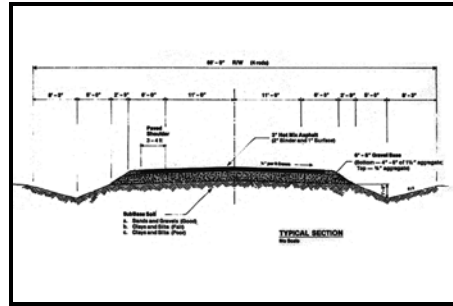
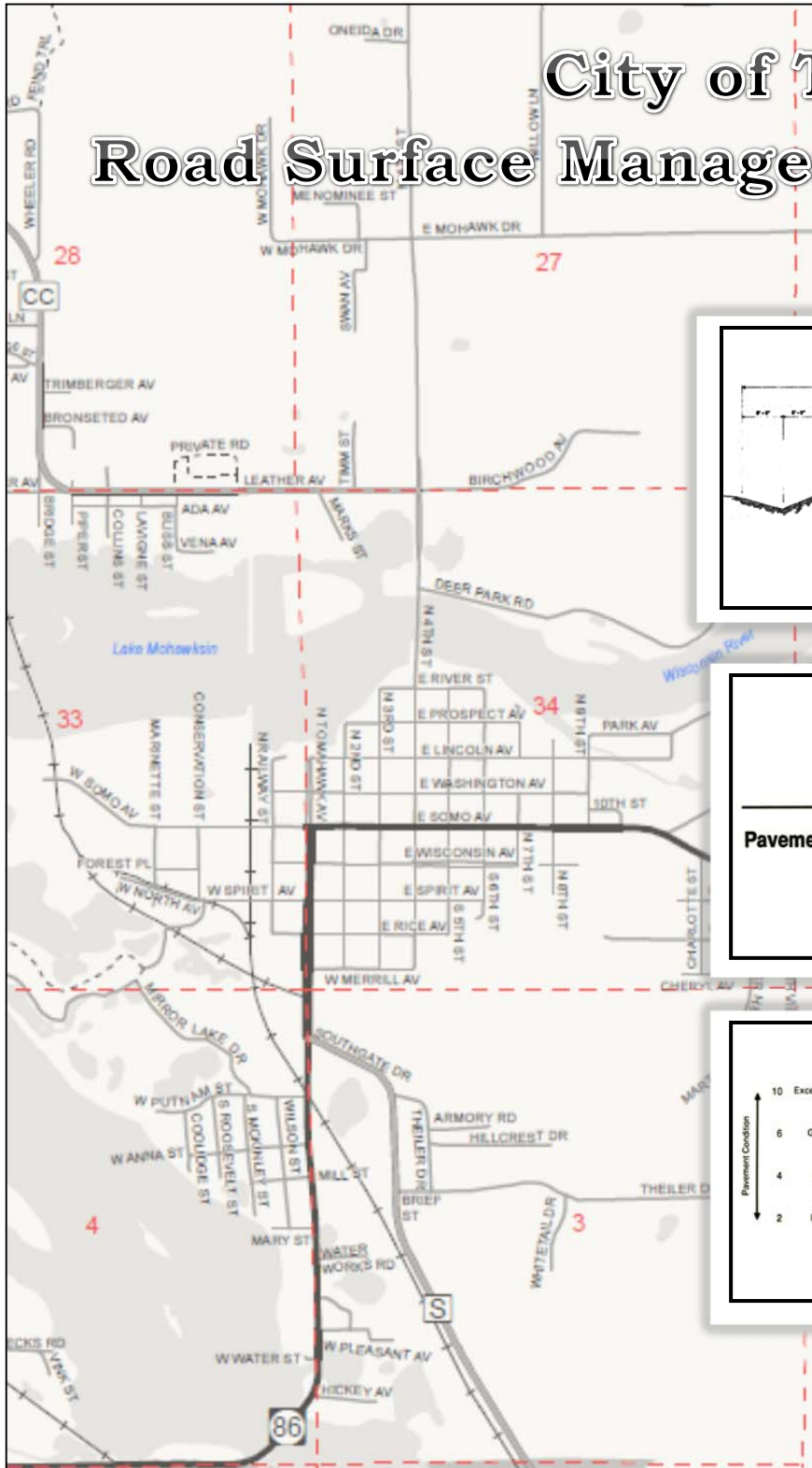
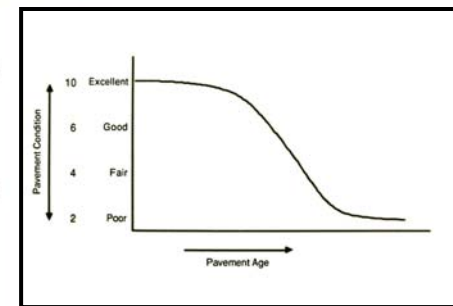


City of Tomahawk Road Surface Management Plan 2014



PASER
Pavement Surface Evaluation and Rating



Prepared by:

**North Central Wisconsin
Regional Planning Commission**

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**CITY OF TOMAHAWK, LINCOLN COUNTY, WISCONSIN
ROADWAY MANAGEMENT PLAN**

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CHAPTER 1 ROADWAY MANAGEMENT PLAN OVERVIEW

INTRODUCTION

A roadway management plan for a local street system provides a community with the ability to plan for future roadway improvements. With a roadway management plan in place, the limited resources allocated to local roads can be better spent. The overall goal of the Roadway Management Plan is to assist municipalities make better decisions on the improvements to the local road system. This document contains information vital to the review and rating of the City of Tomahawk's roadway system. Thus, the Roadway Management Plan will assist in preserving and rehabilitating the existing City street system in a timely and cost-effective manner.

A review of each City road was performed by a representative from the North Central Wisconsin Regional Planning Commission (NCWRPC). Information necessary to complete the roadway management plan was collected during the month of June 2013 using a pavement surface evaluation and rating system. The on-site roadway review was performed following the Wisconsin DOT Plat Record Map.

PURPOSE OF ROADWAY MANAGEMENT PLAN

A Roadway Management Plan helps local government officials respond to growing pressures from constituents to repair roads and upgrade the quality of roads by providing documented information on suggested priorities for improvement and reliable estimates of current and future costs of maintaining and improving the quality of the local road system.

Roadway Management Plans help local officials allocate scarce resources, which are caused by some of the following:

1. Negative public attitudes towards higher property taxes;
2. The historic limits on state and federal revenues to local governments to keep pace with increasing costs of providing local services;
3. An increase in street maintenance and construction costs which have outstripped the available public resources;
4. Historic local budget difficulties have resulted in deferred maintenance on local street systems, thus compounding needs for additional local resources; and/or
5. Some local units of government have not used their scarce dollars in a wise manner. Local politics and poor decision making have, in some cases, resulted in funds being spent in the wrong places or in an inefficient manner.

The objectives for using a pavement management system include:

1. A better understanding of pavement conditions by completing an overall field inventory;
2. An evaluation of causes of pavement conditions by the roadway segments' corresponding rating and analysis of distress;
3. Through improved decision making by taking advantage of preventative maintenance and selection of the most effective repair or rehabilitation;
4. Better communication of needs and strategies to decision makers as a tool to explain needs and convince elected officials and the public that adequate budgets are needed;
5. Long-term planning helps local governments coordinate pavement needs and scheduling with other budget and policy decisions.

INTENDED ROADWAY MANAGEMENT PLAN RESULTS

The results of the Roadway Management Plan are intended to assist the City of Tomahawk in developing a street surface improvement program where by the limited transportation dollars allocated yearly can be spent more wisely. Through this effort, a better transportation system will be realized over time. A roadway management plan can also assist in vying for additional county, state or federal funding.

In addition, municipalities must report to the Wisconsin Department of Transportation an assessment of the physical condition of the roadways under their jurisdiction. The assessment must be completed biennially and must be completed using a WisDOT approved pavement rating system. This surface condition assessment was completed and submitted to WisDOT as part of the roadway management plan process.

CHAPTER II TOMAHAWK'S EXISTING ROADWAY SYSTEM

EXISTING SYSTEM

Prior to the development of a Roadway Management Plan, an inventory of the existing system must be completed. This inventory will assist in cataloging the roadway characteristics by roadway segment and surface type. The field data collected will be used as a benchmark to establish the prioritization of the existing roadway system and will assist in the development of recommended improvements to the local road system.

The Wisconsin Department of Transportation (WisDOT) maintains a roadway characteristic inventory on all local roads eligible to receive state funding through the state road/transportation aid program, see Appendix A. This data file is used as the basis for beginning the Roadway Management Plan. From the base data already collected by the state, a review of the road system may note changes in the roadway characteristics. Thus, this information is updated and represented as such in the data sheets found in the back of this document. The state's inventory of the roadway system includes such features as:

1. Segment length;
2. Surface type (earth, gravel, asphalt, or concrete);
3. Functional classification; and
4. Surface and shoulder width.

The review of the City street system was completed following the Wisconsin DOT City Plat Record Map and corresponding data provided by WisDOT for each roadway segment.

FUNCTIONAL CLASSIFICATION SYSTEM

Tomahawk's roads perform varied functions from moving goods and people within the community or through the community. These roads differ from one-another and are characterized by a functional classification system. In the development of this Roadway Management Plan, the functional classification of the roads is described as follows:

Major Collectors: Major collectors provide service to moderate sized communities and other intra-area traffic generators (schools, churches, employment or service centers) and link those generators to nearby larger population concentrations or major state or county trunk highways.

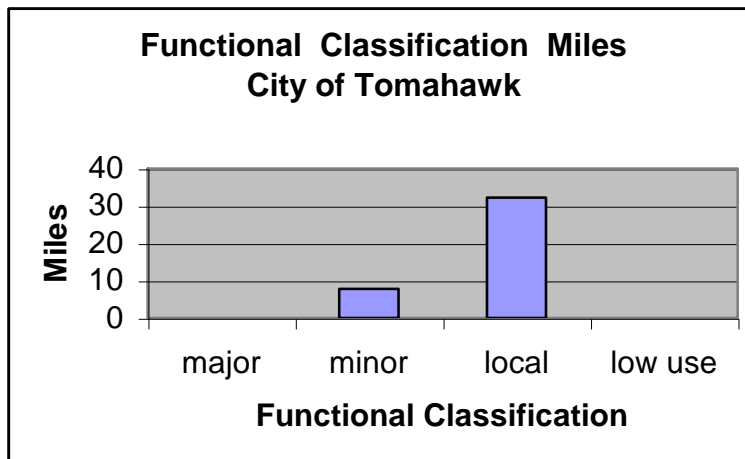
Minor Collectors: Minor collectors provide service to remaining population concentrations not served by higher classified routes, link the locally important traffic generators (schools, churches, and employment and service centers) with the rural hinterland, and are spaced consistent with population density so as to collect traffic from local roads and bring developed areas within a reasonable distance of a higher classified road. One or two very densely developed roads could meet this classification, provided that the level of development is such that relatively high average daily traffic (ADT) counts are realized (a lake loop road is a good example of this type of situation).

Local Roads: Local roads provide access to adjacent land and provide for travel over relatively short distances on an interCity or intraCity basis. All City roads not classified as arterials or collectors will be local functional roads.

Low Use Roads: Low use roads are roads that receive very limited traffic volume due to any of the following reasons: low level of development on property served by road, seasonality of use (hunting, fishing, cross country skiing, etc.), physical barrier to through traffic (road quality, dead end road, or other local factors that contribute to low or intermittent use).

The functional classification mileage of the roads is depicted in Figure 1 and by segment in Appendix A.

FIGURE 1



Most City streets are in the local or low use category, and most county trunk highways are either major or minor collectors. The classification of roads indicates a number of factors regarding the nature of the road for roadway management such as:

1. Role the road plays in providing mobility (through traffic) as opposed to providing access to adjoining property.

2. Amount of development adjacent to a roadway. The more adjoining development, the higher the classification. The nature of the development must also be considered here. In the case of development that would serve a high number of trips, such as commercial, industrial, or institutional a road could be considered for a higher classification.
3. The average daily traffic on the road. Generally, the higher the traffic the higher the classification.

CHAPTER III ROADWAY MANAGEMENT PLAN RESULTS

PAVEMENT SURFACE EVALUATION AND RATING

The data reported in this Roadway Management Plan was produced using the Pavement Analysis Tool within the state's Wisconsin Information System for Local Roads (WISLR). Critical to the development of the surface condition rating of each roadway segment, was a uniform and consistent set of criteria used throughout the City in evaluating and assigning a value to each roadway segment. To achieve this uniform and consistent evaluation, the Pavement Surface Evaluation and Rating (PASER) system developed by the University of Wisconsin-Madison, Transportation Information Center was utilized, see Appendix B. The consistency in evaluating each roadway segment is critical since this information will lead to the development of future improvements needed to the local roadway system.

Based upon the WISLR data collected, there are 38.73 miles of street on the City of Tomahawk's roadway system. On this system, 37.28 miles or 96.3 percent are paved and 1.45 miles or 3.7 percent are unpaved. FIGURES 2 and 3 depict the surface condition ratings of the paved and unpaved roadway system.

FIGURE 2

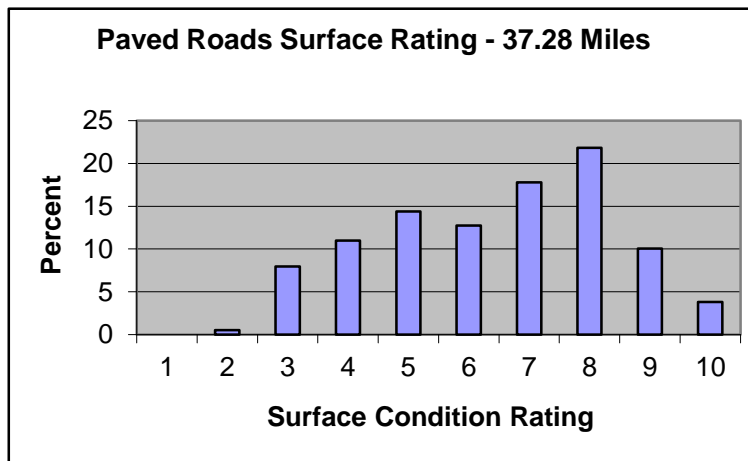
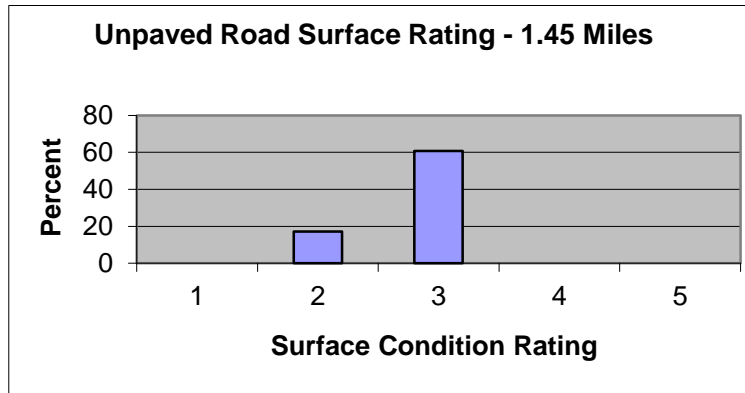


FIGURE 3



Focusing on paved roads, 14 percent is in need of no maintenance. About 18 percent is in need of only minor maintenance or crack filling, and 27 percent could benefit from a surface treatment such as sealcoating. About 19 percent is in need of structural improvement.

PAVEMENT SURFACE NEEDS ANALYSIS

Pavement management is a systematic process that uses roadway data to facilitate development of cost-effective maintenance and improvement programs. The WISLR Pavement Analysis Tool takes a “value-based” approach to pavement management. The objective of this approach is to get more value (cost-effectiveness) from improvement expenditures by getting more pavement life at a lower cost and improving ride quality.

Accomplishing this objective requires selecting the right projects and applying the right fix at the right time.

The surface condition rating value and corresponding suggested improvements for asphalt and concrete (paved) and gravel (unpaved) roads are represented in TABLES 1 through 3.

TABLE 1 ASPHALT SURFACE RATING CONDITION & SUGGESTED IMPROVEMENT	
RATING	ACTION REQUIRED
10 – 9	No Maintenance Required
8	Little or No Maintenance Required
7	Crack Filling
6 - 5	Preservative Treatment (sealcoat)
4 – 3	Structural Improvement (overlay or recycling)
2 - 1	Reconstruction

TABLE 2 CONCRETE SURFACE RATING CONDITION & SUGGESTED IMPROVEMENT	
RATING	ACTION REQUIRED
10 – 9	No Maintenance Required
8	Little or No Maintenance Required
7	Joint Sealing
6 - 5	Preservative Treatment (patching/joint repair/crack filling)
4 – 3	Structural Improvement (overlay or slab replacement)
2 - 1	Reconstruction

TABLE 3 GRAVEL SURFACE RATING CONDITION & SUGGESTED IMPROVEMENT	
RATING	ACTION REQUIRED
5 – 4	Routine Maintenance
3	Minor Ditching/Add Gravel
2	Add Gravel/Drainage Improvement
1	Reconstruction

Based on these suggested treatment actions, a rudimentary needs analysis can be generated. A rudimentary needs analysis provides an estimate of all pavement needs as indicated by existing pavement ratings (unconstrained). Appendix C contains the rudimentary needs analysis for the City of Tomahawk.

The rudimentary needs analysis categorizes need into two categories: capital and maintenance. Capital improvements are those that significantly extend service life. Examples of capital improvements are resurfacing, mill and overlay, and reconstruction. Maintenance improvements help preserve roads, but a typical application does not significantly extend service life. Examples of maintenance improvement are joint and crack sealing, patching and sealcoating.

The first page of the analysis shows a capital improvement need of \$724,528 associated with 8.36 miles of roadway and maintenance need of \$ 292,252 associated with 16.88 miles of roadway. A breakdown by street is also included.

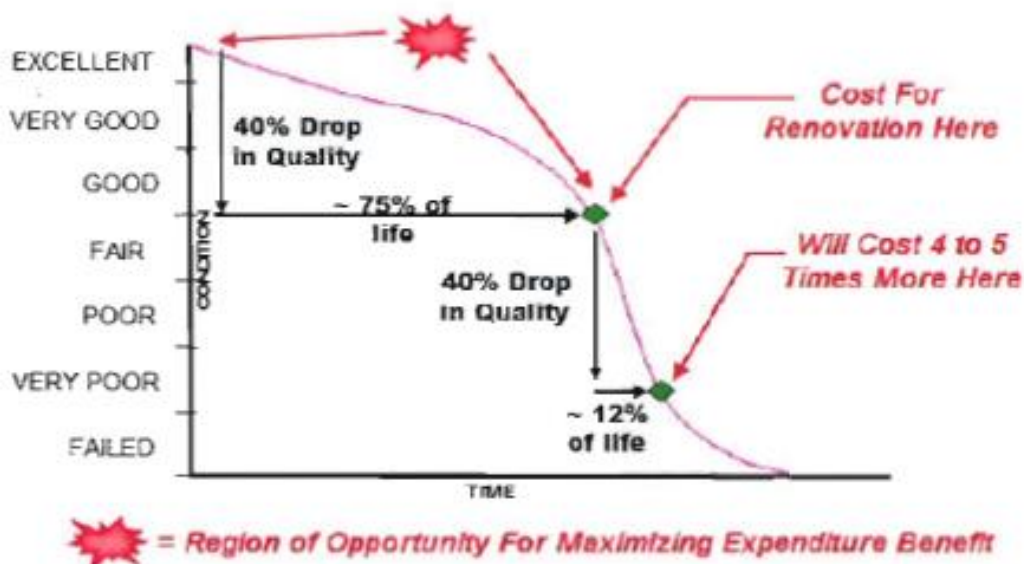
PROJECT PRIORITIZATION

WISLR prioritization emphasizes treating pavements in the “region of opportunity” (see Figure 4) because pavements in this condition range can typically be maintained at a much lower cost per year of service life extension. However, the WISLR model also places priority on roadway classification, recognizing that the most important roads in poor to failed condition can’t be ignored. The combined effect of this dual-priority

approach is intended to select projects based on both cost-effectiveness and importance to overall system function.

FIGURE 4

Typical Pavement Condition Life Cycle



Source: WisDOT

This approach provides a reasonable starting point for programming within a constrained budget. Ultimately project selection will need to incorporate other important factors not included in the WISLR data such as safety, utilities, roughness, etc.

The intent of the WISLR pavement analysis tool is to provide abundant pavement condition and budget impact information in order to aid in project selection and in order to help substantiate budget levels.

CHAPTER IV ROADWAY PRACTICES AND RECOMMENDED IMPROVEMENTS

GENERAL MAINTENANCE AND IMPROVEMENT PRACTICES

The maintenance and improvement of local roads is critical to having a sustainable roadway system. Building good roads result in longer lasting roads.

Building good roads is basic to having a local roadway system that will carry vehicles safely and efficiently, and that save money by lowering future improvement costs. What are some of the basic concepts of building good roads that will last? Below is a list of ten basic concepts to follow when building roads.

1. Get water away from the road. Good drainage is critical to making a good road. It has been estimated that nearly 90% of a road's problems can be attributed to excess water or to poor water drainage. Effective drainage systems divert, drain, and dispose of water along a roadway. These drainage systems use interceptor ditches and slopes, roadway crowns, and ditch and culvert systems. Interceptor ditches, located between the road and higher ground, divert the water by sloping away from the road so that the water does not reach the roadway. Crowning a roadway assists in moving water off the roadway to the interceptor ditch. Typically, a gravel roadway crown should be ½" higher than the shoulder for each foot of width from the centerline to the edge. A paved road crown should be ¼" higher than the shoulder for each foot of width from the centerline to the edge. Too much water remaining on a roadway surface, or in the subbase and subgrade combine with the action of traffic to create potholes, cracks, and pavement failure. Ditches and culverts dispose of water by carrying it away from the road structure. Ditches should be one foot lower than the base of the road. Improper drainage can allow water to seep under the roadway creating the potential for future roadway failures. A rule of thumb is that one-dollar spent on proper roadway drainage will save two dollars on maintenance.
2. Building a firm foundation. A road's foundation is important to the life of your road. A road wears out from the top down but falls apart from the bottom. The subgrade and subbase layer of a road support the entire roadway and traffic using it.
3. Use the best material. When it comes to using materials in the construction or improvement of a road, you will either "pay for it now or later." The selection of materials for the project will determine how long a road may last. Inferior materials may cause premature improvements or life long maintenance to the road. Crushed aggregate is the best material for a base course as the sharp edges interlock when compacted. Rounded aggregate is a poor base course as they will move under the weight of traffic.

4. Compact all layers. Generally, the more densely a material is compacted, the stronger it is. The compaction also helps prevent water moving in and throughout the subbase layer of the roadway. This helps prevent frost heaving and premature deterioration of the roadway. Using gravel with a mix of sizes (well-graded aggregate) allows smaller particles to fill-in the voids created by larger particles.
5. Design for traffic loads and volumes. A road should be designed to carry the highest anticipated load. If this load is unknown, the road should be designed to carry the largest maintenance equipment that will be used on the road. A well-constructed and maintained asphalt road should last 20 years without major repairs or reconstruction. One truck with 9 tons on a single rear axle does as much damage to a road as nearly 10,000 cars!
6. Design for maintenance. Design your road so that it may be easily maintained by having adequate ditches that can be cleaned regularly, culverts that are marked for future maintenance activities, an area where snow can be plowed onto, proper slopes of the roadway and ditches, ditches that are planted to prevent erosion, and ditches that can be mowed safely.
7. Pave only when ready. Every road does not have to be an asphalt road. Laying asphalt on an existing roadway will not fix a gravel road that is failing. Adequate crushed aggregate, drainage, and proper compaction must be in place to support the longevity of an asphalt road. Depending on the subgrade soils of any road, a recommended minimum subbase depth of crushed stone is 10”.
8. Build from the bottom up. Do not waste material on a top dress or resurface if the problem is actually a subbase or subgrade problem. This method does not correct the problem and will result in unwisely spent funds. Choosing an improvement technique that gets to the root of the problem will be the only thing that makes the roadway better.
9. Protect your investment. The local road system often is the City’s largest investment. These maintenance activities are critical to the longevity of a local road:

Surface Grade, shape, patch, seal crack, control dust, remove ice and snow;

Drainage Clean and repair ditches and culverts, remove excess debris;

Roadside Cut brush, trim trees and roadside plantings, control erosion; and

Traffic Service Clean and repair or replace signs.

10. Keep good records. Knowing each road's construction, life, and repair history makes it easier to plan and budget for future improvements.

The ten basic concepts discussed above will assist in providing a good roadway system that will be more popular with the local citizens and will likely assist in making the transportation improvement budget cover more miles of road in a given year.

RECOMMENDED FIVE-YEAR IMPROVEMENT SCHEDULE

The 5-year work program is based on a budget constraint of \$100,000 each year and consultation with the Department of Public Works as to roads they anticipate needing attention over the next five years.

**CITY OF TOMAHAWK
PAVEMENT REHABILITATION SCHEDULE
YEAR ONE**

On Route	At Route	At	Offset	Toward	Route	To	Offset	Length	Width	Surf	Yr	Yr	Action	Cost	Pvmt	Rtg
Anna St	STH 86		0	S	Wilson St		422	422	20	70	7	7	Crack Sealing	384		
Anna St	S Wilson St		0	S	McKinley St		264	264	20	70	7	7	Crack Sealing	240		
Birchwood Ave	N 4th St, Leather St		634	Termini			2640	2006	22	70	6	7	Single Sealcoat	4180		
Bradley Farm Rd	School Rd		0	Kings Rd			1320	1320	24	70	7	7	Crack Sealing	1443		
Bradley Farm Rd	STH 86		0	School Rd			687	687	26	70	7	7	Crack Sealing	813		
Bridge St	Bronstead Ave		0	Curve St			317	317	34	70	7	7	Crack Sealing	490		
Brief St	CTH S, Southgate Dr		0	Theiler Dr			370	370	22	70	7	7	Crack Sealing	370		
Curve St	Bridge St		264	Leather St, Piper St			528	264	34	70	7	7	Crack Sealing	408		
Curve St	Bridge St		0	Leather St, Piper St			264	264	24	70	7	7	Crack Sealing	288		
Deer Haven Dr	Kaphaem Rd		0	Termini			1003	1003	20	70	7	7	Crack Sealing	913		
Deer Park Rd	N 4th St		1901	Termini			3643	1742	22	70	7	7	Crack Sealing	2400		
Deer Park Rd	N 4th St		3643	Termini			4541	898	16	70	7	7				
E Lincoln Ave	N 4th St, W Lincoln Ave		0	N 6th St			740	740	40	70	7	7	Crack Sealing	1348		
E Lincoln Ave	N 6th St		0	N 8th St			740	740	40	70	7	7	Crack Sealing	1348		
E Lincoln Ave	N 9th St		582	Kings Rd, E Park Ave			1162	580	40	70	7	7	Crack Sealing	1056		
E Lincoln Ave	N 8th St		0	Kings Rd, E Park Ave			952	952	40	70	6	7	Single Sealcoat	3554		
E Mohawk Dr	N 4th St, W Mohawk Dr		0	Willow Ln			1373	1373	22	70	7	7	Crack Sealing	1375		
E Wisconsin Ave	Termini		0	N 8th St, S 8th St			264	264	36	70	7	7	Crack Sealing	432		
E Wisconsin Ave	N 8th St, S 8th St		0	Termini			264	264	36	70	7	7	Crack Sealing	432		
Freedom Trl	CTH A		0	Termini			956	956	24	70	7	7	Crack Sealing	1045		
Kaphaem Rd	Theiler Dr		0	CrassRd, KaphaemRd			2957	2957	22	70	6	7	Single Sealcoat	6347		
Kings Hill Dr	Riverview Ln		0	Pine View Ln			475	475	20	55	7	7	Crack Sealing	432		
Kings Hill Dr	Pine View Ln		0	Termini			475	475	20	70	7	7	Crack Sealing	432		
Kings Rd	E Lincoln Ave, E Park Ave		0	School Rd			2059	2059	36	70	7	7	Crack Sealing	3376		
Lake Dr	North Ave, W Spirit Ave		0	Termini			634	634	16	70	7	7	Crack Sealing	462		
Leather St	Marks St		0	Curve St, Piper St			2640	2640	34	70	7	7	Crack Sealing	4088		
Leather St	N 4th St, Birchwood Ave		0	Marks St			1056	1056	32	70	7	7	Crack Sealing	1539		
Leather St	Curve St, Piper St		0	Termini			1743	1743	24	70	7	7	Crack Sealing	1905		
N 2nd St	W Somo Ave, STH 86		0	S 2nd St, W Wis Ave			370	370	40	70	5	6	Sealcoat w/Patching	3353		
N 3rd St	W Somo Ave, STH 86		0	S 3rd St, W Wis Ave			370	370	40	70	5	6	Sealcoat w/Patching	3353		
N 5th St	E Lincoln Ave		0	E River St			740	740	40	70	7	7	Crack Sealing	1348		
N 5th St	S 5th St, E Wisconsin Ave		0	E Somo Ave, STH 86			370	370	40	70	7	7	Crack Sealing	674		
N 5th St	E Somo Ave, STH 86		0	E Washington Ave			370	370	40	70	7	7	Crack Sealing	674		

**CITY OF TOMAHAWK
PAVEMENT REHABILITATION SCHEDULE
YEAR THREE**

On Route	At Route	At	To		Surf	Pvm Rtg	Action	Cost
			Offset	Toward Route				
Cedar Ave	Voerman St	0	Termini	898	22 70	5	6 Sealcoat w/Patching	4477
Cooks Cir	Chandler St	0	Termini	422	22 70	5	6 Sealcoat w/Patching	2103
E River St	N 6th St	370	N 5th St	792	40 70	5	6 Sealcoat w/Patching	3825
E Washington Ave	N 6th St	0	N 7th St	370	40 70	5	6 Sealcoat w/Patching	3353
E Washington Ave	N 7th St	0	N 8th St	370	40 70	5	6 Sealcoat w/Patching	3353
Forest Pl	Marinette St	0	Conservation St	422	34 70	5	6 Sealcoat w/Patching	3251
N 3rd St	W River St	370	W Lincoln Ave	1109	40 70	5	6 Sealcoat w/Patching	6699
N 6th St	E Prospect Ave	0	E River St	370	40 70	5	6 Sealcoat w/Patching	3353
N 7th St	E Somo Ave, STH 86	0	E Washington Ave	370	40 70	5	6 Sealcoat w/Patching	3353
Old Bridge St	Bridge St	0	Murphy Ave, Nelson	950	24 57	5	6 Sealcoat w/Patching	5462
Oneida Dr	N 4th St	0	Termini	475	22 70	5	6 Sealcoat w/Patching	2427
Pine Ave	Pfeifer Rd	0	Termini	686	16 55	5	6 Sealcoat w/Patching	2486
Pine Ridge Ln	STH 86	0	Termini	1214	22 70	5	6 Sealcoat w/Patching	6052
Pine Ridge Ln	STH 86	1214	Termini	1795	24 55	5	6 Sealcoat w/Patching	3232
S 2nd St	W Rice Ave	0	W Spirit Ave	370	40 70	5	6 Sealcoat w/Patching	3353
S 3rd St	W Rice Ave	0	W Spirit Ave	370	40 70	5	6 Sealcoat w/Patching	3353
S 4th St	N 4th St, E Wis Ave, I	370	E Spirit/W Spirit Ave	1109	40 55	5	6 Sealcoat w/Patching	6699
S 4th St	N 4th St, E Wis Ave, I	0	E Spirit/W Spirit Ave	370	40 70	5	6 Sealcoat w/Patching	3353
S 8th St	N 8th St, E Wis Ave	0	Termini	317	40 70	5	6 Sealcoat w/Patching	2872
S Wilson St	W Putnam St	0	Anna St	528	22 70	5	6 Sealcoat w/Patching	2730
Spruce Ave	Voerman St	422	Termini	1162	22 70	5	6 Sealcoat w/Patching	3688
Swan Ave	W Mohawk Dr	0	Termini	1109	20 70	5	6 Sealcoat w/Patching	5026
W Prospect Ave	N 4th St, E Prospect	0	N 2nd St	740	40 70	5	6 Sealcoat w/Patching	6707
W Putnam St	S Roosevelt St	0	Coolidge St	370	22 70	5	6 Sealcoat w/Patching	1913
W Spirit Ave	Railway St	0	Lake Dr, North Ave	686	30 70	5	6 Sealcoat w/Patching	4663
Water Works Rd	STH 86	0	Termini	528	20 70	5	6 Sealcoat w/Patching	2491
								<u>\$100,274</u>

**CITY OF TOMAHAWK
PAVEMENT REHABILITATION SCHEDULE
YEAR FOUR**

On Route	At Route	At	Offset	Toward Route	To	Offset	Length	Width	Surf	Pvm/Rtg			Cost
										Yr 1	Yr 5	Action	
Bradley Farm Rd	Kings Rd	0	Termini	106	106	20	55	5	6	Sealcoat w/Patching		479	
Bridge St	Tannery Rd, CTH CC	0	Bronstead Ave	4647	4647	24	70	8	7	Crack Sealing		5080	
E Mohawk Dr	Willow Ln	1003	Bowens Rd	3696	2693	22	70	4	9	Resurfacing		37748	
E Wisconsin Ave	N 5th St, S 5th St		N 4th St, S 4th St,										
Kings Hill Dr	Kings Rd	0	W Wis Ave	317	317	22	70	5	6	Sealcoat w/Patching		1578	
S Roosevelt St	W Putnam St	310	Riverview Ln	370	370	22	70	5	6	Sealcoat w/Patching		1890	
Wheeler Rd	Bridge St	0	Anna St	634	324	22	70	5	6	Sealcoat w/Patching		1676	
			Termini	2851	2851	18	70	4	9	Resurfacing		38018	
												<u>\$86,469</u>	

**CITY OF TOMAHAWK
PAVEMENT REHABILITATION SCHEDULE
YEAR FIVE**

On Route	At Route	At	Offset	Toward Route	To	Length	Width	Surf Type	Yr 1	Yr 5	Action	Pvmt Rtg	Cost
Armory Dr	Theiler Dr		0	Termini		528	20	70	8	8	7 Crack Sealing		480
Bay Mill Rd	Bay Mill Rd, Bay Mill Rd		739	Jersey Ln		1584	20	70	4	4	9 Resurfacing		17916
Charlotte St	STH 86		0	Cheryl Ave		1268	24	70	8	8	7 Crack Sealing		1386
Cheryl Ave	Termini		0	Termini		422	25	70	8	8	7 Crack Sealing		480
Comfort Dr	N Kaphaem Rd		0	Termini		974	28	70	8	8	7 Crack Sealing		1242
E Mohawk Dr	Bowens Rd		0	Cash Rd		1637	26	70	4	4	9 Resurfacing		26651
E Park Ave	N 9th St		264	Kings Rd, E Lincoln A		1214	40	70	8	8	7 Crack Sealing		1731
E Prospect Ave	N 7th St		0	N 5th St		792	40	70	8	8	7 Crack Sealing		1443
E Prospect Ave	N 5th St		0	N 4th St, W Prospect		317	42	70	8	8	7 Crack Sealing		606
Esker Heights Dr	Charles Ave		0	Termini		1584	24	70	8	8	7 Crack Sealing		1731
Jersey Ln	Tannery Rd		0	Bridge St		1848	20	70	8	8	7 Crack Sealing		1683
Kaphaem Rd	N Kaphaem Rd, STH 86		0	Theiler Dr		3380	22	70	8	8	7 Crack Sealing		3387
Marinette St	Termini		0	North Ave		211	24	70	8	8	7 Crack Sealing		230
Martin Dr	Esker Heights Dr		0	Termini		581	24	70	8	8	7 Crack Sealing		635
Mary St W	STH 86		0	S Wilson St		264	22	70	8	8	7 Crack Sealing		264
N 4th St	S 4th St, E Wisconsin Ave, '1		0	E Somo Ave, W Somc		307	45	70	8	8	7 Crack Sealing		629
N 7th St	E Lincoln Ave		0	E Prospect Ave		370	40	70	8	8	7 Crack Sealing		674
N 8th St	S 8th St, E Wisconsin Ave		0	E Somo Ave, STH 86		686	30	70	4	4	9 Resurfacing		11635
N Kaphaem Rd	Kaphaem Rd, STH 86		0	Comfort Dr		565	28	70	8	8	7 Crack Sealing		720
Nelson Ln	Division St		0	Termini		581	16	35	3	3	4 Add Stone+Regrade		1269
North Ave	Lake Dr, W Spirit Ave		0	Randall St		951	20	70	8	8	7 Crack Sealing		866
Pine Notch	Pine View Ln		0	Termini		327	24	70	8	8	7 Crack Sealing		357
Railway St	W Wisconsin Ave		0	W Spirit Ave		370	34	70	8	8	7 Crack Sealing		572
Railway St	W Spirit Ave		0	W Rice Ave		370	34	70	8	8	7 Crack Sealing		572
S 4th St	E Spirit Ave, W Spirit Ave		0	W Merrill Ave		1109	40	70	8	8	7 Crack Sealing		2020
S Roosevelt St	W Putnam St		0	Anna St		310	24	70	8	8	7 Crack Sealing		338
S Roosevelt St	Anna St		0	Termini		264	24	70	8	8	7 Crack Sealing		288
S Wilson St	W Mill St		0	Mary St W		264	22	70	8	8	7 Crack Sealing		264
S Wilson St	W Mill St		264	Mary St W		528	24	70	8	8	7 Crack Sealing		288
School Rd	E Somo Ave, STH 86		0	Bradley Farm Rd		1478	24	70	8	8	7 Crack Sealing		1615

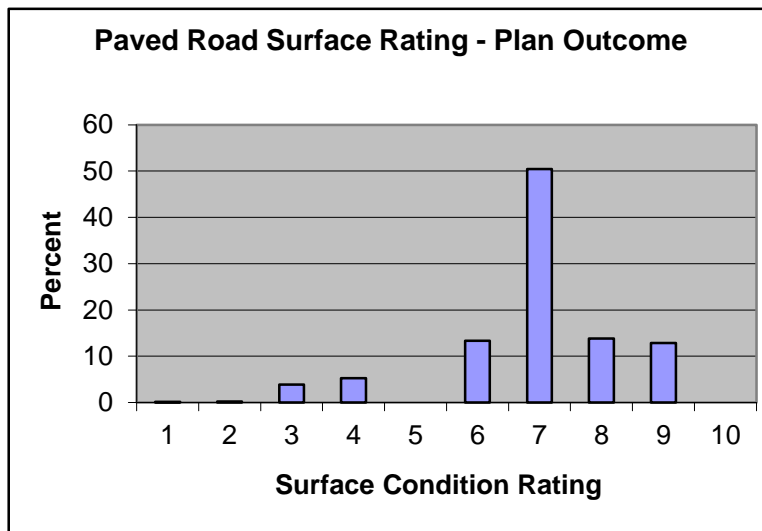
PLAN OUTCOMES

The WISLR Pavement Analysis Tool contains a mechanism to measure effectiveness of a budget plan by providing an assessment of system pavement condition before and after the plan's proposed improvements along with an estimate of the unmet backlog of needs associated with that budget.

The average pavement condition of the City of Tomahawk street system is a PASER rating of 6.28 as of the 2013 pavement surface condition inventory. This is indicative of a structurally sound, but aging street network.

After running the proposed 5-year improvement program through the Pavement Analysis Tool, the average PASER rating of the Tomahawk street system is shown to increase to 6.47. Figure 5 shows the percentage of paved streets in each rating for comparison to Figure 2.

FIGURE 5



The initial need identified totals \$1,016,780. After the proposed \$500,000 program the backlog of unmet need has decreased to \$573,420.

APPENDIX A - WISLR Road Inventory

County - Municipal Code	Pavement Rating and Year	Surface			On Route		At Route			Toward Route			Section Length	Local ID (Optional Field)
		Type	Year	Width	Units (F = Feet/ M = Miles)	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	At Offset	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	Toward Offset (Optional Field)		
35286	6 (2013)	70	1981	40	F	N 2nd St		W Prospect Ave	370		W Lincoln Ave	0	369	n/a
35286	6 (2013)	70	1993	40	F	N 2nd St		W Lincoln Ave	0		W Washington Ave	0	370	n/a
35286	6 (2013)	70	1992	40	F	N 2nd St		W Washington Ave	0		W Somo Ave	0	370	n/a
35286	5 (2013)	70	1991	40	F	N 2nd St		W Somo Ave	0		S 2nd St	0	370	n/a
35286	4 (2013)	70	1971	40	F	S 2nd St		W Merrill Ave	0		W Rice Ave	0	370	n/a
35286	5 (2013)	70	1971	40	F	S 2nd St		W Rice Ave	0		W Spirit Ave	0	370	n/a
35286	9 (2013)	70	2010	40	F	S 2nd St		W Spirit Ave	0		N 2nd St	0	422	n/a
35286	5 (2013)	70	1981	40	F	N 3rd St		W River St	370		W Prospect Ave	0	369	n/a
35286	6 (2013)	70	1981	40	F	N 3rd St		W Prospect Ave	0		W Lincoln Ave	0	370	n/a
35286	6 (2013)	70	1994	40	F	N 3rd St		W Lincoln Ave	0		W Washington Ave	0	370	n/a
35286	6 (2013)	70	1994	40	F	N 3rd St		W Washington Ave	0		W Somo Ave	0	370	n/a
35286	5 (2013)	70	1991	40	F	N 3rd St		W Somo Ave	0		S 3rd St	0	370	n/a
35286	4 (2013)	70	1971	40	F	S 3rd St		W Merrill Ave	0		W Rice Ave	0	370	n/a
35286	5 (2013)	70	1971	40	F	S 3rd St		W Rice Ave	0		W Spirit Ave	0	370	n/a
35286	9 (2013)	70	2010	38	F	S 3rd St		W Spirit Ave	0		N 3rd St	0	370	n/a
35286	8 (2013)	70	2005	45	F	N 4th St		S 4th St	0		E Somo Ave	0	307	n/a
35286	8 (2013)	70	1971	49	F	N 4th St		S 4th St	307		E Somo Ave	0	63	n/a
35286	10 (2013)	70	2013	40	F	N 4th St		E Somo Ave	0		E Washington Ave	0	370	n/a
35286	10 (2013)	70	2013	40	F	N 4th St		E Washington Ave	0		E Lincoln Ave	0	370	n/a
35286	10 (2013)	70	2013	40	F	N 4th St		E Lincoln Ave	0		E Prospect Ave	0	370	n/a
35286	10 (2013)	70	2013	40	F	N 4th St		E Prospect Ave	0		E River St	0	370	n/a
35286	9 (2013)	70	2011	52	F	N 4th St		E River St	0		Deer Park Rd	0	1109	n/a
35286	9 (2013)	70	2011	52	F	N 4th St		Deer Park Rd	0		Birchwood Ave	0	1003	n/a
35286	9 (2013)	70	2011	52	F	N 4th St		Birchwood Ave	0		E Mohawk Dr	0	2640	n/a
35286	9 (2013)	70	2011	24	F	N 4th St		E Mohawk Dr	0		Oneida Dr	0	1954	n/a
35286	9 (2013)	70	2011	24	F	N 4th St		Oneida Dr	0		CTH A	0	686	n/a
35286	5 (2013)	70	1980	40	F	S 4th St		N 4th St	0		E Spirit Ave	0	370	n/a
35286	5 (2013)	55	2000	40	F	S 4th St		N 4th St	370		E Spirit Ave	0	739	n/a
35286	8 (2013)	70	2000	40	F	S 4th St		E Spirit Ave	0		E Rice Ave	0	370	n/a
35286	8 (2013)	70	2000	40	F	S 4th St		E Rice Ave	0		W Merrill Ave	0	739	n/a
35286	7 (2013)	70	1995	40	F	N 5th St		S 5th St	0		E Somo Ave	0	370	n/a
35286	7 (2013)	70	1970	40	F	N 5th St		E Somo Ave	0		E Washington Ave	0	370	n/a
35286	7 (2013)	70	1996	40	F	N 5th St		E Washington Ave	0		E Lincoln Ave	0	370	n/a
35286	7 (2013)	70	1988	40	F	N 5th St		E Lincoln Ave	0		E Prospect Ave	0	370	n/a
35286	7 (2013)	70	1988	40	F	N 5th St		E Prospect Ave	0		E River St	0	370	n/a
35286	7 (2013)	70	1998	37	F	S 5th St		E Rice Ave	370		E Spirit Ave	0	316	n/a
35286	7 (2013)	70	1998	40	F	S 5th St		E Spirit Ave	0		N 5th St	0	370	n/a
35286	4 (2013)	70	1998	40	F	N 6th St		S 6th St	0		E Somo Ave	0	370	n/a
35286	4 (2013)	70	1971	36	F	N 6th St		E Somo Ave	0		E Washington Ave	0	370	n/a
35286	4 (2013)	70	1971	36	F	N 6th St		E Washington Ave	0		E Lincoln Ave	0	370	n/a
35286	8 (2013)	70	1977	40	F	N 6th St		E Lincoln Ave	0		E Prospect Ave	0	370	n/a
35286	5 (2013)	70	1977	40	F	N 6th St		E Prospect Ave	0		E River St	0	370	n/a
35286	8 (2013)	70	1998	36	F	S 6th St		E Spirit Ave	739		N 6th St	0	370	n/a
35286	6 (2013)	70	1987	40	F	N 7th St		E Wisconsin Ave	369		E Somo Ave	0	370	n/a
35286	5 (2013)	70	1983	40	F	N 7th St		E Somo Ave	0		E Washington Ave	0	370	n/a
35286	8 (2013)	70	2007	40	F	N 7th St		E Lincoln Ave	0		E Prospect Ave	0	370	n/a

Note: If Previous Pavement Rating and Year column blank, previous submitted rating incompatible with surface type OR no rating data available.

County - Municipal Code	Pavement Rating and Year	Surface		On Route		At Route		Toward Route			Section Length	Local ID (Optional Field)		
		Type	Year	Width	Units (F = Feet/ M = Miles)	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)			Municipal Location	Toward Offset (Optional Field)
35286	4 (2013)	70	1981	40	F	N 7th St		E Prospect Ave		0	Termini	0	211	n/a
35286	4 (2013)	70	1993	30	F	N 8th St		S 8th St		0	E Somo Ave	0	686	n/a
35286	4 (2013)	70	1979	38	F	N 8th St		E Somo Ave		0	E Washington Ave	0	370	n/a
35286	4 (2013)	70	1979	38	F	N 8th St		E Washington Ave		0	E Lincoln Ave	0	370	n/a
35286	5 (2013)	70	1983	40	F	S 8th St		N 8th St		0	Termini	0	317	n/a
35286	4 (2013)	70	1979	40	F	N 9th St		E Somo Ave		0	E Washington Ave	0	370	n/a
35286	3 (2013)	70	1979	40	F	N 9th St		E Washington Ave		0	E Lincoln Ave	0	370	n/a
35286	8 (2013)	70	1985	42	F	N 9th St		E Lincoln Ave		0	E Park Ave	0	264	n/a
35286	6 (2013)	70	1984	24	F	N 10th St		E Somo Ave		0	Termini	0	264	n/a
35286	6 (2013)	70	1995	22	F	E Acres Dr		Bradley Farm Rd		0	Termini	0	211	n/a
35286	3 (2013)	70	1994	22	F	Ada St		Collins St		0	Termini	0	158	n/a
35286	7 (2013)	70	1996	20	F	Anna St		STH 86		0	S Wilson St	0	422	n/a
35286	7 (2013)	70	1999	20	F	Anna St		S Wilson St		0	S McKinley St	0	264	n/a
35286	6 (2013)	70	1993	20	F	Anna St		S McKinley St		0	S Roosevelt St	0	317	n/a
35286	6 (2013)	70	1993	20	F	Anna St		S Roosevelt St		0	Coolidge St	0	317	n/a
35286	8 (2013)	70	2007	20	F	Armory Dr		Theiler Dr		0	Termini	0	528	n/a
35286	4 (2013)	70	1979	20	F	Bay Mill Rd	35004	Bay Mill Rd (1)	739	0	Jersey Ln	0	1584	n/a
35286	4 (2013)	70	1989	20	F	Birch Ave	35004	Pfeifer Rd	0	0	Termini	0	528	n/a
35286	6 (2013)	70	1989	18	F	Birchwood Ave		N 4th St	0	0	Termini	0	634	n/a
35286	6 (2013)	70	2001	22	F	Birchwood Ave		N 4th St	634	0	Termini	0	2006	n/a
35286	6 (2013)	70	1993	22	F	Bliss St		Termini	0	0	Leather St	0	317	n/a
35286	9 (2013)	70	2010	22	F	Bliss St		Leather St	0	0	Vena Ave	0	634	n/a
35286	6 (2013)	70	1992	20	F	Bowens Rd		E Mohawk Dr	0	0	Termini	0	1056	n/a
35286	7 (2013)	70	2008	26	F	Bradley Farm Rd		STH 86	0	0	E Acres Dr	0	317	n/a
35286	7 (2013)	70	2008	26	F	Bradley Farm Rd		E Acres Dr	0	0	School Rd	0	370	n/a
35286	7 (2013)	70	2007	24	F	Bradley Farm Rd		School Rd	0	0	Kings Rd	0	1320	n/a
35286	5 (2013)	55	1962	20	F	Bradley Farm Rd		Kings Rd	0	0	Termini	0	106	n/a
35286	8 (2013)	70	2010	24	F	Bridge St	35004	Tannery Rd	0	0	Jersey Ln	0	475	n/a
35286	8 (2013)	70	2010	24	F	Bridge St		Jersey Ln	0	0	Wheeler Rd	0	2482	n/a
35286	8 (2013)	70	2010	24	F	Bridge St		Wheeler Rd	0	0	Coey Ln	0	528	n/a
35286	8 (2013)	70	2010	24	F	Bridge St		Coey Ln	0	0	Old Bridge St	0	686	n/a
35286	8 (2013)	70	2010	24	F	Bridge St		Old Bridge St	0	0	Trimberger Ave	0	106	n/a
35286	8 (2013)	70	2010	24	F	Bridge St		Trimberger Ave	0	0	Bronstead Ave	0	370	n/a
35286	7 (2013)	70	2006	34	F	Bridge St		Bronstead Ave	0	0	Curve St	0	317	n/a
35286	4 (2013)	57	1962	24	F	Bridge St		Curve St	0	0	Leather St	0	370	n/a
35286	6 (2013)	70	1990	20	F	Bridge St		Leather St	0	0	Termini	0	264	n/a
35286	7 (2013)	70	2001	22	F	Brief St		CTH S	0	0	Theiler Dr	0	370	n/a
35286	3 (2013)	70	1980	22	F	Bronstead Ave		Bridge St	0	0	Piper St	0	292	n/a
35286	10 (2013)	70	2012	24	F	Cash Rd		E Mohawk Dr	0	0	CTH A	0	2640	n/a
35286	5 (2013)	70	1979	22	F	Cedar Ave		Voerman St	0	0	Termini	0	898	n/a
35286	9 (2013)	70	2011	22	F	Chandler St		STH 86	0	0	Cooks Cir	0	528	n/a
35286	9 (2013)	70	2011	22	F	Chandler St		Cooks Cir	0	0	Termini	0	792	n/a
35286	4 (2013)	70	1980	30	F	Charlene Ave		Cooks Cir	0	0	Termini	0	1003	n/a
35286	5 (2013)	57	1980	30	F	Charles Ave		Termini	0	0	Charlotte St	0	1056	n/a
35286	3 (2013)	70	1997	30	F	Charles Ave		Charlotte St	0	0	Esker Heights Dr	0	581	n/a
35286	3 (2013)	70	1997	30	F	Charles Ave		Esker Heights Dr	0	0	Southview Dr	0	158	n/a

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		Type	Year	Width		Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)		
35286	6 (2013)	70	1997	30	Charles Ave	Southview Dr	0	Termini	0	Termini	370	n/a
35286	8 (2013)	70	2004	24	Charlotte St	STH 86	0	Charlotte Ave	0	Charlotte Ave	528	n/a
35286	8 (2013)	70	2004	24	Charlotte St	Charlotte Ave	0	Charlotte Ave	0	Charlotte Ave	370	n/a
35286	8 (2013)	70	2004	24	Charlotte St	Charlotte Ave	0	Charlotte Ave	0	Charlotte Ave	370	n/a
35286	8 (2013)	70	2004	25	Cheryl Ave	Termini	0	Charlotte St	0	Charlotte St	158	n/a
35286	8 (2013)	70	2004	25	Cheryl Ave	Charlotte St	0	Termini	0	Termini	264	n/a
35286	3 (2013)	55	1959	16	Coey Ln	Bridge St	0	Nelson Ln	0	Nelson Ln	1003	n/a
35286	4 (2013)	70	1994	20	Collins St	Termini	0	Leather St	0	Leather St	264	n/a
35286	4 (2013)	70	1989	20	Collins St	Leather St	0	Ada St	0	Ada St	264	n/a
35286	4 (2013)	70	1989	20	Collins St	Ada St	0	Termini	0	Termini	264	n/a
35286	8 (2013)	70	2003	28	Comfort Dr	N Kaphaem Rd	0	Termini	0	Termini	974	n/a
35286	4 (2013)	57	1983	20	Conservation St	W Somo Ave	0	Forest Pl	0	Forest Pl	370	n/a
35286	4 (2013)	70	1976	20	Conservation St	Forest Pl	0	North Ave	0	North Ave	422	n/a
35286	5 (2013)	70	1984	22	Cooks Cir	Chandler St	0	Termini	0	Termini	422	n/a
35286	4 (2013)	70	1992	22	Coolidge St	W Putnam St	0	Anna St	0	Anna St	475	n/a
35286	4 (2013)	57	1981	20	Coolidge St	Anna St	0	Termini	0	Termini	158	n/a
35286	7 (2013)	70	1985	24	Curve St	Bridge St	264	Leather St	0	Leather St	264	n/a
35286	7 (2013)	70	2006	34	Curve St	Bridge St	0	Leather St	0	Leather St	264	n/a
35286	4 (2013)	35	1957	20	Dam Rd	Jersey Ln	0	Termini	0	Termini	264	n/a
35286	7 (2013)	70	1998	20	Deer Haven Dr	Kaphaem Rd	0	Termini	0	Termini	1003	n/a
35286	9 (2013)	70	2011	31	Deer Park Rd	N 4th St	0	Termini	0	Termini	1901	n/a
35286	7 (2013)	70	1989	22	Deer Park Rd	N 4th St	1901	Termini	0	Termini	1742	n/a
35286	7 (2013)	70	1989	16	Deer Park Rd	N 4th St	3643	Termini	0	Termini	898	n/a
35286	4 (2013)	70	1990	20	Division St	Nelson Ln	0	Termini	0	Termini	370	n/a
35286	5 (2013)	70	1983	22	Erickson Ln	CTH A	0	Termini	0	Termini	3062	n/a
35286	8 (2013)	70	2001	24	Esker Heights Dr	Charles Ave	0	Martin Dr	0	Martin Dr	1426	n/a
35286	5 (2013)	70	1988	34	Esker Heights Dr	Marinette St	0	Termini	0	Termini	158	n/a
35286	7 (2013)	70	2003	24	Freedom Trl	CTH A	0	Conservation St	0	Conservation St	422	n/a
35286	4 (2013)	70	1983	22	Henry St	STH 86	0	School Rd	0	School Rd	956	n/a
35286	6 (2013)	70	1979	20	E Hickey Ave	STH 86	0	Termini	0	Termini	686	n/a
35286	4 (2013)	70	1990	20	Hillcrest Dr	Theiler Dr	0	Termini	0	Termini	1267	n/a
35286	2 (2013)	70	2044	14	Iverson Rd	Kaphaem Rd	0	Termini	0	Termini	1954	n/a
35286	4 (2013)	70	1992	20	Jaacks Rd	Pfeifer Rd	0	Pride St	0	Pride St	317	n/a
35286	3 (2013)	70	1992	20	Jaacks Rd	Pride St	0	Vink St	0	Vink St	686	n/a
35286	3 (2013)	70	1992	20	Jaacks Rd	Vink St	0	Termini	0	Termini	211	n/a
35286	8 (2013)	70	2007	20	Jersey Ln	Tannery Rd	0	Dam Rd	0	Dam Rd	1690	n/a
35286	8 (2013)	70	2007	20	Jersey Ln	Dam Rd	0	Bridge St	0	Bridge St	158	n/a
35286	3 (2013)	70	1979	20	Jersey Ln	Bridge St	0	Bay Mill Rd	0	Bay Mill Rd	2006	n/a
35286	3 (2013)	70	1979	20	Jersey Ln	Bay Mill Rd	0	Termini	0	Termini	106	n/a
35286	8 (2013)	70	2001	22	Kaphaem Rd	N Kaphaem Rd	0	Iverson Rd	0	Iverson Rd	3010	n/a
35286	8 (2013)	70	2001	22	Kaphaem Rd	Kaphaem Rd	0	Theiler Dr	0	Theiler Dr	370	n/a
35286	6 (2013)	70	1995	22	Kaphaem Rd	Theiler Dr	0	Deer Haven Dr	0	Deer Haven Dr	898	n/a
35286	6 (2013)	70	1995	22	Kaphaem Rd	Deer Haven Dr	0	Cross Rd	0	Cross Rd	2059	n/a
35286	9 (2013)	70	2011	22	Kaphaem Rd	Deer Haven Dr	2059	Cross Rd	0	Cross Rd	634	n/a
35286	8 (2013)	70	2003	28	N Kaphaem Rd	Kaphaem Rd	0	Comfort Dr	0	Comfort Dr	565	n/a

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County - Municipal Code	Pavement Rating and Year	Surface		On Route		At Route		Toward Route		Section Length	Local ID (Optional Field)
		Type	Year	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	Municipal Location		
35286	5 (2013)	70	1995	Kings Hill Dr		Kings Rd		Riverview Ln	0	370	n/a
35286	7 (2013)	55	1998	Kings Hill Dr		Riverview Ln		Pine View Ln	0	475	n/a
35286	7 (2013)	70	1998	Kings Hill Dr		Pine View Ln		Termini	0	475	n/a
35286	7 (2013)	70	2002	Kings Rd		E Lincoln Ave		Bradley Farm Rd	0	1637	n/a
35286	7 (2013)	70	2002	Kings Rd		Bradley Farm Rd		School Rd	0	422	n/a
35286	3 (2013)	70	1986	Kings Rd		School Rd		Kings Hill Dr	0	3062	n/a
35286	3 (2013)	70	1990	Kings Rd		School Rd	3062	Kings Hill Dr	0	1056	n/a
35286	5 (2013)	57	1990	Kings Rd		Kings Hill Dr		Ralph Ln	0	2746	n/a
35286	7 (2013)	70	2001	Lake Dr		North Ave		Termini	0	634	n/a
35286	7 (2013)	70	2008	Leather St		N 4th St		Timn St	0	686	n/a
35286	7 (2013)	70	2008	Leather St		Timn St		Marks St	0	370	n/a
35286	7 (2013)	70	2006	Leather St		Marks St		Bliss St	0	1531	n/a
35286	7 (2013)	70	2006	Leather St		Bliss St		Collins St	0	792	n/a
35286	7 (2013)	70	2006	Leather St		Collins St		Curve St	0	317	n/a
35286	7 (2013)	70	1996	Leather St		Curve St		Bridge St	0	317	n/a
35286	7 (2013)	70	1996	Leather St		Bridge St		Termini	0	1426	n/a
35286	7 (2013)	70	1988	E Lincoln Ave		N 4th St		N 5th St	0	370	n/a
35286	7 (2013)	70	1988	E Lincoln Ave		N 5th St		N 6th St	0	370	n/a
35286	7 (2013)	70	1986	E Lincoln Ave		N 6th St		N 7th St	0	370	n/a
35286	7 (2013)	70	1986	E Lincoln Ave		N 7th St		N 8th St	0	370	n/a
35286	6 (2013)	70	1983	E Lincoln Ave		N 8th St		N 9th St	0	370	n/a
35286	6 (2013)	70	1983	E Lincoln Ave		N 9th St		Kings Rd	0	582	n/a
35286	7 (2013)	70	2003	E Lincoln Ave		N 9th St	582	Kings Rd	0	580	n/a
35286	6 (2013)	70	1988	E Lincoln Ave		N 4th St		N 3rd St	0	370	n/a
35286	6 (2013)	70	1988	E Lincoln Ave		N 3rd St		N 2nd St	0	370	n/a
35286	6 (2013)	70	1988	E Lincoln Ave		N 2nd St		N Tomahawk Ave	0	370	n/a
35286	8 (2013)	70	2005	Marinette St		Termini		North Ave	0	211	n/a
35286	4 (2013)	70	1983	Marinette St		North Ave		Forest Pl	0	264	n/a
35286	4 (2013)	70	1983	Marinette St		Forest Pl		W Somo Ave	0	422	n/a
35286	2 (2013)	35	1966	Marks St		Leather St		Termini	0	581	n/a
35286	8 (2013)	70	2001	Martin Dr		Esker Heights Dr		Termini	0	581	n/a
35286	8 (2013)	70	2008	Mary St W		STH 86		S Wilson St	0	264	n/a
35286	3 (2013)	35	1952	Mary St W		S Wilson St		Termini	0	158	n/a
35286	3 (2013)	55	1979	S McKinley St		W Putnam St		Anna St	0	581	n/a
35286	3 (2013)	70	1979	S McKinley St		Anna St		W Mill St	0	370	n/a
35286	3 (2013)	70	1979	S McKinley St		W Mill St		Termini	0	317	n/a
35286	8 (2013)	70	1997	Menominee St		W Mohawk Dr		Termini	0	792	n/a
35286	8 (2013)	70	2004	W Merrill Ave		STH 86		S 2nd St	0	422	n/a
35286	8 (2013)	70	2002	W Merrill Ave		S 2nd St		S 3rd St	0	317	n/a
35286	8 (2013)	70	2002	W Merrill Ave		S 3rd St		S 4th St	0	370	n/a
35286	2 (2013)	35	1962	Metz Dr		Pfeifer Rd		Termini	0	634	n/a
35286	7 (2013)	70	1996	W Mill St		STH 86		S Wilson St	0	264	n/a
35286	7 (2013)	70	1999	W Mill St		S Wilson St		S McKinley St	0	370	n/a
35286	7 (2013)	70	1999	E Mohawk Dr		N 4th St		Willow Ln	0	1373	n/a
35286	10 (2013)	70	2012	E Mohawk Dr		Willow Ln		Bowens Rd	0	1003	n/a
35286	4 (2013)	70	1987	E Mohawk Dr		Willow Ln	1003	Bowens Rd	0	2693	n/a

Note: If Previous Pavement Rating and Year column blank, previous submitted rating incompatible with surface type OR no rating data available.

County - Municipal Code	Pavement Rating and Year	Surface			On Route	At Route		Toward Route			Local ID (Optional Field)	
		Type	Year	Width		Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)		Toward Offset (Optional Field)
35286	4 (2013)	70	1992	26	E Mohawk Dr		Bowens Rd	0	Cash Rd	0	1637	n/a
35286	3 (2013)	70	1991	20	E Mohawk Dr		Cash Rd	0	Termini	0	1848	n/a
35286	8 (2013)	70	2003	26	W Mohawk Dr		N 4th St	0	Swan Ave	0	528	n/a
35286	8 (2013)	70	2003	26	W Mohawk Dr		Menominee St	0	Menominee St	0	264	n/a
35286	8 (2013)	70	2003	26	W Mohawk Dr		Menominee St	0	Termini	0	1742	n/a
35286	10 (2013)	70	2013	14	Morren St		STH 86	0	Pleasant Ave W	0	581	n/a
35286	3 (2013)	35	2002	16	Murphy Ave		Nelson Ln	0	Old Bridge St	0	898	n/a
35286	3 (2013)	57	1971	20	Nelson Ln		Murphy Ave	0	Coey Ln	0	264	n/a
35286	3 (2013)	57	1971	20	Nelson Ln		Coey Ln	0	Division St	0	475	n/a
35286	3 (2013)	35	1952	16	Nelson Ln		Division St	0	Termini	0	581	n/a
35286	8 (2013)	70	2005	20	North Ave		Lake Dr	0	Conservation St	0	264	n/a
35286	8 (2013)	70	2005	20	North Ave		Conservation St	0	Marinette St	0	370	n/a
35286	8 (2013)	70	2005	20	North Ave		Marinette St	0	Marinette St	0	53	n/a
35286	8 (2013)	70	2005	20	North Ave		Marinette St	0	Randall St	0	264	n/a
35286	4 (2013)	35	2005	16	North Ave		Randall St	0	Termini	0	106	n/a
35286	3 (2013)	30	1986	14	Oakland Ave		Pfeifer Rd	0	Termini	0	370	n/a
35286	5 (2013)	57	1985	24	Old Bridge St		Bridge St	0	Murphy Ave	0	195	n/a
35286	5 (2013)	57	1985	24	Old Bridge St		Murphy Ave	0	Murphy Ave	0	755	n/a
35286	5 (2013)	70	1995	22	Oneida Dr		N 4th St	0	Termini	0	475	n/a
35286	8 (2013)	70	2003	40	E Park Ave		N 9th St	264	Kings Rd	0	950	n/a
35286	9 (2013)	70	2011	20	Pfeifer Rd		STH 86	0	Jaacks Rd	0	1320	n/a
35286	3 (2013)	70	1989	18	Pfeifer Rd		Jaacks Rd	0	Metz Dr	0	1690	n/a
35286	3 (2013)	70	1989	18	Pfeifer Rd		Metz Dr	0	Pfeifer Rd	0	317	n/a
35286	3 (2013)	70	1989	16	Pfeifer Rd		Birch Ave	0	Oakland Ave	0	211	n/a
35286	3 (2013)	57	1989	18	Pfeifer Rd		Birch Ave	211	Oakland Ave	0	211	n/a
35286	8 (2013)	57	1989	18	Pfeifer Rd		Oakland Ave	0	Termini	0	346	n/a
35286	8 (2013)	70	1989	24	Pfeifer Rd		Oakland Ave	346	Termini	0	1186	n/a
35286	5 (2013)	55	1954	16	Pine Ave		Pfeifer Rd	0	Termini	0	686	n/a
35286	8 (2013)	70	2005	24	Pine Notch		Pine View Ln	0	Termini	0	327	n/a
35286	5 (2013)	70	1990	22	Pine Ridge Ln		STH 86	0	Termini	0	1214	n/a
35286	5 (2013)	55	2000	24	Pine Ridge Ln		STH 86	1214	Termini	0	581	n/a
35286	7 (2013)	70	1994	24	Pine View Ln		Termini	0	Pine Notch	0	477	n/a
35286	7 (2013)	70	1998	20	Pine View Ln		Pine Notch	0	Kings Hill Dr	0	528	n/a
35286	3 (2013)	57	1980	22	Piper St		Bronstead Ave	0	Termini	0	342	n/a
35286	3 (2013)	35	2047	20	Piper St		Termini	0	Curve St	0	106	n/a
35286	3 (2013)	35	1957	16	Piper St		Curve St	0	Termini	0	528	n/a
35286	4 (2013)	70	1989	20	Pleasant Ave W		STH 86	0	Morren St	0	211	n/a
35286	4 (2013)	70	1989	20	Pleasant Ave W		Morren St	0	Termini	0	634	n/a
35286	3 (2013)	55	1984	20	Pride St		Jaacks Rd	0	Termini	0	581	n/a
35286	8 (2013)	70	2007	40	E Prospect Ave		N 7th St	0	N 6th St	0	370	n/a
35286	8 (2013)	70	2007	40	E Prospect Ave		N 6th St	0	N 5th St	0	422	n/a
35286	8 (2013)	70	2005	42	E Prospect Ave		N 5th St	0	N 4th St	0	317	n/a
35286	5 (2013)	70	1981	40	W Prospect Ave		N 4th St	0	N 3rd St	0	370	n/a
35286	5 (2013)	70	1981	40	W Prospect Ave		N 3rd St	0	N 2nd St	0	370	n/a
35286	7 (2013)	70	1996	22	W Putnam St		STH 86	0	S Wilson St	0	317	n/a
35286	3 (2013)	57	1979	22	W Putnam St		S Wilson St	0	S McKinley St	0	264	n/a

Note: If Previous Pavement Rating and Year column blank, previous submitted rating incompatible with surface type OR no rating data available.

County - Municipal Code	Pavement Rating and Year	Surface		On Route	At Route		Toward Route			Local ID (Optional Field)	
		Type	Year		Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)	Municipal Location	Name (Includes prefix, name, type, suffix and extension)		Toward Offset (Optional Field)
35286	7 (2013)	F	22	Theiler Dr	Kaphaem Rd			Whitetail Dr	0	6547	n/a
35286	8 (2013)	F	22	Theiler Dr	Whitetail Dr			Brief St	0	1478	n/a
35286	8 (2013)	F	22	Theiler Dr	Brief St			Hilcrest Dr	0	422	n/a
35286	8 (2013)	F	22	Theiler Dr	Hilcrest Dr			Armory Dr	0	211	n/a
35286	8 (2013)	F	22	Theiler Dr	Armory Dr			Southgate Dr	0	634	n/a
35286	8 (2013)	F	22	Timm St	Leather St			Termini	0	739	n/a
35286	5 (2013)	F	62	N Tomahawk Ave	W Somo Ave			W Washington Ave	0	370	n/a
35286	5 (2013)	F	68	N Tomahawk Ave	W Washington Ave			W Lincoln Ave	0	369	n/a
35286	4 (2013)	F	24	Trimberger Ave	Bridge St			Termini	0	317	n/a
35286	9 (2013)	F	22	Vena Ave	Bliss St		634	Termini	0	422	n/a
35286	6 (2013)	F	20	Vink St	Jaacks Rd			Termini	0	317	n/a
35286	6 (2013)	F	22	Voerman St	STH 86			Cedar Ave	0	475	n/a
35286	6 (2013)	F	22	Voerman St	Cedar Ave			Spruce Ave	0	422	n/a
35286	6 (2013)	F	40	E Washington Ave	N 4th St			N 5th St	0	370	n/a
35286	6 (2013)	F	40	E Washington Ave	E Washington Ave			N 6th St	0	370	n/a
35286	5 (2013)	F	40	E Washington Ave	E Washington Ave			N 7th St	0	370	n/a
35286	5 (2013)	F	40	E Washington Ave	E Washington Ave			N 8th St	0	370	n/a
35286	4 (2013)	F	40	E Washington Ave	E Washington Ave			N 9th St	0	370	n/a
35286	6 (2013)	F	40	W Washington Ave	N 4th St			N 3rd St	0	370	n/a
35286	6 (2013)	F	40	W Washington Ave	N 3rd St			N 2nd St	0	370	n/a
35286	6 (2013)	F	36	W Washington Ave	N 2nd St			N Tomahawk Ave	0	370	n/a
35286	6 (2013)	F	40	W Washington Ave	N Tomahawk Ave			Railway St	0	370	n/a
35286	8 (2013)	F	18	W Water St	STH 86			Termini	0	158	n/a
35286	5 (2013)	F	20	Water Works Rd	STH 86			Termini	0	528	n/a
35286	4 (2013)	F	18	Wheeler Rd	Bridge St			Termini	0	2851	n/a
35286	8 (2013)	F	22	Whitetail Dr	Theiler Dr			Termini	0	792	n/a
35286	4 (2013)	F	22	Whitetail Dr	Theiler Dr		792	Termini	0	739	n/a
35286	4 (2013)	F	20	Willow Ln	CTH A	35004	1828	CTH A	0	512	n/a
35286	3 (2013)	F	16	Willow Ln	CTH A			E Mohawk Dr	0	2534	n/a
35286	10 (2013)	F	20	Willow Ln	CTH A		2534	E Mohawk Dr	0	106	n/a
35286	5 (2013)	F	22	S Wilson St	W Putnam St			Anna St	0	528	n/a
35286	4 (2013)	F	22	S Wilson St	Anna St			W Mill St	0	317	n/a
35286	8 (2013)	F	24	S Wilson St	W Mill St		264	Mary St W	0	264	n/a
35286	7 (2013)	F	36	E Wisconsin Ave	Termini			N 8th St	0	264	n/a
35286	6 (2013)	F	22	E Wisconsin Ave	N 8th St			Termini	0	264	n/a
35286	6 (2013)	F	22	E Wisconsin Ave	N 7th St		370	N 6th St	0	369	n/a
35286	6 (2013)	F	22	E Wisconsin Ave	N 6th St			N 5th St	0	422	n/a
35286	5 (2013)	F	22	E Wisconsin Ave	N 5th St			N 4th St	0	317	n/a
35286	4 (2013)	F	30	W Wisconsin Ave	Termini			Railway St	0	158	n/a
35286	8 (2013)	F	75	W Wisconsin Ave	Railway St			STH 86	0	370	n/a
35286	8 (2013)	F	77	W Wisconsin Ave	STH 86			N 2nd St	0	370	n/a
35286	8 (2013)	F	77	W Wisconsin Ave	N 2nd St			N 3rd St	0	370	n/a
35286	8 (2013)	F	77	W Wisconsin Ave	N 3rd St			N 4th St	0	317	n/a
35286	7 (2013)	F	22	Woodland Ln	Riverview Ln			Termini	0	211	n/a

Note: If Previous Pavement Rating and Year column blank, previous submitted rating incompatible with surface type OR no rating data available.

APPENDIX B – PASER Rating System

PASER Asphalt Surface Rating System

Surface Rating	Visible Distress*	General condition/ Treatment measures
10 <i>Excellent</i>	None.	New construction.
9 <i>Excellent</i>	None.	Recent overlay, like new..
8 <i>Very Good</i>	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40" or greater). All cracks sealed or tight (open ¼" or less).	Recent sealcoat or new road mix. Little or no maintenance required.
7 <i>Good</i>	Very slight or no ravelling, surface shows some traffic wear. Longitudinal cracks (open ¼") due to reflection or paving joints. Transverse cracks (open ¼") spaced 10 feet or more apart, little or slight crack ravelling. No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
6 <i>Good</i>	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open ¼" - ½") due to reflection and paving joints. Transverse cracking (open ¼" to ½") some paced less than 10 feet. First sign of block cracking. Slight to moderate flushing or polishing. Occasional patching in good condition.	Show signs of aging, sound structural condition. Could extend life with sealcoat.

*Note: Individual roadways may not have all of the types of distress listed for any particular rating. Each road may have only one or two types of distress.

PASER Asphalt Surface Rating System (continued)		
Surface Rating	Visible Distress*	General condition/ Treatment measures
5 <i>Fair</i>	<p>Moderate to severe raveling (loss of fine and coarse aggregate).</p> <p>Longitudinal and transverse cracks (open ½") show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge.</p> <p>Block cracking up to 50% of surface.</p> <p>Extensive to severe flushing or polishing.</p> <p>Some patching or edge wedging in good condition.</p>	<p>Surface aging, sound structural condition. Needs sealcoat or nonstructural overlay.</p>
4 <i>Fair</i>	<p>Severe surface raveling.</p> <p>Multiple longitudinal and transverse cracking with slight raveling.</p> <p>Longitudinal cracking in wheel path.</p> <p>Block cracking (over 50%) of surface).</p> <p>Patching in fair condition.</p> <p>Slight rutting or distortions (1/2" deep or less).</p>	<p>Significant aging and first signs of need for strengthening. Would benefit from recycling or overlay.</p>
3 <i>Poor</i>	<p>Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion.</p> <p>Severe block cracking.</p> <p>Some alligator cracking (less than 25% of surface).</p> <p>Patches in fair to poor condition.</p> <p>Moderate rutting or distortion (1" or 2" deep).</p> <p>Occasional potholes.</p>	<p>Needs patching and major overlay or complete recycling.</p>
2 <i>Very Poor</i>	<p>Alligator cracking (over 25% of surface).</p> <p>Severe distortions (over 2" deep).</p> <p>Extensive patching in poor condition.</p> <p>Potholes.</p>	<p>Severe deterioration. Needs reconstruction with extensive base repair.</p>
1 <i>Failed</i>	<p>Severe distress with extensive loss of surface integrity.</p>	<p>Failed. Needs total reconstruction.</p>

*Note: Individual roadways may not have all of the types of distress listed for any particular rating. Each road may have only one or two types of distress.

PASER Gravel Surface Rating System		
Surface Rating	Visible Distress*	General condition/ Treatment measures
<i>5 (10) Excellent</i>	No distress. Dust controlled. Excellent surface condition and ride.	New construction – or total reconstruction. Excellent drainage. Little or no maintenance required.
<i>4 (8) Good</i>	Dust under dry conditions. Moderate loose aggregate. Slight washboarding.	Recently regraded. Good crown and drainage throughout. Adequate gravel for traffic. Routine maintenance may be needed.
<i>3 (6) Fair</i>	Good crown (3"-6") Ditches present on more than 50% of roadway. Gravel layer is mostly adequate but additional aggregate may be needed at a few locations to help correct washboarding or isolated potholes and ruts. Some culvert cleaning needed. Moderate washboarding (1"-2" deep), over 10%-20% of the area. Moderate dust, partial obstruction of vision. None or slight rutting (less than 1" deep). An occasional small pothole (less than 2" deep). Some loose aggregate (2" deep).	Shows traffic effects. Regrading (reworking) necessary to maintain. Needs some ditch improvement and culvert maintenance. Some areas may need additional gravel.

*Note: Individual roadways may not have all of the types of distress listed for any particular rating. Each road may have only one or two types of distress.

PASER Gravel Surface Rating System (continued)		
Surface Rating	Visible Distress*	General condition/ Treatment measures
<i>2 (4) Poor</i>	<p>Little or no roadway crown (less than 3").</p> <p>Adequate ditches on less than 50% of roadway. Portions of the ditches may be filled, overgrown and/or show erosion.</p> <p>Some areas (25%) with little or no aggregate.</p> <p>Culverts partially full of debris.</p> <p>Moderate to severe washboarding (over 3" deep) over 25% of area.</p> <p>Moderate rutting (1" - 3"), over 10% - 25% of area.</p> <p>Moderate potholes (2" - 4"), over 10% - 25% of area.</p> <p>Severe loose aggregate (over 4").</p>	<p>Travel at slow speeds (less than 25 mph) is required.</p> <p>Needs additional new aggregate.</p> <p>Major ditch construction and culvert maintenance also required.</p>
<i>1 (2) Failed</i>	<p>No roadway crown or road is bowl shaped with extensive ponding.</p> <p>Little if any ditching.</p> <p>Filled or damaged culverts.</p> <p>Severe rutting (over 3" deep), over 25% of the area.</p> <p>Severe potholes (over 4" deep), over 25% of area.</p> <p>Many areas (over 25%) with little or no aggregate.</p>	<p>Travel is difficult and road may be closed at times.</p> <p>Needs complete rebuilding and/or new culverts.</p>

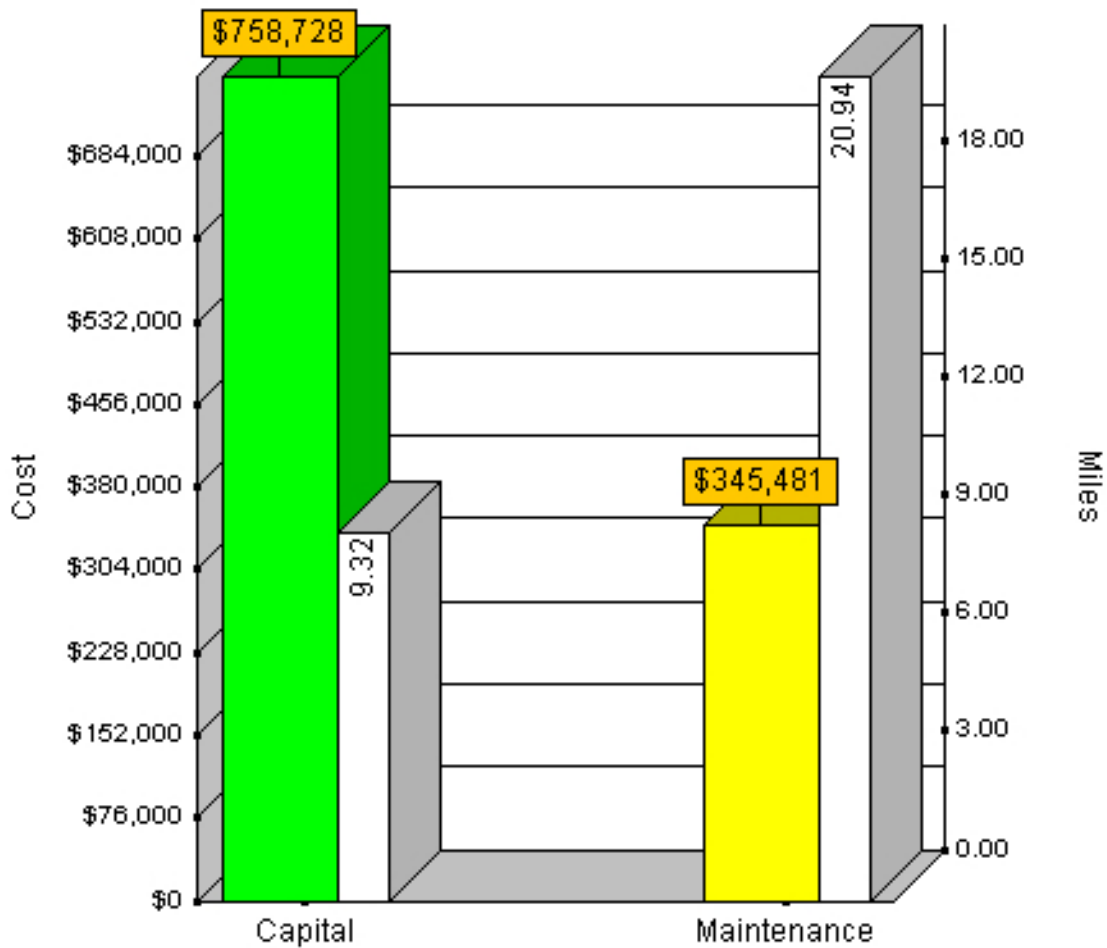
*Note: Individual roadways may not have all of the types of distress listed for any particular rating. Each road may have only one or two types of distress.

Source: Wisconsin Transportation Information Center.

APPENDIX C – Rudimentary Needs Analysis

Rudimentary Needs Analysis

City of Tomahawk



- 100.00% of needs attributed to this year's data
- 0.00% of needs attributed to one year old data
- 0.00% of needs attributed to two year old data
- 0.00% of needs are potentially unreliable - Rating Data > 2 years old
- 0.00% of needs are estimated - No Data
- 0.00% of needs are estimated - Data Too Old (> 5 years old)

***The information shown is based on actual data. Pavement sections without actual rating data were not included in this analysis. There are 38.20 miles of rated roadways and 0.00 miles of unrated roadways. Please note that mileage listed with the graph shown above is the portion of the rated roadway miles indicating need (designated as capital or maintenance).*

Rudimentary Needs Analysis

City of Tomahawk

Roadway Name	Maint. Cost	Capital Cost
2nd St N	8017.20	0.00
2nd St S	0.00	22258.76
N 3rd St	8000.76	0.00
3rd St S	0.00	25752.00
4th St N	6573.16	154000.00
4th St S	14093.03	0.00
N 5th St	3469.78	0.00
S 5th St	2089.92	0.00
N 6th St	2844.89	26932.71
S 6th St	518.00	0.00
7th St N	7312.13	7087.56
8th St N	4326.18	6733.18
8th St S	2437.38	0.00
9th St N	7821.14	0.00
10th St N	520.96	0.00
E Acres Dr	366.20	0.00
Ada St	0.00	2292.05
Anna St	5074.67	0.00
Bay Mill Rd	6089.60	0.00
Birch Ave	0.00	7047.04
Birchwood Ave	4469.11	0.00
Bliss St	0.00	12134.76
Bowens Rd	1750.61	0.00
Bradley Farm Rd	0.00	24571.23
Bridge St	5929.41	5150.40
Bronstead Ave	0.00	4052.96
Cash Rd	0.00	30582.93
Cedar Ave	0.00	9460.93
Chandler St	0.00	13906.93
Charlene Ave	0.00	14409.77
Charles Ave	6521.27	10616.97
Coey Ln	0.00	7685.21

***The information shown is based on actual data. Pavement sections without actual rating data were not included in this analysis.*

There are 38.20 miles of rated roadways and 0.00 miles of unrated roadways.

Collins St	1014.93	6124.80
Conservation St	0.00	7585.60
Cooks Cir	0.00	4446.00
Coolidge St	2709.00	0.00
Deer Haven Dr	780.11	0.00
Deer Park Rd	4340.89	0.00
Division St	1422.44	0.00
Erickson Ln	2619.71	0.00
Forest Pl	2758.00	0.00
Henry St	2901.02	0.00
Hickey Ave E	2747.05	0.00
Hillcrest Dr	4870.91	0.00
Iverson Rd	0.00	13100.48
Jaecks Rd	0.00	14063.52
Jersey Ln	0.00	24499.20
Kaphaem Rd	3072.30	0.00
Kings Hill Dr	2343.04	0.00
Kings Rd	0.00	149096.36
Leather St	1626.80	15713.28
Lincoln Ave E	1151.11	0.00
Lincoln Ave W	2910.67	0.00
Marinette St	5274.58	0.00
Mary St W	0.00	3311.15
McKinley St S	0.00	14689.08
Mill St W	493.11	0.00
E Mohawk Dr	28618.44	0.00
Morren St	0.00	5061.16
Nelson Ln	0.00	8572.40
Oakland Ave	166.91	0.00
Old Bridge St	4636.00	0.00
Pfeifer Rd	0.00	49151.31
Pine Ave	2109.83	0.00
Pine Ridge Ln	3237.98	0.00
Pine View Ln	410.67	0.00
Piper St	0.00	4746.96
Pleasant Ave W	3248.56	0.00
Pride St	0.00	5564.69

***The information shown is based on actual data. Pavement sections without actual rating data were not included in this analysis.*

There are 38.20 miles of rated roadways and 0.00 miles of unrated roadways.

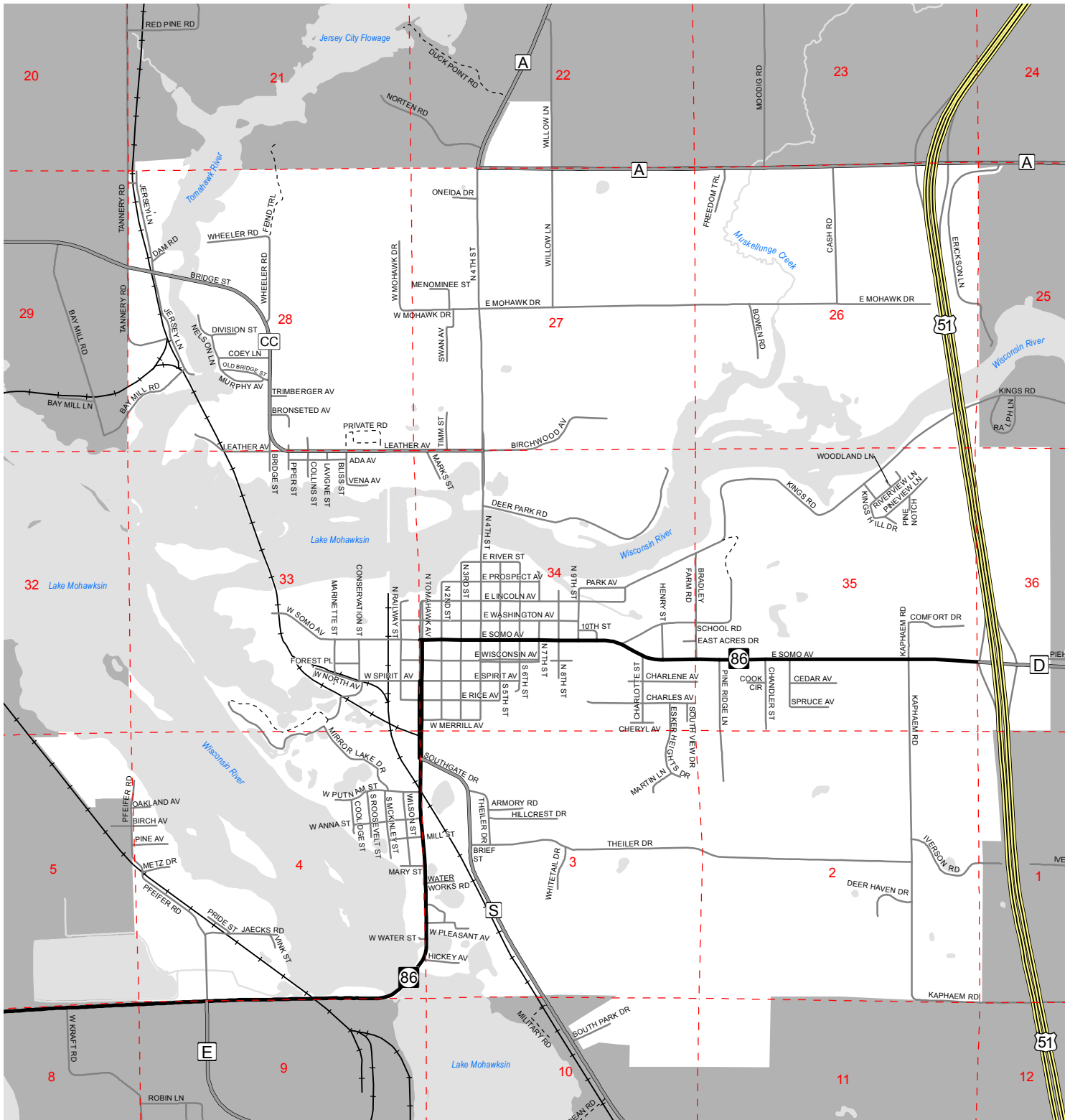
Prospect Ave W	2335.11	0.00
Putnam St W	6719.39	0.00
Railway St	6679.72	0.00
Randall St	147.47	0.00
River St E	3737.82	0.00
River St W	2987.13	0.00
Riverview Ln	858.12	0.00
Roosevelt St S	2580.67	0.00
School Rd	0.00	39054.40
W Somo Ave	15777.02	0.00
Southgate Dr	4561.92	0.00
Spirit Ave E	5682.09	0.00
W Spirit Ave	18821.63	0.00
Spruce Ave	1284.31	0.00
Stlip Rd	305.25	0.00
Swan Ave	862.56	0.00
Tannery Rd	9207.70	0.00
Theiler Dr	7949.82	0.00
Tomahawk Ave N	9232.82	0.00
Trimberger Ave	1546.96	0.00
Vena Ave	0.00	5384.72
Vink St	1252.50	0.00
Voerman St	1556.79	0.00
E Washington Ave	14224.44	0.00
W Washington Ave	11095.07	0.00
Water Works Rd	2114.35	0.00
Wheeler Rd	4352.53	0.00
Willow Ln	6849.42	0.00
Wilson St S	6025.94	0.00
E Wisconsin Ave	3874.91	3887.62
Wisconsin Ave W	8987.26	0.00
Woodland Ln	180.52	0.00
Total	345480.70	758728.12

***The information shown is based on actual data. Pavement sections without actual rating data were not included in this analysis.*

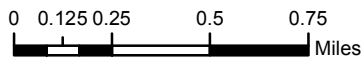
There are 38.20 miles of rated roadways and 0.00 miles of unrated roadways.

APPENDIX E – City Street Map

Map 1 Road Network City of Tomahawk Lincoln County, Wisconsin



- - - Section Lines
- = US Highway
- = State Highways
- = County Highways
- Local Roads
- - - Private Roads
- + + + Railroad
- ~ Water



Source: WI DNR, NCWRPC

This map is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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