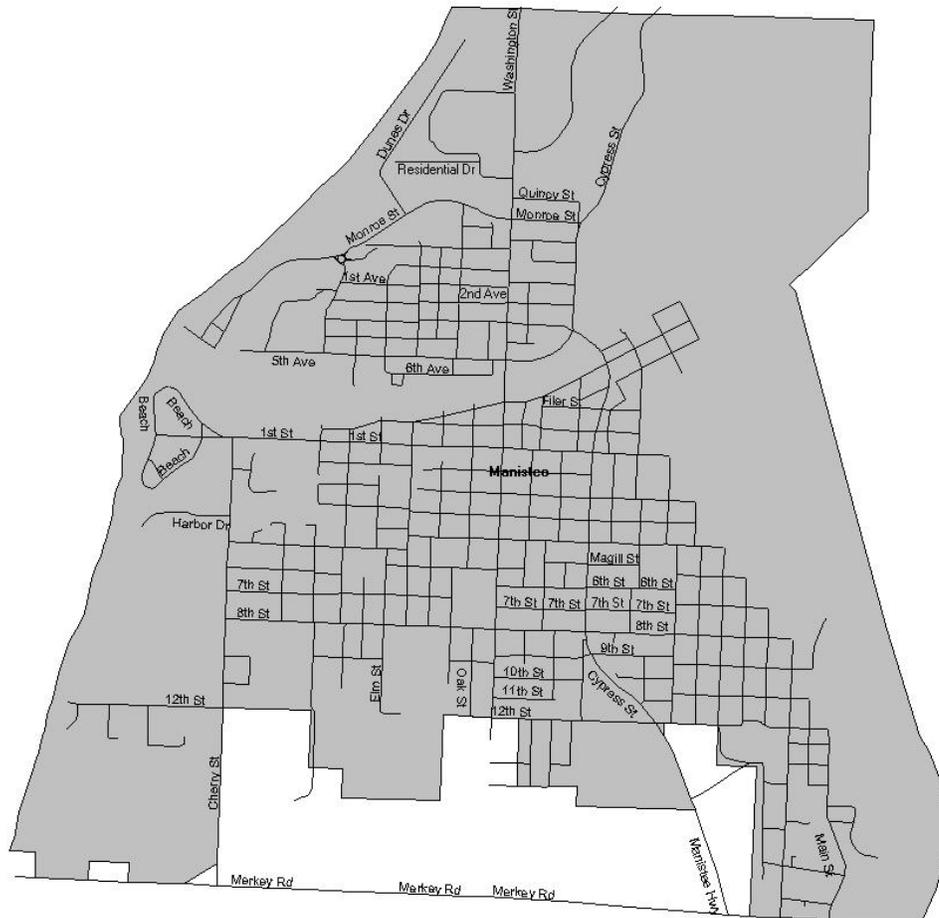


# City of Manistee



## 2008 Street Asset Management Plan

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## **Introduction**

This document is the City of Manistee's Asset Management Plan for its streets. It is intended to serve as a guiding document for all street work and improvements in the City of Manistee. The plan has been developed using Michigan Department of Transportation (MDOT) suggested best practices. The plan will be updated each year based on new information received. Although this plan reflects the best practices currently in use by road agencies across the state, it is tailored to the unique set of facts and circumstances applying to the City of Manistee's street network. The plan will also evolve from year to year as the City gains experience in applying various preventative maintenance techniques.

## **Street Asset Management in Michigan**

The State of Michigan is a national leader in applying asset management principles to its road network. The processes followed by MDOT have been "pushed down" to local road agencies through various legislation. Public Act 499 of 2002 is the primary law that is providing this impetus. It has been followed up by Public Act 338 of 2006 and Public Act 199 of 2007. These laws established Transportation Asset Management Council (TAMC) "in order to provide a coordinated, unified effort by the various roadway agencies within the state." It is further charged with "advising the state transportation commission on a statewide asset management strategy..." The law also specifies that all local road agencies shall implement an asset management approach to maintaining their street networks. This is to be done under the leadership and oversight of the TAMC.

Given this mandate, TAMC has been quite active in pursuing these legislative goals. It has sponsored the statewide asset management conferences, as well as working to provide training opportunities and technical documents to local road agencies. It has also set up local agency reporting requirements and a software tool to assist in meeting these requirements. Finally, the TAMC issues an annual report tracking the state of Michigan's road network.

## **Background on City Streets**

The City has 18.2 miles of major streets and 29.4 miles of local streets, for a total of 47.6 miles of streets that we are entirely responsible for maintaining. This includes routine maintenance (plowing, sweeping, right-of-way work), preventative maintenance and reconstruction. We also are under contract with MDOT to do routine maintenance on 2.2 mile of state trunkline (US-31). The vast majority of our streets are asphalt, with a few segments being concrete. We have curb and gutter in many, but not all, areas of the City. Given the age of the City, many of our streets have a base that would be considered substandard by today's design parameters.

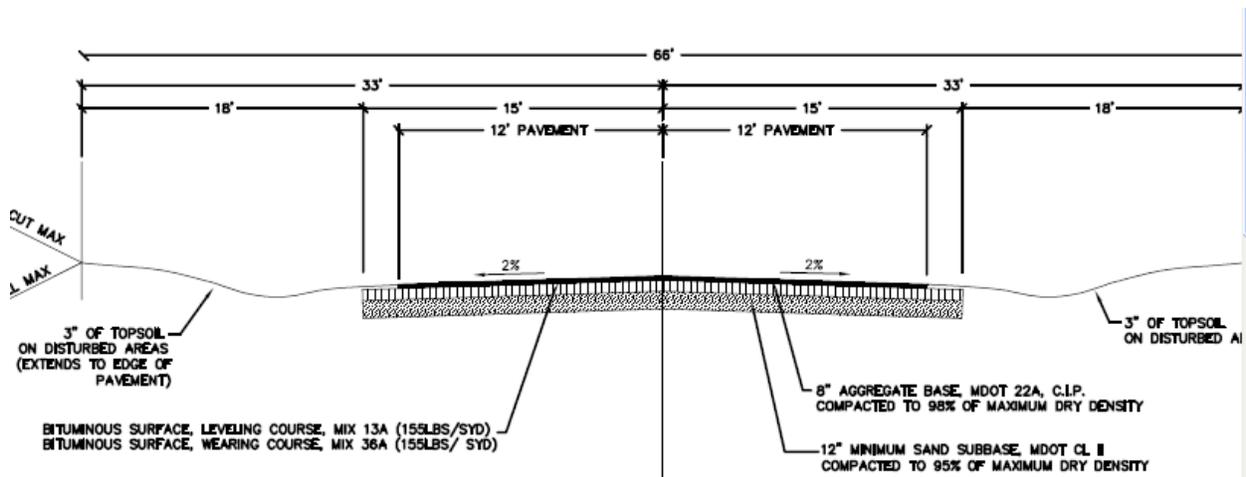
Many City streets have been reconstructed in recent years as part of the extensive sewer separation projects that have been undertaken. These streets were reconstructed to modern design standards and appear to be wearing very well. In addition, we have recently received state and federal grants that have allowed for the resurfacing of several of our major streets.

It is important to note that the City has not been following a structured preventative maintenance program for its streets. It has simply been doing routine maintenance and rehabilitating streets when money and/or grants were available. This is known as the “fix the worst first” approach. This method was the conventional wisdom across the state and most of the country for many years. It is not that this approach was wrong per se, but rather that new and improved tools and techniques have evolved and shown how scarce road dollars can be deployed more efficiently.

The shift to an asset management program for the City is a huge undertaking. There will clearly be a myriad of challenges along the way, and we will undoubtedly make and learn from some mistakes. However, the City’s road network will be better off in the long term because of a switch to this systematic, rational approach towards maintaining its streets.

**Pavement Primer**

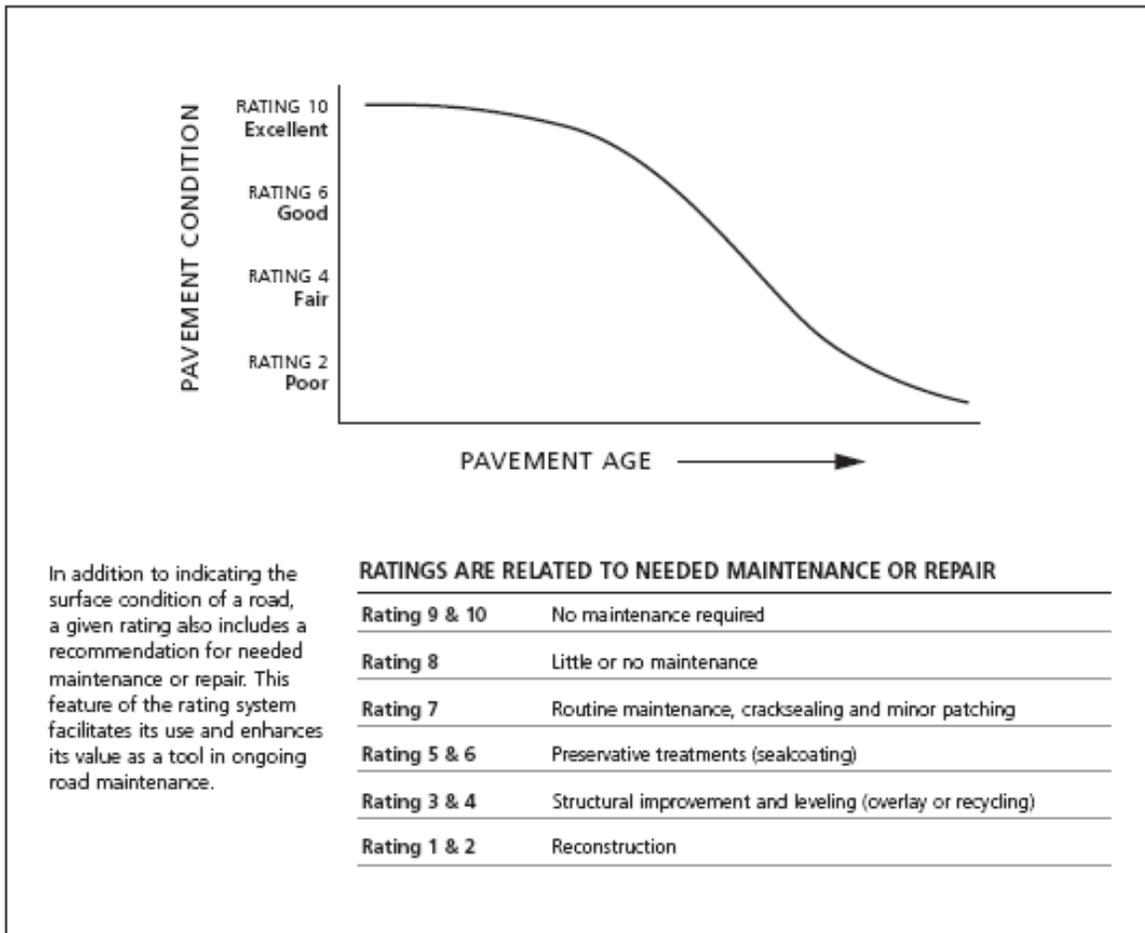
Asphalt is a by-product of crude oil refining. It is a sticky and highly viscous liquid or semi-solid. Asphalt pavement is a mixture of asphalt and mineral aggregate, which is typically heated and mixed together and then laid down in layers and compacted. Modern streets are constructed of a sand base, with layer or layers of compacted gravel or stone above the sand and then layers of asphalt. This is illustrated in Figure 1 below.



**Figure 1 – Street Cross Section**

Asphalt pavement by itself is not particularly rigid. It is designed to flex somewhat to accommodate the weight of traffic on it. Asphalt pavement needs a firm base to provide support and give it rigidity and strength. When properly constructed, a street can have a life expectancy of around 15 years, without any preventative maintenance.

Asphalt pavement deteriorates over time; however, the deterioration is not constant. As can be seen in Figure 2, pavement can remain in good condition for a relatively long period of time before rapidly deteriorating and then leveling off in a poor condition where it will remain for some time before reverting to gravel.



**Figure 2 – How Asphalt Deteriorates**

This deterioration is caused by three major items: water, environment and traffic. When a street is new, the asphalt provides a semi-impermeable barrier to water. Over time, traffic and the exposure to the elements causes the asphalt to dry out, oxidize and become less flexible and more porous. Cracking can then occur. These cracks allow water to penetrate through the pavement to the base. Repeated freeze/thaw cycles can widen the cracks and ultimately damage the base. Traffic adds to the stresses on the pavement, especially when the base is moist from water intrusion. The final result of this process is the development of potholes, extensive cracking and rough or failed pavement.

**Asset Management Process**

State law defines asset management as:

“An ongoing process of maintaining, upgrading, and operating physical assets cost effectively, based on a continuous physical inventory and condition assessment”

What this means in a simple terms is that you have to take care of what you have; i.e. keep your good roads good for as long as possible.

The TAMC has published the Asset Management Guide for Local Agencies in Michigan. This publication lays out a step by step process for local agencies to follow when developing their

asset management plans. It is not intended to restrict local agencies from incorporating their own practices into the process, but rather as a guide for the development of rational, comprehensive plan. The City's plan is based on this recommended approach, supplemented by specific processes and procedures that are unique to Manistee.

## **1. Assess Current Condition of Streets**

### **Rating Systems**

The first step in the asset management process is to document the condition of the City's streets. It is impossible to effectively manage your street assets without having an understanding of what streets you own and what condition they are in. Having this data allows you to communicate the status of the street network with residents, staff and elected officials. It is a vital first step in the asset management process.

There are many different pavement rating systems available for communities to use. Some are very simple, while others are more complex. Examples of these systems are the Distress Index, the Pavement Condition Index, the Pavement Quality Index, the Overall Condition Index and the PASER rating. The TAMC recommends using the PASER rating system and this is what the City has adopted. It is easy and cost effective to implement compared to competing systems.

PASER stands for **PA**vement **SUR**face **E**valuation and **R**ating. It is a methodology adopted by the University of Wisconsin and widely used across the country. The PASER system uses visual inspection of roads to evaluate pavement surface conditions. The methodology involves identifying different types of pavement distress (raveling, rutting, cracks, etc.) and tying them back to a road's life expectancy. This results in a PASER rating of from 10 to 1, with 10 being a newly constructed road and 1 being a failed road with loss of surface integrity.

*Appendix A* is a reprint of the PASER manual published by the Transportation Information Center at the University of Wisconsin-Madison. This document provides a nice overview of the PASER rating system.

### **Status of Street Network**

The City had only once used the PASER rating system to rate its streets before. In the mid 1990's, City engineer Abonmarche produced a map of City streets showing the conditions at that time. It did use the PASER rating system, but it was a point in time evaluation used for the sewer separation program and further ratings were not carried out. The Northwest Michigan Council of Governments has rated the City's major streets since 2003 for the TAMC and the City did obtain that data. It had no ratings for its local streets, though. In order to establish a good base of data for the City to launch its asset management program, the City hired Wade-Trim to perform a comprehensive PASER evaluation of every street the City is responsible for in the spring of 2007.

In anticipation of this study, the City sent DPW staff to PASER training provided by Michigan Technological University's Local Technical Assistance Program (LTAP). The City now has

three fully trained individuals in this area. This allowed the City to have a staff person assist the Wade-Trim evaluator in the first year ratings and gain valuable insight into the process.

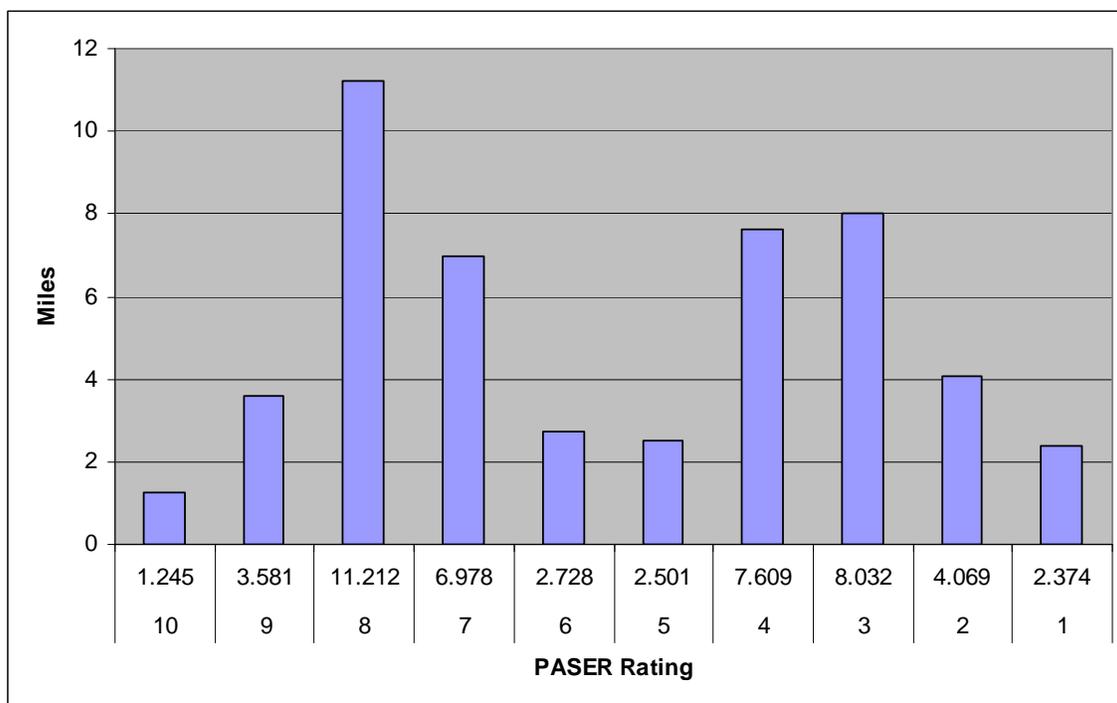
The results of the survey were interesting and revealing. A listing of every City street is included in *Appendix B*. The listing is arranged alphabetically by street name and then by street segment. The current PASER rating is also provided, along with an estimate of the segment’s remaining service life.

*Appendix C* is a series of maps created from Roadsoft and the City’s GIS system. The maps show where in the City each street with a given PASER rating is located. This is done for each rating, from PASER 1 to 10. The final three maps group and display the PASER ratings into three categories: failed to poor (PASER 1-3), good to fair (PASER 4-7) and very good to excellent (PASER 8-10).

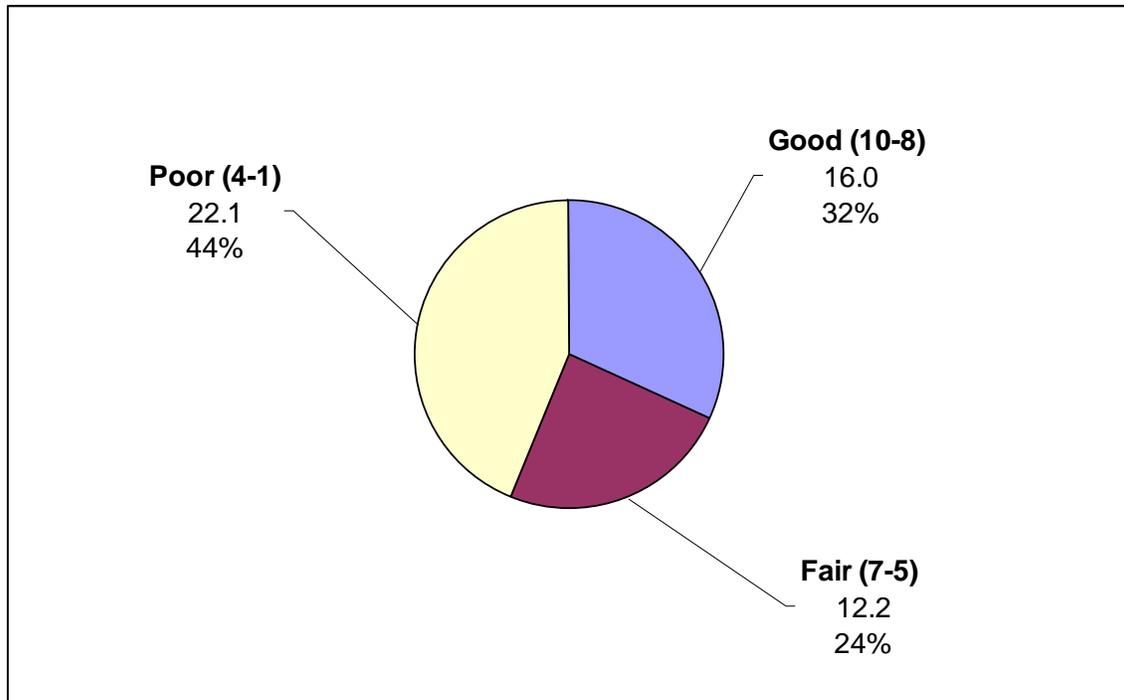
*Appendix D* is a map showing all significant roadwork in the City over the past 15 years.

**Conclusions**

The following figures summarize the PASER rating data from the 2007 study. Figure 3 shows that we have a significant amount of streets in the PASER 7 and 8 categories and another significant grouping in the PASER 3 and 4 categories. Figure 4 shows how our streets fall into three broad categories of Good, Fair and Poor. As you can see, we have about an equal distribution in each of the three areas, with a small bubble in the lower Fair category. Compared to other communities, our streets network is in relatively good shape.



**Figure 3 – Miles of Roads Per PASER Rating Category**



**Figure 4 – Grouped PASER Rating Distribution**

## **2. Select Appropriate Treatments**

**The second step in the asset management process is to select appropriate preventative maintenance treatments.** As previously mentioned, asphalt streets deteriorate over time. Treatments extend the life of the asphalt pavement by sealing out water and/or adding structural integrity to an existing pavement

There are many different types of treatments available for maintaining asphalt pavement. Each treatment has different characteristics, costs and suitability for a given application. Not all treatments are appropriate for a given level of pavement distress. Further, not all treatments are suited to an urban environment. Different treatments offer different results in terms of how much additional pavement life can be achieved.

Having a variety of treatments in your “maintenance toolbox” allows you to better match a treatment to a particular pavement need. This approach is what is known as the “mix of fixes”. It is absolutely critical to apply the right fix at the right time in the right place. Putting the wrong treatment on a street is a waste of money and will result in disappointing outcomes.

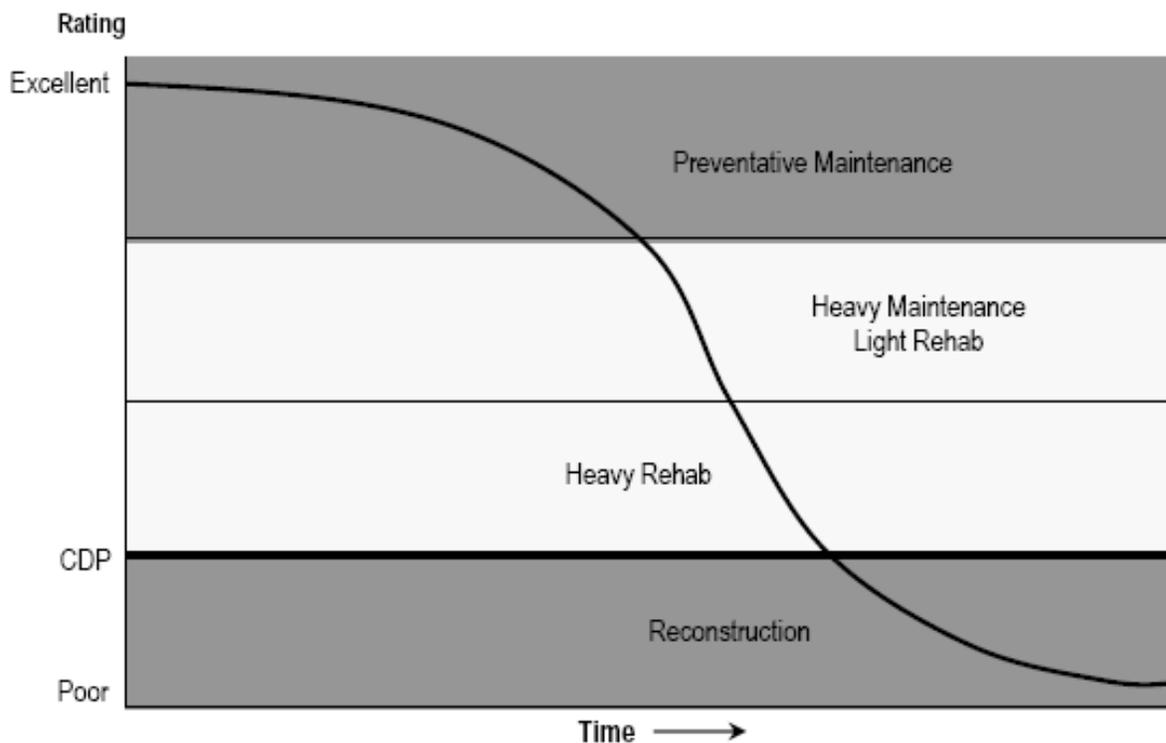
Treatments are defined by TAMC into three broad categories. The first is routine maintenance which involves the day to day work of sweeping, plowing, catch basin clearing and related work. The second category is capital preventative maintenance. This type of work is the heart of asset management. The treatments in this category are designed to address pavement issues before the structural integrity has been compromised. There are many treatments that fall under this

category. The final TAMC class is structural improvement. Typical activities here include rehabilitation and reconstruction.

The DPW Director and City Engineer reviewed the full spectrum of treatments available and came up with a list of those that were appropriate for the City to use. These are listed in the next section as Figure 6. Since the City does not have the equipment to apply these treatments, most, if not all, of this work will be contracted out. When appropriate, the City will explore collaborating with the Manistee County Road Commission.

The City also does not have institutional knowledge of these techniques; how they will work on City streets, the strengths and weaknesses of each technique and how economical they may be. Much of this knowledge will be gained in the first few years of the program and will allow for fine tuning the treatment selection as the plan progresses.

Figure 5 illustrates a final important concept called the window of opportunity. What this means is that as a pavement ages, there will be opportune times to apply a particular fix or treatment. Early on, no maintenance or preventative maintenance is appropriate, but as the pavement declines, more intensive treatments are required. Putting the treatment on too soon is not cost effective and putting a treatment on too late is ineffective. Once again – The Right Fix, at The Right Time in The Right Place.



**Figure 5 – Windows of Opportunity**

### 3. Estimate Treatment Costs and Budget Constraints

**The third step in the asset management process is to estimate the various treatment costs and analyze various financial constraints and budgets to fund the program.**

The City Engineer has provided estimated costs for the various treatments that have been selected for the City’s program which are shown in Figure 6.

<b>Treatment</b>	<b>PASER Rating Trigger</b>	<b>Cost Per Lane Mile</b>	<b>Additional Service Life (in years)</b>	<b>Cost Per Year of Service Life</b>
Crack Sealing	7-8	\$1,600	1	\$1,600
Slurry Sealing	6	\$19,000	5-7	\$3,200
Micro Surfacing	6	\$13,000	5-7	\$2,200
Ultra Thin Overlay	6	\$17,000	7-10	\$2,000
Hot-In-Place + Overlay	5-6	\$36,000	10-12	\$3,300
Fiber Mesh + Micro	5-6	\$35,000	6-8	\$5,000
Mill & Fill	4-5	\$90,000	8-12	\$9,000
Reconstruction	1-3	\$200,000	12-14	\$15,000

**Figure 6 – Treatment Costs**

The City funds its streets primarily thru gas-tax money that is distributed to municipalities under PA 51 of 1951 (Act 51). This Act 51 money is allocated to the City’s major and minor streets, and is required to be accounted for separately in this fashion. Over the past few years, the amount of gas tax money has been decreasing by about 1% to 2% annually, and the resultant payments to the City have also decreased. With the high price of gasoline, this trend is expected to be exacerbated as people drive less.

Other potential sources of revenue to fund street programs in the City are various state and federal grants, General Fund transfers, Capital Improvement fund transfers, special assessments, a dedicated millage and road work completed as part of Water & Sewer Utility infrastructure projects.

The Major and Local Street funds currently pay for all of the costs of maintaining the City streets. Figure 7 shows financial projections for the Major Street fund and Figure 8 for the Local Street fund. These projections illustrate how much money is available for implementing the asset management plan and for potential grant matching.

	2009 Adopted	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	2018 Projected
<b>202 Major Street Fund</b>										
539.000 Grant Revenue	\$0	\$0	\$0							
576.000 Act 51 Revenue	\$365,000	\$360,000	\$355,000							
626.000 Charge for Service	\$140,000	\$140,000	\$140,000							
641.000 Snow Removal	\$0	\$0	\$0							
664.000 Interest Income	\$9,000	\$9,000	\$9,000							
699.000 Operating Transfer In	\$0	\$0	\$0							
<b>Total Revenues</b>	<b>\$514,000</b>	<b>\$509,000</b>	<b>\$504,000</b>	<b>\$504,000</b>	<b>\$509,040</b>	<b>\$514,130</b>	<b>\$519,272</b>	<b>\$524,464</b>	<b>\$529,709</b>	<b>\$535,006</b>
799.000 Miscellaneous Expense	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
935.000 Traffic Services	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
936.000 Preservation Streets	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000	\$117,000
937.000 Routine Maintenance Bridges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
938.000 Winter Maintenance Streets	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000
981.000 Construction Streets	\$14,376	\$14,376	\$14,376	\$14,376	\$14,376	\$14,376	\$14,376	\$14,376	\$14,376	\$14,376
982.000 Construction Bridges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
999.000 Operating Transfer Out	\$139,395	\$146,091	\$146,716	\$146,716	\$146,716	\$146,716	\$146,716	\$146,716	\$146,716	\$146,716
<b>Asset Management Plan Implementation</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>
<b>Total Expenses</b>	<b>\$571,771</b>	<b>\$578,467</b>	<b>\$579,092</b>	<b>\$579,092</b>	<b>\$579,092</b>	<b>\$529,092</b>	<b>\$529,092</b>	<b>\$529,092</b>	<b>\$529,092</b>	<b>\$529,092</b>
<b>TOTAL MAJOR STREET</b>	<b>-\$57,771</b>	<b>-\$69,467</b>	<b>-\$75,092</b>	<b>-\$75,092</b>	<b>-\$70,052</b>	<b>-\$14,962</b>	<b>-\$9,820</b>	<b>-\$4,628</b>	<b>\$617</b>	<b>\$5,914</b>
Beginning Fund Balance	\$400,260	\$342,489	\$273,022	\$197,930	\$122,838	\$52,786	\$37,824	\$28,004	\$23,377	\$23,994
Projected Ending Fund Balance	\$342,489	\$273,022	\$197,930	\$122,838	\$52,786	\$37,824	\$28,004	\$23,377	\$23,994	\$29,908

**Figure 7 – Major Street Finances**

	2009 Adopted	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	2018 Projected
<b>203 Local Street Fund</b>										
576.000 Act 51 Revenue	\$125,000	\$123,000	\$120,000							
626.000 Charge for Service	0	0	0							
641.000 Snow Removal	0	0	0							
664.000 Interest Income	10,000	10,000	10,000							
699.000 Operating Transfer In	0	0	0							
<b>Total Revenues</b>	<b>\$135,000</b>	<b>\$133,000</b>	<b>\$130,000</b>	<b>\$130,000</b>	<b>\$131,300</b>	<b>\$132,613</b>	<b>\$133,939</b>	<b>\$135,279</b>	<b>\$136,631</b>	<b>\$137,998</b>
935.000 Traffic Services	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
936.000 Preservation Streets	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
938.000 Winter Maintenance Streets	62,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000	62,000
981.000 Construction Streets	0	0	0	0	0	0	0	0	0	0
<b>Asset Management Plan Implementation</b>	<b>70,000</b>	<b>70,000</b>	<b>70,000</b>	<b>70,000</b>	<b>70,000</b>	<b>40,000</b>	<b>40,000</b>	<b>40,000</b>	<b>40,000</b>	<b>40,000</b>
<b>Total Expenditures</b>	<b>\$194,000</b>	<b>\$194,000</b>	<b>\$194,000</b>	<b>\$194,000</b>	<b>\$194,000</b>	<b>\$164,000</b>	<b>\$164,000</b>	<b>\$164,000</b>	<b>\$164,000</b>	<b>\$164,000</b>
<b>TOTAL LOCAL STREET</b>	<b>-\$59,000</b>	<b>-\$61,000</b>	<b>-\$64,000</b>	<b>-\$64,000</b>	<b>-\$62,700</b>	<b>-\$31,387</b>	<b>-\$30,061</b>	<b>-\$28,721</b>	<b>-\$27,369</b>	<b>-\$26,002</b>
Beginning Fund Balance	\$488,265	\$429,265	\$368,265	\$304,265	\$240,265	\$177,565	\$146,178	\$116,118	\$87,396	\$60,027
Projected Ending Fund Balance	\$429,265	\$368,265	\$304,265	\$240,265	\$177,565	\$146,178	\$116,118	\$87,396	\$60,027	\$34,025

**Figure 8 – Local Street Finances**

#### **4. Predict Future Condition of Street Network**

**The fourth step in the asset management process is to model and predict the future condition of the street network.** The simplest way to do this is to acquire a pavement management system (PMS). These sophisticated software tools allow the user to compile all of the available data on the street network in one database and analyze it using powerful tools. There are several PMS's available for use including MicroPaver, AgileAssets, Street Master and RoadsoftGIS, among others. The City has selected Roadsoft as its pavement management system. This product is funded by MDOT and provided by LTAP, free of charge. It is used by road agencies across Michigan and is based on the PASER rating system which the City is also using.

The Roadsoft program allows the City to maintain an inventory of streets, track street conditions over time, summarize current and future conditions of the street network, optimize repair and maintenance strategies and promote good communication to decision makers and residents. Roadsoft will not, however, replace engineering judgment, make decisions for the local road agency or provide all of the answers. It is simply a tool that allows the City to approach maintenance of its street network in a rational, fact-grounded, economical way.

Roadsoft works by using PASER data and asphalt deterioration curves to model how asphalt pavement degrades over time. It uses sophisticated algorithms to project how a street segment will hold up into the future. The concepts of Remaining Service Life (RSL) and Critical Distress Point (CDP) are key to this discussion. RSL is a measure of how long a road will last before it hits the CDP if no treatments applied. CDP is the point at which preventative maintenance treatments are no longer available for use because the window of opportunity has been closed and reconstruction is now necessary. This is illustrated in Figure 5.

To City residents, the distinction between major and minor streets is of little importance. Residents expect that all streets should be maintained in a cost effective manner, particularly those that are in front of their house. In general, the City needs to look at its street network in this fashion as well. However, because of the Act 51 funding limitations, the City must evaluate its streets as two distinct networks with different needs and different funding sources.

#### **5. Establish Street Network Goals and Performance Measures**

**The fifth step in the asset management process is to establish performance targets and measures.** A primary objective of the asset management program is to ensure that scarce resources (dollars & time) allocated to the street network are utilized in the most cost-effective manner. However, without overall goals for the condition of the street network, it is difficult to measure progress and may result in sub-optimal decisions being made.

Goals can be stated in a variety of ways. For example, a goal may be that all streets are to be at PASER 7 or better by a certain date. Another may be to have a certain percentage of roads in the Good, Fair and Poor category after so many years. Yet another may establish targets for increasing the remaining service life of the entire network each year. There is no cookie cutter

approach to establishing goals. They will vary from community to community based on a number of factors, including technical, political and financial.

This plan establishes a short term goal of spending available street dollars in the most cost effective manner. While this short term goal maximizes the remaining service life (RSL) of the street network given the budgetary limitations, this does not mean that the streets are getting better as a whole. It will likely take new funding sources and/or new pavement technologies to reverse the trend of declining RSL and allow the street network to get better as a whole.

The long term goal for the street network is one that City Council needs to establish and provide funding to achieve. However, until the City has a few years of experience with asset management under its belt and can evaluate how various treatments are working, it will be challenging to predict necessary funding levels with a high degree of certainty. Staff will continue to adjust the plan to react to changing conditions. The City will monitor its performance by conducting the previously mentioned annual PASER evaluation of all City streets and use this data to generate reports back to City Council, Staff and residents.

## **6. Evaluate Impact of Various Treatment Alternatives(Optimize Treatment Strategy)**

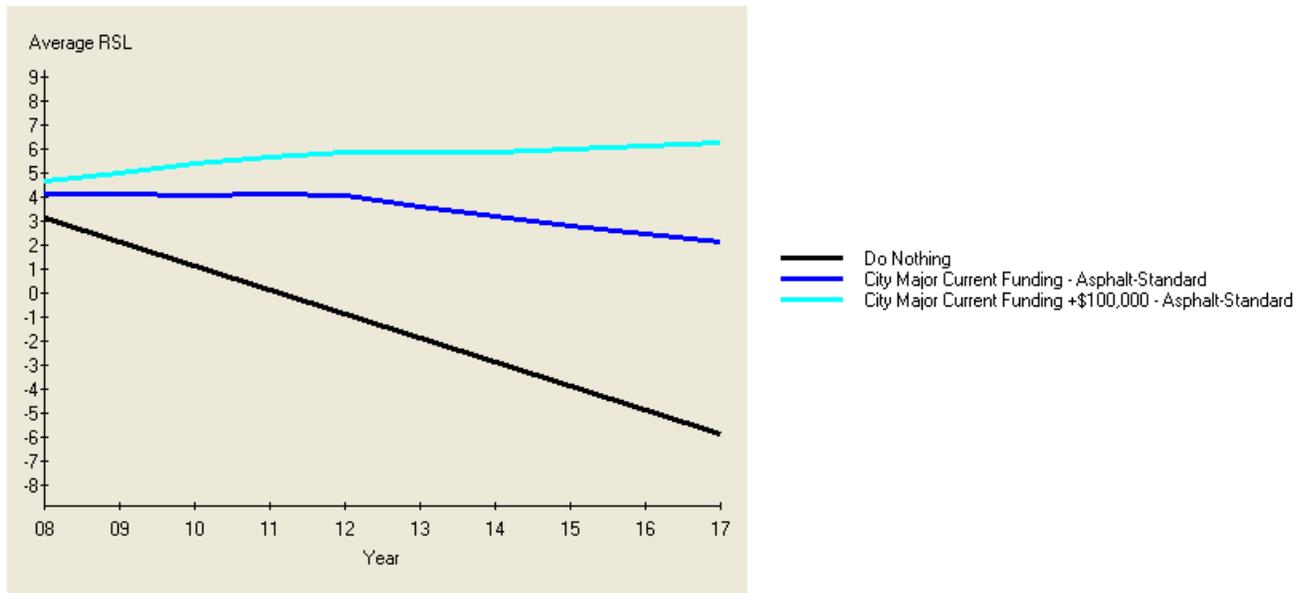
**The sixth step in the asset management process is to evaluate the effectiveness of various treatment regiments, or mix of fixes, towards reaching the street network goals.** Using Roadsoft, the City is able to run a variety of scenarios that can vary the available budget amounts, timing and treatments selected. Roadsoft will output what the network's future projected condition will be based on the inputs provided. Thru a series of these analyses, an optimal strategy can be determined.

The City worked with an engineer from LTAP to generate several acceptable scenarios using our treatments and financial constraints. It then refined these strategies somewhat by altering the mix of fixes and budgetary amounts. The outcomes of these treatment scenarios are presented in Figure 9 for the Major Streets and Figure 10 for the Local Streets.

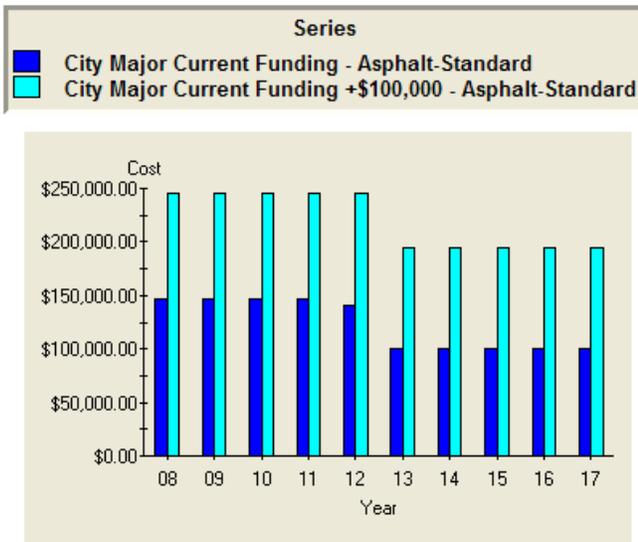
For each network, three different scenarios are presented: Do Nothing, Current Funding Level and Current Funding Level plus \$100,000. The Major Street network is smaller and in better overall shape than the Local Street network. However, in both cases current funding (as shown in Figures 7 & 8) is not able to maintain the network's RSL. This means that the streets will continue to deteriorate. This is particularly noticeable in the Local Streets.

If an additional \$100,000 per year per network was added to the funding mix, the Major Street network would show an increase in RSL and eliminate most poor roads. The Local Street network would maintain a flat RSL, although the percentage of poor roads would be reduced slightly. Neither set of scenarios significantly increases the number of good roads, but rather increases the number of fair roads. Increasing the number of good roads would require more financial resources.

Average RSL Comparison



Cost Comparison By Year



Total Cost Comparison

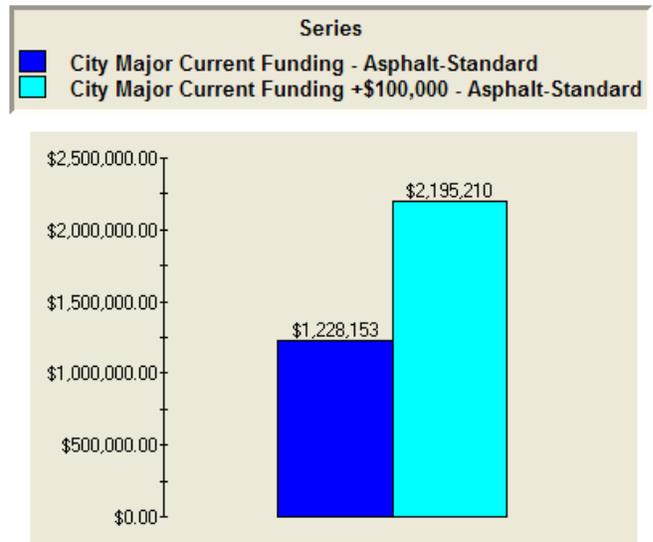
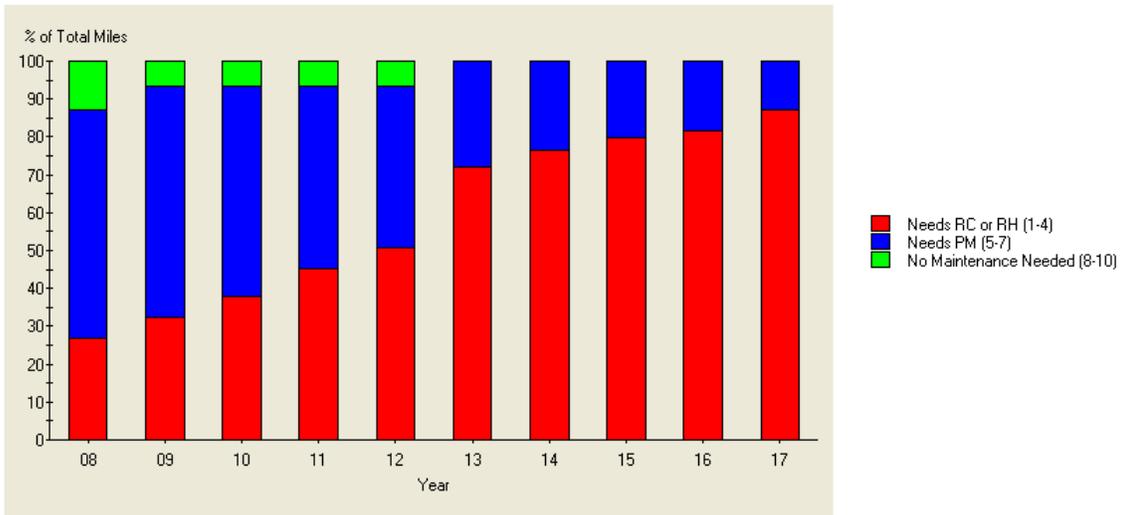


Figure 9 – Major Street Network Scenarios (RSL & Cost)

Do Nothing PM-RH-RC Needed



City Major Current Funding - Asphalt-Standard PM-RH-RC Needed



City Major Current Funding +\$100,000 - Asphalt-Standard PM-RH-RC Needed

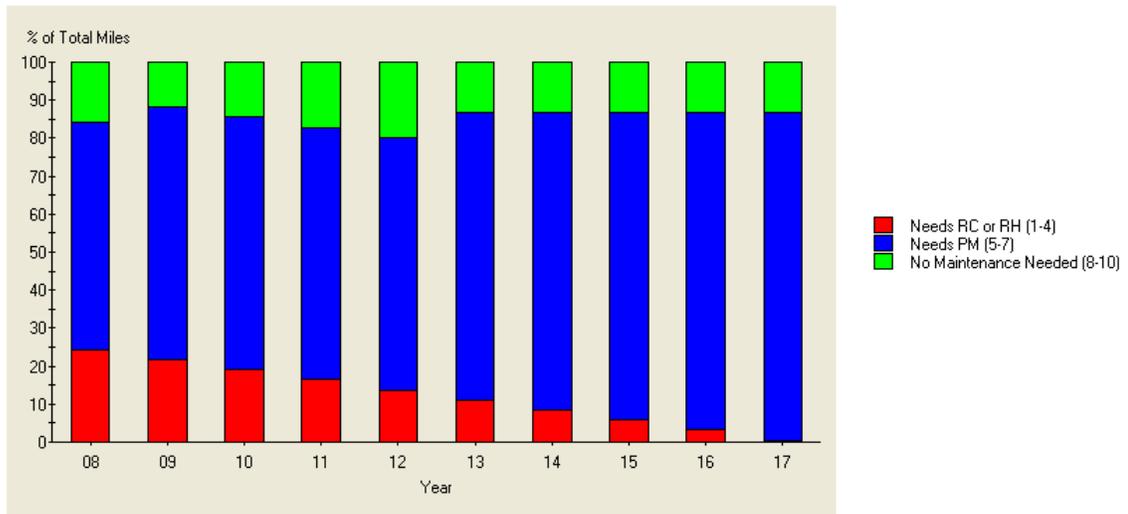
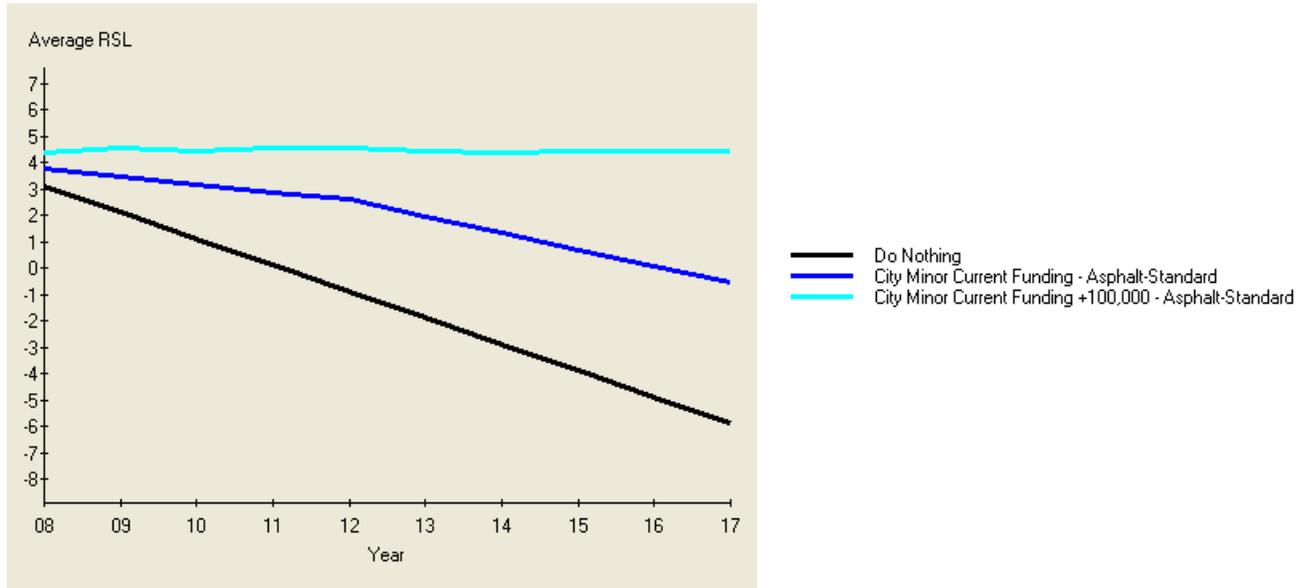
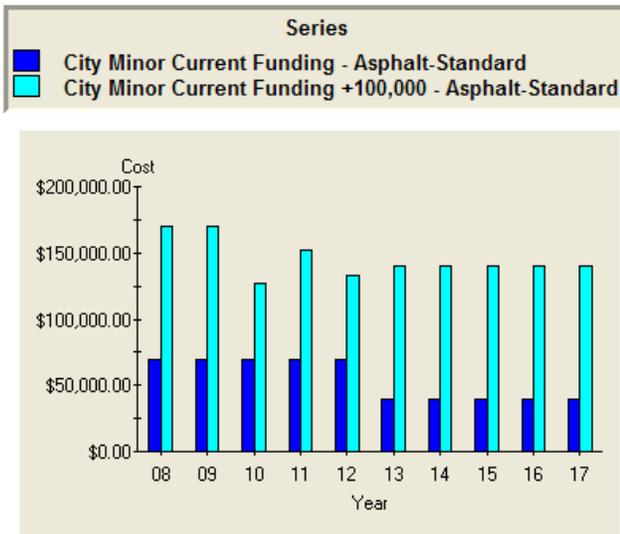


Figure 9 – Major Street Network Scenarios (Good, Fair, Poor)

Average RSL Comparison



Cost Comparison By Year



Total Cost Comparison

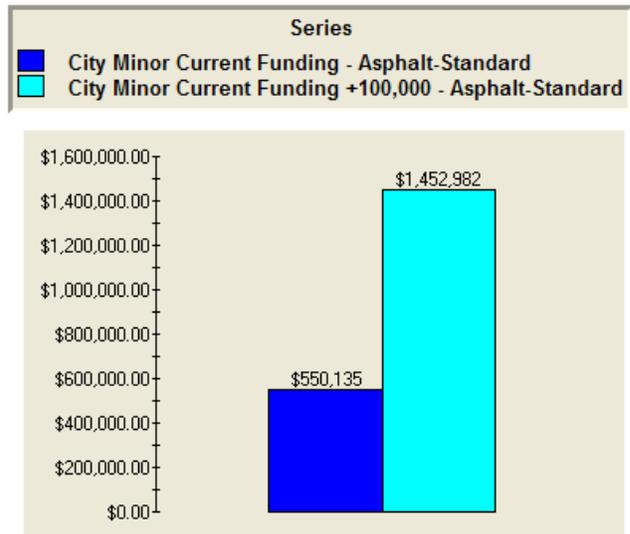
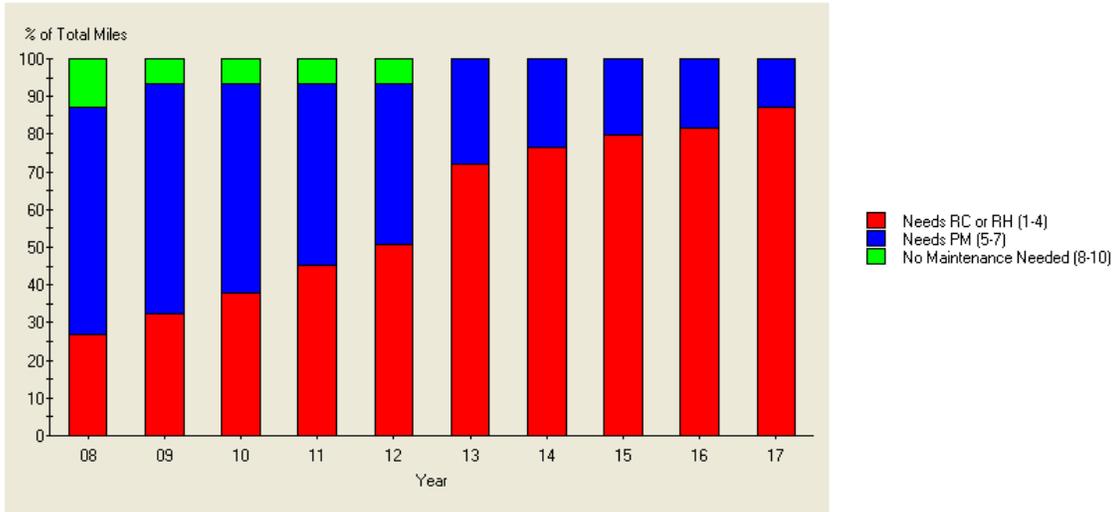
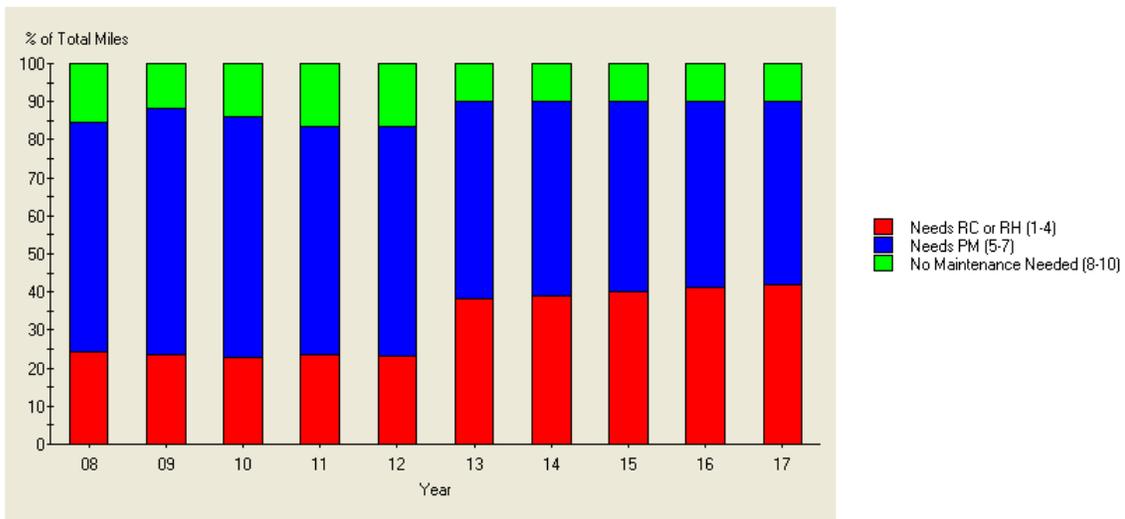


Figure 10 – Local Street Network Scenarios (RSL & Cost)

Do Nothing PM-RH-RC Needed



City Minor Current Funding - Asphalt-Standard PM-RH-RC Needed



City Minor Current Funding +100,000 - Asphalt-Standard PM-RH-RC Needed

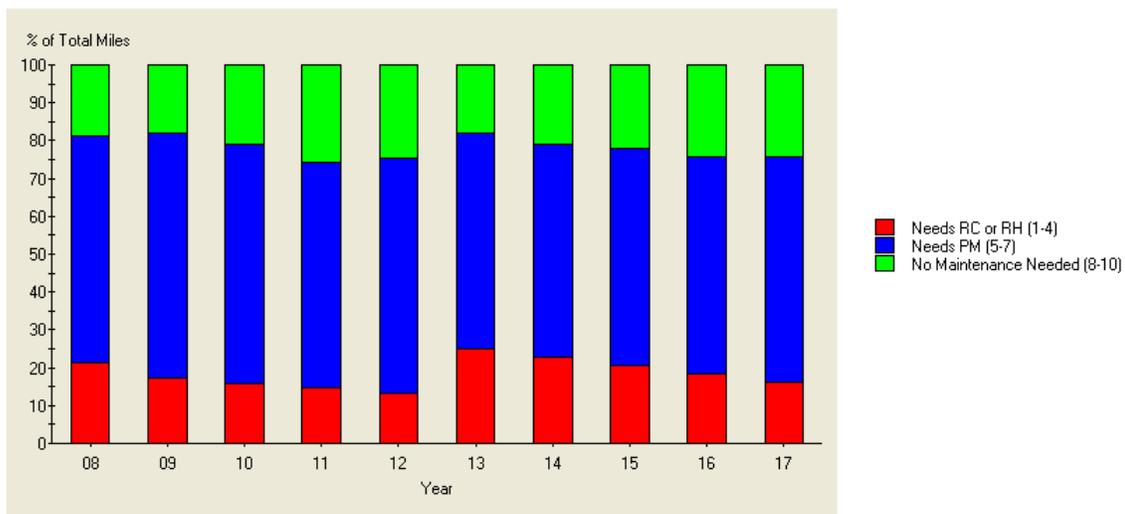


Figure 10 – Local Street Network (Good, Fair, Poor)

## **7. Identify, Prioritize and Select Projects**

**The last step in the asset management process is to select the streets on which to apply the optimized strategy.** The City will identify streets as candidates for treatment based first on their PASER rating (again, looking at windows of opportunity). However, prioritization of the projects is much more complicated. This discussion will involve many more factors than simple PASER ratings, and may include:

- Detailed engineering review of the potential segments
- Condition of road base (institutional knowledge and corings)
- Traffic data
- Future water & sewer work
- Grant funding availability
- Future known projects
- Condition of curb & gutter
- Economic impacts
- Dispersion of projects in neighborhoods
- Mobilization of contractors
- Safety issues

Staff will prioritize candidates to receive treatments and communicate this information to City Council. The City will then bid the work out following its internal purchasing policy. The public will be kept well informed of the progress thru televised City Council meetings, work sessions and website updates. The first group of treatments is expected to commence in late summer or early fall for the 2008 program.

### **Conclusion**

Applying asset management principles to the City's street network is not only mandated by the state; it is good business. Asset management leads to well informed, more cost effective and more transparent decisions when allocating scarce resources to the City's street network. It is the best way to be good stewards of the taxpayer's dollars.

Although the plan presented here is a good start, it is just that, a start. As the City gains knowledge of the applicability and effectiveness of the various treatments, as uncertain funding resources become better known, as new treatments emerge and as we gather better data, this plan will continue to evolve and get stronger. This plan will be updated annually and reflect the increased knowledge and data that the City has acquired. The result will be a continually better document and better results for the citizenry.

# PASER Asphalt Roads Manual

RATING  
**10**



RATING  
**7**



RATING  
**4**



RATING  
**1**



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This manual is intended to assist local officials in understanding and rating the surface condition of asphalt pavement. It describes types of defects and provides a simple system to visually rate pavement condition. The rating procedure can be used as condition data for the Wisconsin DOT local road inventory and as part of a computerized pavement management system like PASERWARE.

The PASER system described here and in other T.I.C. publications is based in part on a roadway management system originally developed by Phil Scherer, transportation planner, Northwest Wisconsin Regional Planning Commission.

Produced by the T.I.C. with support from the Federal Highway Administration, the Wisconsin Department of Transportation, and the University of Wisconsin-Extension. The T.I.C., part of the nationwide Local Technical Assistance Program (LTAP), is a Center of the College of Engineering, Department of Engineering Professional Development, University of Wisconsin–Madison.

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Printed on recycled paper.

*Pavement Surface Evaluation and Rating*

# PASER Manual

## Asphalt Roads

Donald Walker, T.I.C. Director, *author*  
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Susan Kummer, Artifax, *designer*



## *Pavement Surface Evaluation and Rating*

# **Asphalt PASER Manual**

A local highway agency's major goal is to use public funds to provide a comfortable, safe and economical road surface—no simple task. It requires balancing priorities and making difficult decisions in order to manage pavements. Local rural and small city pavements are often managed informally, based on the staff's judgment and experience. While this process is both important and functional, using a slightly more formalized technique can make it easier to manage pavements effectively.

Experience has shown that there are three especially useful steps in managing local roads:

1. Inventory all local roads and streets.
2. Periodically evaluate the condition of all pavements.
3. Use the condition evaluations to set priorities for projects and select alternative treatments.

A comprehensive pavement management system involves collecting data and assessing several road characteristics: roughness (ride), surface distress (condition), surface skid characteristics, and structure (pavement strength and deflection). Planners can combine this condition data with economic analysis to develop short-range and long-range plans for a variety of budget levels. However, many local agencies lack the resources for such a full-scale system.

Since surface condition is the most vital element in any pavement management system, local agencies can use the simplified rating system presented in this *Asphalt PASER Manual* to evaluate their roads. The PASER ratings combined with other inventory data (width, length, shoulder, pavement type, etc.) from the WisDOT local roads inventory (WISLR) can be very helpful in planning future budgets and priorities.

WISLR inventory information and PASER ratings can be used in a computerized pavement management system, PASERWARE, developed by the T.I.C and WisDOT. Local officials can use PASERWARE to evaluate whether their annual road budgets are adequate to maintain or improve current road conditions and to select the most cost-effective strategies and priorities for annual projects.

PASER Manuals for gravel, concrete, and other road surfaces, with compatible rating systems are also available (page 29). Together they make a comprehensive condition rating method for all road types. PASER ratings are accepted for WISLR condition data.

## *Asphalt pavement distress*

PASER uses visual inspection to evaluate pavement surface conditions. The key to a useful evaluation is identifying different types of pavement distress and linking them to a cause. Understanding the cause for current conditions is extremely important in selecting an appropriate maintenance or rehabilitation technique.

There are four major categories of common asphalt pavement surface distress:

### **Surface defects**

Raveling, flushing, polishing.

### **Surface deformation**

Rutting, distortion—rippling and shoving, settling, frost heave.

### **Cracks**

Transverse, reflection, slippage, longitudinal, block, and alligator cracks.

### **Patches and potholes**

Deterioration has two general causes: environmental due to weathering and aging, and structural caused by repeated traffic loadings.

Obviously, most pavement deterioration results from both environmental and structural causes. However, it is important to try to distinguish between the two in order to select the most effective rehabilitation techniques.

The rate at which pavement deteriorates depends on its environment, traffic loading conditions, original construction quality, and interim maintenance procedures. Poor quality materials or poor construction procedures can significantly reduce the life of a pavement. As a result, two pavements constructed at the same time may have significantly different lives, or certain portions of a pavement may deteriorate more rapidly than others. On the other hand, timely and effective maintenance can extend a pavement's life. Crack sealing and seal coating can reduce the effect of moisture in aging of asphalt pavement.

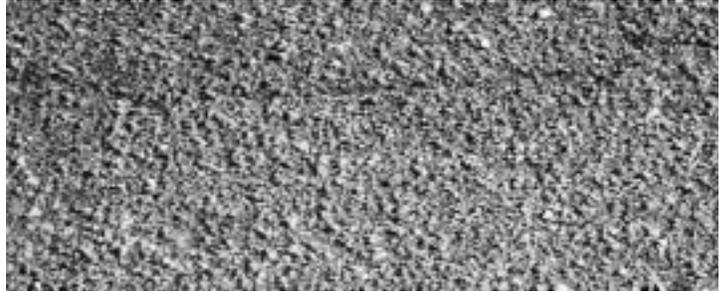
With all of these variables, it is easy to see why pavements deteriorate at various rates and why we find them in various stages of disrepair. Recognizing defects and understanding their causes helps us rate pavement condition and select cost-effective repairs. The pavement defects shown on the following pages provide a background for this process.

Periodic inspection is necessary to provide current and useful evaluation data. It is recommended that PASER ratings be updated every two years, and an annual update is even better.

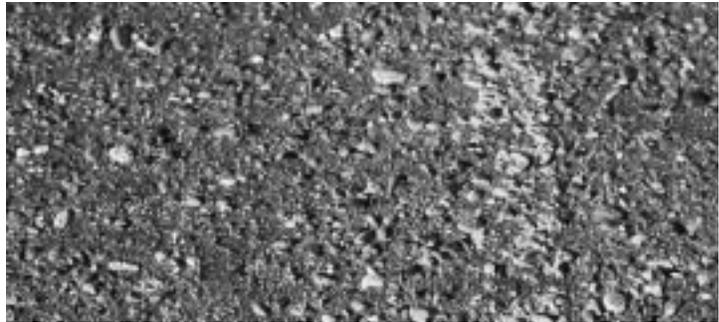
**SURFACE DEFECTS**

**Raveling**

Raveling is progressive loss of pavement material from the surface downward, caused by: stripping of the bituminous film from the aggregate, asphalt hardening due to aging, poor compaction especially in cold weather construction, or insufficient asphalt content. Slight to moderate raveling has loss of fines. Severe raveling has loss of coarse aggregate. Raveling in the wheelpaths can be accelerated by traffic. Protect pavement surfaces from the environment with a sealcoat or a thin overlay if additional strength is required.



◀ Slight raveling. Small aggregate particles have worn away exposing tops of large aggregate.



◀ Moderate to severe raveling. Erosion further exposes large aggregate.

**Flushing**

Flushing is excess asphalt on the surface caused by a poor initial asphalt mix design or by paving or sealcoating over a flushed surface. Repair by blotting with sand or by overlaying with properly designed asphalt mix.



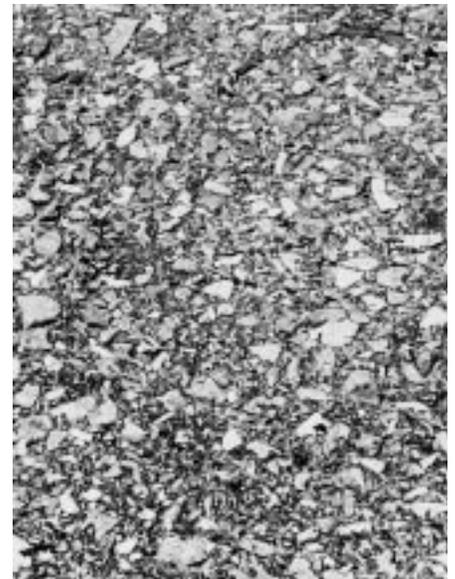
◀ Severe raveling and loss of surface material.

**Polishing**

Polishing is a smooth slippery surface caused by traffic wearing off sharp edges of aggregates. Repair with sealcoat or thin bituminous overlay using skid-resistant aggregate.

Polished, worn aggregate needs repair. ▼

▶ Flushing. Dark patches show where asphalt has worked to surface.



**SURFACE DEFORMATION**

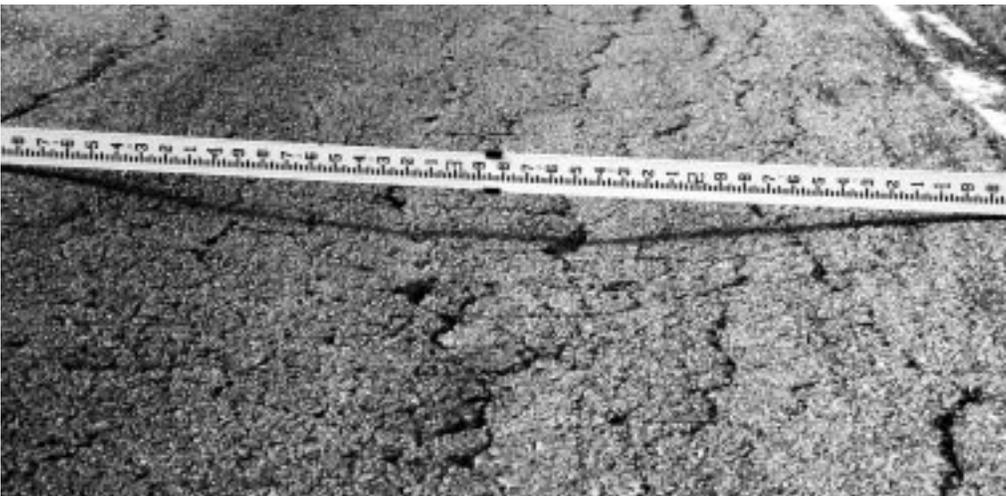
*Rutting*

Rutting is displacement of material, creating channels in wheelpaths. It is caused by traffic compaction or displacement of unstable material. Severe rutting (over 2") may be caused by base or subgrade consolidation. Repair minor rutting with overlays. Severe rutting requires milling the old surface or reconstructing the roadbed before resurfacing.

◀ Even slight rutting is evident after a rain.



◀ Severe rutting over 2" caused by poor mix design.



◀ Severe rutting caused by poor base or subgrade.

### Distortion

Shoving or rippling is surfacing material displaced crossways to the direction of traffic. It can develop into washboarding when the asphalt mixture is unstable because of poor quality aggregate or improper mix design. Repair by milling smooth and overlaying with stable asphalt mix.

Other pavement distortions may be caused by settling, frost heave, etc. Patching may provide temporary repair. Permanent correction usually involves removal of unsuitable subgrade material and reconstruction.

▼ Heavy traffic has shoved pavement into washboard ripples and bumps.



► Severe settling from utility trench.



► Frost heave damage from spring break-up.

▼ Widely spaced, well-sealed cracks.



**CRACKS**

*Transverse cracks*

A crack at approximately right angles to the center line is a transverse crack. They are often regularly spaced. The cause is movement due to temperature changes and hardening of the asphalt with aging.

Transverse cracks will initially be widely spaced (over 50'). Additional cracking will occur with aging until they are closely spaced (within several feet). These usually begin as hairline or very narrow cracks; with aging they widen. If not properly sealed and maintained, secondary or multiple cracks develop parallel to the initial crack. The crack edges can further deteriorate by raveling and eroding the adjacent pavement.

Prevent water intrusion and damage by sealing cracks which are more than 1/4" wide.

◀ Sealed cracks, a few feet apart.



▲ Tight cracks less than 1/4" in width.



▲ Open crack – 1/2" or more in width.



▲ Water enters unsealed cracks softening pavement and causing secondary cracks.



▲ Pavement ravel and erodes along open cracks causing deterioration.

### *Reflection cracks*

Cracks in overlays reflect the crack pattern in the pavement underneath. They are difficult to prevent and correct. Thick overlays or reconstruction is usually required.

►  
**Concrete joints reflected through bituminous overlay.**



### *Slippage cracks*

Crescent or rounded cracks in the direction of traffic, caused by slippage between an overlay and an underlying pavement. Slippage is most likely to occur at intersections where traffic is stopping and starting. Repair by removing the top surface and resurfacing using a tack coat.

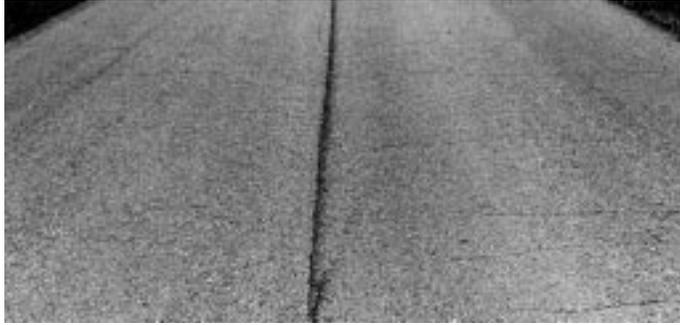
►  
**Crescent-shaped cracks characteristic of slippage.**



►  
**Loss of bond between pavement layers allows traffic to break loose pieces of surface.**



Centerline crack (still tight). ▶



Edge cracking from weakened subbase and traffic loads. ▼



### Longitudinal cracks

Cracks running in the direction of traffic are longitudinal cracks. Center line or lane cracks are caused by inadequate bonding during construction or reflect cracks in underlying pavement. Longitudinal cracks in the wheel path indicate fatigue failure from heavy vehicle loads. Cracks within one foot of the edge are caused by insufficient shoulder support, poor drainage, or frost action. Cracks usually start as hairline or vary narrow and widen and erode with age. Without crack filling, they can ravel, develop multiple cracks, and become wide enough to require patching.

Filling and sealing cracks will reduce moisture penetration and prevent further subgrade weakening. Multiple longitudinal cracks in the wheel path or pavement edge indicate a need for strengthening with an overlay or reconstruction.

▶ First stage of wheelpath cracking caused by heavy traffic loads.



▼ Load-related cracks in wheel path plus centerline cracking.

Multiple open cracks at center line, wheelpaths and lane center. ▼



### Block cracks

Block cracking is interconnected cracks forming large blocks. Cracks usually intersect at nearly right angles. Blocks may range from one foot to approximately 10' or more across. The closer spacing indicates more advanced aging caused by shrinking and hardening of the asphalt over time. Repair with sealcoating during early stages to reduce weathering of the asphalt. Overlay or reconstruction required in the advanced stages.

▶  
**Large blocks, approximately 10' across.**



▶  
**Intermediate-size block cracking, 1'-5' across with open cracks.**



▲ **Extensive block cracking in an irregular pattern.**

▶  
**Severe block cracking – 1' or smaller blocks. Tight cracks with no raveling.**



*Alligator cracks*

Interconnected cracks forming small pieces ranging in size from about 1" to 6". This is caused by failure of the surfacing due to traffic loading (fatigue) and very often also due to inadequate base or subgrade support. Repair by excavating localized areas and replacing base and surface. Large areas require reconstruction. Improvements in drainage may often be required.

◀ **Alligator crack pattern. Tight cracks and one patch.**



◀ **Characteristic "chicken wire" crack pattern shows smaller pavement pieces and patching.**



◀ **Open raveled alligator cracking with settlement along lane edge most likely due to very soft subgrade.**



## PATCHES AND POTHOLES

### Patches

Original surface repaired with new asphalt patch material. This indicates a pavement defect or utility excavation which has been repaired. Patches with cracking, settlement or distortions indicate underlying causes still remain. Recycling or reconstruction are required when extensive patching shows distress.

►  
**Typical repair of utility excavation. Patch in fair to good condition.**



►  
**Edge wedging. Pavement edges strengthened with wedges of asphalt. Patch is in very good condition.**



►  
**Extensive patching in very poor condition.**



*Potholes*

Holes and loss of pavement material caused by traffic loading, fatigue and inadequate strength. Often combined with poor drainage. Repair by excavating or rebuilding localized potholes. Reconstruction required for extensive defects.



◀ **Small pothole where top course has broken away.**



◀ **Multiple potholes show pavement failure, probably due to poor subgrade soils, frost heave, and bad drainage.**



◀ **Large, isolated pothole, extends through base. Note adjacent alligator cracks which commonly deteriorate into potholes.**

# Rating pavement surface condition

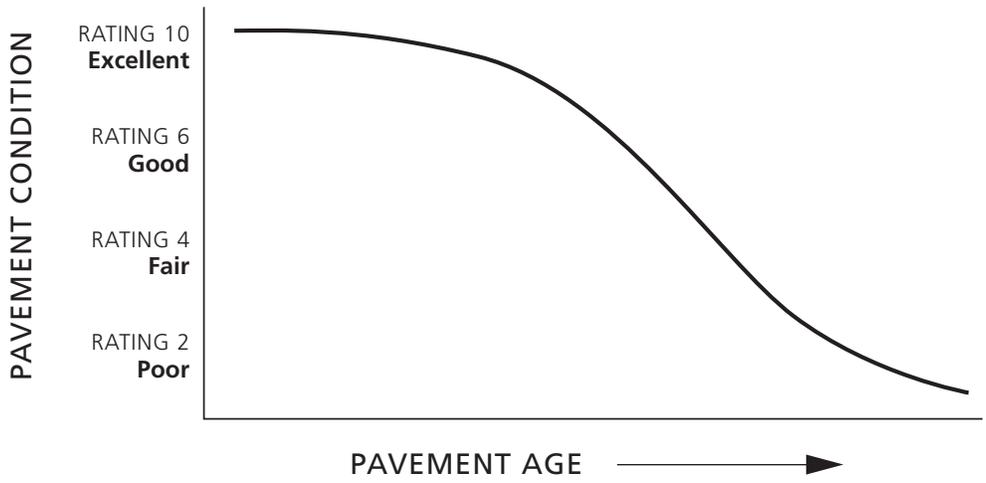
With an understanding of surface distress, you can evaluate and rate asphalt pavement surfaces. The rating scale ranges from **10–excellent** condition to **1–failed**. Most pavements will deteriorate through the phases listed in the rating scale. The time it takes to go from excellent condition (10) to complete failure (1) depends largely on the quality of the original construction and the amount of heavy traffic loading.

Once significant deterioration begins, it is common to see pavement decline rapidly. This is usually due to a combination of loading and the effects of additional moisture. As a pavement ages and additional cracking develops, more moisture can enter the pavement and accelerate the rate of deterioration.

Look at the photographs in this section to become familiar with the descriptions of the individual rating categories. To evaluate an individual pavement segment, first determine its general condition. Is it relatively new,

toward the top end of the scale? In very poor condition and at the bottom of the scale? Or somewhere in between? Next, think generally about the appropriate maintenance method. Use the rating categories outlined below.

Finally, review the individual pavement distress and select the appropriate surface rating. Individual pavements will **not** have all of the types of distress listed for any particular rating. They may have only one or two types.



In addition to indicating the surface condition of a road, a given rating also includes a recommendation for needed maintenance or repair. This feature of the rating system facilitates its use and enhances its value as a tool in ongoing road maintenance.

### RATINGS ARE RELATED TO NEEDED MAINTENANCE OR REPAIR

<b>Rating 9 &amp; 10</b>	No maintenance required
<b>Rating 8</b>	Little or no maintenance
<b>Rating 7</b>	Routine maintenance, cracksealing and minor patching
<b>Rating 5 &amp; 6</b>	Preservative treatments (sealcoating)
<b>Rating 3 &amp; 4</b>	Structural improvement and leveling (overlay or recycling)
<b>Rating 1 &amp; 2</b>	Reconstruction

## Rating system

Surface rating	Visible distress*	General condition/ treatment measures
<b>10</b> Excellent	None.	New construction.
<b>9</b> Excellent	None.	Recent overlay. Like new.
<b>8</b> Very 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> Good	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> Good	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> Fair	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> Very 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> Failed	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.

**RATING 10 & 9**

**EXCELLENT —  
No maintenance required**

Newly constructed or recently overlaid roads are in excellent condition and require no maintenance.



▶  
**RATING 10**  
New construction.



▶  
**RATING 9**  
Recent overlay,  
rural.



▶  
**RATING 9**  
Recent overlay,  
urban.



**RATING 8**

**VERY GOOD —  
Little or no maintenance required**

This category includes roads which have been recently sealcoated or overlaid with new cold mix. It also includes recently constructed or overlaid roads which may show longitudinal or transverse cracks. All cracks are tight or sealed.

◀  
**Recent  
chip seal.**



◀  
**Recent  
slurry seal.**

▼ **Widely spaced,  
sealed cracks.**



▲ **New cold mix surface.**



## RATING 7

**GOOD —**

**Routine sealing recommended**

Roads show first signs of aging, and they may have very slight raveling. Any longitudinal cracks are along paving joint. Transverse cracks may be approximately 10' or more apart. All cracks are 1/4" or less, with little or no crack erosion. Few if any patches, all in very good condition. Maintain a crack sealing program.

► **Tight and sealed transverse and longitudinal cracks. Maintain crack sealing program.**



► **Tight and sealed transverse and longitudinal cracks.**



► **Transverse cracks about 10' or more apart. Maintain crack sealing program.**





**RATING 6**

**GOOD —**  
**Consider preservative treatment**

Roads are in sound structural condition but show definite signs of aging. Seal-coating could extend their useful life. There may be slight surface raveling. Transverse cracks can be frequent, less than 10' apart. Cracks may be 1/4–1/2" and sealed or open. Pavement is generally sound adjacent to cracks. First signs of block cracking may be evident. May have slight or moderate bleeding or polishing. Patches are in good condition.

◀ **Slight surface raveling with tight cracks, less than 10' apart.**

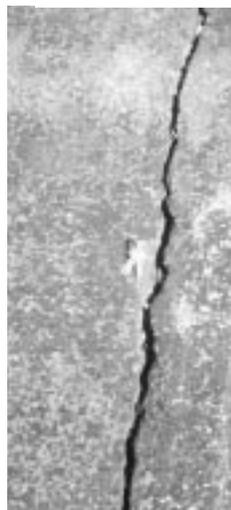
◀ **Transverse cracking less than 10' apart; cracks well-sealed.**



▼ **Large blocks, early signs of raveling and block cracking.**

▼ **Open crack, 1/2" wide; adjoining pavement sound.**

▼ **Moderate flushing.**



**RATING 5**

**FAIR —  
Preservative maintenance  
treatment required**

Roads are still in good structural condition but clearly need sealcoating or overlay. They may have moderate to severe surface raveling with significant loss of aggregate. First signs of longitudinal cracks near the edge. First signs of raveling along cracks. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Any patches or edge wedges are in good condition.

▼ Block cracking with open cracks.



► Moderate to severe raveling in wheel paths.



▼ Severe flushing.



▲ Wedges and patches extensive but in good condition.

Severe raveling with  
▼ extreme loss of aggregate.



Load cracking and slight  
▼ rutting in wheel path.



**RATING 4**

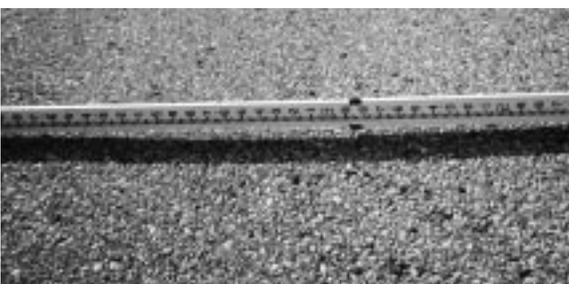
**FAIR —**  
**Structural improvement required**

Roads show first signs of needing strengthening by overlay. They have very severe surface raveling which should no longer be sealed. First longitudinal cracking in wheel path. Many transverse cracks and some may be raveling slightly. Over 50% of the surface may have block cracking. Patches are in fair condition. They may have rutting less than 1/2" deep or slight distortion.



◀ **Longitudinal cracking; early load-related distress in wheel path. Strengthening needed.**

▼ **Slight rutting; patch in good condition.**



▶ **Extensive block cracking. Blocks tight and sound.**  
◀ **Slight rutting in wheel path.**

### RATING 3

**POOR—**

**Structural improvement required**

Roads must be strengthened with a structural overlay (2" or more). Will benefit from milling and very likely will require pavement patching and repair beforehand. Cracking will likely be extensive. Raveling and erosion in cracks may be common. Surface may have severe block cracking and show first signs of alligator cracking. Patches are in fair to poor condition. There is moderate distortion or rutting (1-2") and occasional potholes.

► **Many wide and raveled cracks indicate need for milling and overlay.**



► **2" ruts need mill and overlay.**



► **Open and raveled block cracks.**



**RATING 3**

**POOR** — (continued)

**Structural improvement required**

◀ **Alligator cracking.**  
Edge needs repair  
and drainage needs  
improvement prior  
to rehabilitation.

▼ **Distortion with patches**  
in poor condition. Repair  
and overlay.



**RATING 2**

**VERY POOR—  
Reconstruction required**

Roads are severely deteriorated and need reconstruction. Surface pulverization and additional base may be cost-effective. These roads have more than 25% alligator cracking, severe distortion or rutting, as well as potholes or extensive patches in poor condition.



▶  
**Extensive alligator cracking. Pulverize and rebuild.**



▲ **Patches in poor condition, wheelpath rutting. Pulverize, strengthen and reconstruct.**



▲ **Severe rutting. Strengthen base and reconstruct.**



▶  
**Severe frost damage. Reconstruct.**



**RATING 1**

**FAILED —  
Reconstruction required**

Roads have failed, showing severe distress and extensive loss of surface integrity.

◀  
**Potholes from frost damage. Reconstruct.**



◀  
**Potholes and severe alligator cracking. Failed pavement. Reconstruct.**



◀  
**Extensive loss of surface. Rebuild.**

# Practical advice on rating roads

## Inventory and field inspection

Most agencies routinely observe roadway conditions as a part of their normal work and travel. However, an actual inspection means looking at the entire roadway system as a whole and preparing a written summary of conditions. This inspection has many benefits over casual observations. It can be helpful to compare segments, and ratings decisions are likely to be more consistent because the roadway system is considered as a whole within a relatively short time.

An inspection also encourages a review of specific conditions important in roadway maintenance, such as drainage, adequate strength, and safety.

A simple written inventory is useful in making decisions where other people are involved. You do not have to trust your memory, and you can usually answer questions in more detail. Having a written record and objective information also improves your credibility with the public.

Finally, a written inventory is very useful in documenting changing roadway conditions. Without records over several years it is impossible to know if road conditions are improving, holding their own, or declining.

Annual budgets and long range planning are best done when based on actual needs as documented with a written inventory.

The Wisconsin DOT local road inventory (WISLR) is a valuable resource for managing your local roads. Adding PASER surface condition ratings is an important improvement.

## Averaging and comparing sections

For evaluation, divide the local road system into individual segments which are similar in construction and condition. Rural segments may vary from

1/2 mile to a mile long, while sections in urban areas will likely be 1-4 blocks long or more. If you are starting with the WISLR Inventory, the segments have already been established. You may want to review them for consistent road conditions.

Obviously, no roadway segment is entirely consistent. Also, surfaces in one section will not have all of the types of distress listed for any particular rating. They may have only one or two types. Therefore, some averaging is necessary.

The objective is to rate the condition that represents the majority of the roadway. Small or isolated conditions should not influence the rating. It is useful to note these special conditions on the inventory form so this information can be used in planning specific improvement projects. For example, some spot repairs may be required.

Occasionally surface conditions vary significantly within a segment. For example, short sections of good condition may be followed by sections of poor surface conditions. In these cases, it is best to rate the segment according to the worst conditions and note the variation on the form.

The overall purpose of condition rating is to be able to compare each

segment relative to all the other segments in your roadway system. On completion you should be able to look at any two pavement segments and find that the better surface has a higher rating.

Within a given rating, say 6, not all pavements will be exactly the same. However, they should all be considered to be in better condition than those with lower ratings, say 5. Sometimes it is helpful in rating a difficult segment to compare it to other previously rated segments. For example, if it is better than one you rated 5 and worse than a typical 7, then a rating of 6 is appropriate. Having all pavement segments rated in the proper relative order is most important and useful.

## Assessing drainage conditions

Moisture and poor pavement drainage are significant factors in pavement deterioration. Some assessment of drainage conditions during pavement rating is highly recommended. While you should review drainage in detail at the project level, at this stage simply include an overview drainage evaluation at the same time as you evaluate surface condition.



**Urban drainage.**  
**RATING:**  
**Excellent**

Good rural ditch and driveway culvert. Culvert end needs cleaning.

RATING: Good



Consider both pavement surface drainage and lateral drainage (ditches or storm sewers). Pavement should be able to quickly shed water off the surface into the lateral ditches. Ditches should be large and deep enough to drain the pavement and remove the surface water efficiently into adjacent waterways.

Look at the roadway crown and check for low surface areas that permit ponding. Paved surfaces should have approximately a 2% cross slope or crown across the roadway. This will provide approximately 3" of fall on a 12' traffic lane. Shoulders should have a greater slope to improve surface drainage.

A pavement's ability to carry heavy traffic loads depends on both the pavement materials (asphalt surfacing and granular base) and the strength of the underlying soils. Most soils lose strength when they are very wet. Therefore, it is important to provide drainage to the top layer of the subgrade supporting the pavement structure.

In rural areas, drainage is provided most economically by open ditches that allow soil moisture to drain laterally. As a rule of thumb, the bottom of the ditch ought to be at least one foot below the base course of the pavement in order to drain the soils. This means that minimum ditch depth should be about 2' below the center of the pavement. Deeper ditches, of course, are required to accommodate roadway culverts and maintain the flow line to adjacent drainage channels or streams.

You should also check culverts and storm drain systems. Storm drainage systems that are silted in, have a large accumulation of debris, or are in poor structural condition will also degrade pavement performance.

The T.I.C. publication, *Drainage Manual: Local Road Assessment and Improvement*, describes the elements of drainage systems, depicts them in detailed photographs, and explains how to rate their condition. Copies are available from the Transportation Information Center.

High shoulder and no ditch lead to pavement damage. Needs major ditch improvement for a short distance.

RATING: Fair



No drainage leads to failed pavement.

RATING: Poor



### **Planning annual maintenance and repair budgets**

We have found that relating a normal maintenance or rehabilitation procedure to the surface rating scheme helps local officials use the rating system. However, an individual surface rating should not automatically dictate the final maintenance or rehabilitation technique.

You should consider future traffic projections, original construction, and

pavement strength since these may dictate a more comprehensive rehabilitation than the rating suggests. On the other hand, it may be appropriate under special conditions to do nothing and let the pavement fully deteriorate, then rebuild when funds are available.

### **Summary**

Using local road funds most efficiently requires good planning and accurate identification of appropriate rehabili-

tation projects. Assessing roadway conditions is an essential first step in this process. This asphalt pavement surface condition rating procedure has proved effective in improving decision making and using highway funds more efficiently. It can be used directly by local officials and staff. It may be combined with additional testing and data collection in a more comprehensive pavement management system.

**Transportation  
Information  
Center  
Publications**

**Pavement Surface Evaluation and Rating (PASER) Manuals**

**Asphalt PASER Manual**, 2002, 28 pp.

**Brick and Block PASER Manual**, 2001, 8 pp.

**Concrete PASER Manual**, 2002, 28 pp.

**Gravel PASER Manual**, 2002, 20 pp.

**Sealcoat PASER Manual**, 2000, 16 pp.

**Unimproved Roads PASER Manual**, 2001, 12 pp.

**Drainage Manual**

Local Road Assessment and Improvement, 2000, 16 pp.

**SAFER Manual**

Safety Evaluation for Roadways, 1996, 40 pp.

**Flagger's Handbook** (pocket-sized guide), 1998, 22 pp.

**Work Zone Safety**, Guidelines for Construction, Maintenance, and Utility Operations, (pocket-sized guide), 1999, 55 pp.

**Wisconsin Transportation Bulletins**

- #1 Understanding and Using Asphalt
- #2 How Vehicle Loads Affect Pavement Performance
- #3 LCC—Life Cycle Cost Analysis
- #4 Road Drainage
- #5 Gravel Roads
- #6 Using Salt and Sand for Winter Road Maintenance
- #7 Signing for Local Roads
- #8 Using Weight Limits to Protect Local Roads
- #9 Pavement Markings
- #10 Seal Coating and Other Asphalt Surface Treatments
- #11 Compaction Improves Pavement Performance
- #12 Roadway Safety and Guardrail
- #13 Dust Control on Unpaved Roads
- #14 Mailbox Safety
- #15 Culverts-Proper Use and Installation
- #16 Geotextiles in Road Construction/Maintenance and Erosion Control
- #17 Managing Utility Cuts
- #18 Roadway Management and Tort Liability in Wisconsin
- #19 The Basics of a Good Road
- #20 Using Recovered Materials in Highway Construction
- #21 Setting Speed Limits on Local Roads

# PASER

 **Transportation  
Information Center**  
University of Wisconsin–Madison

**Asphalt Roads**

# Current Surface Rating by Road

Report Module: Road Surface Management Analysis

Today's Date: 12/3/2007

Report Filter		
Field Name	Operator	Value(s)
City/Twp	=	Manistee

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1159908	10th St	10th St	Maple St	Concord St	0.000	0.167	0.167	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		10th St	Concord St	Cypress St	0.167	0.249	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1160208	10th St	10th St	Davis St	Ramsdell St	0.000	0.065	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		10th St	Ramsdell St	Kosciusko St	0.065	0.130	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		10th St	Kosciusko St	Engelmann St	0.130	0.196	0.066	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		10th St	Engelmann St	High St	0.196	0.261	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		10th St	High St	Vine St	0.261	0.329	0.068	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		10th St	Vine St	Manistee St	0.329	0.384	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1161615	10th St	10th St	Davis St	Center St	0.000	0.082	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		10th St	Center St		0.082	0.166	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1159907	11th St	11th St	Maple St	Concord St	0.000	0.167	0.167	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		11th St	Concord St		0.167	0.179	0.012	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
1161604	11th St	11th St	Center St	Davis St	0.000	0.080	0.080	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1153901	12th St	12th St	Oak St	Maple St	0.000	0.055	0.055	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	6	4
		12th St	Maple St	Princeton Rd	0.055	0.166	0.111	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	2	1
		12th St	Princeton Rd	Greenwich St	0.166	0.222	0.056	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-6
		12th St	Greenwich St	Cornell St	0.222	0.278	0.056	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-6
		12th St	Cornell St	Cypress St	0.278	0.307	0.029	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	2	-6
		12th St	Cypress St	Manistee Hwy	0.307	0.514	0.207	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-6
		12th St	Manistee Hwy	Davis St	0.514	0.557	0.043	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	1	-8
		12th St	Davis St	Ramsdell St	0.557	0.621	0.064	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	-2
		12th St	Ramsdell St	Kosciusko St	0.621	0.688	0.067	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-6
		12th St	Kosciusko St	Engelmann St	0.688	0.748	0.060	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1161507	12th St														

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1161507	12th St	12th St		Sweetnam Dr	0.000	0.027	0.027	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		12th St	Sweetnam Dr	Pearce Rd	0.027	0.116	0.089	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		12th St	Pearce Rd	Sunset Ln	0.116	0.223	0.107	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		12th St	Sunset Ln	Cherry Rd	0.223	0.431	0.208	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
3510007	12th St	12th St	Engelmann St	High St	0.000	0.069	0.069	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		12th St	High St	Vine St	0.069	0.137	0.068	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		12th St	Vine St	Manistee St	0.137	0.192	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		12th St	Manistee St	Main St	0.192	0.247	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
3510887	12th St	12th St	Elm St	0.000	0.057	0.057	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0	
1159802	13th St	13th St	Vine St	Manistee St	0.000	0.056	0.056	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-5
		13th St	Manistee St	Main St	0.056	0.112	0.056	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-5
1159801	14th St	14th St	Vine St	Manistee St	0.000	0.057	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		14th St	Manistee St	Main St	0.057	0.113	0.056	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
1159905	14th St	14th St	City/Twp Line	Princeton Rd	0.074	0.110	0.036	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1161506	14th St	14th St	Greenwich St	Cornell St	0.000	0.055	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1159710	15th St	15th St	Manistee St	Main St	0.000	0.055	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
1159904	15th St	15th St	City/Twp Line	Princeton Rd	0.077	0.113	0.036	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
		15th St	Princeton Rd	Greenwich St	0.113	0.165	0.052	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
1160207	15th St	15th St	Maywood Ave	Vine St	0.000	0.066	0.066	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1159709	16th St	16th St	Main St	State St	0.000	0.076	0.076	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1159709	16th St														
1159708	17th St	17th St	Main St	State St	0.000	0.069	0.069	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
3510603	17th St	17th St	Vine St		0.000	0.071	0.071	Manistee	Unk	Undef	Undefined	0	0	0	0
1154003	1st St	S Lakeshore Dr	Beach	Beach	0.000	0.130	0.130	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	3	-5
		S Lakeshore Dr	Beach	Beach	0.130	0.188	0.058	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	3	-5
		S Lakeshore Dr	Beach	Cherry St	0.188	0.214	0.026	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	7	6
		1st St	Cherry St	Tamarack St	0.214	0.459	0.245	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	2	-5
		1st St	Tamarack St	Cedar St	0.459	0.541	0.082	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-4
		1st St	Cedar St	Elm St	0.541	0.628	0.087	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-3
		1st St	Elm St	Spruce St	0.628	0.715	0.087	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-5
		1st St	Spruce St	Pine St	0.715	0.801	0.086	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	4
		1st St	Pine St	Oak St	0.801	0.884	0.083	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	3
		1st St	Oak St	Maple St	0.884	0.969	0.085	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	3
		1st St	Maple St	Poplar St	0.969	1.023	0.054	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		1st St	Poplar St	Sycamore St	1.023	1.051	0.028	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	6	3
		1st St	Sycamore St	Greenbush St	1.051	1.071	0.020	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		1st St	Greenbush St	Walnut St	1.071	1.134	0.063	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		1st St	Walnut St	Division St	1.134	1.177	0.043	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	5	2
		1st St	Division St	Cypress St	1.177	1.219	0.042	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	2
		1st St	Cypress St	Grant St	1.219	1.264	0.045	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		1st St	Grant St	McKee St	1.264	1.280	0.016	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	4
		1st St	McKee St	Hancock St	1.280	1.343	0.063	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		1st St	Hancock St	Hancock St	1.343	1.348	0.005	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		1st St	Hancock St	Sibben St	1.348	1.437	0.089	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
3510014	1st Ave	1st Ave	Fremont St	Franklin St	0.000	0.055	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		1st Ave	Franklin St	Ford St	0.055	0.112	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2

## Current Surface Rating by Road

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3510014	1st Ave	1st Ave	Ford St	Washington St	0.112	0.248	0.136	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
3510015	1st Ave	1st Ave	Oakwood St	Melitzer St	0.000	0.137	0.137	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		1st Ave	Melitzer St	Fremont St	0.137	0.227	0.090	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1154002	2nd St	2nd St		Pine St	0.000	0.052	0.052	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
		2nd St	Pine St	Oak St	0.052	0.135	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		2nd St	Oak St	Maple St	0.135	0.219	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		2nd St	Maple St	Sycamore St	0.219	0.302	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		2nd St	Sycamore St	Walnut St	0.302	0.386	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		2nd St	Walnut St	Cypress St	0.386	0.470	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1161908	2nd St	2nd St	Tamarack St	Cedar St	0.000	0.082	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		2nd St	Cedar St	Elm St	0.082	0.170	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		2nd St	Elm St	Spruce St	0.170	0.258	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
3510000	2nd Ave	2nd Ave	Fremont St	Franklin St	0.000	0.055	0.055	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	5	1
		2nd Ave	Franklin St	Ford St	0.055	0.111	0.056	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	5	0
		2nd Ave	Ford St	Washington St	0.111	0.249	0.138	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	0
3510016	2nd Ave	2nd Ave	Oakwood St	Melitzer St	0.000	0.152	0.152	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		2nd Ave	Melitzer St	Fremont St	0.152	0.243	0.091	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1154001	3rd St	3rd St		Pine St	0.000	0.066	0.066	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		3rd St	Pine St	Oak St	0.066	0.149	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		3rd St	Oak St	Maple St	0.149	0.232	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		3rd St	Maple St	Sycamore St	0.232	0.316	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		3rd St	Sycamore St	Walnut St	0.316	0.400	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		3rd St	Walnut St	Cypress St	0.400	0.483	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1154001	3rd St	3rd St	Cypress St	McKee St	0.483	0.546	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		3rd St	McKee St	Hancock St	0.546	0.610	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		3rd St	Hancock St	Hancock St	0.610	0.627	0.017	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		3rd St	Hancock St	Sibben St	0.627	0.701	0.074	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		3rd St	Sibben St	Ramsdell St	0.701	0.778	0.077	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1161906	3rd St	3rd St	3rd St	Cedar St	0.000	0.080	0.080	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		3rd St	Cedar St	Elm St	0.080	0.168	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
3510017	3rd Ave	3rd Ave	Fremont St	Franklin St	0.000	0.054	0.054	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		3rd Ave	Franklin St	Ford St	0.054	0.111	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		3rd Ave	Ford St	Short St	0.111	0.199	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		3rd Ave	Short St	Taylor St	0.199	0.248	0.049	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
3510018	3rd Ave	3rd Ave	Oakwood St	Hastings St	0.000	0.087	0.087	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		3rd Ave	Hastings St	Melitzer St	0.087	0.170	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		3rd Ave	Melitzer St	Fremont St	0.170	0.259	0.089	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1153910	4th St	4th St	Spruce St	Pine St	0.000	0.084	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		4th St	Pine St	Oak St	0.084	0.167	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		4th St	Oak St	Maple St	0.167	0.251	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		4th St	Maple St	Sycamore St	0.251	0.336	0.085	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		4th St	Sycamore St	Walnut St	0.336	0.420	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		4th St	Walnut St	Cypress St	0.420	0.502	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		4th St	Cypress St	McKee St	0.502	0.565	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		4th St	McKee St	Hancock St	0.565	0.645	0.080	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		4th St	Hancock St	Sibben St	0.645	0.721	0.076	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		4th St	Sibben St	Ramsdell St	0.721	0.799	0.078	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1161904	4th St														

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1161904	4th St	4th St	Tamarack St	Cedar St	0.000	0.076	0.076	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		4th St	Cedar St	Elm St	0.076	0.163	0.087	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		4th St	Elm St	Spruce St	0.163	0.251	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1162209	4th Ave	4th Ave	Lakeshore Dr	Harbor Point Ln	0.000	0.043	0.043	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
3510012	4th Ave	4th Ave	Oakwood St	Hastings St	0.000	0.089	0.089	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		4th Ave	Hastings St	Melitzer St	0.089	0.173	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		4th Ave	Melitzer St	Fremont St	0.173	0.260	0.087	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		4th Ave	Fremont St	Franklin St	0.260	0.314	0.054	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		4th Ave	Franklin St	Ford St	0.314	0.372	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
1153909	5th St	5th St	Spruce St	Pine St	0.000	0.063	0.063	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	6	4
		5th St	Pine St	Pine St	0.063	0.084	0.021	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	9	6
		5th St	Pine St	Oak St	0.084	0.168	0.084	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	4
		5th St	Oak St	Maple St	0.168	0.251	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	5
		5th St	Maple St	Michael St	0.251	0.327	0.076	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	9	5
		5th St	Michael St	Sycamore St	0.327	0.336	0.009	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		5th St	Sycamore St	Fairview Ave	0.336	0.383	0.047	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		5th St	Fairview Ave	Walnut St	0.383	0.420	0.037	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		5th St	Walnut St	Cypress St	0.420	0.503	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		5th St	Cypress St	McKee St	0.503	0.565	0.062	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	10	15
		5th St	McKee St	Hancock St	0.565	0.646	0.081	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	10	15
		5th St	Hancock St	Sibben St	0.646	0.722	0.076	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	10	15
		5th St	Sibben St	Davis St	0.722	0.753	0.031	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
		5th St	Davis St	Ramsdell St	0.753	0.800	0.047	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
		5th St	Ramsdell St	Ramsdell St	0.800	0.819	0.019	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
5th St	Ramsdell St	Kosciusko St	0.819	0.881	0.062	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15		
1160003	5th Ave														

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1160003	5th Ave	5th Ave	Lakeshore Dr	Harbor Point Ln	0.000	0.046	0.046	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
3510045	5th Ave	5th Ave	Memorial Dr	Short St	0.000	0.037	0.037	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	5
		5th Ave	Short St	Short St	0.037	0.049	0.012	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	5
		5th Ave	Short St	Ford St	0.049	0.136	0.087	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	5
		5th Ave	Ford St	Daniels St	0.136	0.146	0.010	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	4
		5th Ave	Daniels St	Fremont St	0.146	0.247	0.101	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	4
		5th Ave	Fremont St	Melitzer St	0.247	0.336	0.089	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	3
		5th Ave	Melitzer St	Hastings St	0.336	0.418	0.082	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	4
		5th Ave	Hastings St	Oakwood St	0.418	0.508	0.090	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	5
		5th Ave	Oakwood St	Anchor Rode Dr	0.508	0.673	0.165	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		5th Ave	Anchor Rode Dr		0.673	0.745	0.072	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
3510046	5th Ave	5th Ave	Lakeshore Dr		0.000	0.062	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1153907	6th St	6th St	Maple St	Michael St	0.000	0.075	0.075	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		6th St	Michael St	Fairview Ave	0.075	0.132	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		6th St	Fairview Ave	Lynn St	0.132	0.190	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		6th St	Lynn St	Cypress St	0.190	0.252	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		6th St	Cypress St	Hopkins St	0.252	0.377	0.125	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	6	0
		6th St	Hopkins St	Hancock St	0.377	0.399	0.022	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	-1
		6th St	Hancock St	Davis St	0.399	0.503	0.104	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	-3
1160001	6th St	6th St	Elm St	Spruce St	0.000	0.058	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		6th St	Spruce St	Pine St	0.058	0.123	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		6th St	Pine St	Robinson St	0.123	0.184	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		6th St	Robinson St	Oak St	0.184	0.227	0.043	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		6th St	Oak St	Maple St	0.227	0.311	0.084	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	5	-1
1161805	6th St														

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1161805	6th St	6th St	Davis St	Ramsdell St	0.000	0.065	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		6th St	Ramsdell St	Kosciusko St	0.065	0.130	0.065	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	6	5
		6th St	Kosciusko St	Engelmann St	0.130	0.193	0.063	Manistee	Urban Coll	CtyMajSt	Concrete-Sta	0	2007	3	-6
1162203	6th Ave	6th Ave	Melitzer St	N Water St	0.000	0.032	0.032	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		6th Ave	N Water St	Daniels St	0.032	0.171	0.139	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		6th Ave	Daniels St	Short St	0.171	0.280	0.109	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1153906	7th St	7th St	Maple St	Fairview Ave	0.000	0.131	0.131	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		7th St	Fairview Ave	Cypress St	0.131	0.250	0.119	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		7th St	Cypress St	Hopkins St	0.250	0.376	0.126	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		7th St	Hopkins St	Davis St	0.376	0.502	0.126	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	7	9
1159807	7th St	7th St	Cherry St	Birch St	0.000	0.155	0.155	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		7th St	Birch St	Tamarack St	0.155	0.244	0.089	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		7th St	Tamarack St	7th St	0.244	0.320	0.076	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		7th St	7th St	Locust St	0.320	0.382	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		7th St	Locust St	Elm St	0.382	0.443	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		7th St	Elm St	Spruce St	0.443	0.503	0.060	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		7th St	Spruce St	Pine St	0.503	0.566	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1161710	7th St	7th St	Pine St	Robinson St	0.566	0.628	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		7th St	Davis St	Ramsdell St	0.000	0.065	0.065	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	7	9
		7th St	Ramsdell St	Kosciusko St	0.065	0.130	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		7th St	Kosciusko St	Engelmann St	0.130	0.195	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1153905	8th St	7th St	Engelmann St	High St	0.195	0.258	0.063	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	7	9
		8th St	Birch St	Tamarack St	0.156	0.244	0.088	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Tamarack St	Tamarack St	0.244	0.248	0.004	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1153905	8th St	8th St	Tamarack St	Cedar St	0.248	0.319	0.071	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Cedar St	Cedar St	0.319	0.340	0.021	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	4
		8th St	Cedar St	Locust St	0.340	0.381	0.041	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	4
		8th St	Locust St	Elm St	0.381	0.442	0.061	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Elm St	Spruce St	0.442	0.504	0.062	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Spruce St	Pine St	0.504	0.566	0.062	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Pine St	Robinson St	0.566	0.628	0.062	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Robinson St	Oak St	0.628	0.691	0.063	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Oak St	Maple St	0.691	0.751	0.060	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Maple St	Lexington Rd	0.751	0.835	0.084	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Lexington Rd	Fairview Ave	0.835	0.884	0.049	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Fairview Ave	Concord St	0.884	0.918	0.034	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Concord St	Cypress St	0.918	1.004	0.086	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		8th St	Cypress St	Olga St	1.004	1.086	0.082	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	-5
		8th St	Olga St	Hopkins St	1.086	1.129	0.043	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	-5
		8th St	Hopkins St	Davis St	1.129	1.253	0.124	Manistee	Urban Min Art	CtyMajSt	Concrete-Sta	0	2007	7	0
		8th St	Davis St	Ramsdell St	1.253	1.319	0.066	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
		8th St	Ramsdell St	Kosciusko St	1.319	1.384	0.065	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
8th St	Kosciusko St	Engelmann St	1.384	1.450	0.066	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15		
8th St	Engelmann St	High St	1.450	1.516	0.066	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15		
8th St	High St	Vine St	1.516	1.582	0.066	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15		
1159909	9th St	9th St	Robinson St	Oak St	0.000	0.063	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		9th St	Oak St	Maple St	0.063	0.125	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1159910	9th St	9th St	Maple St	Lexington Rd	0.000	0.082	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		9th St	Lexington Rd	Concord St	0.082	0.167	0.085	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		9th St	Concord St	Cypress St	0.167	0.249	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		9th St	Cypress St	Manistee Hwy	0.249	0.272	0.023	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1159910	9th St	9th St	Manistee Hwy	Center St	0.272	0.419	0.147	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		9th St	Center St	Davis St	0.419	0.502	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1160209	9th St	9th St	Davis St	Ramsdell St	0.000	0.064	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		9th St	Ramsdell St	Kosciusko St	0.064	0.129	0.065	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		9th St	Kosciusko St	Engelmann St	0.129	0.195	0.066	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		9th St	Engelmann St	High St	0.195	0.259	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		9th St	High St	Vine St	0.259	0.328	0.069	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		9th St	Vine St	Disposal Rd	0.328	0.382	0.054	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1161606	9th St	9th St	Tamarack St	Cedar St	0.000	0.082	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		9th St	Cedar St	Locust St	0.082	0.133	0.051	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		9th St	Locust St	Elm St	0.133	0.194	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
3510617	Anchor Rode Dr	Anchor Rode Dr	5th Ave	Marina Dr	0.000	0.268	0.268	Manistee	Unk	Undef	Asphalt-Stan	0	2007	7	6
1162107	Ashland St	Ashland St	Cross St	East St	0.000	0.088	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1162001	Beach	Beach	S Lakeshore Dr		0.000	0.072	0.072	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Beach			0.072	0.212	0.140	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1162002	Beach	Beach		Beach Dr	0.000	0.061	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Beach	Beach Dr	S Lakeshore Dr	0.061	0.228	0.167	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Beach	S Lakeshore Dr		0.228	0.267	0.039	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1162003	Beach	Beach		Beach Dr	0.000	0.080	0.080	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Beach	Beach Dr	S Lakeshore Dr	0.080	0.154	0.074	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Beach	S Lakeshore Dr		0.154	0.312	0.158	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1162004	Beach Dr	Beach Dr	Beach	Beach	0.000	0.071	0.071	Manistee	Unk	Undef	Undefined	0	0	0	0

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1162004	Beach Dr														
1161705	Birch St														
		Birch St	8th St	Browning Ave	0.000	0.077	0.077	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Birch St	Browning Ave	Broad Ave	0.077	0.143	0.066	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Birch St	Broad Ave	Bryant Ave	0.143	0.213	0.070	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Birch St	Bryant Ave	Harvard Ln	0.213	0.272	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1159808	Broad Ave														
		Broad Ave	Cherry St	Birch St	0.000	0.157	0.157	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Broad Ave	Birch St	Tamarack St	0.157	0.245	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
3510002	Broad Ave														
		Broad Ave	Tamarack St	Cedar St	0.000	0.075	0.075	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1159809	Bryant Ave														
		Bryant Ave	Cherry St	Harvard Ln	0.000	0.067	0.067	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Bryant Ave	Harvard Ln	Birch St	0.067	0.156	0.089	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Bryant Ave	Birch St	Tamarack St	0.156	0.241	0.085	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Bryant Ave	Tamarack St	Cedar St	0.241	0.319	0.078	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-5
		Bryant Ave	Cedar St	Cedar St	0.319	0.325	0.006	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	1	-6
		Bryant Ave	Cedar St	Elm St	0.325	0.413	0.088	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	2	-8
		Bryant Ave	Elm St	Elm St	0.413	0.442	0.029	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	6
		Bryant Ave	Elm St	Spruce St	0.442	0.500	0.058	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	6
1841606	Care Center Dr														
		Care Center Dr	City/Twp Line	14th St	0.174	0.192	0.018	Manistee	Urban Loc	CoLocRd	Undefined	0	0	0	0
3510004	Cedar St														
		Cedar St	Bryant Ave	4th St	0.000	0.117	0.117	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Cedar St	4th St	3rd St	0.117	0.175	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Cedar St	3rd St	2nd St	0.175	0.236	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Cedar St	2nd St	1st St	0.236	0.294	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Cedar St	1st St	Water St	0.294	0.330	0.036	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	-2
3510005	Cedar St														
		Cedar St	8th St	7th St	0.000	0.084	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5

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PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
3510005	Cedar St	Cedar St	7th St	Broad Ave	0.084	0.137	0.053	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Cedar St	Broad Ave	Bryant Ave	0.137	0.212	0.075	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
3510501	Cedar St	Cedar St	8th St	9th St	0.000	0.101	0.101	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Cedar St	9th St		0.101	0.188	0.087	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1153902	Center St	Center St	Manistee Hwy	11th St	0.000	0.013	0.013	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Center St	11th St	10th St	0.013	0.076	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Center St	10th St	9th St	0.076	0.138	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1159806	Chapman St	Chapman St	Cherry St	Dinsen St	0.000	0.072	0.072	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
3510101	Cherry St	Cherry St	City/Twp Line	12th St	0.560	0.995	0.435	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Cherry St	12th St	Ramsdell St	0.995	1.062	0.067	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Cherry St	Ramsdell St	Chapman St	1.062	1.139	0.077	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	7
		Cherry St	Chapman St	8th St	1.139	1.241	0.102	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	7
		Cherry St	8th St	Browning Ave	1.241	1.321	0.080	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	7
		Cherry St	Browning Ave	Broad Ave	1.321	1.388	0.067	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	7
		Cherry St	Broad Ave	Bryant Ave	1.388	1.458	0.070	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	7
		Cherry St	Bryant Ave	Harbor Dr	1.458	1.530	0.072	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	7
		Cherry St	Harbor Dr	Landings Blvd	1.530	1.661	0.131	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	7
		Cherry St	Landings Blvd	S Lakeshore Dr	1.661	1.749	0.088	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	7
1153803	Chippewa Hwy	Cypress St	City/Twp Line	12th St	4.103	4.142	0.039	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2006	5	4
		Cypress St	12th St	Center St	4.142	4.211	0.069	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	8	8
		Cypress St	Center St	9th St	4.211	4.410	0.199	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	9
		Cypress St	9th St	Cypress St	4.410	4.453	0.043	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	7	8
		Cypress St	Cypress St	Cypress St	4.453	4.475	0.022	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2006	6	8
		Cypress St	Cypress St	7th St	4.475	4.536	0.061	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	7	7

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1153803	Chippewa Hwy	Cypress St	7th St	6th St	4.536	4.601	0.065	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	7	7
		Cypress St	6th St	Magill St	4.601	4.665	0.064	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	7	7
		Cypress St	Magill St	5th St	4.665	4.725	0.060	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	7	7
		Cypress St	5th St	4th St	4.725	4.786	0.061	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	7	7
		Cypress St	4th St	3rd St	4.786	4.849	0.063	Manistee	NFwyUrbOtPrA	St-Trnkline	Concrete-Sta	0	2007	7	7
		Cypress St	3rd St	2nd St	4.849	4.913	0.064	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	7	10
		Cypress St	2nd St	1st St	4.913	4.975	0.062	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	1st St	Clay St	4.975	5.037	0.062	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	Clay St	Filer St	5.037	5.099	0.062	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	Filer St	Lake St	5.099	5.166	0.067	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	Lake St	River St	5.166	5.233	0.067	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	River St	Mason St	5.233	5.269	0.036	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	Mason St	Taylor St	5.269	5.365	0.096	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	Taylor St	Lincoln St	5.365	5.437	0.072	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	Lincoln St	Harrison St	5.437	5.494	0.057	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	7	4
		Cypress St	Harrison St	Van Buren St	5.494	5.554	0.060	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	7	4
		Cypress St	Van Buren St	Jackson St	5.554	5.610	0.056	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
		Cypress St	Jackson St	Arthur St	5.610	5.646	0.036	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4
Cypress St	Arthur St	Monroe St	5.646	5.669	0.023	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2006	6	4		
Cypress St	Monroe St	Lakeshore Rd	5.669	6.287	0.618	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4		
Cypress St	Lakeshore Rd	City/Twp Line	6.287	6.311	0.024	Manistee	NFwyUrbOtPrA	St-Trnkline	Asphalt-Stan	0	2007	8	4		
3510073	Cleveland St	Cleveland St	Arthur St	Monroe St	0.000	0.022	0.022	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Cleveland St	Monroe St	Quincy St	0.022	0.081	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1161603	Concord St	Concord St	11th St	10th St	0.000	0.057	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Concord St	10th St	9th St	0.057	0.118	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Concord St	9th St	8th St	0.118	0.193	0.075	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1784808	Cornell St														

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1784808	Cornell St	Cornell St	14th St	12th St	0.000	0.125	0.125	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
3510644	Cottage Ln	Cottage Ln	Oakwood St		0.000	0.100	0.100	Manistee	Unk	Undef	Asphalt-Stan	0	2007	7	6
1162102	Cross St	Cross St	Lake St	River St	0.000	0.059	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Cross St	River St	Ashland St	0.059	0.117	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
3510651	Cross St	Cross St	Lake St		0.000	0.065	0.065	Manistee	Unk	Undef	Asphalt-Stan	0	2007	4	-2
1153904	Cypress St	Cypress St	12th St	10th St	0.000	0.117	0.117	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Cypress St	10th St	9th St	0.117	0.179	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Cypress St	9th St	Manistee Hwy	0.179	0.235	0.056	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1162204	Daniels St	Daniels St	6th Ave	5th Ave	0.000	0.048	0.048	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
1161509	Davis St	Davis St	12th St	11th St	0.000	0.061	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Davis St	11th St	10th St	0.061	0.081	0.020	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Davis St	10th St	10th St	0.081	0.123	0.042	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Davis St	10th St	9th St	0.123	0.163	0.040	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Davis St	9th St	9th St	0.163	0.186	0.023	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Davis St	9th St	8th St	0.186	0.247	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		Davis St	8th St	7th St	0.247	0.309	0.062	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-3
		Davis St	7th St	7th St	0.309	0.331	0.022	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-3
		Davis St	7th St	6th St	0.331	0.372	0.041	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-3
		Davis St	6th St	6th St	0.372	0.414	0.042	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	5	1
		Davis St	6th St	5th St	0.414	0.496	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
3510658	Dinsen St	Dinsen St	Ramsdell St	Chapman St	0.000	0.076	0.076	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1161703	Disposal Rd	Disposal Rd	9th St		0.000	0.158	0.158	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10

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1161703	Disposal Rd														
1162008	Division St														
		Division St	1st St	Clay St	0.000	0.058	0.058	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Division St	Clay St	Filer St	0.058	0.122	0.064	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Division St	Filer St	Lake St	0.122	0.141	0.019	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Division St	Lake St	River St	0.141	0.208	0.067	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
1162303	Duffy St														
		Duffy St	Saint Marys Pkwy	Grove St	0.000	0.058	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Duffy St	Grove St		0.058	0.074	0.016	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
3510526	Dunes Dr														
		Dunes Dr	Monroe St		0.000	0.568	0.568	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1162103	East St														
		East St	Lake St	River St	0.000	0.059	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		East St	River St	Ashland St	0.059	0.120	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1161806	Elm St														
		Elm St	Bryant Ave	Oxford St	0.000	0.057	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Elm St	Oxford St	4th St	0.057	0.116	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		Elm St	3rd St		0.177	0.205	0.028	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
1161910	Elm St														
		Elm St	2nd St	1st St	0.000	0.058	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Elm St	1st St	Water St	0.058	0.121	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Elm St	Water St		0.121	0.134	0.013	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
3510886	Elm St														
		Elm St	12th St	9th St	0.000	0.149	0.149	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
		Elm St	9th St	8th St	0.149	0.245	0.096	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Elm St	8th St	7th St	0.245	0.329	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Elm St	7th St	6th St	0.329	0.412	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Elm St	6th St	Bryant Ave	0.412	0.457	0.045	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
1161601	Engelmann St														
		Engelmann St	12th St	12th St	0.000	0.018	0.018	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5

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1161601	Engelmann St	Engelmann St	12th St	10th St	0.018	0.086	0.068	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Engelmann St	10th St	9th St	0.086	0.168	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Engelmann St	9th St	8th St	0.168	0.251	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Engelmann St	8th St	7th St	0.251	0.334	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-1
		Engelmann St	7th St	6th St	0.334	0.417	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	6	0
1161708	Fairview Ave	Fairview Ave	8th St	7th St	0.000	0.061	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Fairview Ave	7th St	6th St	0.061	0.120	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Fairview Ave	6th St	Magill St	0.120	0.191	0.071	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Fairview Ave	Magill St	5th St	0.191	0.252	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
1899108	Fairway Ln	Fairway Ln	Sunset Ln	Golf Ct	0.000	0.091	0.091	Manistee	Urban Loc	CtyMinSt	Gravel-Stand	0	2007	4	-2
1154005	Filer St	Filer St	Greenbush St	Division St	0.000	0.104	0.104	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	8	9
		Filer St	Division St	Cypress St	0.104	0.166	0.062	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	4	-2
		Filer St	Cypress St	Webster Ct	0.166	0.190	0.024	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Filer St	Webster Ct	Hancock St	0.190	0.274	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1159510	Filer City Rd	Main St	City/Twp Line	Forest Ave	2.252	2.295	0.043	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	5	1
		Main St	Forest Ave	Park Pl	2.295	2.385	0.090	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	6	2
		Main St	Park Pl	17th St	2.385	2.544	0.159	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Main St	17th St	16th St	2.544	2.589	0.045	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Main St	16th St	15th St	2.589	2.647	0.058	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Main St	15th St	14th St	2.647	2.703	0.056	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	-5
		Main St	14th St	13th St	2.703	2.760	0.057	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	-5
		Main St	13th St	12th St	2.760	2.804	0.044	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
1160004	Filmore St	Filmore St	Washington St	Jefferson St	0.000	0.058	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Filmore St	Jefferson St		0.058	0.081	0.023	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9

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3510008	Ford St	Ford St	5th Ave	4th Ave	0.000	0.054	0.054	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Ford St	4th Ave	3rd Ave	0.054	0.105	0.051	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Ford St	3rd Ave	2nd Ave	0.105	0.156	0.051	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Ford St	2nd Ave	1st Ave	0.156	0.207	0.051	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Ford St	1st Ave	Hughes St	0.207	0.252	0.045	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Ford St	Hughes St	Saint Marys Pkwy	0.252	0.310	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Ford St	Saint Marys Pkwy	Grove St	0.310	0.369	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Ford St	Grove St	Monroe St	0.369	0.436	0.067	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
1159706	Forest Ave	Forest Ave	Vine St	Park St	0.000	0.068	0.068	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Forest Ave	Park St	Main St	0.068	0.141	0.073	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1162301	Franklin St	Franklin St	4th Ave	3rd Ave	0.000	0.052	0.052	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Franklin St	3rd Ave	2nd Ave	0.052	0.102	0.050	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Franklin St	2nd Ave	1st Ave	0.102	0.152	0.050	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Franklin St	1st Ave	Hughes St	0.152	0.200	0.048	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Franklin St	Hughes St	Saint Marys Pkwy	0.200	0.256	0.056	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1162208	Fremont St	Fremont St	5th Ave	4th Ave	0.000	0.052	0.052	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-5
		Fremont St	4th Ave	3rd Ave	0.052	0.097	0.045	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	2	-5
		Fremont St	3rd Ave	3rd Ave	0.097	0.105	0.008	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	2	-5
		Fremont St	3rd Ave	2nd Ave	0.105	0.149	0.044	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	2	-6
		Fremont St	2nd Ave	2nd Ave	0.149	0.155	0.006	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-5
		Fremont St	2nd Ave	1st Ave	0.155	0.199	0.044	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Fremont St	1st Ave	1st Ave	0.199	0.206	0.007	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Fremont St	1st Ave	Hughes St	0.206	0.254	0.048	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Fremont St	Hughes St	Saint Marys Pkwy	0.254	0.309	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Fremont St	Saint Marys Pkwy		0.309	0.326	0.017	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
3510060	Glocheski Dr														

## Current Surface Rating by Road

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
3510060	Glocheski Dr	Glocheski Dr	Madison St	Residential Dr	0.000	0.045	0.045	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	6	4
		Glocheski Dr	Residential Dr	Washington St	0.045	0.564	0.519	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	6	4
1899109	Golf Ct	Golf Ct	Golf Ct		0.000	0.033	0.033	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
		Grand Ave	Maywood Ave	Vine St	0.000	0.063	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1162009	Grant St	Grant St	1st St	Clay St	0.000	0.060	0.060	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Grant St	Clay St	Webster Ct	0.060	0.121	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1162007	Greenbush St	Greenbush St	1st St	Clay St	0.000	0.063	0.063	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Greenbush St	Clay St	Filer St	0.063	0.121	0.058	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Greenbush St	Filer St	River St	0.121	0.153	0.032	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
1161505	Greenwich St	Greenwich St	15th St &	14th St	0.000	0.061	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Greenwich St	14th St	12th St	0.061	0.186	0.125	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1162304	Grove St	Grove St	Ford St	Duffy St	0.000	0.089	0.089	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		1161803	Hancock St	Hancock St	6th St	Magill St	0.000	0.064	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007
Hancock St	Magill St			5th St	0.064	0.123	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
Hancock St	5th St			4th St	0.123	0.186	0.063	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	5	1
Hancock St	4th St			3rd St	0.186	0.249	0.063	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	3	-7
1161907	Hancock St	Hancock St	3rd St	1st St	0.000	0.123	0.123	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
3510001	Hancock St	Hancock St	1st St	Clay St	0.000	0.059	0.059	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Hancock St	Clay St	Filer St	0.059	0.122	0.063	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Hancock St	Filer St	Lake St	0.122	0.241	0.119	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Hancock St	Lake St	River St	0.241	0.300	0.059	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-5

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3510001	Hancock St	Jones St	River St	Mason St	0.300	0.336	0.036	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Jones St	Mason St		0.336	0.373	0.037	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1159820	Harbor Dr	Harbor Dr	Cherry St		0.000	0.263	0.263	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1770110	Harbor Point Ln	Harbor Point Ln	5th Ave	4th Ave	0.000	0.052	0.052	Manistee	Unk	Undef	Asphalt-Stan	0	2007	7	6
		Harbor Point Ln	4th Ave	Lakeshore Dr	0.052	0.165	0.113	Manistee	Unk	Undef	Asphalt-Stan	0	2007	7	6
1154102	Harrison St	Harrison St	Washington St	Jefferson St	0.000	0.055	0.055	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	5	-2
		Harrison St	Jefferson St	Cleveland St	0.055	0.182	0.127	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-5
3510006	Harvard Ln	Harvard Ln	Birch St		0.000	0.044	0.044	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
3510068	Harvard Ln	Harvard Ln	Tamarack St		0.000	0.030	0.030	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
3510683	Harvard Ln	Harvard Ln	Bryant Ave		0.000	0.053	0.053	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1162207	Hastings St	Hastings St		5th Ave	0.000	0.087	0.087	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Hastings St	5th Ave	4th Ave	0.087	0.136	0.049	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Hastings St	4th Ave	3rd Ave	0.136	0.185	0.049	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1161602	High St	High St	12th St	10th St	0.000	0.079	0.079	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		High St	10th St	9th St	0.079	0.162	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		High St	9th St	8th St	0.162	0.246	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		High St	8th St	7th St	0.246	0.330	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1163206	Holly Ct	Holly Ct	Park Pl		0.000	0.044	0.044	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1161709	Hopkins St	Hopkins St	8th St	7th St	0.000	0.063	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6

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1161709	Hopkins St	Hopkins St	7th St	6th St	0.063	0.125	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
3510013	Hughes St	Hughes St	Melitzer St	Fremont St	0.000	0.063	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Hughes St	Fremont St	Franklin St	0.063	0.117	0.054	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Hughes St	Franklin St	Ford St	0.117	0.176	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Hughes St	Ford St	Washington St	0.176	0.307	0.131	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1154104	Jackson St	Jackson St	Washington St	Van Buren St	0.000	0.060	0.060	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Jackson St	Van Buren St	Cleveland St	0.060	0.191	0.131	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1162302	Jefferson St	Jefferson St	Filmore St	Taylor St	0.000	0.052	0.052	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Jefferson St	Taylor St	Lincoln St	0.052	0.111	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Jefferson St	Lincoln St	Harrison St	0.111	0.169	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1161501	Kosciusko St	14th St	14th St	Care Center Dr	0.000	0.039	0.039	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	2	-10
		Kosciusko St	Care Center Dr	Kosciusko St	0.039	0.202	0.163	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	1	-8
		Kosciusko St	Kosciusko St	10th St	0.202	0.284	0.082	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-6
		Kosciusko St	10th St	9th St	0.284	0.368	0.084	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	1	-6
		Kosciusko St	9th St	8th St	0.368	0.451	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	-2
		Kosciusko St	8th St	7th St	0.451	0.535	0.084	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
		Kosciusko St	7th St	6th St	0.535	0.618	0.083	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
		Kosciusko St	6th St	5th St	0.618	0.702	0.084	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
1154006	Lake St	Lake St	Division St	Cypress St	0.000	0.091	0.091	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
1162105	Lake St	Lake St	Smith St	Jones St	0.000	0.081	0.081	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Lake St	Jones St	Cross St	0.081	0.175	0.094	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Lake St	Cross St	East St	0.175	0.260	0.085	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1154109	Lakeshore Rd														

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PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1154109	Lakeshore Rd	Lakeshore Rd	Arthur St	City/Twp Line	0.000	0.016	0.016	Manistee	Urban Coll	CoPrimRd	Asphalt-Stan	0	2007	6	5
1162108	Lakeshore Dr	Lakeshore Dr	5th Ave	4th Ave	0.000	0.055	0.055	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Lakeshore Dr	4th Ave	Harbor Point Ln	0.055	0.169	0.114	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Lakeshore Dr	Harbor Point Ln	Oakwood St	0.169	0.429	0.260	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
3510716	Landings Blvd	Landings Blvd	Cherry St	Lighthouse Way N	0.000	0.052	0.052	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
1161712	Lexington Rd	Lexington Rd	8th St	9th St	0.000	0.070	0.070	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Lexington Rd	9th St		0.070	0.096	0.026	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
3510719	Lighthouse Way N	Lighthouse Way N	Lighthouse Way S		0.000	0.049	0.049	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
3510720	Lighthouse Way S	Lighthouse Way S	Lighthouse Way N		0.000	0.133	0.133	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
1154101	Lincoln St	Lincoln St	Washington St	Jefferson St	0.000	0.057	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Lincoln St	Jefferson St	Cleveland St	0.057	0.184	0.127	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1161609	Locust St	Locust St	9th St	8th St	0.000	0.096	0.096	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		Locust St	8th St	7th St	0.096	0.180	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Locust St	7th St		0.180	0.228	0.048	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1161802	Lynn St	Lynn St	6th St	Magill St	0.000	0.072	0.072	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1154108	Madison St	Madison St	Glocheski Dr	Washington St	0.000	0.079	0.079	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	6	4
1153908	Magill St	Magill St	Fairview Ave	Lynn St	0.000	0.058	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Magill St	Lynn St	Cypress St	0.058	0.119	0.061	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Magill St	Cypress St	Hancock St	0.119	0.265	0.146	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2

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PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1161502	Manistee St	Manistee St	15th St	14th St	0.000	0.058	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Manistee St	14th St	13th St	0.058	0.115	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		Manistee St	13th St	12th St	0.115	0.158	0.043	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Manistee St	12th St	10th St	0.158	0.240	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1159404	Maple Rd	Maple St	Maple St	11th St	4.013	4.069	0.056	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	8
		Maple St	11th St	10th St	4.069	4.127	0.058	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	8
		Maple St	10th St	9th St	4.127	4.166	0.039	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	8
		Maple St	9th St	9th St	4.166	4.185	0.019	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	8
		Maple St	9th St	8th St	4.185	4.262	0.077	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	7
		Maple St	8th St	7th St	4.262	4.323	0.061	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	8
		Maple St	7th St	6th St	4.323	4.380	0.057	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	8
		Maple St	6th St	Sophia St	4.380	4.430	0.050	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	8
		Maple St	Sophia St	5th St	4.430	4.513	0.083	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	5
		Maple St	5th St	4th St	4.513	4.579	0.066	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	5
		Maple St	4th St	3rd St	4.579	4.641	0.062	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	6	4
		Maple St	3rd St	2nd St	4.641	4.704	0.063	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	5
		Maple St	2nd St	1st St	4.704	4.767	0.063	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	5
		Maple St	1st St	Water St	4.767	4.833	0.066	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	5	3
		Maple St	Water St	River St	4.833	4.896	0.063	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	9	7
		Maple St	River St	Memorial Dr	4.896	5.014	0.118	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	5
		Maple St	Memorial Dr	Filmore St	5.014	5.063	0.049	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	3
		Maple St	Filmore St	Taylor St	5.063	5.118	0.055	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Maple St	Taylor St	2nd Ave	5.118	5.175	0.057	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Maple St	2nd Ave	1st Ave	5.175	5.218	0.043	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
Maple St	1st Ave	Harrison St	5.218	5.232	0.014	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4		
Maple St	Harrison St	Hughes St	5.232	5.264	0.032	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4		
Maple St	Hughes St	Saint Marys Pkwy	5.264	5.326	0.062	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4		
Maple St	Saint Marys Pkwy	Jackson St	5.326	5.351	0.025	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	3		

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1159404	Maple Rd	Maple St	Jackson St	Monroe St	5.351	5.410	0.059	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	3
		Maple St	Monroe St	Quincy St	5.410	5.467	0.057	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	3
		Maple St	Quincy St	Madison St	5.467	5.523	0.056	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	2
		Maple St	Madison St	Veterans Oak Grove Dr	5.523	5.595	0.072	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	2
		Washington St	Veterans Oak Grove Dr	[Surface Segment Split]	5.595	5.635	0.040	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	8	2
		Washington St	[Surface Segment Split]	Glocheski Dr	5.635	5.763	0.128	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	8	9
		Washington St	Glocheski Dr	City/Twp Line	5.763	5.998	0.235	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	9	12
3510730	Marina Dr	Marina Dr	Oakwood St	Anchor Rode Dr	0.000	0.025	0.025	Manistee	Unk	Undef	Asphalt-Stan	0	2007	7	6
		Marina Dr	Anchor Rode Dr		0.025	0.058	0.033	Manistee	Unk	Undef	Asphalt-Stan	0	2007	7	6
1154008	Mason St	Mason St	Cypress St	Jones St	0.000	0.086	0.086	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1161410	Maywood Ave	Maywood Ave		Park Pl	0.000	0.045	0.045	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
		Maywood Ave	Park Pl	Grand Ave	0.045	0.140	0.095	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Maywood Ave	Grand Ave	15th St	0.140	0.274	0.134	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Maywood Ave	15th St	14th St	0.274	0.320	0.046	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1161901	McKee St	McKee St	5th St	4th St	0.000	0.062	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		McKee St	4th St	3rd St	0.062	0.126	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		McKee St	3rd St	1st St	0.126	0.250	0.124	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1162201	Melitzer St	Melitzer St	North St	6th Ave	0.000	0.032	0.032	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Melitzer St	6th Ave	5th Ave	0.032	0.095	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Melitzer St	5th Ave	4th Ave	0.095	0.144	0.049	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Melitzer St	4th Ave	3rd Ave	0.144	0.193	0.049	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Melitzer St	3rd Ave	2nd Ave	0.193	0.243	0.050	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Melitzer St	2nd Ave	1st Ave	0.243	0.293	0.050	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Melitzer St	1st Ave	Hughes St	0.293	0.357	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5

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1154009	Memorial Dr	Memorial Dr	5th Ave	Taylor St	0.000	0.225	0.225	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	6
1161801	Michael St	Michael St	6th St	Sophia St	0.000	0.052	0.052	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Michael St	Sophia St	5th St	0.052	0.133	0.081	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1162210	Monroe St	Monroe St	5th Ave	4th Ave	0.000	0.048	0.048	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Monroe St	4th Ave	3rd Ave	0.048	0.095	0.047	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Monroe St	3rd Ave	2nd Ave	0.095	0.152	0.057	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Monroe St	2nd Ave	Marina Dr	0.152	0.180	0.028	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Monroe St	Marina Dr	1st Ave	0.180	0.203	0.023	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Monroe St	1st Ave	Cottage Ln	0.203	0.239	0.036	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Monroe St	Cottage Ln	Lakeshore Dr	0.239	0.259	0.020	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Monroe St	Lakeshore Dr	Dunes Dr	0.259	0.532	0.273	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Monroe St	Dunes Dr	Ford St	0.532	0.695	0.163	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Monroe St	Ford St	Washington St	0.695	0.837	0.142	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Monroe St	Washington St	Cleveland St	0.837	1.030	0.193	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	-5
		Monroe St	Cleveland St	Cleveland St	1.030	1.032	0.002	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2006	2	-5
		Monroe St	Cleveland St	Arthur St	1.032	1.037	0.005	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2004	3	-5
1162110	North St	North St	Melitzer St	N Water St	0.000	0.033	0.033	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1161508	Oak St	Oak St	12th St	9th St	0.000	0.155	0.155	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Oak St	9th St	8th St	0.155	0.250	0.095	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1161804	Oak St	Oak St	6th St	5th St	0.000	0.083	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Oak St	5th St	4th St	0.083	0.151	0.068	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Oak St	4th St	3rd St	0.151	0.214	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Oak St	3rd St	2nd St	0.214	0.276	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Oak St	2nd St	1st St	0.276	0.339	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9

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1161804	Oak St	Oak St	1st St	Water St	0.339	0.401	0.062	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	8	9
		Oak St	Water St	River St	0.401	0.445	0.044	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	8	9
		Oak St	River St		0.445	0.462	0.017	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	7	6
3510761	Olga St	Olga St	8th St		0.000	0.029	0.029	Manistee	Unk	Undef	Asphalt-Stan	0	2007	6	4
1161807	Oxford St	Oxford St	Elm St	Spruce St	0.000	0.088	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1159707	Park Pl	Park Pl	Maywood Ave	Vine St	0.000	0.057	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Park Pl	Vine St	Holly Ct	0.057	0.081	0.024	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Park Pl	Holly Ct	Main St	0.081	0.230	0.149	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1163215	Park St	Park St	Forest Ave		0.000	0.016	0.016	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1899120	Pearce Rd	Pearce Rd	12th St		0.000	0.121	0.121	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1161707	Pine St	Pine St	8th St	7th St	0.000	0.083	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Pine St	7th St	6th St	0.083	0.166	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Pine St	6th St	5th St	0.166	0.250	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
1161808	Pine St	Pine St	5th St	4th St	0.000	0.067	0.067	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Pine St	4th St	3rd St	0.067	0.130	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Pine St	3rd St	2nd St	0.130	0.194	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Pine St	2nd St		0.194	0.214	0.020	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
1162005	Pine St	Pine St	1st St	Water St	0.000	0.063	0.063	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	8	9
		Pine St	Water St	River St	0.063	0.086	0.023	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	7	6
		Pine St	River St		0.086	0.102	0.016	Manistee	Urban Loc	CtyMajSt	Undefined	0	0	0	0
1162006	Poplar St	Poplar St	1st St	Water St	0.000	0.068	0.068	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	1

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1162006	Poplar St	Poplar St	Water St	River St	0.068	0.133	0.065	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	9	5
1161504	Princeton Rd	Princeton Rd	15th St	14th St	0.000	0.063	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Princeton Rd	14th St	12th St	0.063	0.187	0.124	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
1160010	Quincy St	Quincy St	Washington St	Cleveland St	0.000	0.195	0.195	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1159805	Ramsdell St	Ramsdell St	Cherry St	Dinsen St	0.000	0.070	0.070	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1161510	Ramsdell St	Ramsdell St	12th St	10th St	0.000	0.083	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Ramsdell St	10th St	9th St	0.083	0.166	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Ramsdell St	9th St	8th St	0.166	0.248	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Ramsdell St	8th St	7th St	0.248	0.333	0.085	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Ramsdell St	7th St	6th St	0.333	0.414	0.081	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		Ramsdell St	6th St	5th St	0.414	0.498	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1161903	Ramsdell St	Ramsdell St	5th St	4th St	0.000	0.064	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Ramsdell St	4th St	3rd St	0.064	0.123	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1901711	Residential Dr	Residential Dr	Glocheski Dr		0.000	0.241	0.241	Manistee	Urban Loc	CtyMinSt	Gravel-Stand	0	2007	6	1
1154007	River St	Water St	Tamarack St	Cedar St	0.000	0.077	0.077	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
		River St	Cedar St	Elm St	0.077	0.170	0.093	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	-4
		River St	Elm St	Spruce St	0.170	0.256	0.086	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	4	-4
		River St	Spruce St	Pine St	0.256	0.345	0.089	Manistee	Urban Coll	CtyMajSt	Concrete-Sta	0	2007	6	5
		River St	Pine St	Oak St	0.345	0.432	0.087	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	6
		River St	Oak St	Maple St	0.432	0.520	0.088	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	6
		River St	Maple St	Poplar St	0.520	0.578	0.058	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	6
		River St	Poplar St	Greenbush St	0.578	0.632	0.054	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	6

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1154007	River St	River St	Greenbush St	Division St	0.632	0.746	0.114	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	6
		River St	Division St	Cypress St	0.746	0.828	0.082	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	8	6
		River St	Cypress St	Jones St	0.828	0.918	0.090	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	9	7
		River St	Jones St	Cross St	0.918	1.004	0.086	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	4	-2
		River St	Cross St	East St	1.004	1.091	0.087	Manistee	Urban Loc	CtyMajSt	Asphalt-Stan	0	2007	5	1
1161701	Robinson St	Robinson St		9th St	0.000	0.060	0.060	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Robinson St	9th St	8th St	0.060	0.156	0.096	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Robinson St	8th St	7th St	0.156	0.239	0.083	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Robinson St	7th St	6th St	0.239	0.321	0.082	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1160009	Saint Marys Pkwy	Saint Marys Pkwy		Fremont St	0.000	0.148	0.148	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	5	1
		Saint Marys Pkwy	Fremont St	Franklin St	0.148	0.204	0.056	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Saint Marys Pkwy	Franklin St	Ford St	0.204	0.263	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
		Saint Marys Pkwy	Ford St	Duffy St	0.263	0.350	0.087	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Saint Marys Pkwy	Duffy St	Washington St	0.350	0.395	0.045	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1162205	Short St	Short St	6th Ave	5th Ave	0.000	0.044	0.044	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
3510009	Short St	Short St	5th Ave	3rd Ave	0.000	0.106	0.106	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1161902	Sibben St	Sibben St	5th St	4th St	0.000	0.059	0.059	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
		Sibben St	4th St	3rd St	0.059	0.121	0.062	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
		Sibben St	3rd St	1st St	0.121	0.243	0.122	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	7	6
3510500	Smith St	Smith St	Webster Ct	Lake St	0.000	0.057	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
1160002	Sophia St	Sophia St	Maple St	Michael St	0.000	0.074	0.074	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1161706	Spruce St	Spruce St	8th St	7th St	0.000	0.083	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4

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1161706	Spruce St														
		Spruce St	7th St	6th St	0.083	0.166	0.083	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Spruce St	6th St	Bryant Ave	0.166	0.211	0.045	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Spruce St	Bryant Ave	5th St	0.211	0.250	0.039	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Spruce St	5th St	Oxford St	0.250	0.269	0.019	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Spruce St	Oxford St	4th St	0.269	0.320	0.051	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Spruce St	4th St	4th St	0.320	0.327	0.007	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Spruce St	4th St	2nd St	0.327	0.446	0.119	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Spruce St	2nd St	1st St	0.446	0.504	0.058	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Spruce St	1st St	Water St	0.504	0.569	0.065	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
1163217	State St														
		State St	16th St	17th St	0.000	0.040	0.040	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		State St	17th St	Attribute Change	0.040	0.097	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		State St	Attribute Change		0.097	0.194	0.097	Manistee	Unk	Undef	Sealcoat-Sta	0	2007	8	5
1899107	Sunset Ln														
		Sunset Ln	Fairway Ln	12th St	0.000	0.110	0.110	Manistee	Urban Loc	CtyMinSt	Gravel-Stand	0	2007	4	-2
1899211	Sweetnam Dr														
		Sweetnam Dr	12th St		0.000	0.084	0.084	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1161809	Sycamore St														
		Sycamore St	5th St	4th St	0.000	0.064	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Sycamore St	4th St	3rd St	0.064	0.126	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Sycamore St	3rd St	2nd St	0.126	0.189	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Sycamore St	2nd St	1st St	0.189	0.253	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	4	-2
1161607	Tamarack St														
		Tamarack St		9th St	0.000	0.156	0.156	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Tamarack St	9th St	8th St	0.156	0.252	0.096	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
1161905	Tamarack St														
		Tamarack St	4th St	3rd St	0.000	0.058	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
1161909	Tamarack St														
		Tamarack St		2nd St	0.000	0.035	0.035	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17

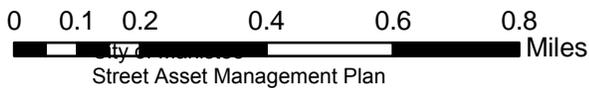
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1161909	Tamarack St	Tamarack St	2nd St	1st St	0.035	0.093	0.058	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Tamarack St	1st St	Water St	0.093	0.126	0.033	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	3	-5
		Tamarack St	Water St		0.126	0.141	0.015	Manistee	Urban Loc	CtyMinSt	Undefined	0	0	0	0
3510003	Tamarack St	Tamarack St	8th St	Browning Ave	0.000	0.079	0.079	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Tamarack St	Browning Ave	Broad Ave	0.079	0.136	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Tamarack St	Broad Ave	Broad Ave	0.136	0.144	0.008	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Tamarack St	Broad Ave	Bryant Ave	0.144	0.213	0.069	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Tamarack St	Bryant Ave	Harvard Ln	0.213	0.272	0.059	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
3510802	Tamarack St	Tamarack St		City/Twp Line	0.000	0.157	0.157	Manistee	Unk	Undef	Asphalt-Stan	0	2007	1	-17
1154010	Taylor St	Taylor St	Washington St	Jefferson St	0.000	0.058	0.058	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	2
		Taylor St	Jefferson St	Cleveland St	0.058	0.191	0.133	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	2
3510077	Van Buren St	Van Buren St	Jackson St	Cleveland St	0.000	0.181	0.181	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	2	-10
3510885	Veterans Oak Grove Dr	Veterans Oak Grove Dr	Washington St	City/Twp Line	0.000	0.524	0.524	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	0
1160101	Vine St	Vine St	20th St	Forest Ave	0.120	0.175	0.055	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		Vine St	Forest Ave	Park Pl	0.175	0.267	0.092	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Vine St	Park Pl	Grand Ave &	0.267	0.369	0.102	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	7	6
		Vine St	Grand Ave &	17th St	0.369	0.392	0.023	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		Vine St	17th St	15th St	0.392	0.494	0.102	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
		Vine St	15th St	14th St	0.494	0.552	0.058	Manistee	Urban Loc	CtyMinSt	Concrete-Sta	0	2007	4	-3
		Vine St	14th St	13th St	0.552	0.609	0.057	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
		Vine St	13th St	12th St	0.609	0.653	0.044	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	4	-5
		Vine St	12th St	10th St	0.653	0.734	0.081	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	3	-3
		Vine St	10th St	9th St	0.734	0.818	0.084	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15

## Current Surface Rating by Road

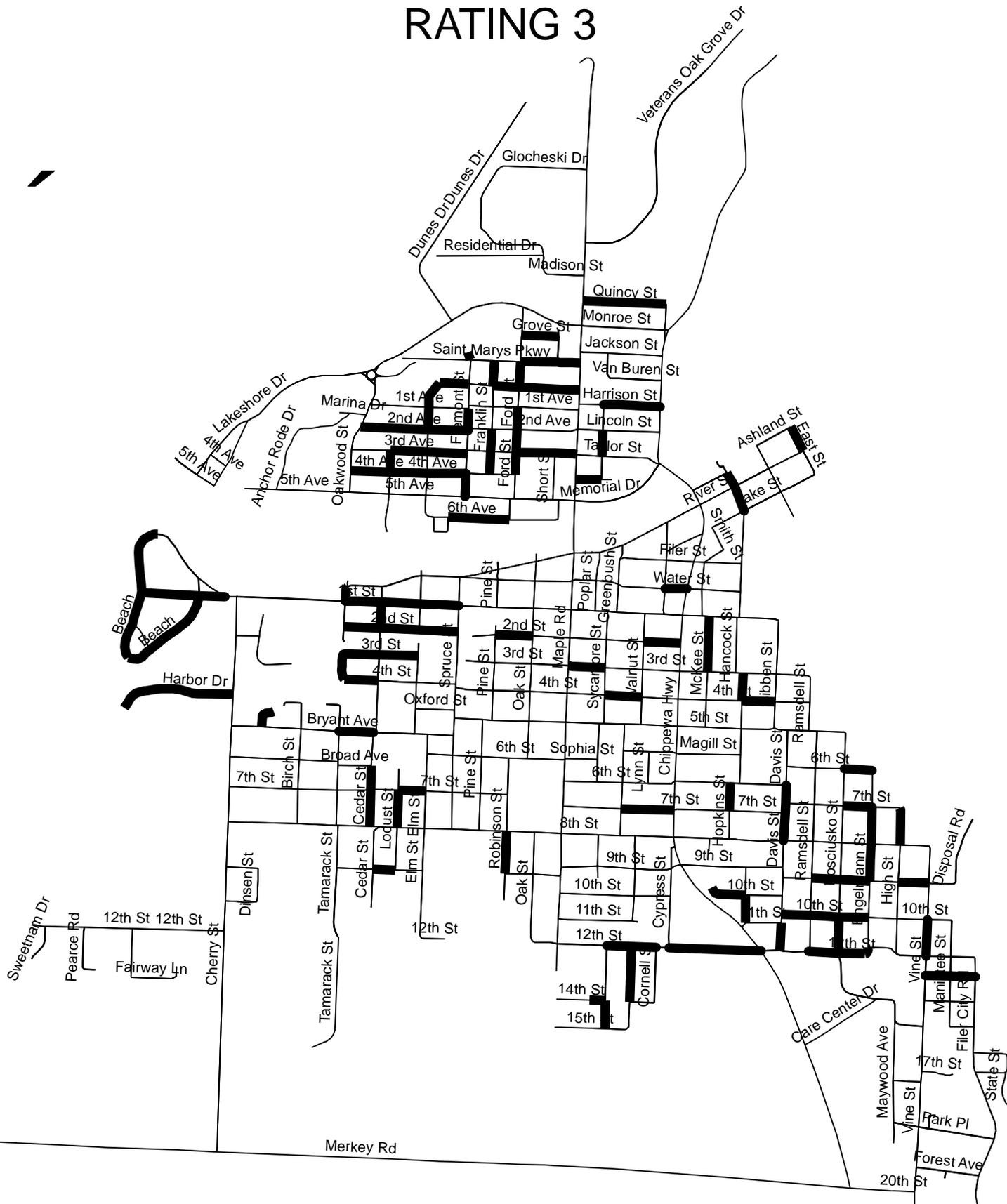
PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/ Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating	RSL
1160101	Vine St	Vine St	9th St	8th St	0.818	0.900	0.082	Manistee	Urban Min Art	CtyMajSt	Asphalt-Stan	0	2007	10	15
1161810	Walnut St	Walnut St	5th St	4th St	0.000	0.062	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Walnut St	4th St	3rd St	0.062	0.124	0.062	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Walnut St	3rd St	2nd St	0.124	0.187	0.063	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
		Walnut St	2nd St	1st St	0.187	0.251	0.064	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
1154004	Water St	Water St	Spruce St	Pine St	0.000	0.086	0.086	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Water St	Pine St	Oak St	0.086	0.170	0.084	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	6
		Water St	Oak St	Maple St	0.170	0.255	0.085	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	6	2
		Water St	Maple St	Poplar St	0.255	0.308	0.053	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Water St	Poplar St	Greenbush St	0.308	0.359	0.051	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	8	4
		Water St	Greenbush St	Division St	0.359	0.466	0.107	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	7	3
		Water St	Division St	Cypress St	0.466	0.515	0.049	Manistee	Urban Coll	CtyMajSt	Asphalt-Stan	0	2007	3	-2
		Clay St	Cypress St	Grant St	0.515	0.549	0.034	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	8	9
		Clay St	Grant St	Hancock St	0.549	0.637	0.088	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	6	4
1162202	N Water St	N Water St	North St	6th Ave	0.000	0.031	0.031	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	1	-17
1162010	Webster Ct	Webster Ct	Webster Ct	Smith St	0.000	0.053	0.053	Manistee	Urban Loc	CtyMinSt	Asphalt-Stan	0	2007	9	12
<b>Total Mileage for all roads:</b>					<b>50.960</b>										

# PASER SURFACE CONDITION RATING 1



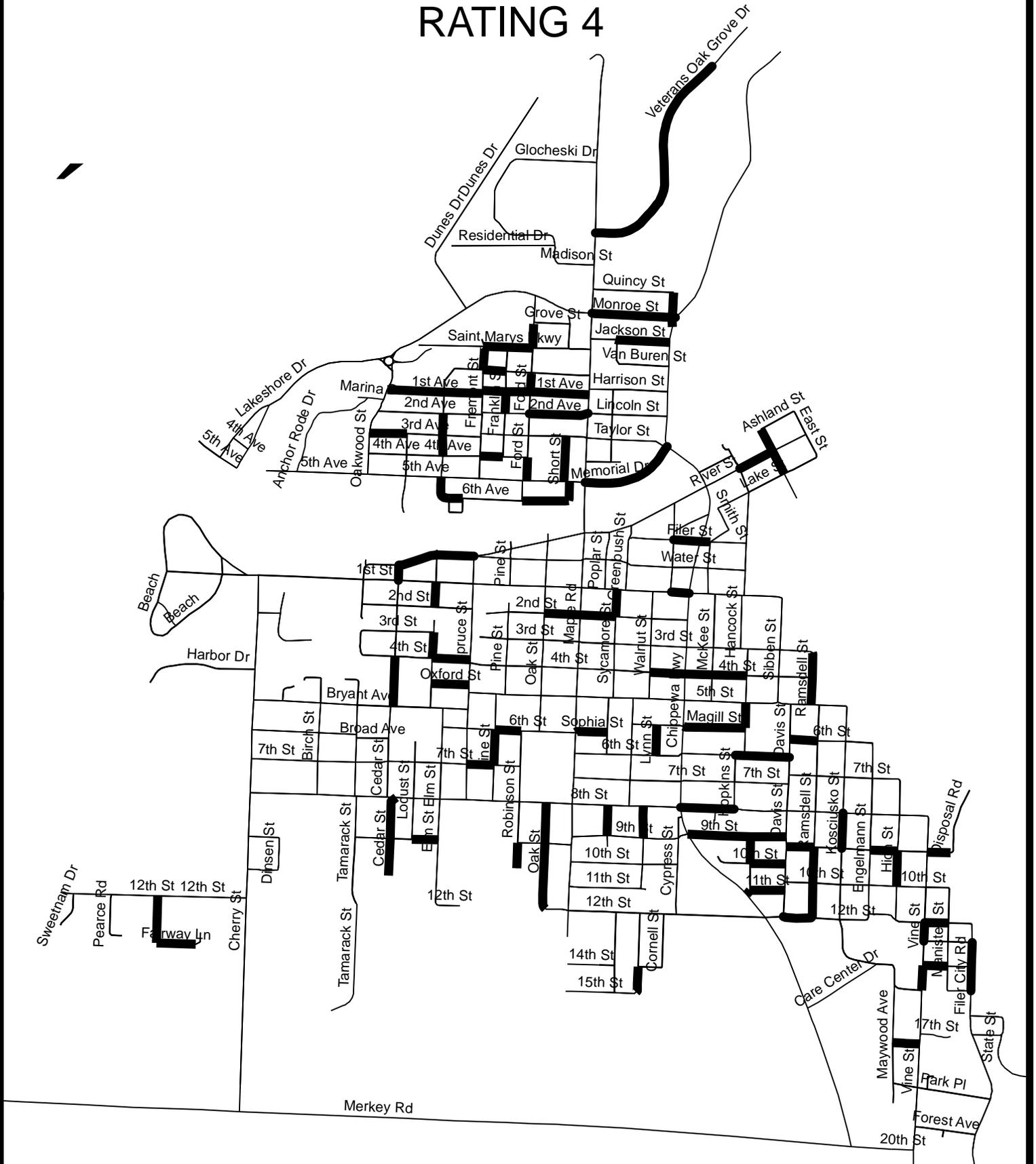


# PASER SURFACE CONDITION RATING 3

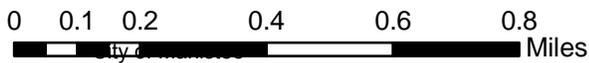
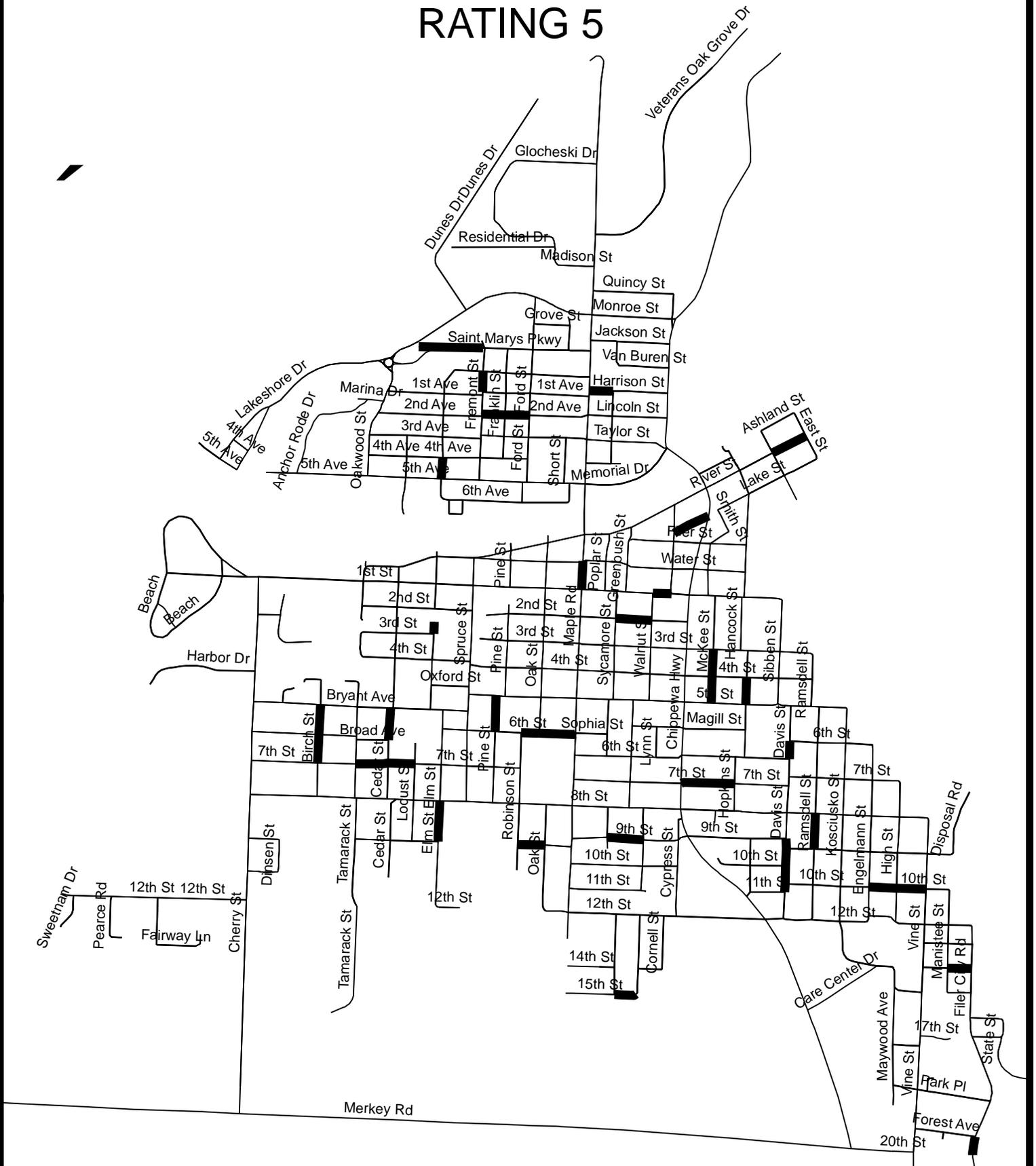


# PASER SURFACE CONDITION

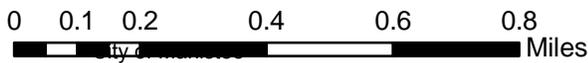
## RATING 4



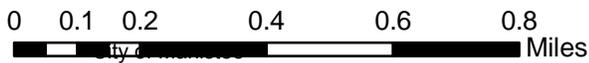
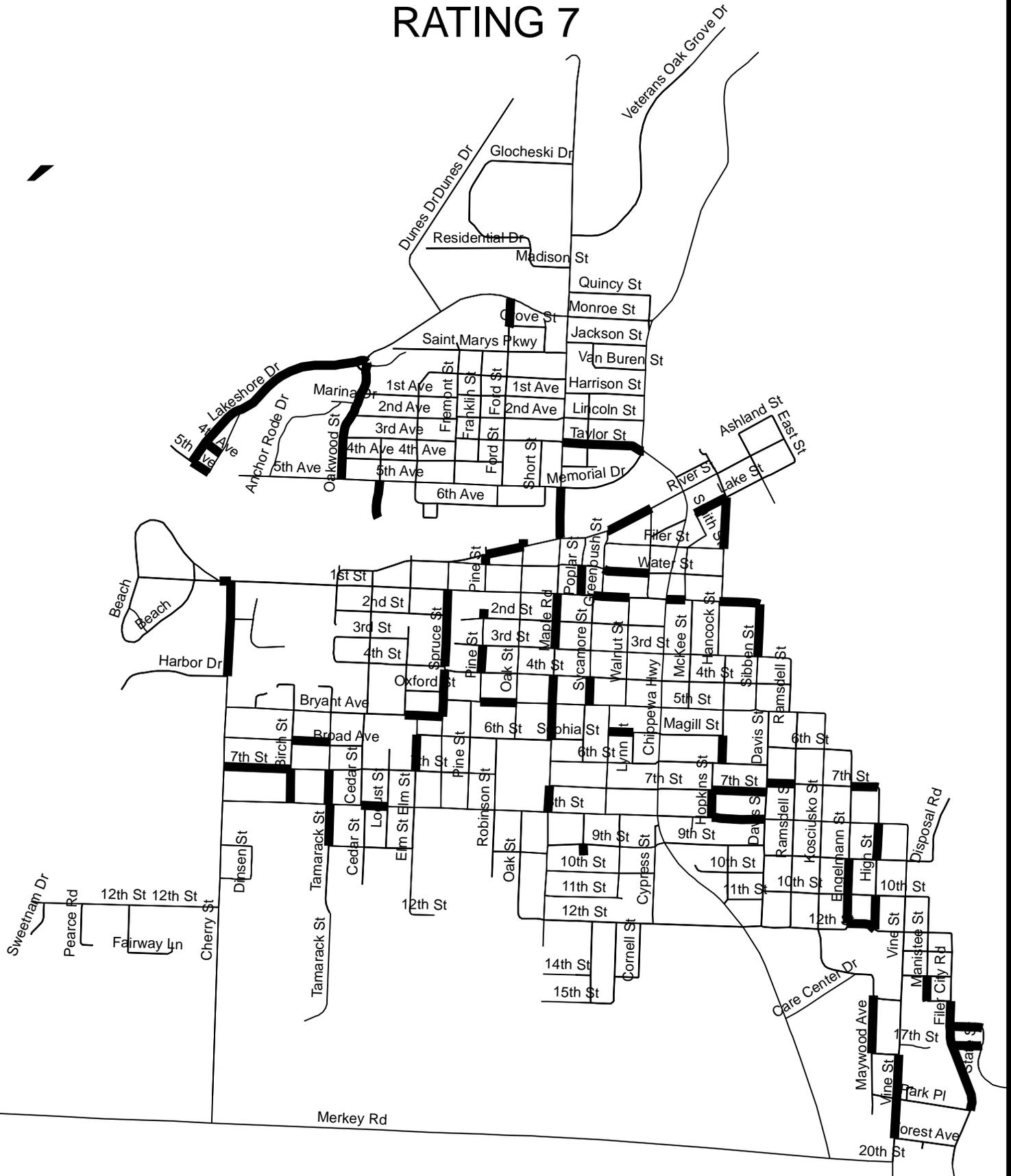
# PASER SURFACE CONDITION RATING 5



# PASER SURFACE CONDITION RATING 6

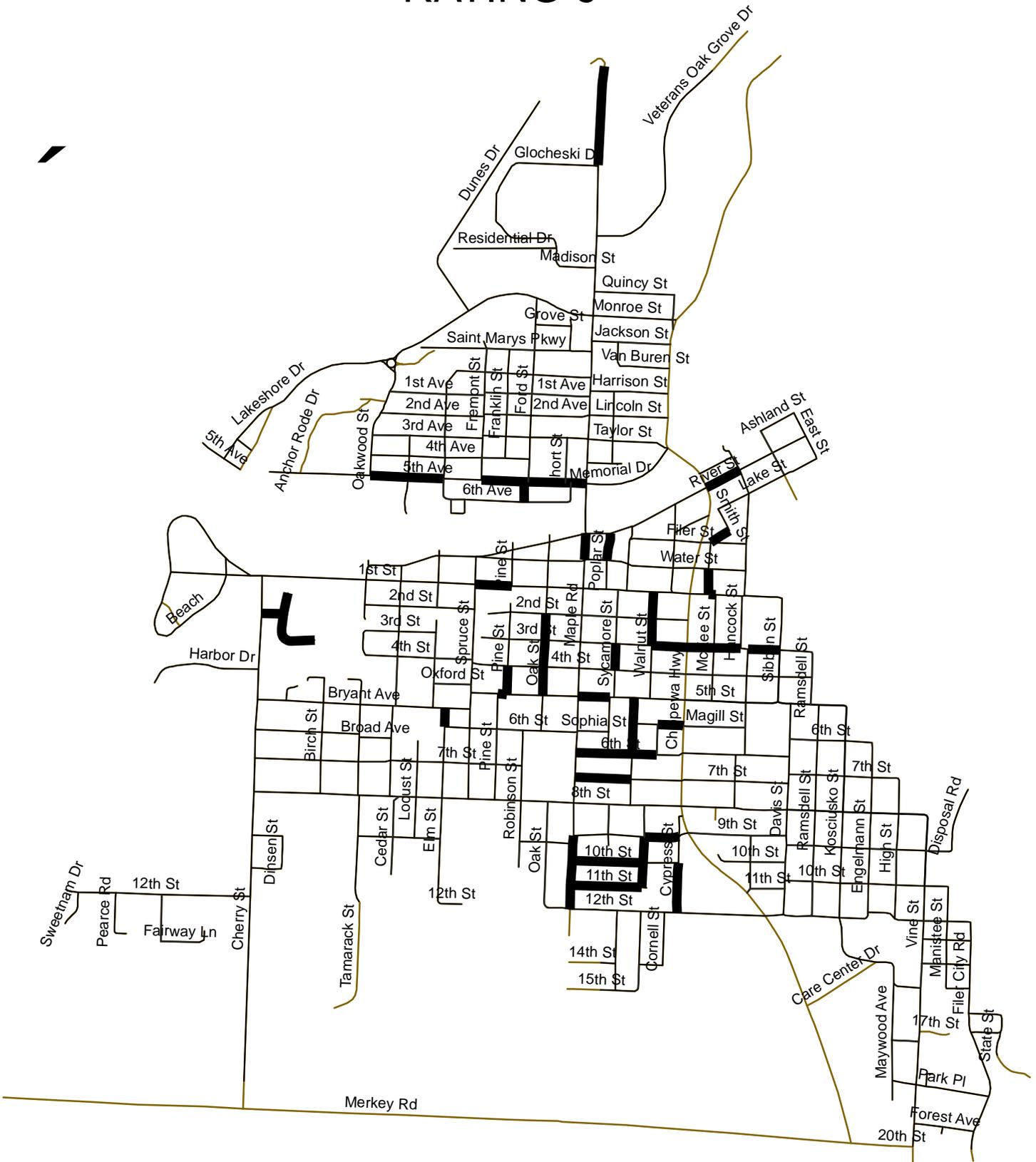


# PASER SURFACE CONDITION RATING 7





# PASER SURFACE CONDITION RATING 9

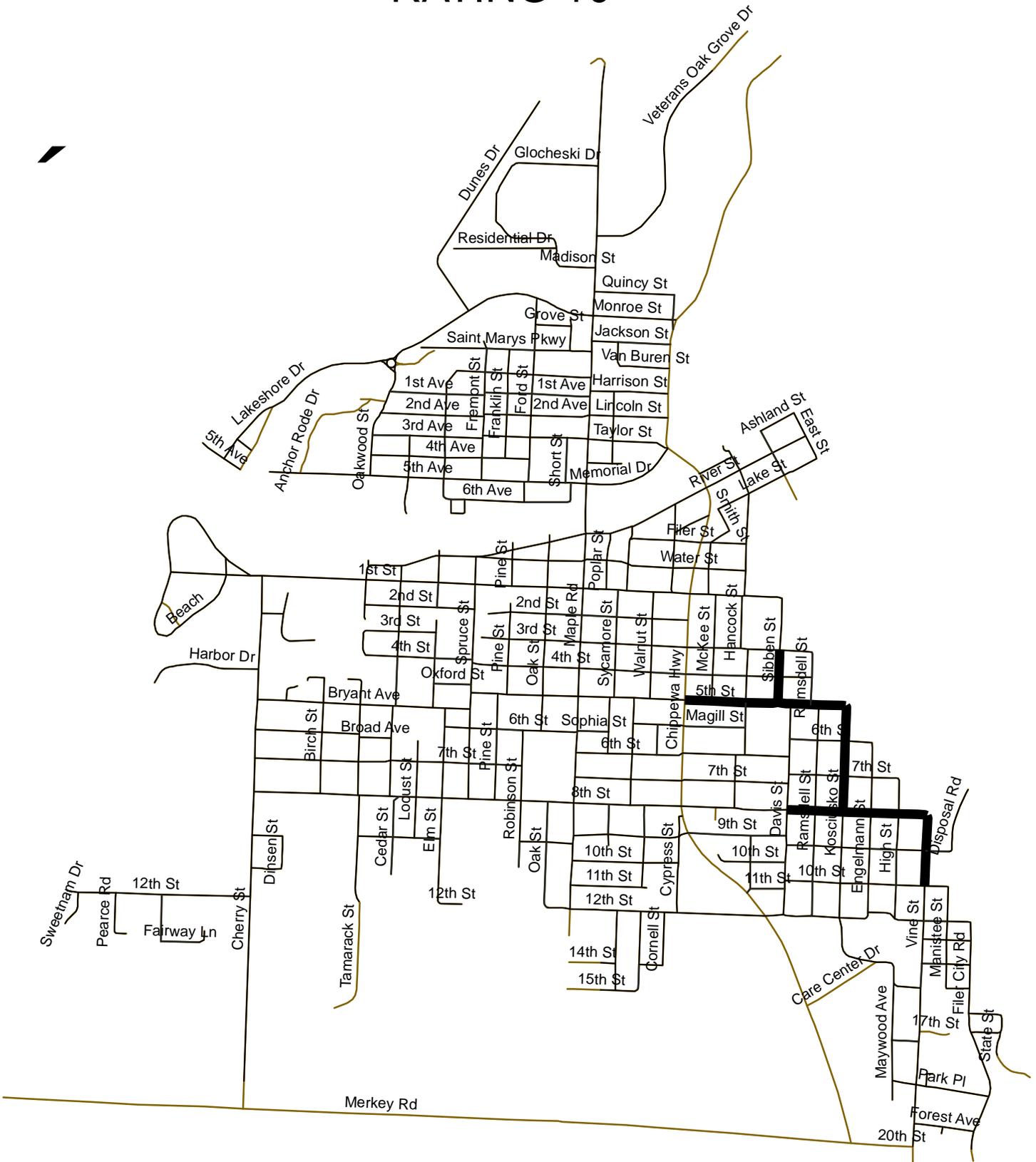


0.0 0.1 0.2 0.3 0.4  
City of Manistee Miles

Street Asset Management Plan

City of Manistee - GIS

# PASER SURFACE CONDITION RATING 10



0 0.06.1 0.2 0.3 0.4

City of Manistee Miles

Street Asset Management Plan

# PASER SURFACE CONDITION RATINGS 8 TO 10 GOOD



0.0 0.1 0.2 0.3 0.4  
 City of Manistee Miles

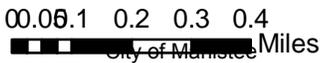
Street Asset Management Plan

# PASER SURFACE CONDITION RATINGS 5 TO 7 FAIR



0.0 0.1 0.2 0.3 0.4  
 City of Manistee Miles

# PASER SURFACE CONDITION RATINGS 1 TO 4 POOR



Street Work since 1993

