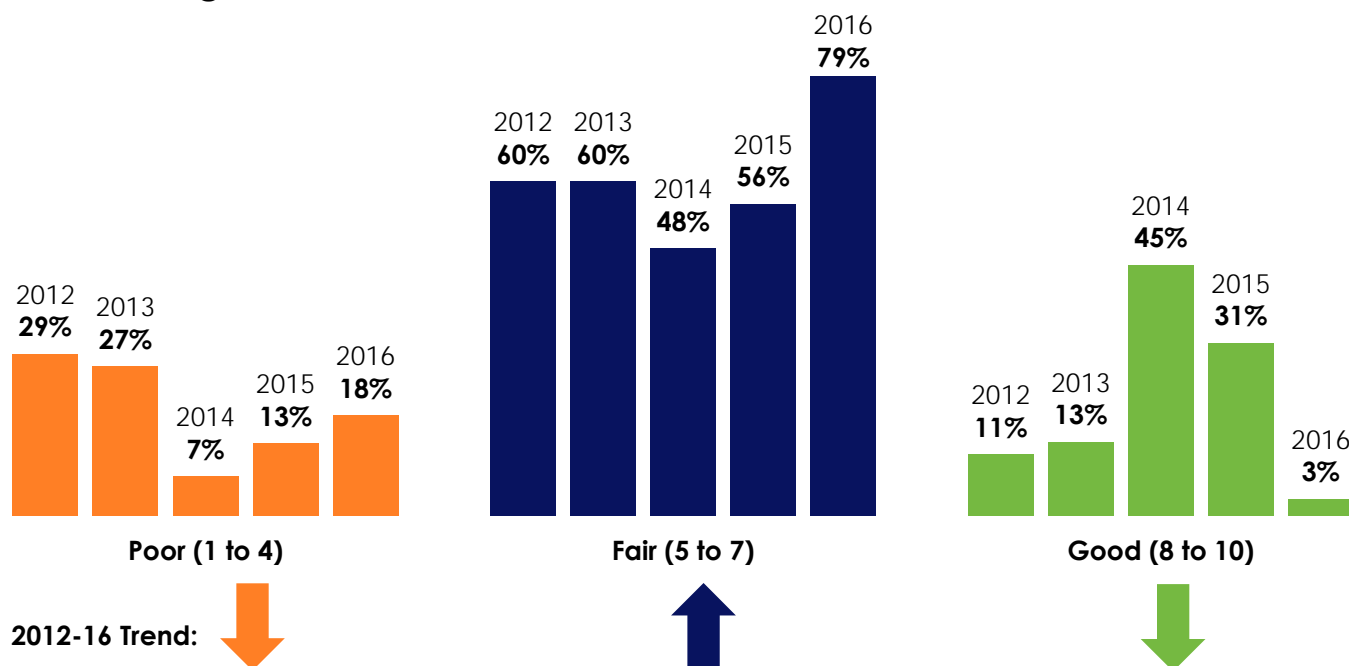
## Mt. Morris Township

- Rating 8-10 (Good, 5%, 7.22 lane miles)
- Rating 5-7 (Fair, 49%, 72.14 lane miles)
- Rating 1-4 (Poor, 46%, 66.25 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#3** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

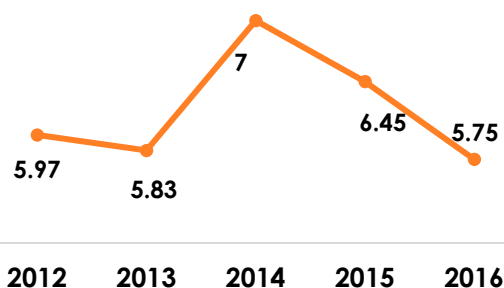
**83.2** lane miles of Federal Aid roads; ranked **#5** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

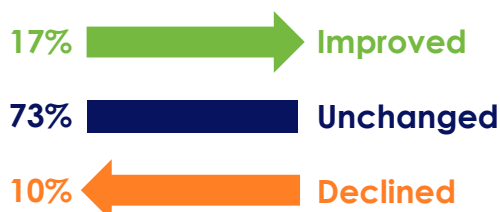
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Mundy Township Average PASER Rating (APR)




## Mundy Township Trend 2012-2016

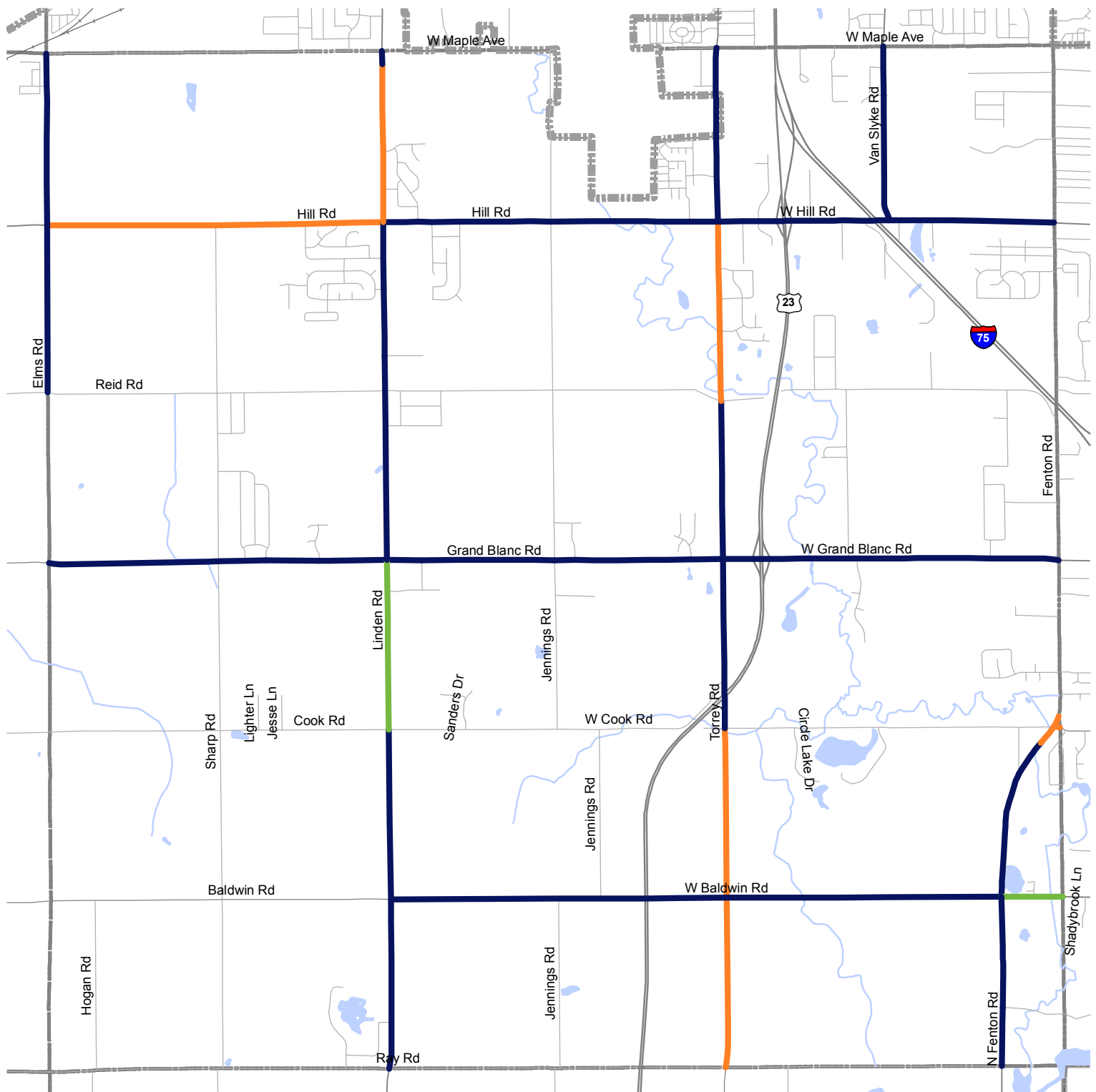


**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

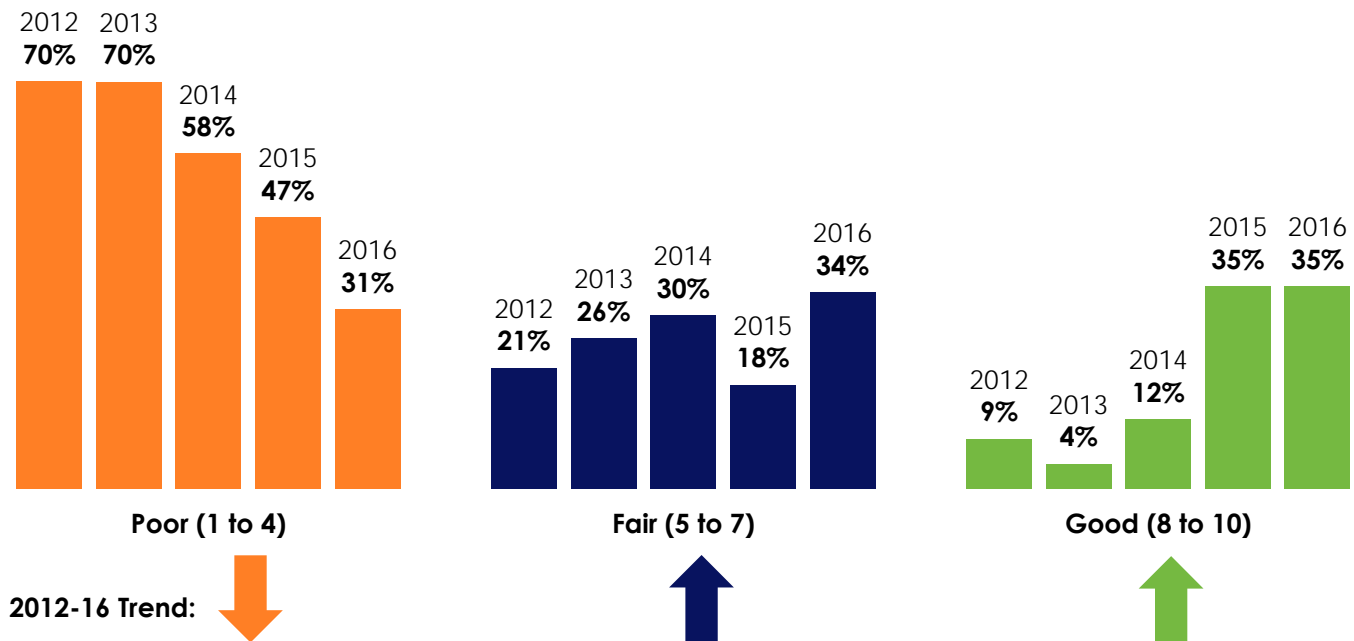
According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

# Mundy Township

- Rating 8-10 (Good, 3%, 2.76 lane miles)
- Rating 5-7 (Fair, 79%, 65.65 lane miles)
- Rating 1-4 (Poor, 18%, 14.79 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#2** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

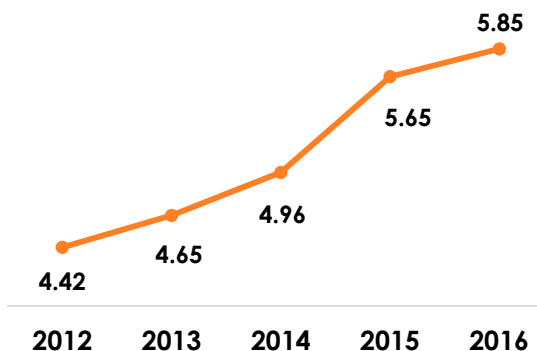
**45.7** lane miles of Federal Aid roads; ranked **#9** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

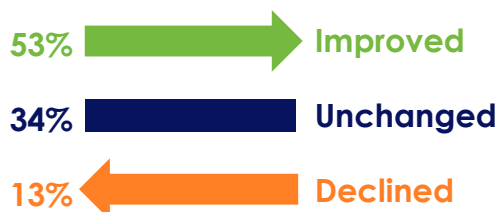
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Richfield Township Average PASER Rating (APR)



## Richfield Township Trend 2012-2016




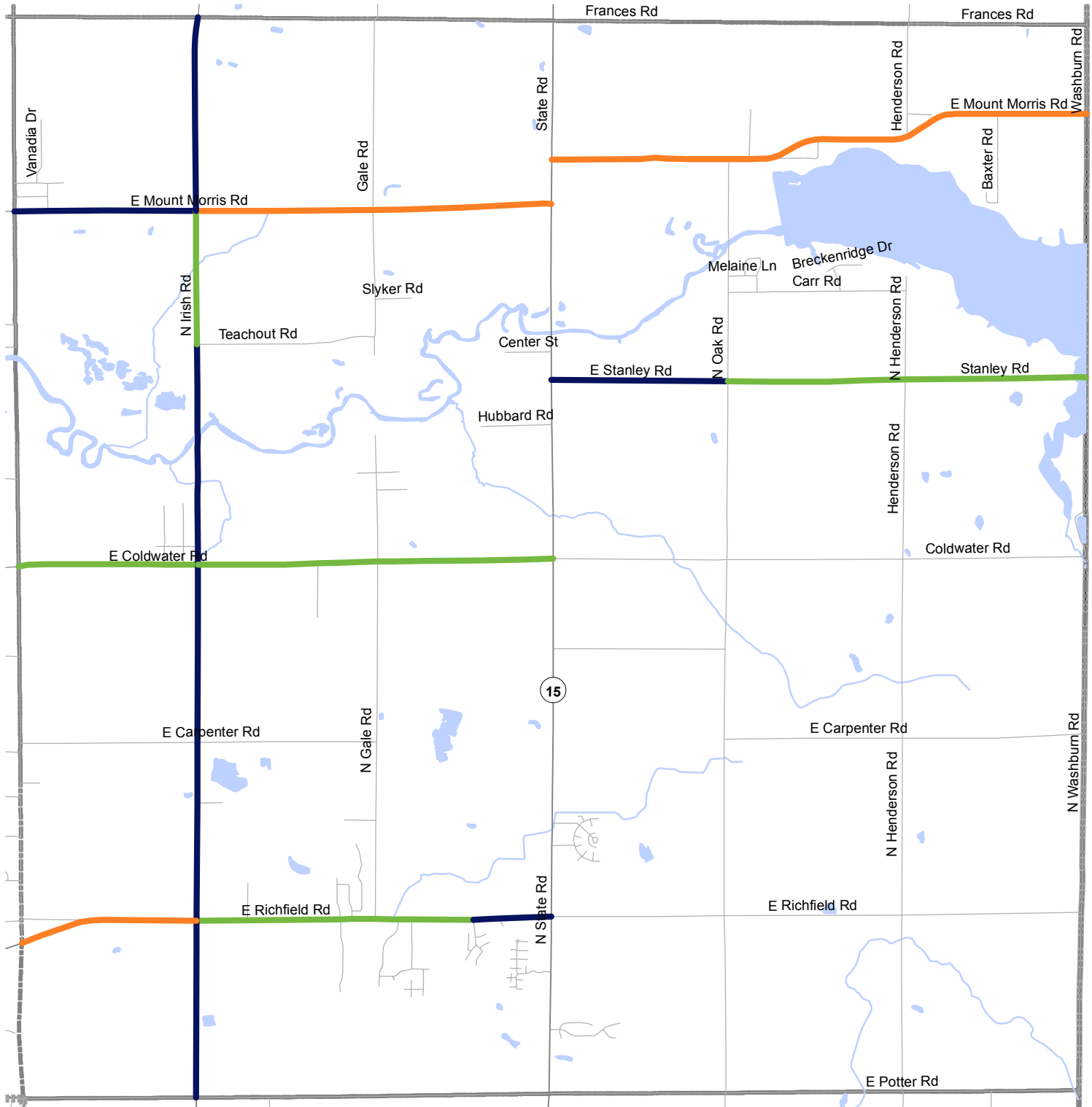
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

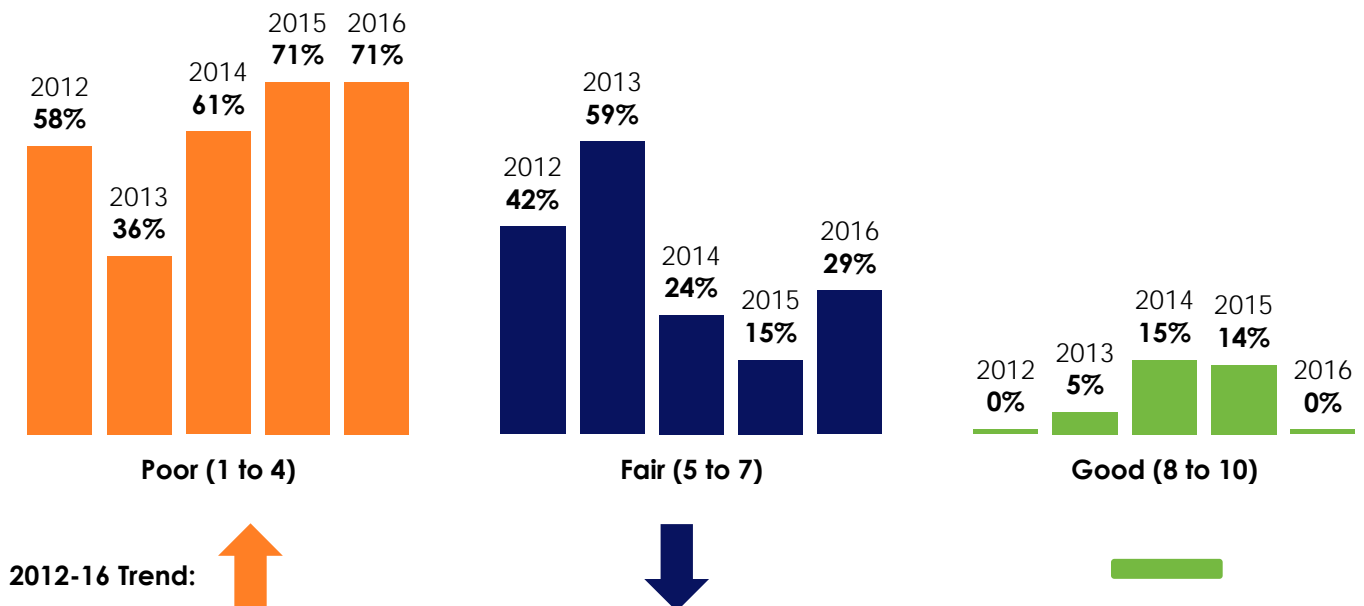
# 2016 PASER Survey

## Richfield Township

- Rating 8-10 (Good, 35%, 15.89 lane miles)
- Rating 5-7 (Fair, 34%, 15.59 lane miles)
- Rating 1-4 (Poor, 31%, 14.18 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## PASER Ratings 2012-2016



Ranked **#17** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

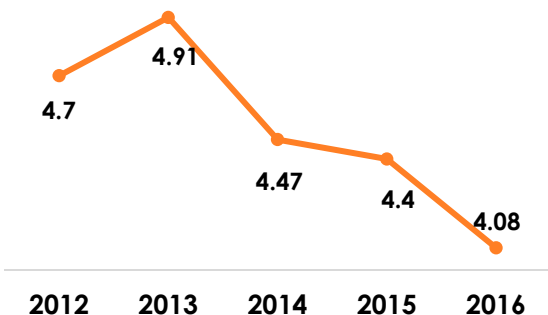
**41.8** lane miles of Federal Aid roads; ranked **#12** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

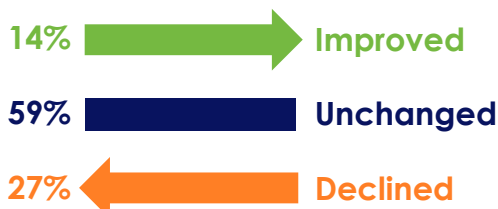
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

## Theftord Township Average PASER Rating (APR)




## Theftord Township Trend 2012-2016



**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

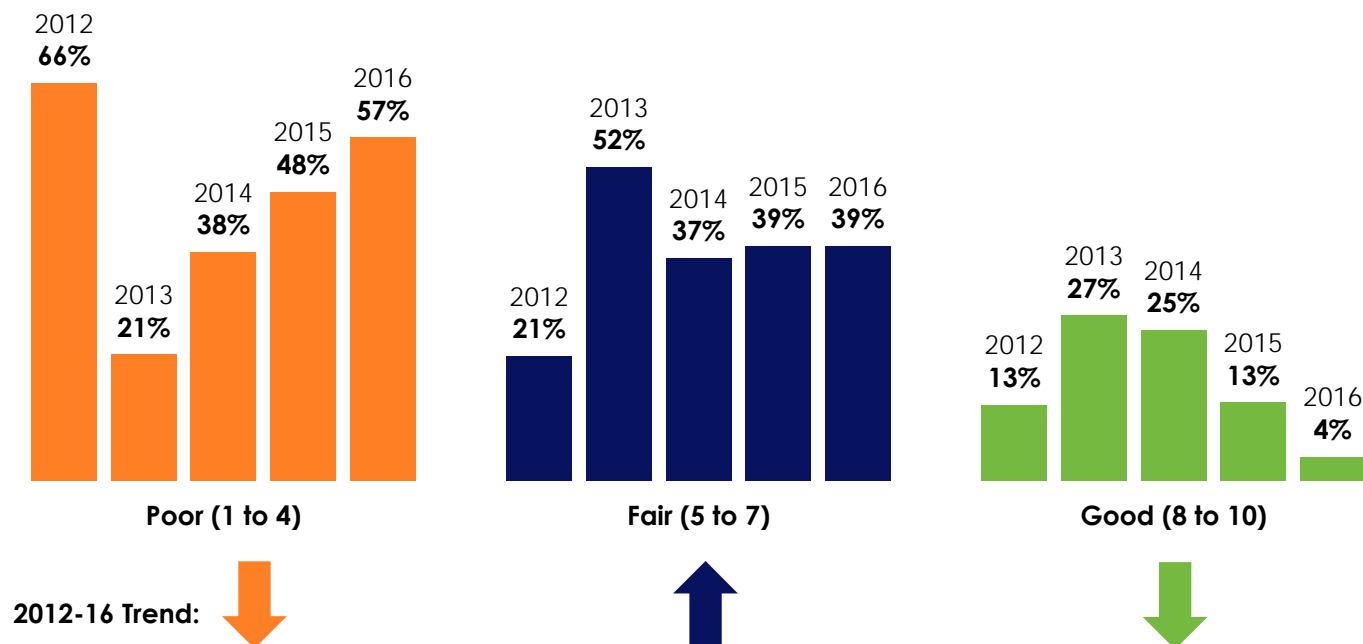
According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

- Rating 8-10 (Good, 0%, 0.0 lane miles)
- Rating 5-7 (Fair, 29%, 12.11 lane miles)
- Rating 1-4 (Poor, 71%, 29.73 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





## PASER Ratings 2012-2016



Ranked **#16** out of 17 townships in Genesee County by Average PASER Rating, #17 being the worst

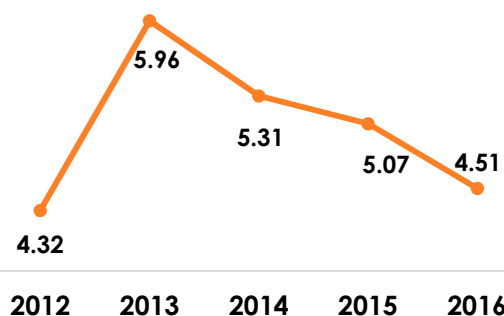
**56.2** lane miles of Federal Aid roads; ranked **#8** out of 17 townships, #1 having highest lane mileage

Flint and the surrounding urbanized area ranked **#1** of 63 Medium-Sized Urban Areas in the U.S. with the most roads in poor condition (2015 *TRIP* Report)

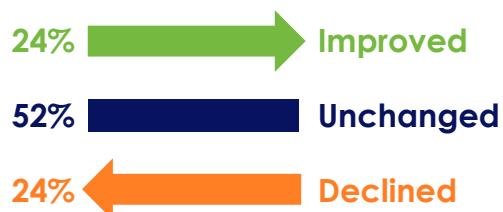
Genesee County ranked **#48** out of 83 counties in the state by percentage of poor roads, with #1 being the worst (*Michigan TAMC*)

Michigan ranked **#4** in the U.S. by comparing percentage of poor roads, #1 being the worst (2015 *TRIP* Report)

### Vienna Township Average PASER Rating (APR)



### Vienna Township Trend 2012-2016



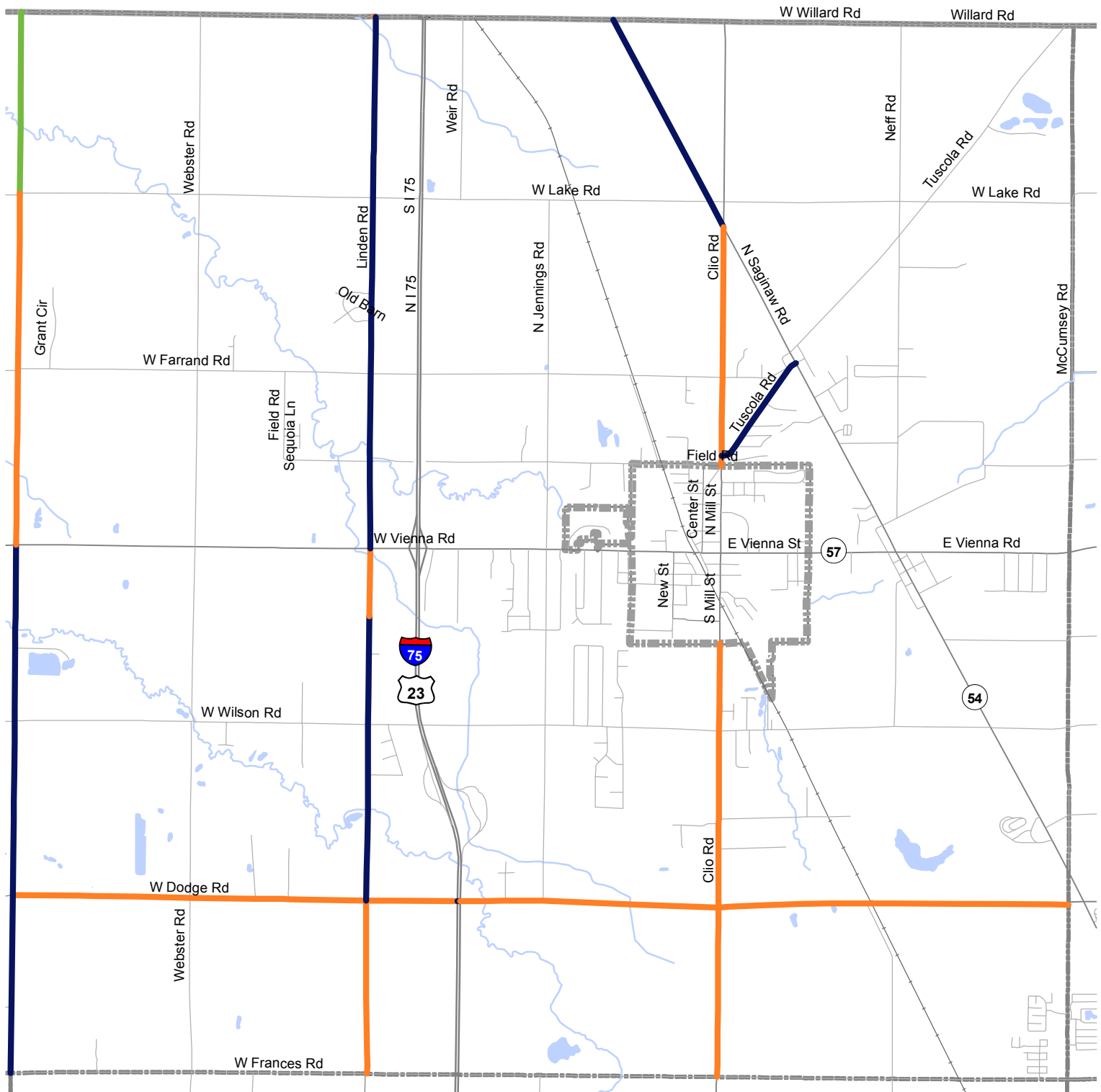
**Genesee County** allocates an average of **\$7.1 million** in federal funds per year to improve the local federal aid network. **Genesee County Road Agencies** spend an additional **\$9.5 million** per year on road surface improvements using state Act 51 and local funds.

Although conditions have improved in the short term, additional funding is needed to maintain roads in the long term. According to the 2040 Genesee County Long Range Transportation Plan, **2** times the current funding is needed to maintain existing conditions; **3** times the current funding is needed to see improvement.

## 2016 PASER Survey

# Vienna Township

- Rating 8-10 (Good, 4%, 2.07 lane miles)
- Rating 5-7 (Fair, 39%, 22.20 lane miles)
- Rating 1-4 (Poor, 57%, 31.90 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



## Asset Management Plans

An Asset Management process allows public agencies to make strategic decisions based on in-depth understanding of the relationship between cost and performance. A Pavement Asset Management Plan allows the most cost-effective projects to be selected for the right place at the right time. Having such a plan in place allows an agency to be more accountable and better communicate with the public and elected officials with regards to investments and performance. MDOT uses the following fundamental components of asset management:

1. **Performance Based** – Performance measures and targets based on policy objectives.
2. **Quality Information** – Know what you own and what condition it is in. Make use of analytical tools.
3. **Policy Driven** – Resource allocation decisions based on well-defined policy goals and objectives. Alternatives are examined.
4. **Options Evaluated** – Conduct tradeoff analysis between types of fixes and among various priorities within your program.
5. **Clear Accountability** – Monitor and report results. Feedback loop to influence goals and decisions. Transparent decision making.

While this report includes an inventory and rating of federal aid roads, this is only one element of a comprehensive asset management plan. A general pavement management plan might include the following elements:

1. **Inventory**
2. **Rating**
3. **Predict Future Conditions**
4. **Set Goals / Performance Management**
5. **Policy for Selecting Projects**
6. **List of Potential Projects That Meet Criteria / Costs / Benefits**
7. **Report Results**

An Asset Management process for pavement management focuses on a “Mix of Fixes”, rather than the “Worst First” approach. Rather than rehabilitating only roads in the worst conditions as funding allows, a “Mix of Fixes” approach uses a range of preventative maintenance treatments on roads already in good condition.

Below are some additional online resources provided by the Michigan Transportation Asset Management Council to assist local agencies in creating an Asset Management Plan:

Sample Asset Management Plan:

<http://www.mcgi.state.mi.us/MITRP/document.aspx?id=513>

Local Agency Guidelines for Developing an Asset Management Process and Plan:

<http://www.mcgi.state.mi.us/MITRP/document.aspx?id=491>

## Summary Charts

2016 PASER Rating by Jurisdiction					
Description	Poor	Fair	Good	Total Lane Miles	Percentage of PASER Lane Miles
<b>Cities/Villages</b>	362.69	329.54	48.43	<b>740.66</b>	<b>27%</b>
<b>GCRC</b>	425.55	613.41	122.94	<b>1161.90</b>	<b>43%</b>
<b>MDOT</b>	109.23	479.63	212.98	<b>801.84</b>	<b>30%</b>
<b>Genesee Total</b>	<b>897.47</b>	<b>1422.58</b>	<b>384.35</b>	<b>2704.40</b>	<b>100%</b>
<b>Total %</b>	<b>33%</b>	<b>53%</b>	<b>14%</b>	<b>100%</b>	

2016 PASER Ratings by Surface Type					
Description	Poor	Fair	Good	Total Lane Miles	Percentage of PASER Lane Miles
<b>Asphalt</b>	723.19	1226.78	266.15	<b>2216.12</b>	<b>81.9%</b>
<b>Concrete</b>	172.72	195.63	118.20	<b>486.55</b>	<b>18.0%</b>
<b>Brick</b>	1.56	0.17	0.00	<b>1.73</b>	<b>0.1%</b>
<b>Total</b>	<b>897.47</b>	<b>1422.58</b>	<b>384.35</b>	<b>2704.40</b>	<b>100%</b>
<b>Total %</b>	<b>33%</b>	<b>53%</b>	<b>14%</b>	<b>100%</b>	

2016 PASER Ratings - Cities and Villages (in lane miles)				
Description	Poor	Fair	Good	Total Lane Miles
Burton	112.45	35.07	10.91	158.43
Clio	4.40	1.71	0.00	6.11
Davison	1.26	4.83	1.26	7.35
Fenton	14.39	24.09	9.02	47.50
Flint	195.17	205.23	13.29	413.69
Flushing	6.73	17.66	0.00	24.39
Gaines	1.13	0.42	0.00	1.55
Goodrich	1.83	0.74	1.31	3.88
Grand Blanc	2.83	15.46	3.97	22.26
Lennon	0.00	0.00	0.00	0.00
Linden	3.49	7.53	0.00	11.02
Montrose	1.36	0.98	0.00	2.34
Mt. Morris	7.62	5.60	0.00	13.22
Otisville	0.00	0.00	0.00	0.00
Offer Lake	0.00	0.49	0.00	0.49
Swartz Creek	10.03	9.73	8.67	28.43
Total	362.69	329.54	48.43	740.66
Percentage	49%	44%	7%	100%

<b>2016 PASER Ratings - Townships (in lane miles)</b>				
<b>Description</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Total Lane Miles</b>
<b>Argentine Twp</b>	8.13	27.06	1.39	<b>36.58</b>
<b>Atlas Twp</b>	13.14	20.59	3.37	<b>37.10</b>
<b>Clayton Twp</b>	21.37	19.18	2.03	<b>42.58</b>
<b>Davison Twp</b>	26.13	34.50	4.10	<b>64.73</b>
<b>Fenton Twp</b>	12.30	40.01	6.75	<b>59.06</b>
<b>Flint Twp</b>	50.31	86.77	31.21	<b>168.29</b>
<b>Flushing Twp</b>	3.10	32.13	6.80	<b>42.03</b>
<b>Forest Twp</b>	14.36	17.93	7.25	<b>39.54</b>
<b>Gaines Twp</b>	14.29	21.12	1.04	<b>36.45</b>
<b>Genesee Twp</b>	48.78	66.21	6.47	<b>121.46</b>
<b>Grand Blanc Twp</b>	48.68	58.17	22.62	<b>129.47</b>
<b>Montrose Twp</b>	8.11	2.05	1.97	<b>12.13</b>
<b>Mt Morris Twp</b>	66.25	72.14	7.22	<b>145.61</b>
<b>Mundy Twp</b>	14.79	65.65	2.76	<b>83.20</b>
<b>Richfield Twp</b>	14.18	15.59	15.89	<b>45.66</b>
<b>Thetford Twp</b>	29.73	12.11	0.00	<b>41.84</b>
<b>Vienna Twp</b>	31.90	22.20	2.07	<b>56.17</b>
<b>Total</b>	<b>425.55</b>	<b>613.41</b>	<b>122.94</b>	<b>1161.90</b>
<b>Percentage</b>	<b>37%</b>	<b>53%</b>	<b>10%</b>	<b>100%</b>



**Additional 2015/2016  
Non-Federal Aid PASER Ratings**

## Additional 2015/2016 Non-Federal Aid PASER Ratings

Data and maps presented so far throughout this report have focused mainly on the federal-aid road network. Federal-aid roads carry the most traffic, however they only represent a small portion of roads in most communities. In Genesee County there are a total of 2,865 centerline miles of roads, 1,031 miles (36%) of which are federal-aid, and 1,834 (64%) of which are non-federal aid/local.

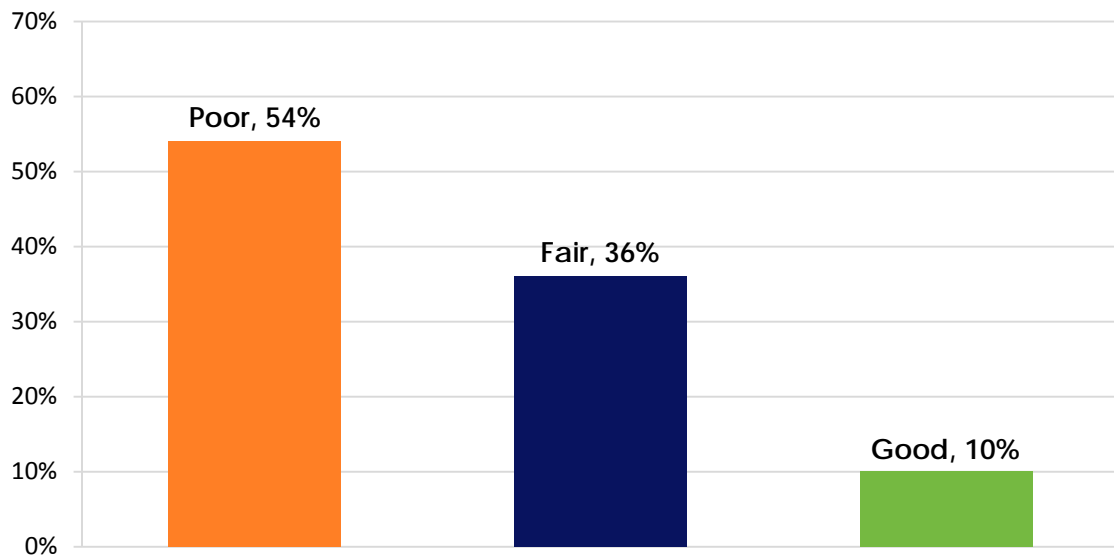
The Michigan Transportation Asset Management Council (TAMC) supports data collection efforts on all roads, however MDOT and GCMPC staff are only reimbursed for federal-aid PASER data collection. TAMC now also provides limited funding for paved, non-federal aid (PNFA) roads on a first-come first-serve basis for local agencies that apply for reimbursement. Regardless of reimbursement, many communities choose to regularly survey their local roads so that road condition data is up to date, allowing for data-driven decisions to be made. Typically, requests for PNFA reimbursement must be submitted early in the year. For specific dates and more information, please visit TAMC's website at <http://tamc.mcgi.state.mi.us/TAMC>, or contact Roger Belknap, TAMC Coordinator at [belknap@michigan.gov](mailto:belknap@michigan.gov).

The following section includes maps of each jurisdiction that had local PASER data available. In October 2016, GCMPC staff requested that if any road agencies currently collect non-federal aid PASER data in a digital format, that those agencies provide it to GCMPC. Staff received data from three cities: Burton, Flushing and Mt. Morris, as well as the Genesee County Road Commission (GCRC), which collects non-federal aid ratings on a large portion of local township roads. GCRC publishes information on pavement condition of their roads on their website at [www.gcrc.org](http://www.gcrc.org). Some agencies choose to take ratings on half of their local road network each year, so that the full network is surveyed every two years. Therefore, the maps shown in this section include ratings from both 2015 and 2016.

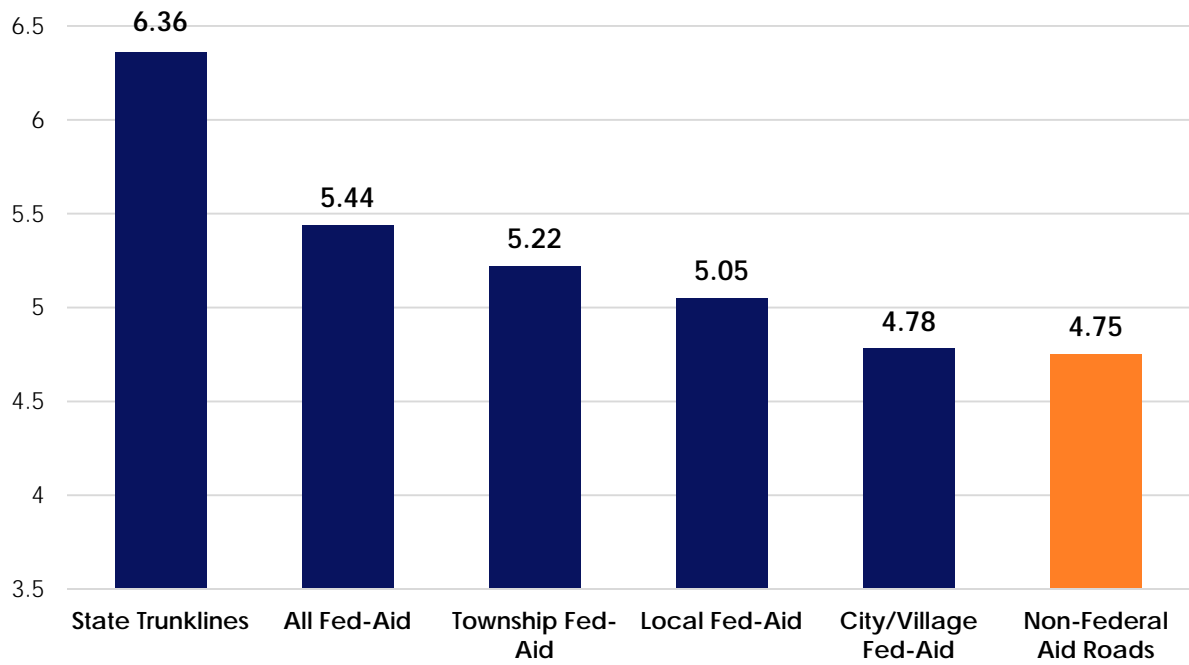
Of the 1,335.5 lane miles of non-federal aid roads surveyed in 2015 and 2016, 54% were in poor condition (rating 1-4), 36% were in fair condition (rating 5-7), and 10% were in good condition (rating 8-10). This analysis shows that non-federal aid roads overall are in worse condition than federal-aid roads. This is very similar to the statewide average of non-federal aid conditions reported to TAMC in 2015. Non-federal aid roads in Genesee County had an Average PASER Rating of 4.75 (1-10 scale), which is lower than all other road networks analyzed. The next page includes charts showing the overall conditions of non-federal aid roads in Genesee County, and a comparison of the Average PASER Rating (APR) with federal aid roads.

In addition to local PASER data, staff surveyed local agencies to find out which communities have a road millage in place. Of those surveyed, only two had a millage, Swartz Creek and Flint Township. For these agencies, the approximate amount of money raised through the millage is included on their fact sheet (pg. 6-76).

### 2015/2016 Non-Federal Aid Road Conditions

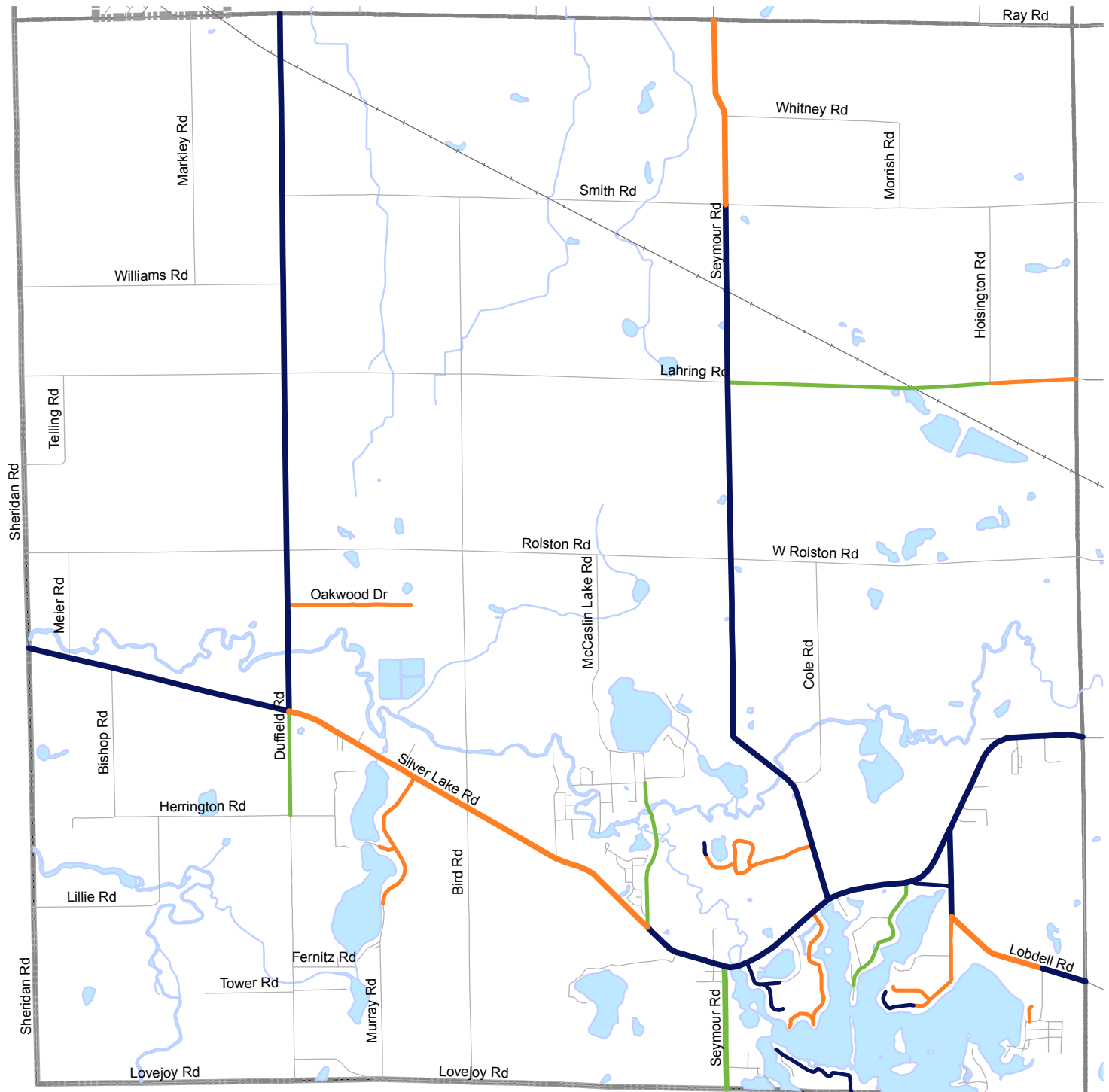


### 2016 Average PASER Rating Comparison



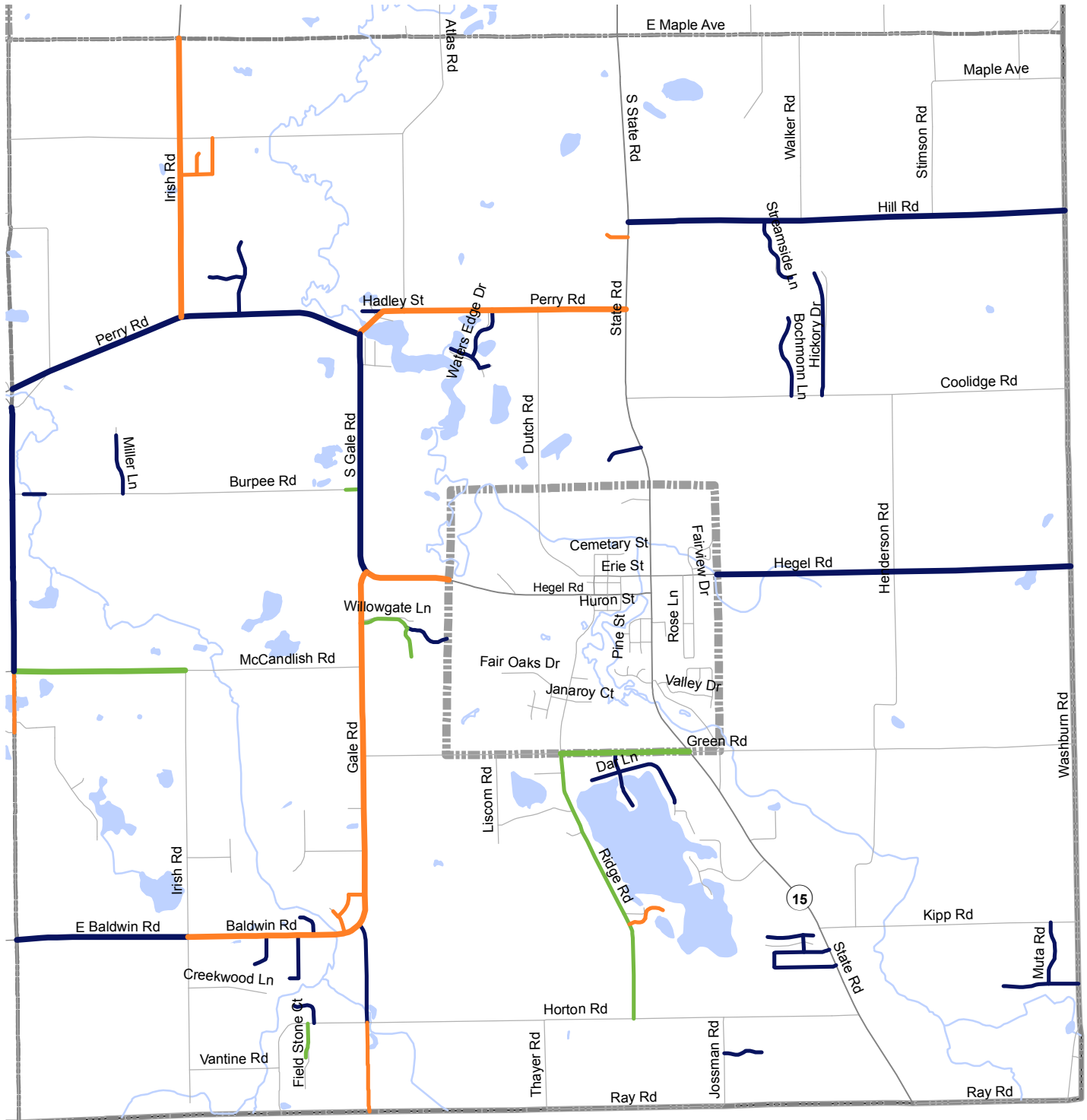
# Argentine Township - Federal and Local Roads

- Rating 8-10 (Good, 15%, 8.68 lane miles)
- Rating 5-7 (Fair, 53%, 29.79 lane miles)
- Rating 1-4 (Poor, 32%, 18.34 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



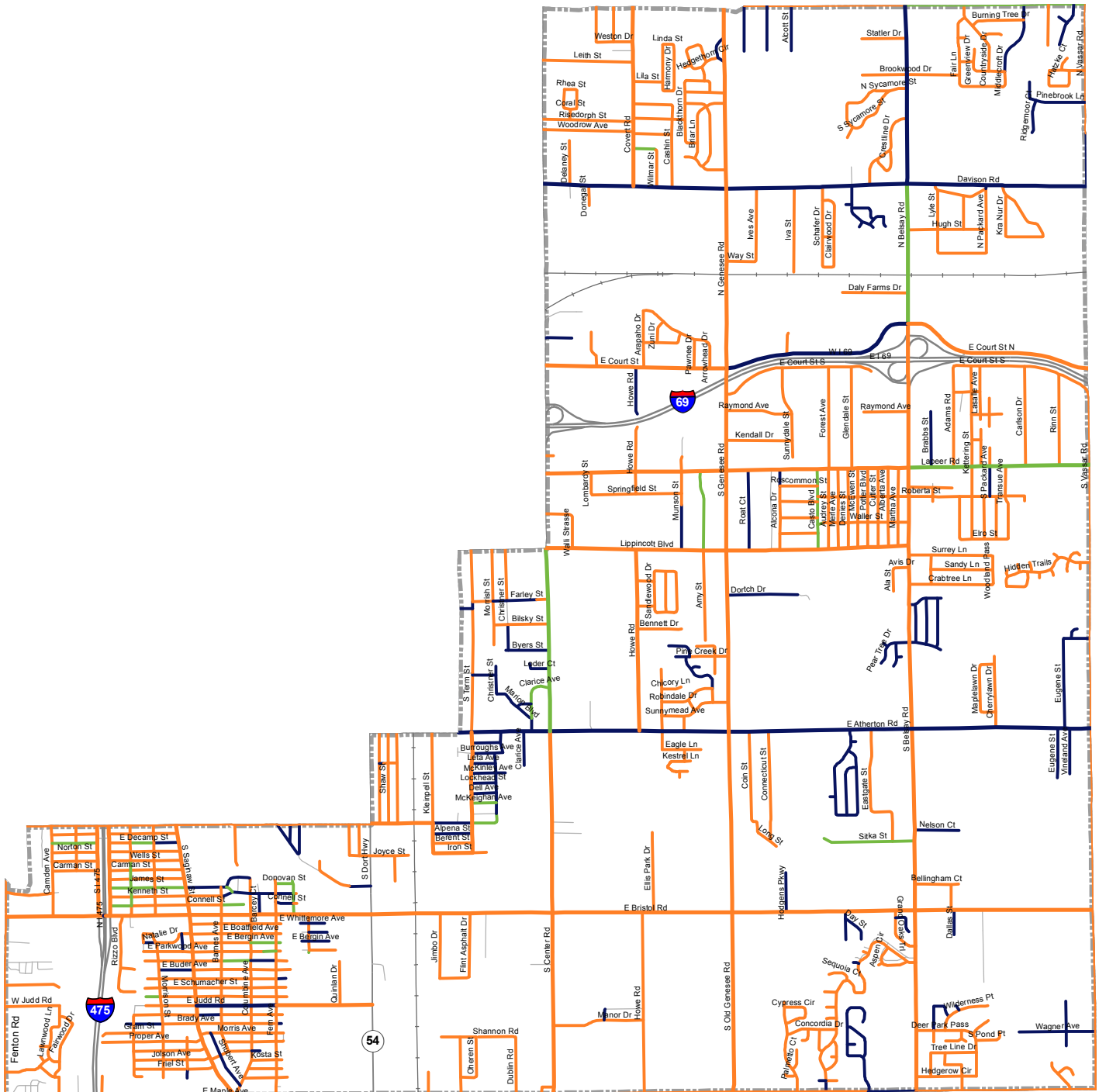
# Atlas Township - Federal and Local Roads

- Rating 8-10 (Good, 13%, 8.00 lane miles)
- Rating 5-7 (Fair, 59%, 37.01 lane miles)
- Rating 1-4 (Poor, 28%, 17.33 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



# City of Burton - Federal and Local Roads

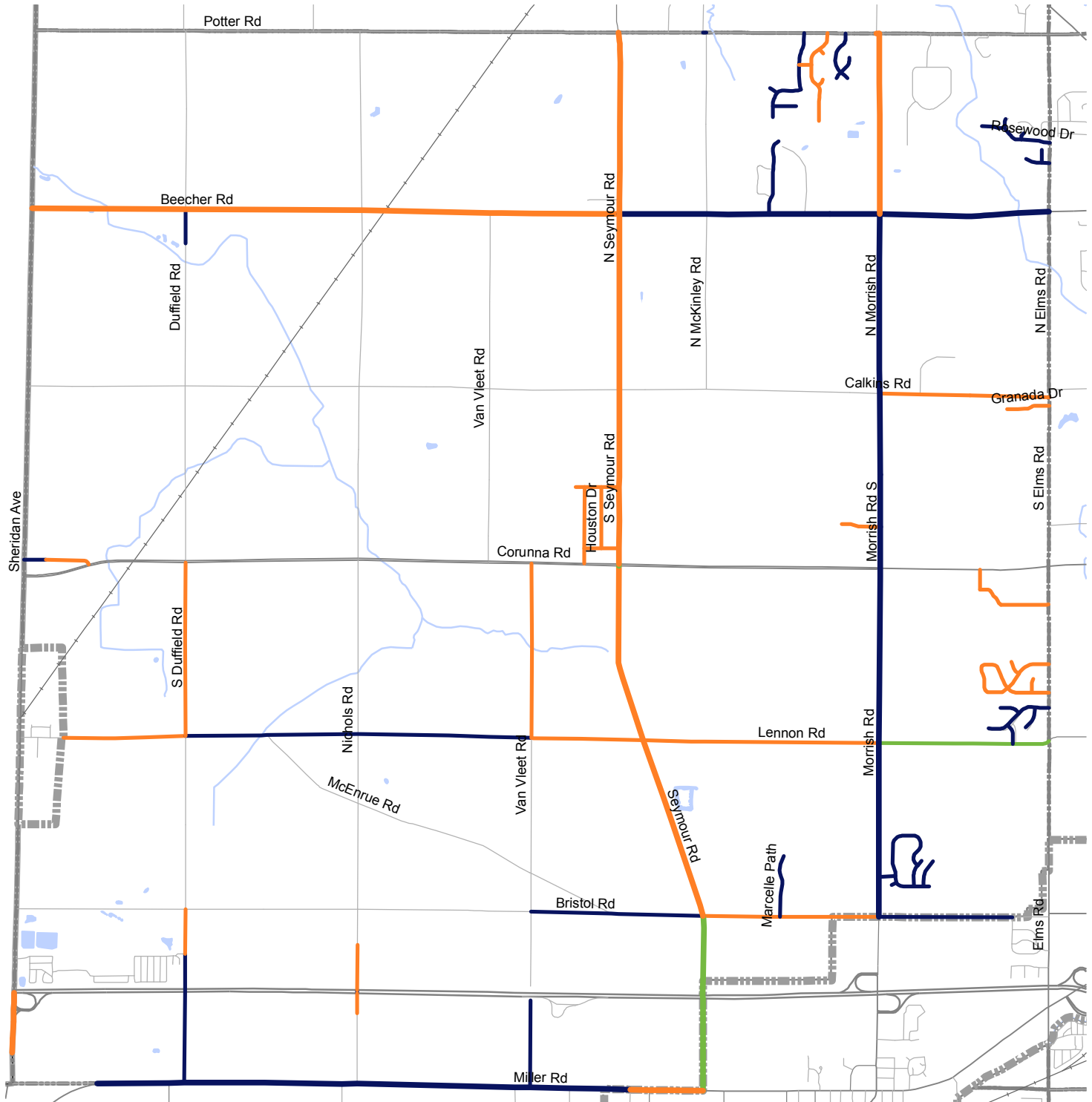
- Rating 8-10 (Good, 5%, 17.47 lane miles)
- Rating 5-7 (Fair, 15%, 56.60 lane miles)
- Rating 1-4 (Poor, 80%, 295.72 lane miles)
-  Roads Under State Jurisdiction





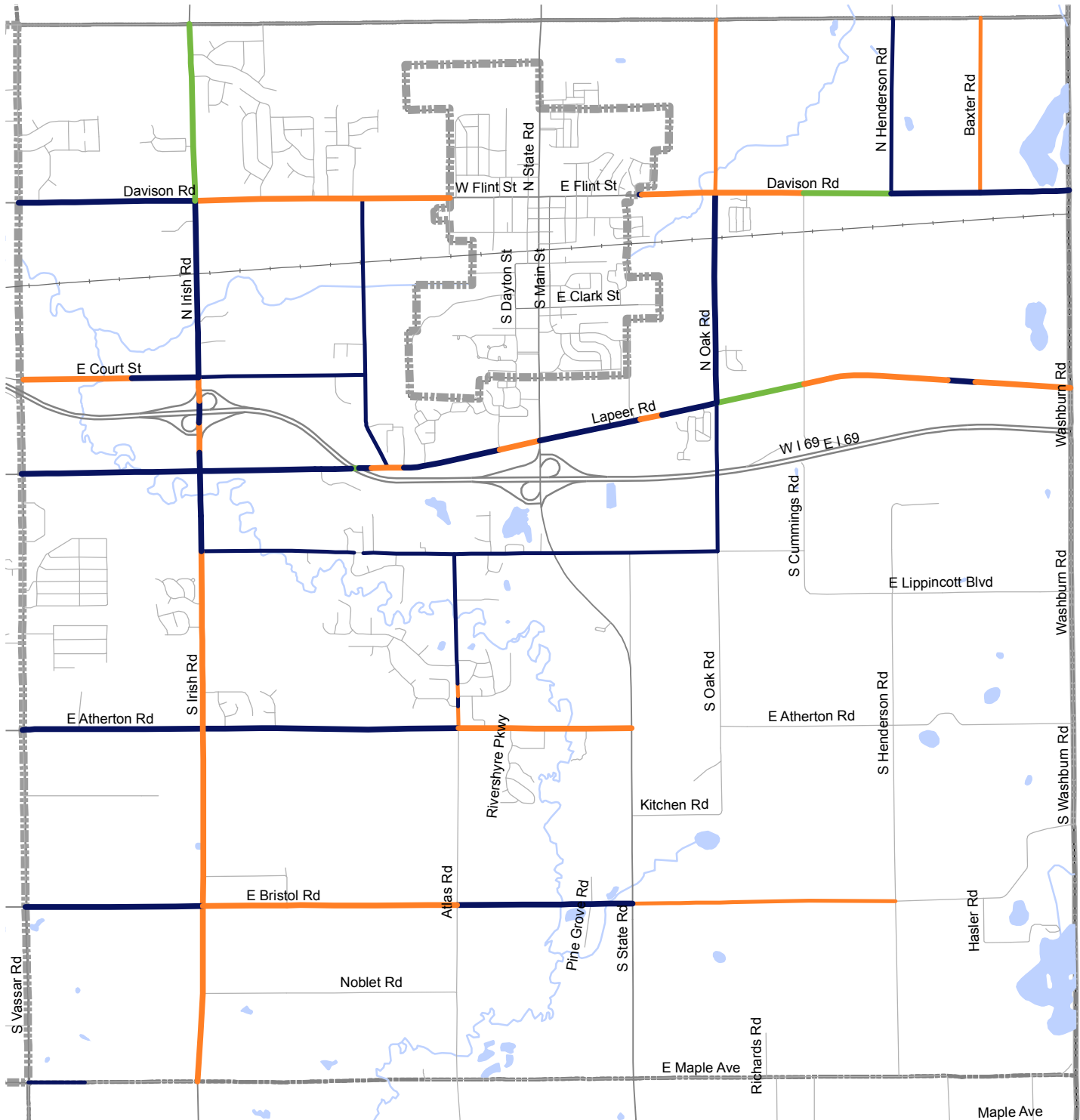
# Clayton Township - Federal and Local Roads

- Rating 8-10 (Good, 4%, 3.99 lane miles)
- Rating 5-7 (Fair, 45%, 39.31 lane miles)
- Rating 1-4 (Poor, 51%, 44.92 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



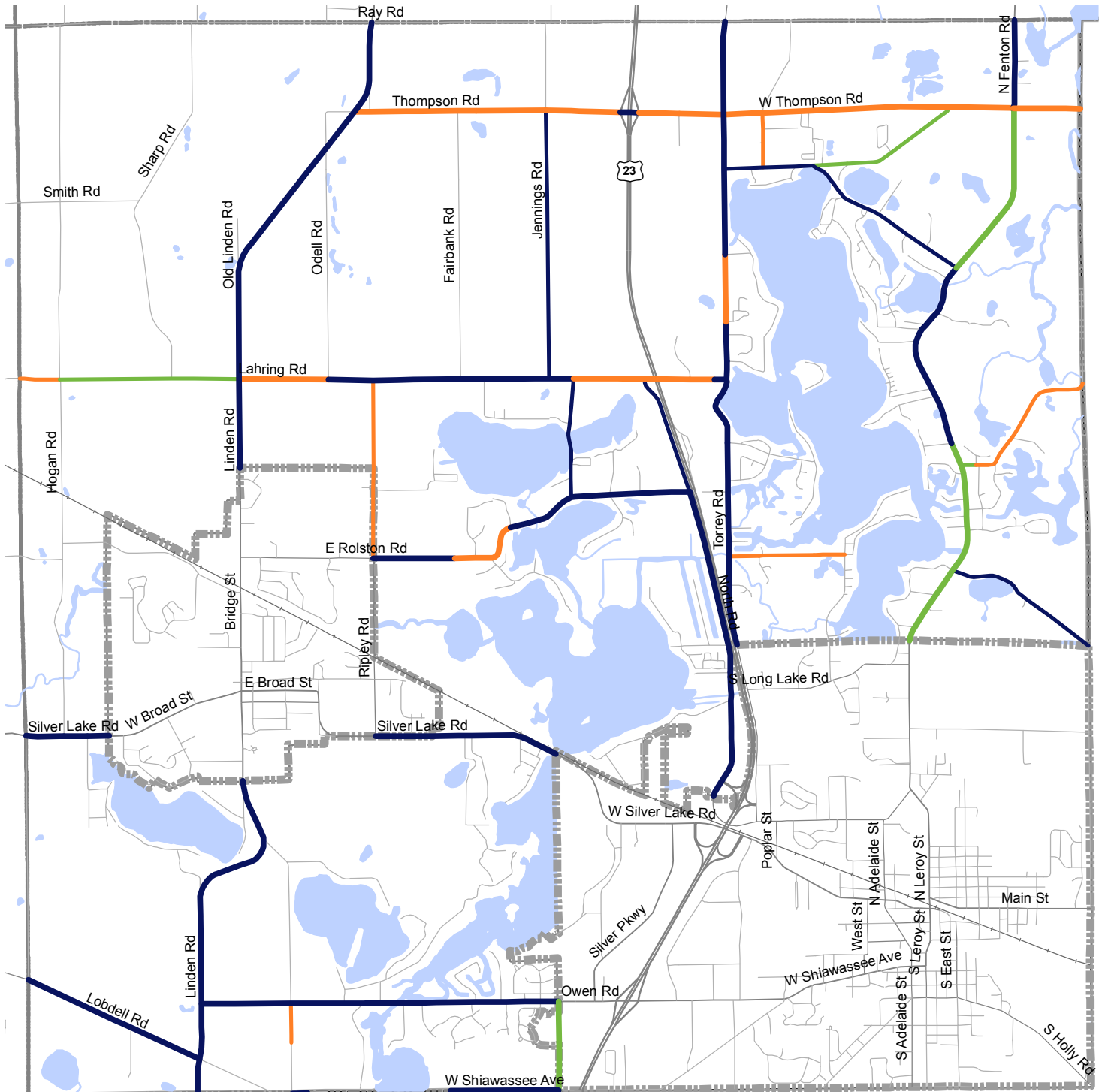
# Davison Township - Federal and Local Roads

- Rating 8-10 (Good, 4%, 4.10 lane miles)
- Rating 5-7 (Fair, 58%, 51.12 lane miles)
- Rating 1-4 (Poor, 38%, 33.44 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)




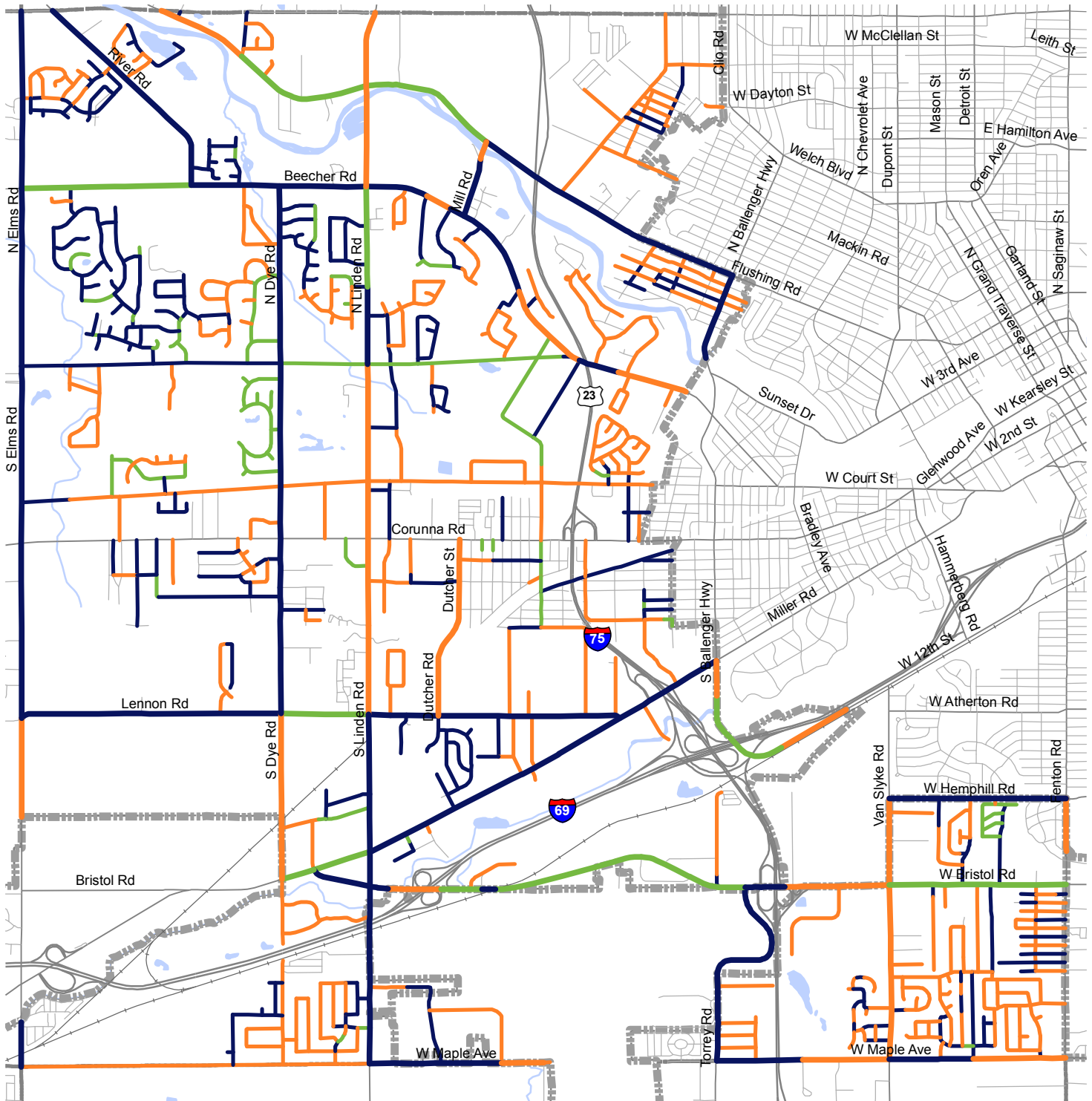
# Fenton Township - Federal and Local Roads

- Rating 8-10 (Good, 13%, 10.75 lane miles)
- Rating 5-7 (Fair, 63%, 50.87 lane miles)
- Rating 1-4 (Poor, 24%, 18.86 lane miles)
- Roads Under State Jurisdiction
- Local Road (Not Rated)



# Flint Township - Federal and Local Roads

- Rating 8-10 (Good, 14%, 51.44 lane miles)
- Rating 5-7 (Fair, 42%, 158.81 lane miles)
- Rating 1-4 (Poor, 44%, 166.15 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)




## City of Flushing - Federal and Local Roads

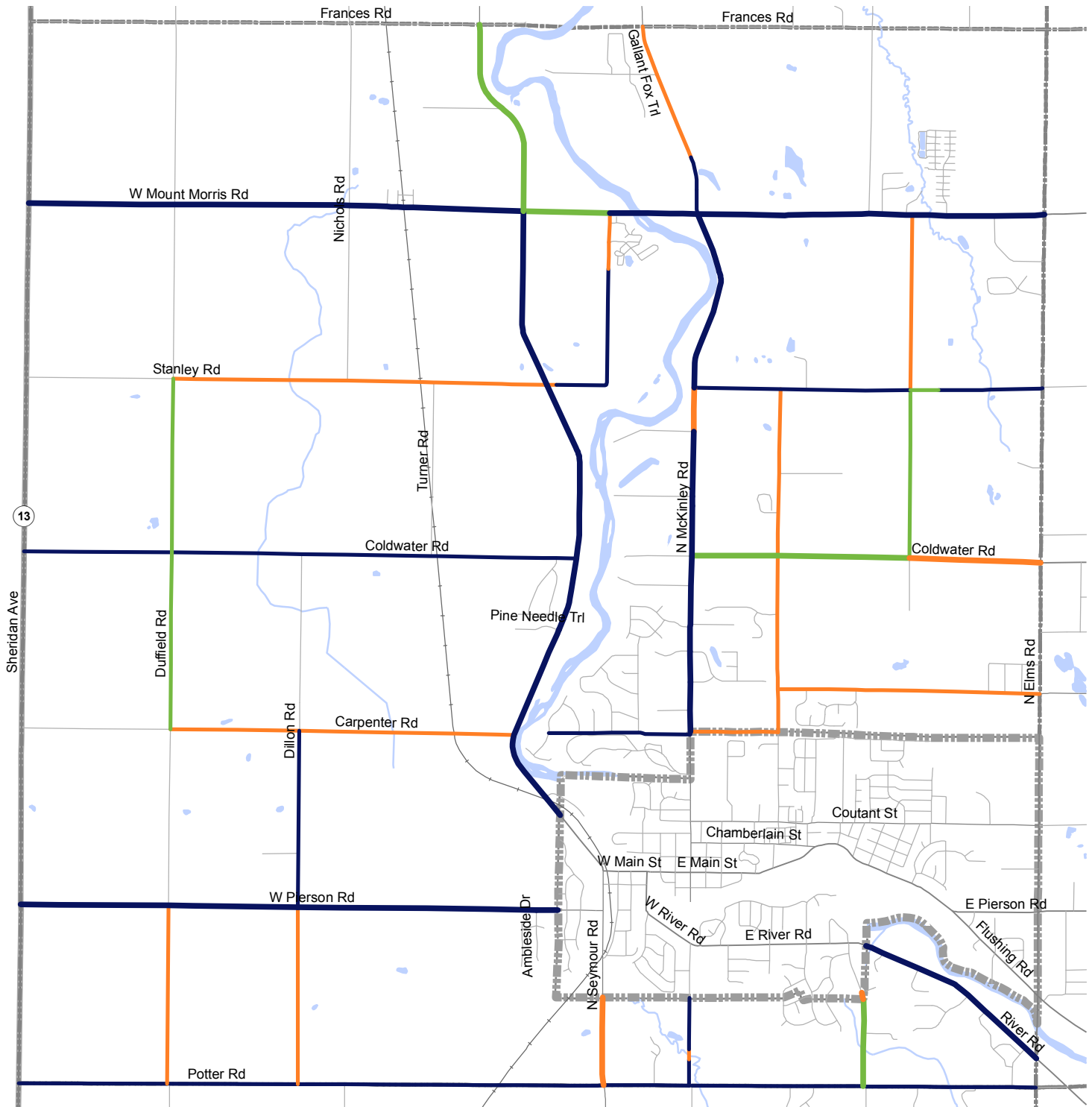


- Rating 8-10 (Good, 1%, 0.93 lane miles)
- Rating 5-7 (Fair, 61%, 50.87 lane miles)
- Rating 1-4 (Poor, 38%, 31.15 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



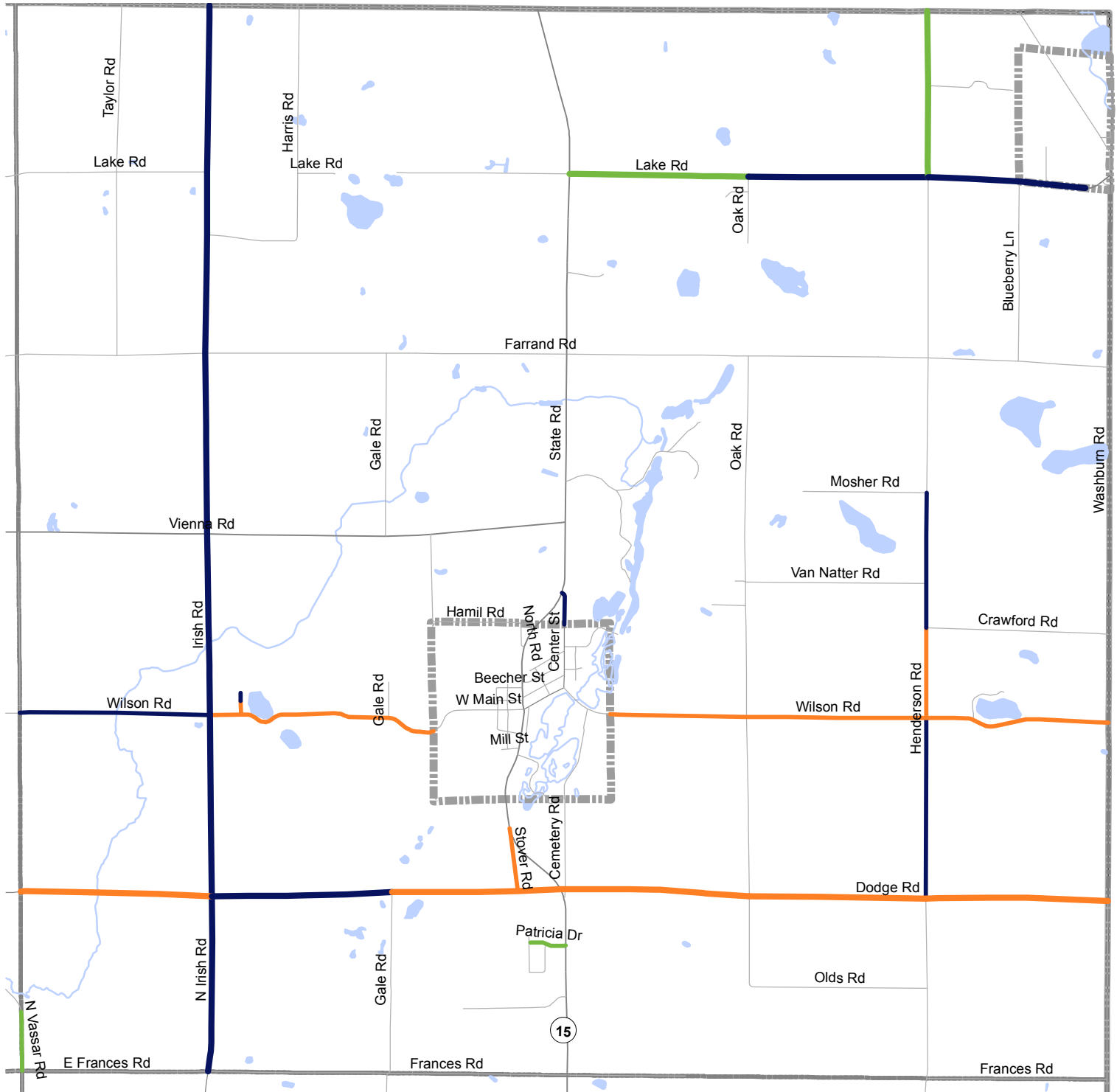
# Flushing Township - Federal and Local Roads

- Rating 8-10 (Good, 13%, 13.07 lane miles)
- Rating 5-7 (Fair, 60%, 60.82 lane miles)
- Rating 1-4 (Poor, 27%, 27.83 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



# Forest Township - Federal and Local Roads

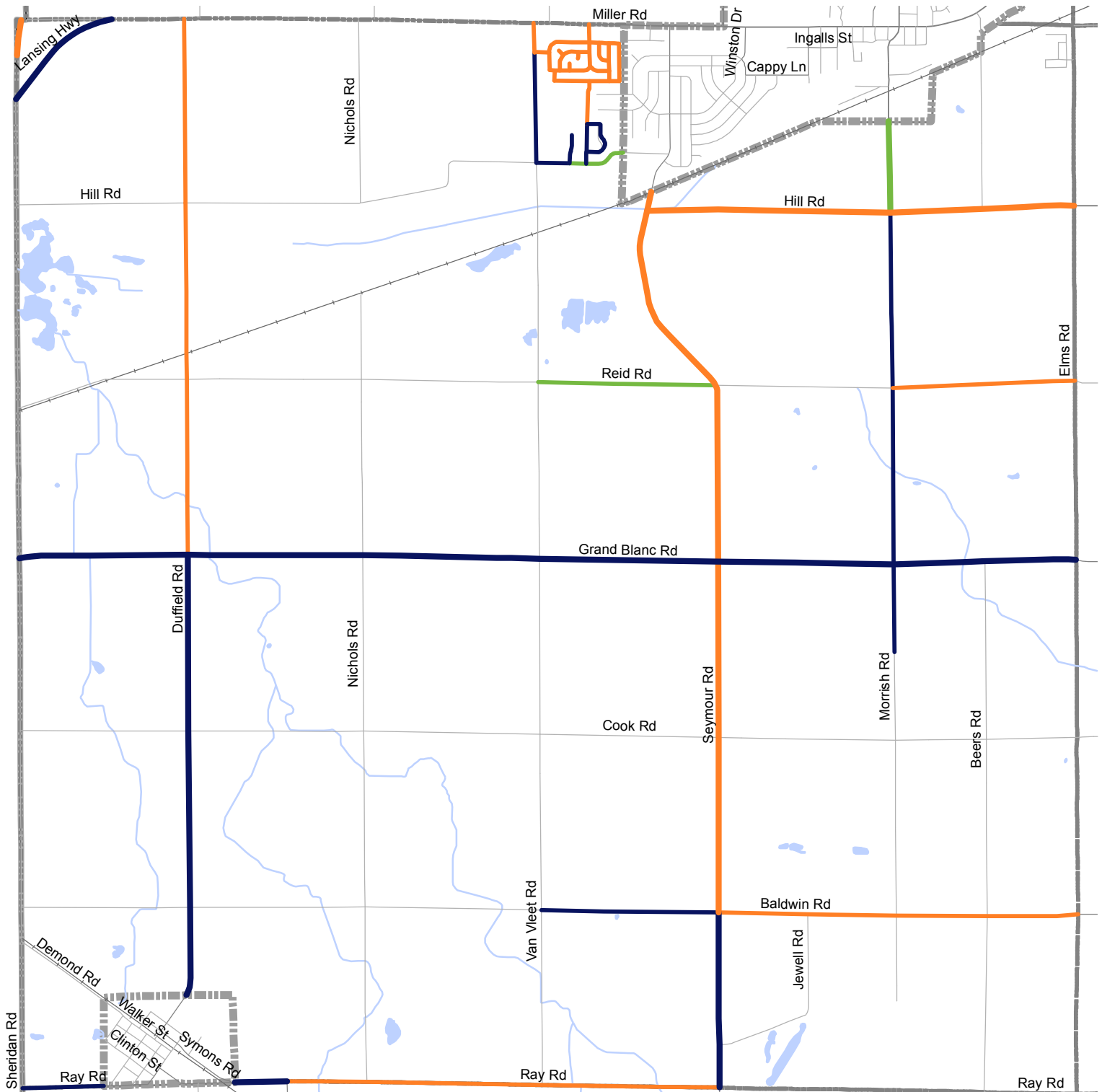
- Rating 8-10 (Good, 15%, 8.31 lane miles)
- Rating 5-7 (Fair, 42%, 24.02 lane miles)
- Rating 1-4 (Poor, 43%, 24.40 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)






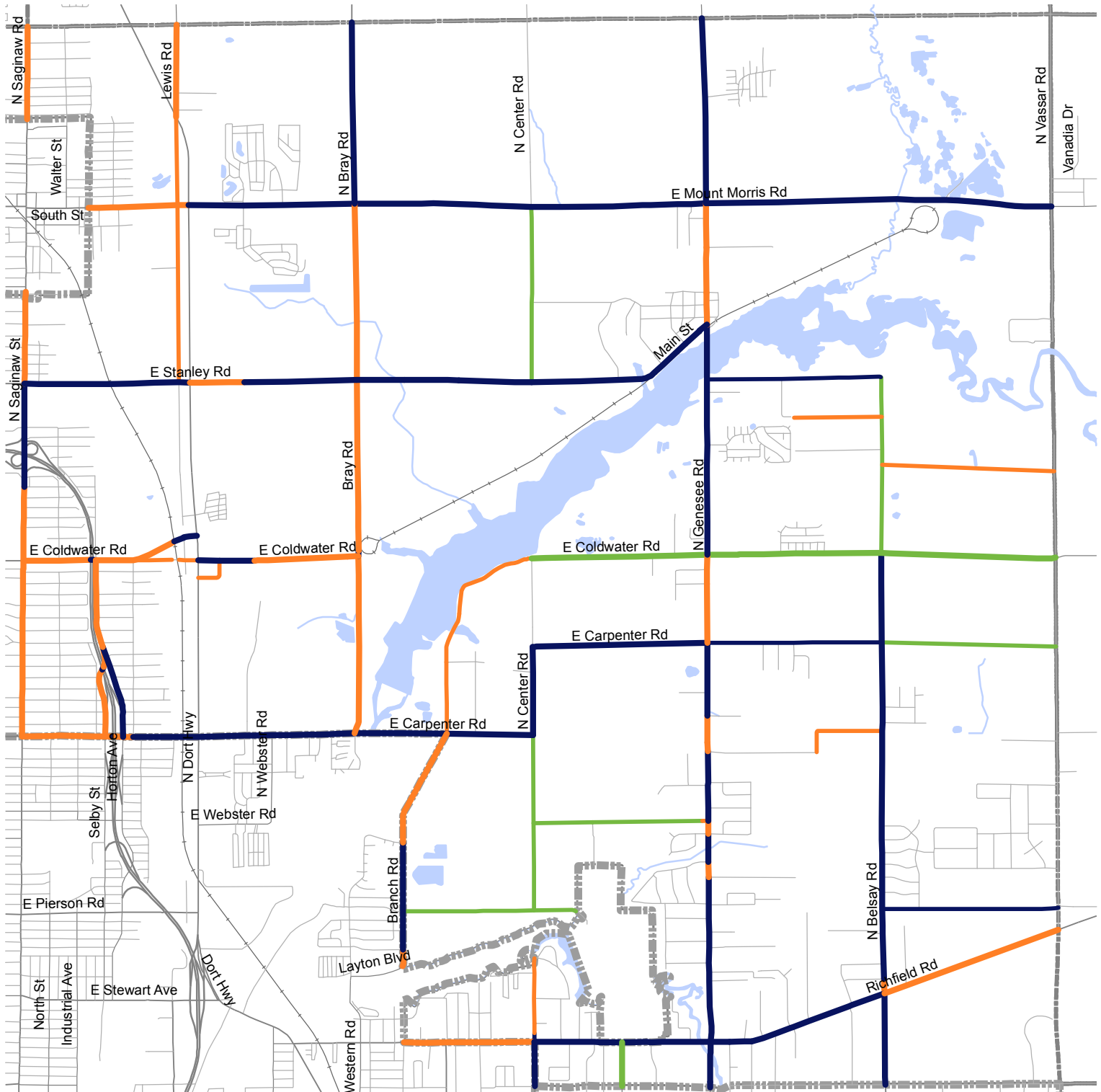
# Gaines Township - Federal and Local Roads

- Rating 8-10 (Good, 5%, 3.71 lane miles)
- Rating 5-7 (Fair, 44%, 32.13 lane miles)
- Rating 1-4 (Poor, 51%, 37.48 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)




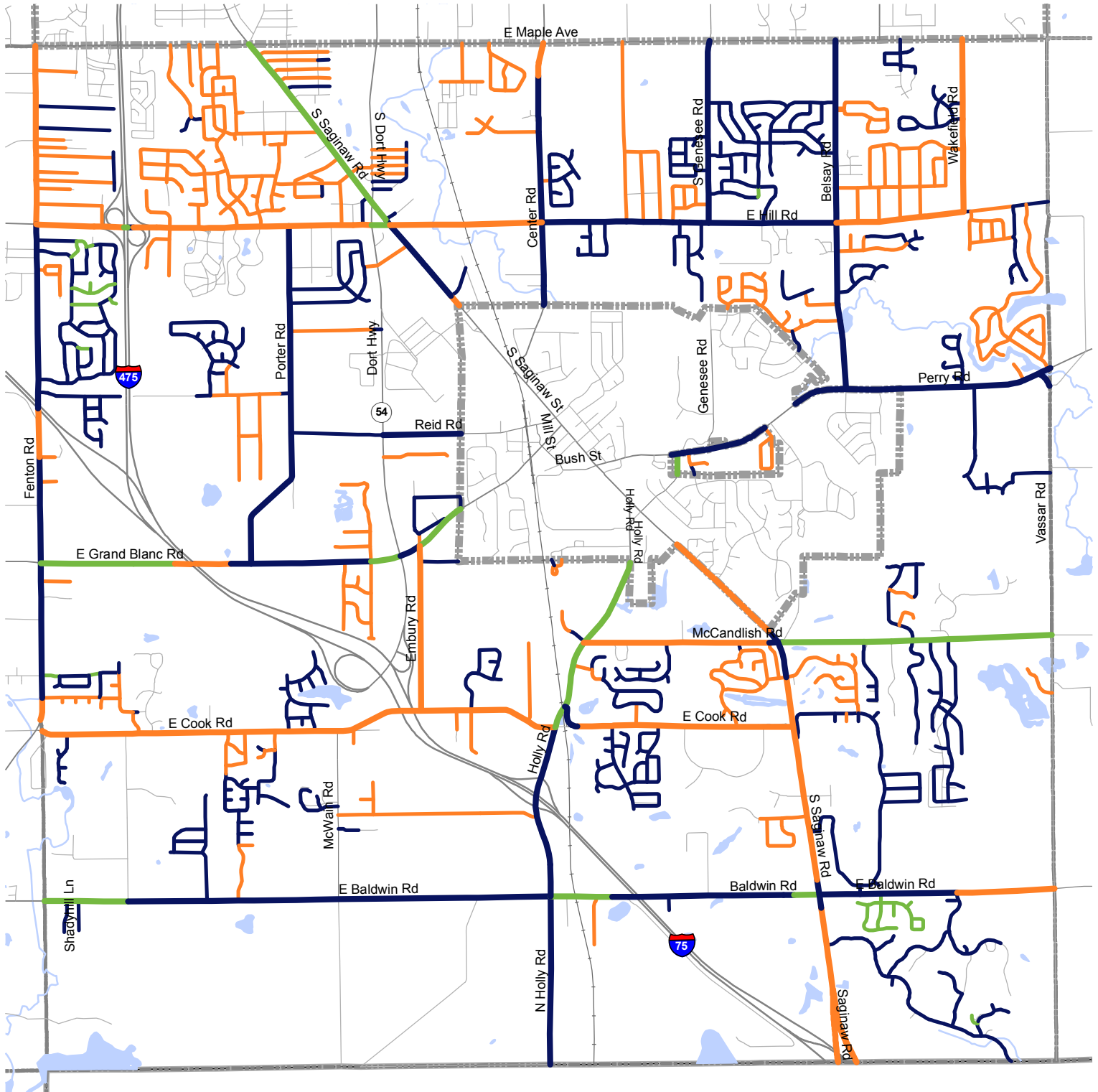
# Genesee Township - Federal and Local Roads

- Rating 8-10 (Good, 12%, 18.36 lane miles)
- Rating 5-7 (Fair, 48%, 72.29 lane miles)
- Rating 1-4 (Poor, 40%, 60.32 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)




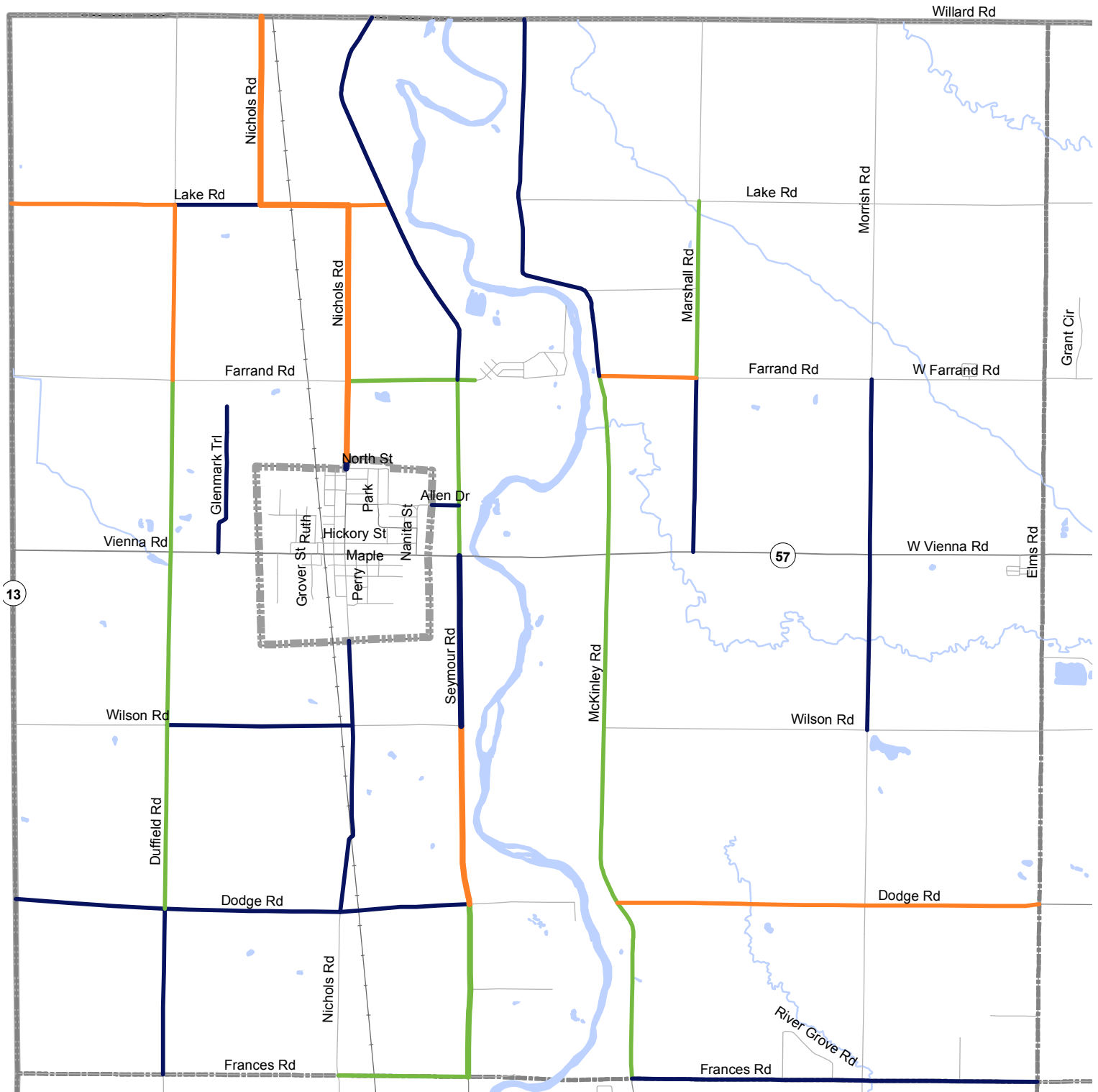
# Grand Blanc Township - Federal and Local Roads

- Rating 8-10 (Good, 8%, 27.60 lane miles)
- Rating 5-7 (Fair, 49%, 168.02 lane miles)
- Rating 1-4 (Poor, 43%, 148.38 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)

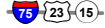


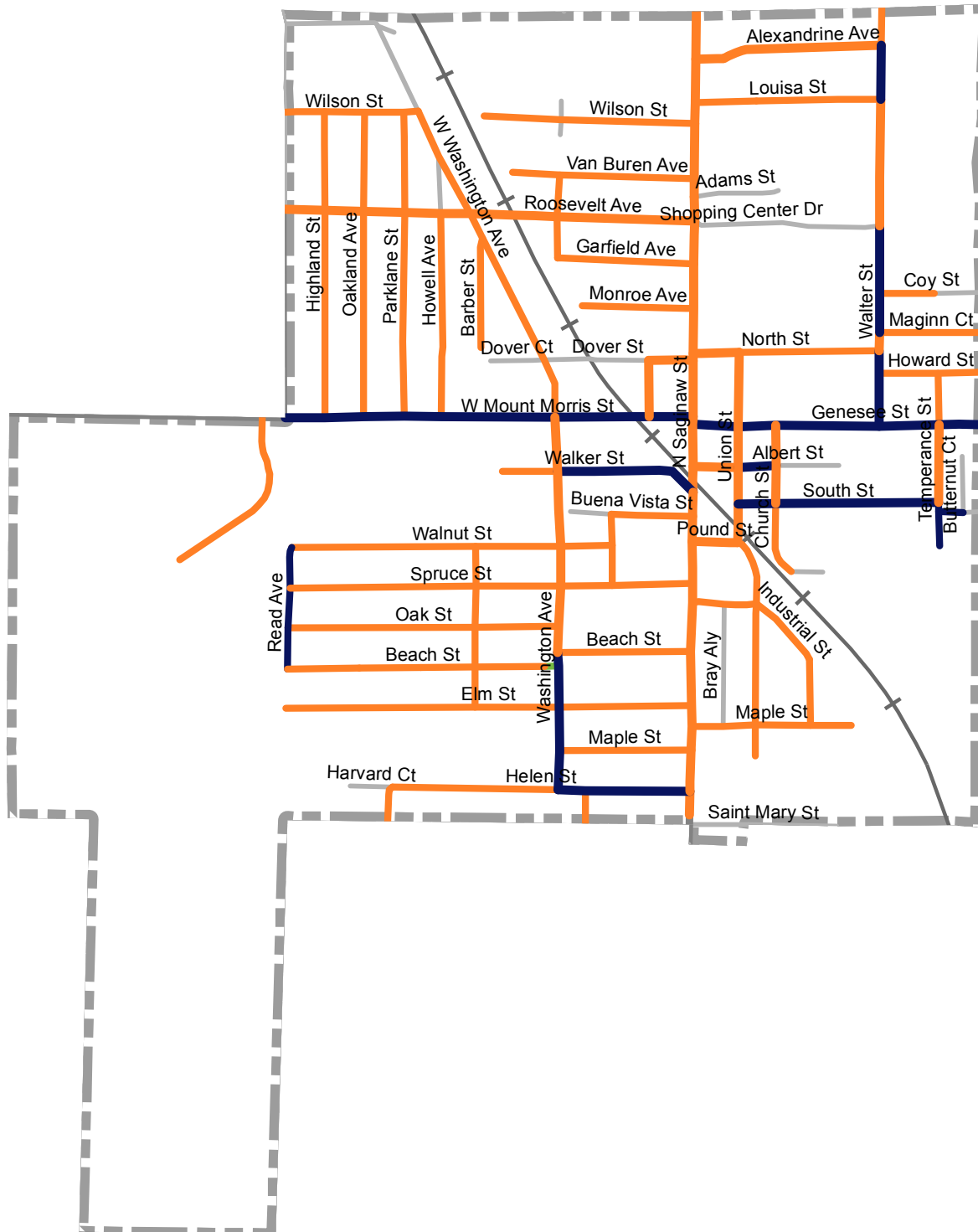
# Montrose Township - Federal and Local Roads

- Rating 8-10 (Good, 32%, 26.27 lane miles)
- Rating 5-7 (Fair, 45%, 37.20 lane miles)
- Rating 1-4 (Poor, 23%, 18.38 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)

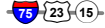


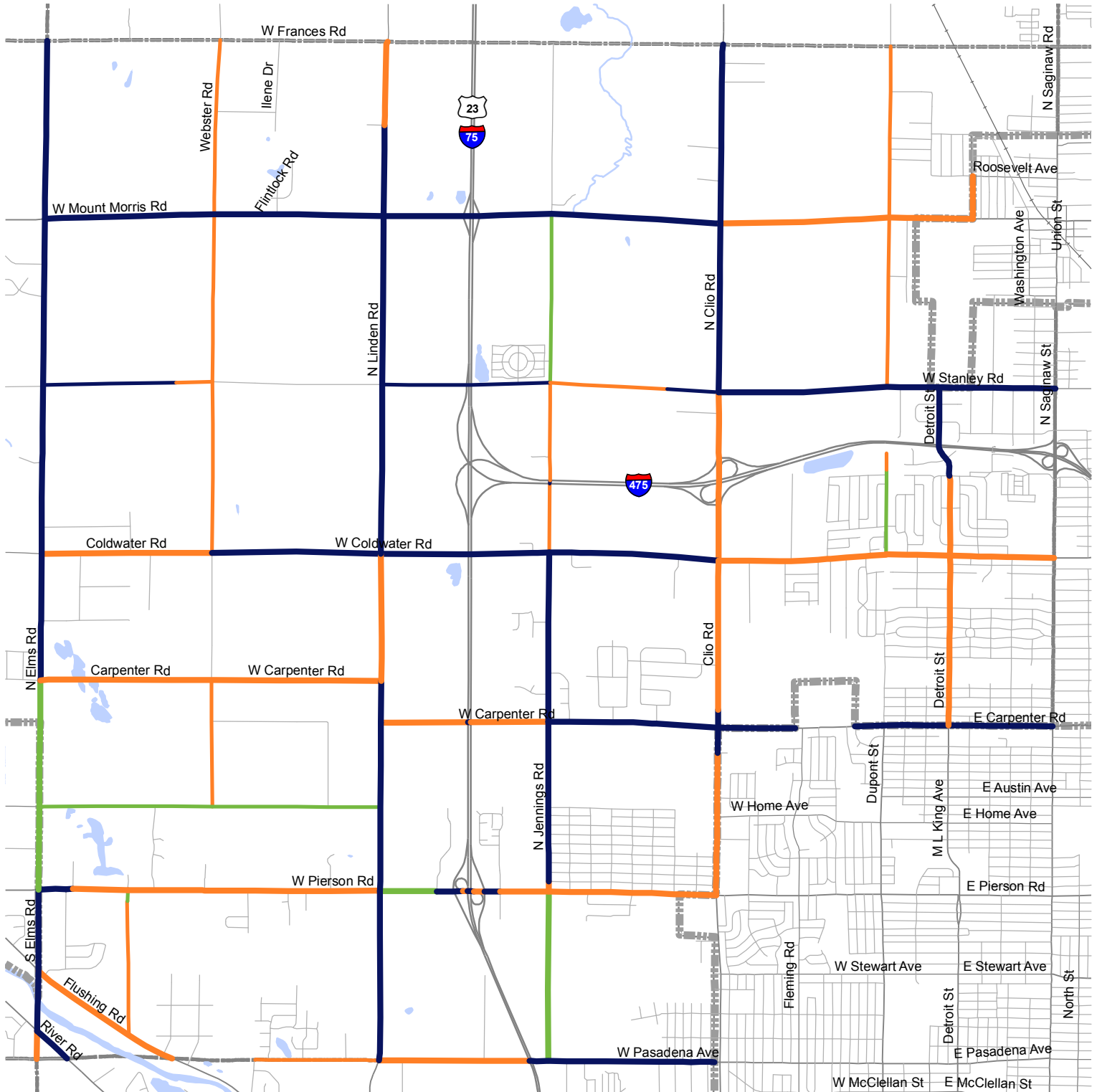
# City of Mt. Morris - Federal and Local Roads

- Rating 8-10 (Good, 0%, 0.03 lane miles)
- Rating 5-7 (Fair, 21%, 6.07 lane miles)
- Rating 1-4 (Poor, 79%, 23.38 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



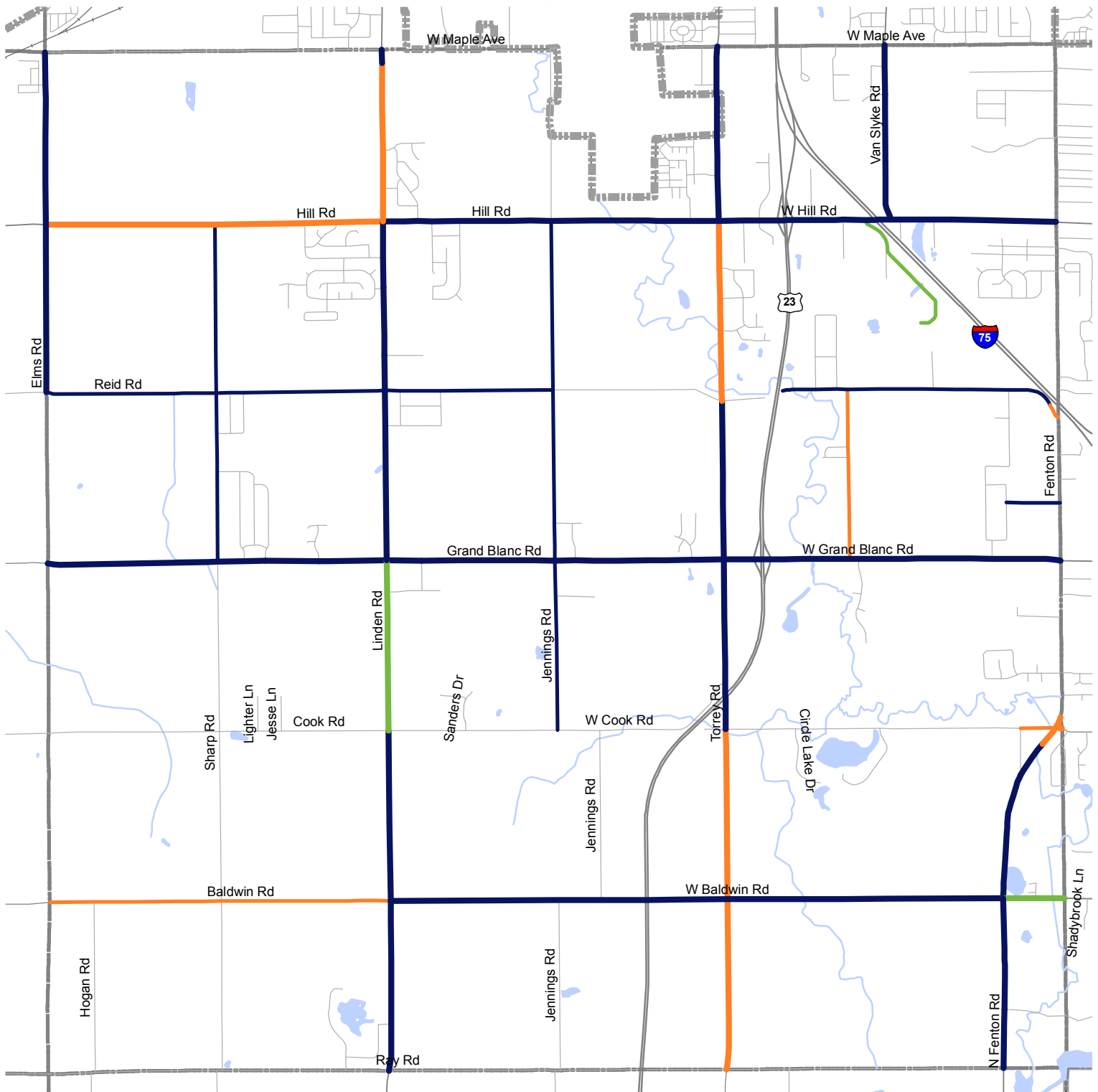
# Mt. Morris Township - Federal and Local Roads

- Rating 8-10 (Good, 8%, 14.44 lane miles)
- Rating 5-7 (Fair, 44%, 76.38 lane miles)
- Rating 1-4 (Poor, 48%, 85.02 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)




# Mundy Township - Federal and Local Roads

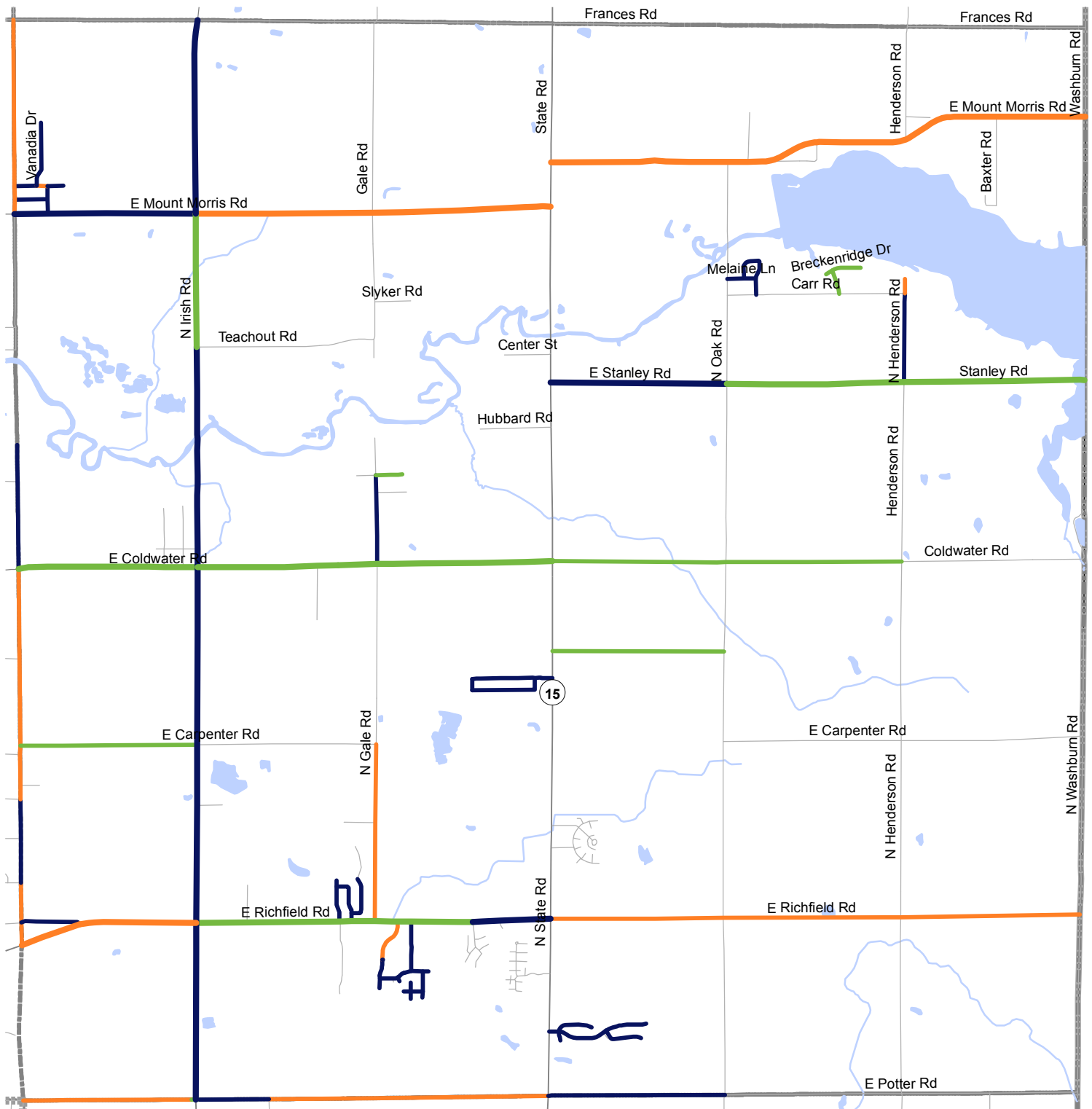
- Rating 8-10 (Good, 4%, 4.46 lane miles)
- Rating 5-7 (Fair, 77%, 85.67 lane miles)
- Rating 1-4 (Poor, 19%, 21.47 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)





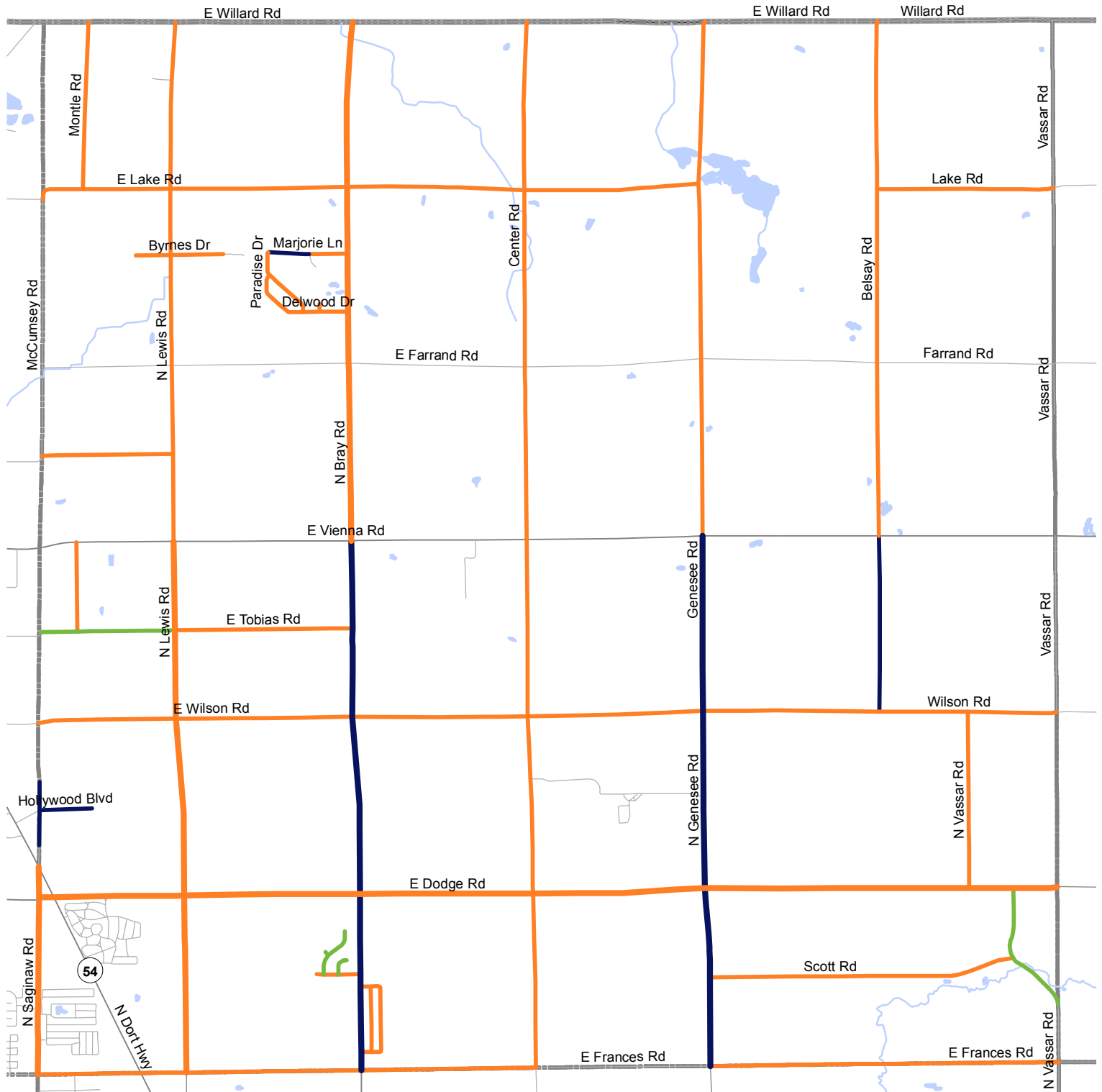
# Richfield Township - Federal and Local Roads

- Rating 8-10 (Good, 27%, 24.85 lane miles)
- Rating 5-7 (Fair, 37%, 33.92 lane miles)
- Rating 1-4 (Poor, 36%, 33.46 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)




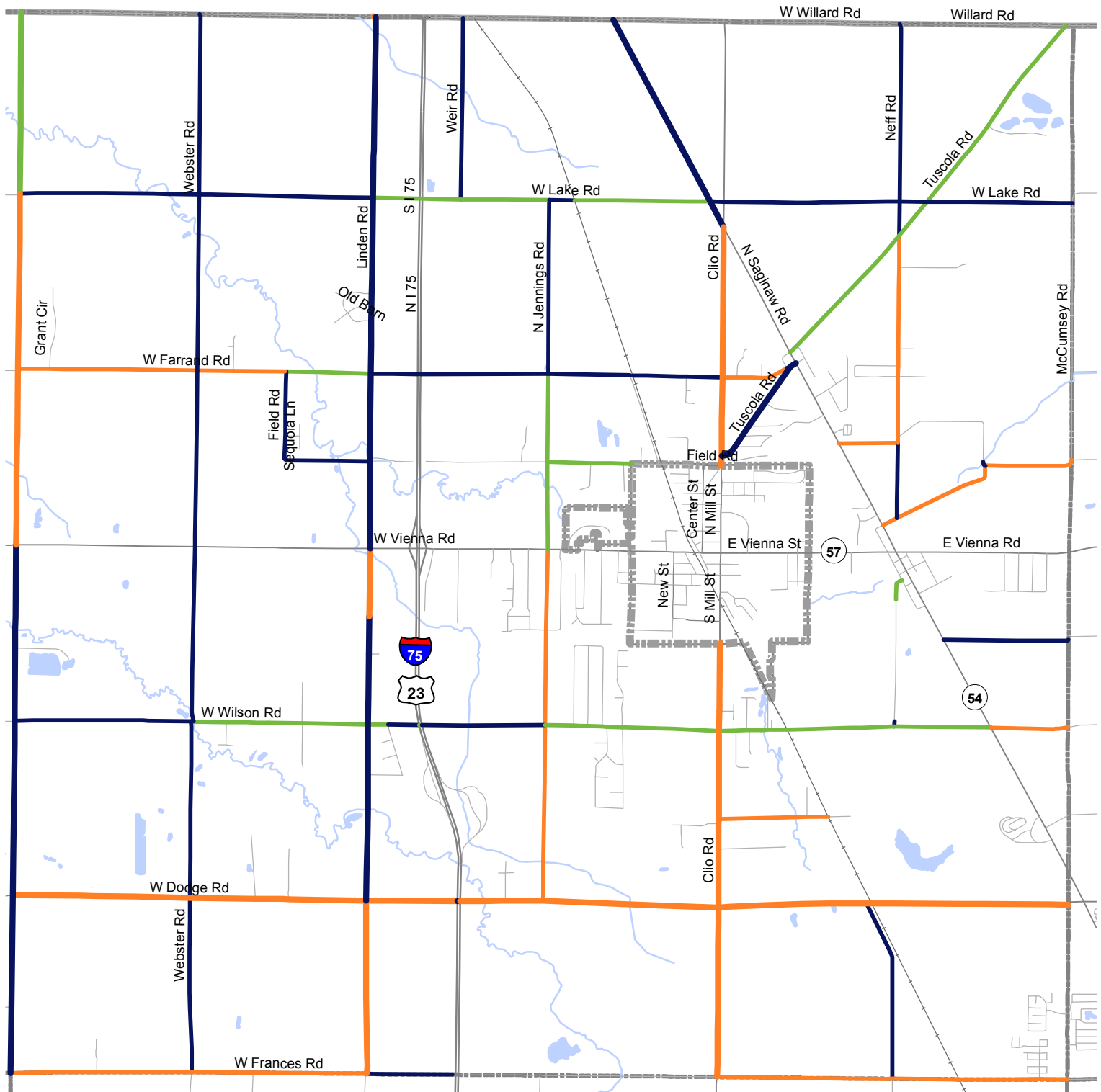
# Thefford Township - Federal and Local Roads

- Rating 8-10 (Good, 3%, 3.96 lane miles)
- Rating 5-7 (Fair, 12%, 15.91 lane miles)
- Rating 1-4 (Poor, 85%, 108.29 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



# Vienna Township - Federal and Local Roads

- Rating 8-10 (Good, 16%, 22.06 lane miles)
- Rating 5-7 (Fair, 45%, 64.43 lane miles)
- Rating 1-4 (Poor, 39%, 55.38 lane miles)
-  Roads Under State Jurisdiction
- Local Road (Not Rated)



# Concrete - PASER Rating System Manual

## Rating system

Surface rating	Visible distress*	General condition/ treatment measures
<b>10</b> Good	None.	New pavement. No maintenance required.
<b>9</b> Good	Traffic wear in wheelpath. Slight map cracking or pop-outs.	Recent concrete overlay or joint rehabilitation. Like new condition. No maintenance required.
<b>8</b> Good	Pop-outs, map cracking, or minor surface defects. Slight surface scaling. Partial loss of joint sealant. Isolated meander cracks, tight or well sealed. Isolated cracks at manholes, tight or well sealed.	More surface wear or slight defects. Little or no maintenance required.
<b>7</b> Fair	More extensive surface scaling. Some open joints. Isolated transverse or longitudinal cracks, tight or well sealed. Some manhole displacement and cracking. First utility patch, in good condition. First noticeable settlement or heave area.	First sign of transverse cracks (all tight); first utility patch. More extensive surface scaling. Seal open joints and other routine maintenance.
<b>6</b> Fair	Moderate scaling in several locations. A few isolated surface spalls. Shallow reinforcement causing cracks. Several corner cracks, tight or well sealed. Open (1/4" wide) longitudinal or transverse joints and more frequent transverse cracks (some open 1/4").	First signs of shallow reinforcement or corner cracking. Needs general joint and crack sealing. Scaled areas could be overlaid.
<b>5</b> Fair	Moderate to severe polishing or scaling over 25% of the surface. High reinforcing steel causing surface spalling. Some joints and cracks have begun spalling. First signs of joint or crack faulting (1/4"). Multiple corner cracks with broken pieces. Moderate settlement or frost heave areas. Patching showing distress.	First signs of joint or crack spalling or faulting. Grind to repair surface defects. Some partial depth patching or joint repairs needed.
<b>4</b> Poor	Severe polishing, scaling, map cracking, or spalling over 50% of the area. Joints and cracks show moderate to severe spalling. Pumping and faulting of joints (1/2") with fair ride. Several slabs have multiple transverse or meander cracks with moderate spalling. Spalled area broken into several pieces. Corner cracks with missing pieces or patches. Pavement blowups.	Needs some full depth repairs, grinding, and/or asphalt overlay to correct surface defects.
<b>3</b> Poor	Most joints and cracks are open, with multiple parallel cracks, severe spalling, or faulting. D-cracking is evident. Severe faulting (1") giving poor ride. Extensive patching in fair to poor condition. Many transverse and meander cracks, open and severely spalled.	Needs extensive full depth patching plus some full slab replacement.
<b>2</b> Poor	Extensive slab cracking, severely spalled and patched. Joints failed. Patching in very poor condition. Severe and extensive settlements or frost heaves.	Recycle and/or rebuild pavement.
<b>1</b> Poor	Restricted speed. Extensive potholes. Almost total loss of pavement integrity.	Total reconstruction.

\* Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.

# **Asphalt - PASER Rating System Manual**

## Rating system

Surface rating	Visible distress*	General condition/ treatment measures
<b>10</b> Good	None.	New construction.
<b>9</b> Good	None.	Recent overlay. Like new.
<b>8</b> Good	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). All cracks sealed or tight (open less than 1/4").	Recent sealcoat or new cold mix. Little or no maintenance required.
<b>7</b> Fair	Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open 1/4") due to reflection or paving joints. Transverse cracks (open 1/4") spaced 10' or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
<b>6</b> Fair	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4"–1/2"), some spaced less than 10'. First sign of block cracking. Slight to moderate flushing or polishing. Occasional patching in good condition.	Shows signs of aging. Sound structural condition. Could extend life with sealcoat.
<b>5</b> Fair	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open 1/2") show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge wedging in good condition.	Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2")
<b>4</b> Poor	Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (1/2" deep or less).	Significant aging and first signs of need for strengthening. Would benefit from a structural overlay (2" or more).
<b>3</b> Poor	Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (1" or 2" deep). Occasional potholes.	Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay.
<b>2</b> Poor	Alligator cracking (over 25% of surface). Severe distortions (over 2" deep) Extensive patching in poor condition. Potholes.	Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective.
<b>1</b> Poor	Severe distress with extensive loss of surface integrity.	Failed. Needs total reconstruction.

\* Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.



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