

CROW WING COUNTY

Capital Improvements Plan

2011-2016



Prepared by the Offices of the County Auditor and County Administrator

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2011 – 2016 Capital Improvements Plan

Introduction

The Crow Wing County Capital Improvements plan (CIP) is a multi-year guide to the construction and/or improvement of county roads and facilities and the acquisition of capital equipment. Through the process of preparing and updating a capital improvements plan, the county meets the need for orderly maintenance of the physical assets of the county. This CIP is intended to serve as a planning tool and is structured to present meaningful long-range perspective of the county's long-range capital needs.

Minnesota Statutes, Section 373.40, allows counties to plan and finance the “acquisition and betterment of public lands, buildings, and other improvements within the county for the purpose of a county courthouse, administrative building, health and social service facility, correctional facility, jail, law enforcement center, hospital, morgue, library, park, qualified indoor ice arena, and road and bridges.” The law requires that a Capital Improvements Plan be prepared which must cover at least a five-year period beginning with the date of the plan adoption. The CIP must set forth:

- 1) The estimated schedule, timing and details of specific capital improvements;
- 2) Estimated cost of the capital improvements identified;
- 3) The need for the improvements; and
- 4) The sources of revenues needed to pay for the improvements.

Approval of the CIP and annual amendments must be approved by the county board after a noticed public hearing.

The Crow Wing County Capital Improvements Plan has been created in accordance with the guidelines of Minnesota Statutes, Section 373.40. The CIP covers all public improvement and building projects for a six-year period. The first year of the CIP represents the current year's capital budget. The remaining five-years of the CIP are used to identify needed capital projects and to coordinate the financing and timing of these projects. CIP projects require a total expenditure of at least \$5,000 and must provide for or extend the useful life of the asset at least 5 years. While cost estimates and proposed funding sources are identified for each general improvement area, the CIP is not intended to provide a detailed or complete financing plan for each project. As the county prepares to undertake individual projects, the County Board will consider a specific funding source.

The CIP will be revised and updated on a periodic basis during the future budget cycles. Changes to the priorities established in the plan should be expected. Changes can be caused by reductions in funding levels, project delays due to price fluctuations, opportunities for grants or other aids, delays in obtaining construction permits or necessary approvals, emergency needs or simply changes in community preferences.

CIP Policy Overview

In adopting the capital improvements plan, the county finds:

- 1) The projects contained in the capital improvements plan are necessary to maintain the existing infrastructure of the county and to properly provide for the health, safety and general well being of its residents.
- 2) The proposed projects provide an adequate response to anticipated service demands in each area of operation.
- 3) The county has considered the costs of the projects and the available financial resources and has determined that the projects are within the financial ability of the county. Further, the county has determined that failure to undertake the CIP will create a greater financial burden through higher service cost alternatives and increased costs of future project options.
- 4) The public improvement projects will result in lower operating costs by avoiding maintenance expense and by providing public services in a cost effective manner. The projects have been designed to keep operating costs at a minimum.
- 5) The county has thoroughly reviewed the alternatives for undertaking the applicable projects through shared facilities with other counties or units of government. All of the proposed public facilities are an integral part

of the services provided by Crow Wing County. Crow Wing County will participate in shared facility options when such options are found to be either efficient or cost effective.

- 6) The CIP is designed to make the most effective use of all financial resources available to the county, including fund reserves, current budgeted revenues, grants, and borrowing. The county's goal is to strike a reasonable balance among all of its resources. The debt proposed in the CIP is within the statutory and financial capacity of the county. It will be difficult for the county to meet its public facility's needs in a timely manner without incurring debt. The county will structure all necessary debt in a manner that makes the best use of its financial resources and minimizes the impacts on county residents.
- 7) In preparing the CIP, the county has considered the impacts on operating costs. Projects are designed to keep the increases in operating costs to a minimum. Increases in operating costs are balanced with the overall need to provide the improvement.
- 8) The majority of the projects in the CIP are financed without incurring debt. For those projects utilizing debt, borrowing is needed to provide the improvement in a timely manner and to spread the financial impacts over a period of years. These objectives outweigh the increase in county or overlapping indebtedness.

Impact on Operating Budgets

The State of Minnesota occasionally imposes property tax levy limits on local government. For that reason, any new projects and all capital equipment purchases have been approved by the County Board on the premise that there will be little or no impact on operating budgets. Funding for capital improvements projects, capital equipment and various repair projects is provided within existing levy, and special levy outside of levy limits for debt service relating to capital improvements included in the six year capital improvements plan or reserves.

CIP projects that are proposed to be funded by General Fund revenues, Community Services revenues and Highway Fund revenues are intended to be included in the budget in the appropriate year(s). Even so, because circumstances may change between the adoption of the CIP and the Budget, CIP projects must be resubmitted as part of each department's annual budget request. Funds for such projects are not available unless and until they are included in the Budget approved by the County Board of Commissioners.

Most CIP regular projects are repair/replacement and maintenance projects. These projects should help improve operating efficiencies and offset increased costs for operations and repairs. By continuing an ongoing equipment replacement schedule, departmental operating budgets will not need to fund replacement of this equipment. Replacing equipment on a scheduled basis also results in reduced maintenance costs of the old equipment and can provide enhanced performance due to new equipment technology. Completion of scheduled building maintenance improvements will extend the lives of the buildings. Providing funds for building improvements annually will enable capital improvements to be scheduled as needed, over time, rather than waiting for an emergency situation which will cost more to correct.

Types of CIP Long-Term Financing

Most of the projects contained in the CIP can be funded through current property tax levy, fund balance, grants & aids, internal borrowing and reserves. Bonding is always an option for the county both in times that levy limits are imposed and for new facilities or major capital improvements. Crow Wing County will always review all other funding sources before bonding. Listed below are the types of bonds available to the county:

General Obligation Bonds Authorized by Special Election: Minnesota Statutes, Chapter 475, allows general obligation bonds to be issued for building purposes in an amount up to the county's debt limit. This requires a vote of the public and must be approved by one vote more than 50% of those voting. The tax for debt service is spread on the basis of market value (rather than net tax capacity, as all other options require).

Capital Improvement Plan/Bonds: Minnesota Statutes, Chapter 373.40, allows counties to issue general obligation bonds for purposes defined in the Capital Improvement Plan. The adoption of this capital improvements plan is the first step in gaining the authority to issue these bonds. Once the CIP has been approved, the county must hold a public hearing on its plans to issue bonds. The decision to issue capital improvement bonds is subject to "reverse referendum". The county may issue the bonds unless a petition requesting a referendum signed by voters equal to 5% of the votes cast in the most recent general election is filed with the county auditor within 30 days following the public hearing.

Jail Bonds: Minnesota Statutes, Section 641.23, allows the county to issue general obligation bonds authorized by Board resolution with project approval by the Commissioner of Corrections. These bonds may be issued for jail and other law enforcement facilities. Jail/law enforcement facility financing may also be accomplished under Minnesota Statutes, Section 641.24, with the bonds of a city within the county or a county housing and redevelopment authority that are backed by a general obligation lease-purchase agreement. The city or authority enters into a lease purchase agreement with the county, and the county (as lessee) makes payments over a period of time to the lessor in an amount sufficient to cover the bond principle and interest. Annual rentals may not exceed one-tenth of one percent of market value.

Other Financing Options: Minnesota Statutes, Chapter 373, allows counties to issue general obligation Capital Notes to finance road construction, public safety, medical, and data processing equipment. There is also special authority when approved by the Statewide Radio Board to issue either capital notes or CIP bonds under Minnesota Statute, Section 373.47, for public safety communication system infrastructure and equipment for use on a statewide or shared radio system. For state aid road improvements, State aid payments can be pledged to retire general obligation bonds (M.S. Chapter 162).

Statutory Debt Limit

Minnesota counties have a debt limit equal to 3% (2% prior to 2007) of the taxable market value. This statutory limit applies to (1) general obligation bonds expected to be paid entirely from property taxes (not, for instance, to bonds which may have special assessments and/or revenues pledged to their payment) and (2) to lease purchase financing which is more than \$1,000,000 in size.

The calculation of Crow Wing County's debt limit is as follows:

Market value of taxable property	\$11,434,134,100
Times 3%	<u>x .03</u>
Gross debt limit	\$ 343,024,023
Less: net general obligation bonds outstanding	<u>- 44,067,972</u>
Available debt limit	\$ 298,956,051

The CIP Process

The process begins with the distribution of instructions to department heads. Department heads fill out project requests to be considered for the current year capital budget and the next five-year CIP period. In the future, each department head is responsible for reviewing the most recent CIP to determine the funding necessary for projects that are currently identified in the CIP. Based on this review and a review of new requirements for capital improvements for the next period, the department head completes a CIP spreadsheet. Once the capital project spreadsheet has been completed and prioritized by using the capital project-rating sheet, the forms are submitted to the Auditor – Treasurer’s office. The Auditor – Treasurer’s office conducts an analysis of the capital projects to assure that sufficient data has been provided and that the cost estimates are reasonable. The requests are reviewed and the budget committee will make recommendations. Upon county board adoption in December, the final CIP document is produced and distributed to the departments for implementation of the plan. The county board can only approve budgets on an annual basis. Therefore, capital expenditures approved spending will be for the current year only.

Organization of the CIP

The CIP is divided into seven sections (all Highway projects and totals are in section 7):

Summary by fund & department: Section (1) shows a one page layout of total dollars by fund & department by year.

Funding sources summary: Section (2) shows capital funding for all years at the fund level. General Fund and Highway Fund expenditures shown here would require levy dollars or bonding. The other funds that are shown are reserves or grants.

Funding sources by year: Section (3) shows by year the funding source for each individual project.

Department summary: Section (4) shows the total dollars by department by year.

Department detail: Section (5) shows a detailed listing of all projects in the CIP by department.

Department project request forms: Section (6) shows all project request forms from the departments.

Highway improvement plan 2009 – 2013: Section (7) contains the Highway Departments improvement plan.

CROW WING COUNTY
2011 - 2016
CAPITAL IMPROVEMENT PLAN
SUMMARY BY FUND/DEPT

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>TOTAL</u>
FACILITIES	-	59,500	7,500	-	25,000	-	92,000
SHERIFF	-	555,430	354,000	352,000	356,000	10,374,000	11,991,430
GENERAL FUND	-	614,930	361,500	352,000	381,000	10,374,000	12,083,430
COMMUNITY SERVICES FUND	50,000	50,000	50,000	50,000	50,000	50,000	300,000
HIGHWAY FUND	205,000	395,000	480,000	470,000	465,000	475,000	2,490,000
E911 RESERVE	-	-	-	-	-	-	-
PARKS RESERVE	35,000	45,000	-	-	-	-	80,000
PUBLIC LANDS MGMT FUND	39,000	39,000	-	-	10,000	10,000	98,000
SOLID WASTE FUND	580,000	-	-	-	-	-	580,000
BUILDING FUND	75,000	615,000	230,000	85,000	-	-	1,005,000
TOTAL W/OUT 800 MHZ	984,000	1,758,930	1,121,500	957,000	906,000	10,909,000	16,636,430
800 MHZ	3,760,562	-	-	-	-	-	3,760,562
GRAND TOTAL	4,744,562	1,758,930	1,121,500	957,000	906,000	10,909,000	20,396,992
FUNDING FOR 800 MHZ							
GENERAL FUND	3,000,000						
GRANTS / INTERNAL BORROWING	760,562						
	3,760,562	-					

**CROW WING COUNTY
2011-2016 CIP
FUNDING SOURCES SUMMARY**

	General Fund	G.O. Capital Improvement Bonds	Highway Fund	Human Services Fund	County Building Fund	Solid Waste Fund	Forfeited Tax Sale	Grants	General Fund Reserves	Total
2011	-	-	205,000	50,000	75,000	580,000	39,000	760,562	3,035,000	4,744,562
2012	614,930	-	395,000	50,000	615,000	-	39,000	-	45,000	1,758,930
2013	361,500	-	480,000	50,000	230,000	-	-	-	-	1,121,500
2014	352,000	-	470,000	50,000	85,000	-	-	-	-	957,000
2015	381,000	-	465,000	50,000	-	-	10,000	-	-	906,000
2016	374,000	10,000,000	475,000	50,000	-	-	10,000	-	-	10,909,000
Total	2,083,430	10,000,000	2,490,000	300,000	1,005,000	580,000	98,000	760,562	3,080,000	20,396,992

**CROW WING COUNTY
2011 CIP
FUNDING SOURCES SUMMARY**

Year	Project Title	Project #	Dept.	Highway Fund	Human Services Fund	County Building Fund	Solid Waste Fund	Forfeited Tax Sale	Grants	General Fund Reserves	Total
2011	Pickup Truck Replacement	670-2002	County Land Management					30,000			30,000
2011	Snowmobile Replacement	670-2004	County Land Management					9,000			9,000
			County Land Management Total	-	-	-	-	39,000	-	-	39,000
2011	Retro-fit lights at the LEC	110-0018	Government Buildings			20,000					20,000
2011	Range Land and Building Improvements	110-0012	Government Buildings			25,000					25,000
2011	New LEC	110-0011	Government Buildings			30,000					30,000
2011	800 MHZ Radio System	201-2001	Government Buildings						760,562	3,000,000	3,760,562
			Government Buildings Total	-	-	75,000	-	-	760,562	3,000,000	3,835,562
2011	Vehicle replacement	420-2005	Health		50,000						50,000
			Health Total	-	50,000	-	-	-	-	-	50,000
2011	Purchase Vehicles for Engineering & maintenance Personnel	301-2001	Highways	160,000							160,000
2011	Purchase Tar Kettles	301-2515	Highways	45,000							45,000
			Highways Total	205,000	-	-	-	-	-	-	205,000
2011	Cell 5 site preparation	393-1001	Landfill Sw376				500,000				500,000
2011	Install new recirculation laterals in cell 4	393-1002	Landfill Sw376				80,000				80,000
			Landfill Sw376 Total	-	-	-	580,000	-	-	-	580,000
2011	Milford Mine Memorial Park	520-1001	Parks							35,000	35,000
			Parks Total	-	-	-	-	-	-	35,000	35,000
			Grand Total	205,000	50,000	75,000	580,000	39,000	760,562	3,035,000	4,744,562

**CROW WING COUNTY
2012 CIP
FUNDING SOURCES SUMMARY**

Year	Project Title	Project #	Dept.	General Fund	Highway Fund	Human Services Fund	County Building Fund	Forfeited Tax Sale	General Fund Reserves	Total
2012	Pickup Truck Replacement	670-2002	County Land Management					30,000		30,000
2012	Snowmobile Replacement	670-2004	County Land Management					9,000		9,000
			County Land Management Total	-	-	-	-	39,000	-	39,000
2012	Truck	110-2004	Government Buildings	40,000						40,000
2012	Used Forklift	110-2005	Government Buildings	12,000						12,000
2012	Zero Turn Radius Mower	110-2002	Government Buildings	7,500						7,500
2012	Increase Emergency Power	110-0002	Government Buildings				100,000			100,000
2012	Range Land and Building Improvements	110-0012	Government Buildings				5,000			5,000
2012	New LEC	110-0011	Government Buildings				15,000			15,000
2012	New Storage Facility - Sheriff's Office	201-0001	Government Buildings				495,000			495,000
			Government Buildings Total	59,500	-	-	615,000	-	-	674,500
2012	Vehicle Replacement	420-2005	Health			50,000				50,000
			Health Total	-	-	50,000	-	-	-	50,000
2012	Purchase 1 Tandem axle Dump Trucks	301-2504	Highways		210,000					210,000
2012	Purchase 3 Maintenance Trucks	301-2511	Highways		150,000					150,000
2012	Purchase 1 Wood Chipper	301-2512	Highways		35,000					35,000
			Highways Total	-	395,000	-	-	-	-	395,000
2012	Milford Mine Memorial Park	520-1001	Parks						45,000	45,000
			Parks Total	-	-	-	-	-	45,000	45,000
2012	Emergency Equipment Replacement	201-2502	Sheriff	158,000						158,000
2012	Emergency Vehicle Replacement	201-2501	Sheriff	397,430						397,430
			Sheriff Total	555,430	-	-	-	-	-	555,430
			Grand Total	614,930	395,000	50,000	615,000	39,000	45,000	1,758,930

**CROW WING COUNTY
2013 CIP
FUNDING SOURCES SUMMARY**

Year	Project Title	Project #	Dept.	General Fund	Highway Fund	Human Services Fund	County Building Fund	Total
2013	Shampooer	110-2006	Government Buildings	7,500				7,500
2013	Replace Window at Historic Courthouse	110-0007	Government Buildings				200,000	200,000
2013	Rang Land and Building Improvements	110-0012	Government Buildings				30,000	30,000
			Government Buildings Total	7,500	-	-	230,000	237,500
2013	Vehicle Replacment	420-2005	Health			50,000		50,000
			Health Total	-	-	50,000	-	50,000
2013	Purchase 1 Tandem Axle Dump trucks	301-2504	Highways		210,000			210,000
2013	Purchase 2 Skid steer loaders and attachments	301-2503	Highways		120,000			120,000
2013	Purchase 3 Maintenance Trucks	301-2511	Highways		150,000			150,000
			Highways Total	-	480,000	-	-	480,000
2013	Emergency Equipment Replacement	201-2502	Sheriff	119,000				119,000
2013	Emergency Vehicle Replacement	201-2501	Sheriff	235,000				235,000
			Sheriff Total	354,000	-	-	-	354,000
			Grand Total	361,500	480,000	50,000	230,000	1,121,500

CROW WING COUNTY
2014 CIP
FUNDING SOURCES SUMMARY

Year	Project Title	Project #	Dept.	General Fund	Highway Fund	Human Services Fund	County Building Fund	Total
2014	Replace LEC Roof	110-0005	Government Buildings				85,000	85,000
			Government Buildings Total	-	-	-	85,000	85,000
2014	Vehicle Replacement	420-2005	Health			50,000		50,000
			Health Total	-	-	50,000	-	50,000
2014	Purchase 1 Tandem Axle Dump Trucks	301-2504	Highways		215,000			215,000
2014	Purchase one Motorgrader	301-2510	Highways		170,000			170,000
2014	Purchase Vehicles for Engineering & Maintenance Personnel	301-2001	Highways		55,000			55,000
2014	Purchase 2 equipment Trailers	301-2514	Highways		30,000			30,000
			Highways Total	-	470,000	-	-	470,000
2014	Emergency Equipment Replacement	201-2502	Sheriff	122,000				122,000
2014	Emergency Vehicle Replacement	201-2501	Sheriff	230,000				230,000
			Sheriff Total	352,000	-	-	-	352,000
			Grand Total	352,000	470,000	50,000	85,000	957,000

**CROW WING COUNTY
2015 CIP
FUNDING SOURCES SUMMARY**

Year	Project Title	Project #	Dept.	General Fund	Highway Fund	Human Services Fund	Forfeited Tax Sale	Total
2015	ATV Replacement	670-2003	County Land Management				10,000	10,000
			County Land Management Total	-	-	-	10,000	10,000
2015	John Deere front end loader	110-2001	Government Buildings	25,000				25,000
			Government Buildings Total	25,000	-	-	-	25,000
2015	Vehicle Replacement	420-2005	Health			50,000		50,000
			Health Total	-	-	50,000	-	50,000
2015	Purchase 1 Tandem Axle Dump Trucks	301-2504	Highways		215,000			215,000
2015	Purchase one tractor with mowers	301-2507	Highways		80,000			80,000
2015	Purchase Vehicles for Engineering & Maintenance Personnel	301-2001	Highways		80,000			80,000
2015	Purchase one Backhoe/Loader	301-2501	Highways		90,000			90,000
			Highways Total	-	465,000	-	-	465,000
2015	Emergency Equipmet Replacement	201-2502	Sheriff	136,000				136,000
2015	Emergency Vehicle Replacement	201-2501	Sheriff	220,000				220,000
			Sheriff Total	356,000	-	-	-	356,000
			Grand Total	381,000	465,000	50,000	10,000	906,000

**CROW WING COUNTY
2016 CIP
FUNDING SOURCES SUMMARY**

Year	Project Title	Project #	Dept.	General Fund	G.O. Capital Improvement Bonds	Highway Fund	Human Services Fund	Forfeited Tax Sale	Total
2016	ATV Replacement	670-2003	County Land Management					10,000	10,000
			County Land Management Total	-	-	-	-	10,000	10,000
2016	Vehicle Replacement	420-2005	Health				50,000		50,000
			Health Total	-	-	-	50,000	-	50,000
2016	Purchase 2 Tandem Axle Dump Trucks	301-2504	Highways			430,000			430,000
2016	Purchase Vehicles for Engineering & Maintenance Personnel	301-2001	Highways			45,000			45,000
			Highways Total	-	-	475,000	-	-	475,000
2016	Emergency Equipment Replacement	201-2502	Sheriff	134,000					134,000
2016	Emergency Vehicle Replacement	201-2501	Sheriff	240,000					240,000
2016	New LEC	110-0011	Sheriff		10,000,000				10,000,000
			Sheriff Total	374,000	10,000,000	-	-	-	10,374,000
			Grand Total	374,000	10,000,000	475,000	50,000	10,000	10,909,000

CROW WING COUNTY
2011 - 2016 CIP
DEPARTMENT SUMMARY

	County Land Management	Government Buildings	Health	Highways	Landfill Sw376	Parks	Sheriff	Total
2011	39,000	3,835,562	50,000	205,000	580,000	35,000	-	4,744,562
2012	39,000	674,500	50,000	395,000	-	45,000	555,430	1,758,930
2013	-	237,500	50,000	480,000	-	-	354,000	1,121,500
2014	-	85,000	50,000	470,000	-	-	352,000	957,000
2015	10,000	25,000	50,000	465,000	-	-	356,000	906,000
2016	10,000	-	50,000	475,000	-	-	10,374,000	10,909,000
Total	98,000	4,857,562	300,000	2,490,000	580,000	80,000	11,991,430	20,396,992

CROW WING COUNTY
2011 - 2016
DEPARTMENT DETAIL

Year	Project Title	Project #	Dept.	Priority	Description/Location	Total
2012	Increase Emergency Power	110-0002	Government Buildings	24	Connect Courthouse, LEC, Land Svcs, Museum to main generator at Cntrl Svcs	100,000
2014	Replace LEC Roof	110-0005	Government Buildings	32	Replace rubber roof of LEC	85,000
2013	Replace Window at Historic Courthouse	110-0007	Government Buildings	29	Replace window for better thermal efficient windows	200,000
2011	New LEC	110-0011	Government Buildings	35	Refurbish old building and design, build new one.	30,000
2012	New LEC	110-0011	Government Buildings	35	Refurbish old building and design, build new one	15,000
2011	Range Land and Building Improvements	110-0012	Government Buildings	34	Install higher burms, drainage, fence, bathroom	25,000
2012	Range Land and Building Improvements	110-0012	Government Buildings	34	Install higher burms, drainage, fence, bathroom	5,000
2013	Rang Land and Building Improvements	110-0012	Government Buildings	34	Install higher burms, drainage, fence, bathroom	30,000
2011	Retro-fit lights at the LEC	110-0018	Government Buildings	0	Replace circuline fixtures with 4 foot lights	20,000
2015	John Deere front end loader	110-2001	Government Buildings	0	Equipment Replacement	25,000
2012	Zero Turn Radius Mower	110-2002	Government Buildings	0	Equipment Replacement	7,500
2012	Truck	110-2004	Government Buildings	0	Replace 3/4 Ton, 4x4, plow and tommy gate	40,000
2012	Used Forklift	110-2005	Government Buildings	0	Equipment Replacement	12,000
2013	Shampooer	110-2006	Government Buildings	0	Equipment replacement	7,500
2012	New Storage Facility - Sheriff's Office	201-0001	Government Buildings	37	New Storage Facility - Sheriff's Office	495,000
2011	800 MHZ Radio System	201-2001	Government Buildings	45	Replacement of current radio system	3,760,562
2016	New LEC	110-0011	Sheriff	35	Refurbish old building and design, Build new one	10,000,000
2012	Emergency Equipment Replacement	201-2502	Sheriff	29	Replacement of emergency equipment	158,000
2012	Emergency Vehicle Replacement	201-2501	Sheriff	29	Replacement of emergency vehicles	397,430
2013	Emergency Equipment Replacement	201-2502	Sheriff	29	Replacment of emergency equipment	119,000
2013	Emergency Vehicle Replacement	201-2501	Sheriff	29	Replacement of emergency vehicles	235,000
2014	Emergency Equipment Replacement	201-2502	Sheriff	29	Replacement of emergency equipment	122,000
2014	Emergency Vehicle Replacement	201-2501	Sheriff	29	Replacement of emergency vehicles	230,000
2015	Emergency Equipmet Replacement	201-2502	Sheriff	29	Replacement of emergency equipment	136,000
2015	Emergency Vehicle Replacement	201-2501	Sheriff	29	Replacement of emergency vehicles	220,000
2016	Emergency Equipment Replacement	201-2502	Sheriff	29	Replacement of emergency equipment	134,000
2016	Emergency Vehicle Replacement	201-2501	Sheriff	29	Replacement of emergency vehicles	240,000
2011	Purchase Vehicles for Engineering & maintenance Personnel	301-2001	Highways	39	Repalce units #13/20/25/60/63	160,000
2011	Purchase Tar Kettles	301-2515	Highways	45	Replace Unit# 165,166,167,168 & 169	45,000
2012	Purchase 1 Tandem axle Dump Trucks	301-2504	Highways	39	Replace unit #36	210,000
2012	Purchase 3 Maintenance Trucks	301-2511	Highways	39	Replace units #42, 49, 50	150,000
2012	Purchase 1 Wood Chipper	301-2512	Highways	42	Add wood chipper to Crosslake shop	35,000
2013	Purchase 1 Tandem Axle Dump trucks	301-2504	Highways	39	Replace Unit #38	210,000
2013	Purchase 2 Skid steer loaders and attachments	301-2503	Highways	39	Replace Unit # 1874/1875	120,000
2013	Purchase 3 Maintenance Trucks	301-2511	Highways	39	Replace units #45, 46, 47	150,000
2014	Purchase 1 Tandem Axle Dump Trucks	301-2504	Highways	39	Replace Unit # 31/32	215,000
2014	Purchase one Motorgrader	301-2510	Highways	39	Replace Unit # 1	170,000
2014	Purchase Vehicles for Engineering & Maintenance Personnel	301-2001	Highways	39	replace Unit # 64	55,000
2014	Purchase 2 equipment Trailers	301-2514	Highways	42	Replace Unit #110/111	30,000
2015	Purchase 1 Tandem Axle Dump Trucks	301-2504	Highways	39	Vehicle replacement	215,000
2015	Purchase one tractor with mowers	301-2507	Highways	39	Replace Unit #81	80,000
2015	Purchase Vehicles for Engineering & Maintenance Personnel	301-2001	Highways	39	Vehicle Replacement	80,000
2015	Purchase one Backhoe/Loader	301-2501	Highways	42	Replace Unit #12	90,000
2016	Purchase 2 Tandem Axle Dump Trucks	301-2504	Highways	39	Replace Units # 33/36	430,000
2016	Purchase Vehicles for Engineering & Maintenance Personnel	301-2001	Highways	39	Replace Unit # 57/1751	45,000
2011	Cell 5 site preparation	393-1001	Landfill Sw376	34	Clear, Grub, Remove top soil	500,000
2011	Install new recirculation laterals in cell 4	393-1002	Landfill Sw376	34	Replace existing laterals	80,000
2011	Vehicle replacement	420-2005	Health	39	Community services fleet	50,000
2012	Vehicle Replacement	420-2005	Health	39	Community Services fleet	50,000
2013	Vehicle Replacment	420-2005	Health	39	Community Services vehicle fleet	50,000
2014	Vehicle Replacement	420-2005	Health	39	Community Services vehicle fleet	50,000
2015	Vehicle Replacement	420-2005	Health	39	Community Services vehicle fleet	50,000

CROW WING COUNTY
2011 - 2016
DEPARTMENT DETAIL

Year	Project Title	Project #	Dept.	Priority	Description/Location	Total
2016	Vehicle Replacement	420-2005	Health	39	Community Services vehicle fleet	50,000
2011	Milford Mine Memorial Park	520-1001	Parks	29	Build park dedicated to miners that died in 1924	35,000
2012	Milford Mine Memorial Park	520-1001	Parks	29	Build park dedicated to miners that died in 1924	45,000
2011	Pickup Truck Replacement	670-2002	County Land Management	31	Pickup Truck	30,000
2011	Snowmobile Replacement	670-2004	County Land Management	33	Snowmobile	9,000
2012	Pickup Truck Replacement	670-2002	County Land Management	31	Pickup Truck	30,000
2012	Snowmobile Replacement	670-2004	County Land Management	32	Replace Snowmobile	9,000
2015	ATV Replacement	670-2003	County Land Management	30	ATV Replacements	10,000
2016	ATV Replacement	670-2003	County Land Management	33	ATV	10,000

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	25	DEPT	Building / Sheriff				PROJ#	110-0011
PROJECT TITLE	New LEC - Sheriff's Office							
PRIORITY	34							
DESCRIPTION / LOCATION	Necessary maintenance of the existing LEC and the building of new LEC.							
PURPOSE / JUSTIFICATION	The current LEC is the only buidling on campus that has not been either replaced or fully remodeled to meet current needs. Carpeting is worn, cubical walls in the squad room are falling down, many of our desks our outdated and some of our walls have been half heartily repaired - We need a new faciilty and we need to update this building in the meantime. At a minimum we would like to have our carpets replaced and the workstations in the squadroom updated. Costs are estimates only.							
FUTURE IMPACT ON OPERATING COSTS	Uncertain at this time							
FUNDING SOURCE AND AMOUNT	Fund Balance					\$	45,000	
	Bond Issuance					\$	10,000,000	
CURRENT								
ACCOUNT DESCRIPTION	YEAR	2012	2013	2014	2015	2016	TOTAL	
Building Acq./ Const. Over \$5K	30,000	15,000	-	-	-	10,000,000	\$ 10,045,000	
-	-	-					\$ -	
							\$ -	
							\$ -	
TOTAL	\$ 30,000	\$ 15,000	\$ -	\$ -	\$ -	\$10,000,000	\$ 10,045,000	

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	1	DEPT	Facilities				PROJ#	110-2002
PROJECT TITLE	Zero Turn Radius mower							
PRIORITY	0							
DESCRIPTION / LOCATION	Equipment replacement							
PURPOSE / JUSTIFICATION	Equipment replacement plan							
FUTURE IMPACT ON OPERATING COSTS	0							
FUNDING SOURCE AND AMOUNT	County Tax Dollars					\$	-	
	ACCOUNT DESCRIPTION	CURRENT YEAR	2012	2013	2014	2015	2016	2011 - 2016 TOTAL
	Building - Imp. Over \$5K	-	7,500	-	-	-	-	\$ 7,500
	-	-	-					\$ -
								\$ -
								\$ -
	TOTAL	\$ -	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ 7,500

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	2	DEPT	Sheriff				PROJ#	201-2001
PROJECT TITLE	800 MHZ Radio System							
PRIORITY	45							
DESCRIPTION / LOCATION	Complete replacement of our current radio system in order to comply with the State mandated 800 Mhz.							
PURPOSE / JUSTIFICATION	The State of Minnesota has mandated that all PSAP emergency response centers within the state are running on the 800 MHZ radio system by the year 2013. Crow Wing County has committed to the full migration to 800 Mhz and has retained the services of GeoComm for project management. A study was completed regarding what will be needed to meet the state's expectation. We know that a tower will need to be installed in the Crosby area and that the radios in dispatch, all emergency vehicles and those assigned to each of our officers will need to be replaced. The preliminary costs have been identified as well as grants that will offset a portion of the expense. Crow Wing County will be responsible for all charges related to building up the infrastructure and radio needs of the Sheriff's Office. The County has also agreed to pay 80% of the expense related to local police, fire department and first responders. This program will also affect city plows, county highway, public works and the project will not be successful unless all areas are fully considered. On going discussions are planned to continue to assess the needs and their financial impact.							
FUTURE IMPACT ON OPERATING COSTS	Uncertain at this time							
FUNDING SOURCE AND AMOUNT	Fund Balance					\$	3,000,000	
	Federal Grants					\$	760,562	
CURRENT								
ACCOUNT DESCRIPTION	YEAR	2012	2013	2014	2015	2016	TOTAL	
Building Acq./ Const. Over \$5K	215,300	-	-	-	-	-	\$ 215,300	
Furn. & Eq. Other Over \$5K	3,545,262	-					\$ 3,545,262	
							\$ -	
							\$ -	
TOTAL	\$ 3,760,562	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,760,562	

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	1	DEPT	Sheriff		PROJ#	201-2502	
PROJECT TITLE	Emergency Vehicle Equipment Replacement						
PRIORITY	29						
DESCRIPTION / LOCATION	On-going replacement rotation of all emergency response vehicles for the Crow Wing County Sheriff's Office. This project represents the purchase of the equipment necessary for all new squads and goes hand-in-hand with Emergency Vehicle Replacement (Vehicle) and also includes the costs of the Mobile Data Computers.						
PURPOSE / JUSTIFICATION	The CWC Sheriff's Office has an established policy for replacement of their emergency vehicles. Vehicles which are purchased must be customized both inside and out prior to being put into operation. Outside customization includes such items as the decals, lightbar, grill lights and pushbumper. Inside, equipment such as the cage, door skins, radar, GPS, gun mounts are all needed. It takes approximately \$19000 to make a vehicle into an emergency response vehicle. Cost can vary for specialized vehicles. Whenever possible, existing equipment is used and fitted to the new vehicles. Wear and tear and the expense to custom fit older equipment is always a consideration when attempting to recycle existing equipment. *We have excluded the computer, camera and radio from our list of inside equipment since these three purchases are all covered by the funds granted under other projects.						
FUTURE IMPACT ON OPERATING COSTS	Beginning in 2012 this expense will return to our operating budget and will appear to inflate our expense. These costs have not been reflected in our operating budget for several years. -- Projected expenses do not include any cost considerations related to inflation						
FUNDING SOURCE AND AMOUNT	County Tax Dollars				\$	122,000	
CURRENT							
ACCOUNT DESCRIPTION	YEAR	2012	2013	2014	2015	2016	2011 - 2016 TOTAL
Furn. & Eq. Other Over \$5K	-	158,000	119,000	122,000	136,000	134,000	\$ 669,000
-	-	-					\$ -
							\$ -
							\$ -
TOTAL	\$ -	\$ 158,000	\$ 119,000	\$ 122,000	\$ 136,000	\$ 134,000	\$ 669,000

**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	10	DEPT	Highways			PROJ#	301-2001
PROJECT TITLE	Purchase Vehicles for Engineering & Maintenance Personnel						
PRIORITY	39						
DESCRIPTION / LOCATION	Replace Unit #58 (1999 Jeep Cherokee) & Unit #51 (2000 Ford F150 Pickup) with 2010 model vehicles. Replace Unit #13 (1998 Jeep Cherokee), Unit #20 (1991 Ford F250), Unit #25 (1999 Chev Suburban), Unit #60 (1995 Ford F250), Unit #64 (1999 Jeep Cherokee) & Unit #63 (1997 Jeep Cherokee) with 2011 model vehicles. Replace Unit #54 (2001 Chev pickup) & Unit #56 (2000 Ford Excursion) with 2014 model vehicles. Replace Unit #44 (2004 F-350 Pickup), Unit #59 (2004 F-350 Pickup) & Unit #17 (1999 Dakota Pickup) with 2015 model vehicles. Replace Unit #57 (2005 Colorado Pickup) & Unit #1751 (2007 Ford Pickup) with 2016 model vehicles.						
PURPOSE / JUSTIFICATION	These Units are all due for replacement because of high mileage/age.						
FUTURE IMPACT ON OPERATING COSTS	By replacing the old equipment with newer more efficient equipment we will reduce operating costs and generate more revenue because of less down-time.						
FUNDING SOURCE AND AMOUNT	County Tax Dollars					\$	55,000
CURRENT							2011 - 2016
ACCOUNT DESCRIPTION	YEAR	2012	2013	2014	2015	2016	TOTAL
Site or Grounds Acq. Over \$5K	160,000	-	-	55,000	80,000	45,000	\$ 340,000
-	-	-					\$ -
							\$ -
							\$ -
TOTAL	\$ 160,000	\$ -	\$ -	\$ 55,000	\$ 80,000	\$ 45,000	\$ 340,000

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	10	DEPT	Highway		PROJ#	301-2504	
PROJECT TITLE	Purchase 8 Tandem axle Dump Trucks						
PRIORITY	39						
DESCRIPTION / LOCATION	Replace Unit #21 & Unit #23 (1995 Ford Single Axle Dump Trucks) with 2010 model tandem axle dump trucks and plow equipment. Replace Unit #24 (1995 Ford Single Axle Dump Truck) with 2012 Snow Plow Dump Truck. Replace Unit #22 (1995 Ford Single Axle Dump Trucks) with 2013 Snow Plow Dump Truck. Replace Unit #31 (2000 Sterling Tandem Axle Dump Truck) with 2014 Snow Plow Dump Truck. Replace Unit #32 (2000 Sterling Tandem Axle Dump Truck) with 2015 Snow Plow Dump Truck. Replace Unit #33 (2000 Sterling Tandem Axle Dump Truck) & Unit #36 (2000 Sterling Tandem Axle Dump Truck) with 2016 Snow Plow Dump Trucks.						
PURPOSE / JUSTIFICATION	Unit #21 and Unit #23 will be 15 years old and are due for replacement. Unit #24 will be 16 years old and due for replacement. Unit #22 will be 17 years old and due for replacement. Unit #31 will be 14 years old and due for replacement. Unit #32 will be 15 years old and due for replacement. Unit #33 and Unit #36 will be 16 years old and due for replacement.						
FUTURE IMPACT ON OPERATING COSTS	By replacing the old equipment with newer more efficient equipment we will reduce operating costs and generate more revenue because of less down-time.						
FUNDING SOURCE AND AMOUNT	County Tax Dollars				\$	215,000	
CURRENT							
ACCOUNT DESCRIPTION	YEAR	2012	2013	2014	2015	2016	2011 - 2016 TOTAL
Vehicle & Machinery Over \$5K	-	210,000	210,000	215,000	215,000	430,000	\$ 1,280,000
-	-	-					\$ -
							\$ -
							\$ -
TOTAL	\$ -	\$ 210,000	\$ 210,000	\$ 215,000	\$ 215,000	\$ 430,000	\$ 1,280,000

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	10	DEPT	Highway		PROJ#	301-2510		
PROJECT TITLE	Purchase 1 Motorgrader							
PRIORITY	39							
DESCRIPTION / LOCATION	Replace Unit #1 (1997 John Deere Motorgrader) with a 2014 model.							
PURPOSE / JUSTIFICATION	Unit #1 will be 17 years old and due for replacement.							
FUTURE IMPACT ON OPERATING COSTS	By replacing this motorgrader we will reduce our maintenance and operating costs with the more efficient operation of a new unit.							
FUNDING SOURCE AND AMOUNT	County Tax Dollars				\$	170,000		
	ACCOUNT DESCRIPTION	CURRENT YEAR	2012	2013	2014	2015	2016	2011 - 2016 TOTAL
	Vehicle & Machinery Over \$5K	-	-	-	170,000	-	-	\$ 170,000
	-	-	-					\$ -
								\$ -
								\$ -
	TOTAL	\$ -	\$ -	\$ -	\$ 170,000	\$ -	\$ -	\$ 170,000

FORM A

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	10	DEPT	Highway		PROJ#	301-2514		
PROJECT TITLE	Purchase 2 equipment Trailers							
PRIORITY	42							
DESCRIPTION / LOCATION	Replace Unit #110 (1994 Felling Trailer) and Unit #111 (1986 Wisconsin Trailer) with 2014 models.							
PURPOSE / JUSTIFICATION	Unit #110 and Unit #111 will be due for replacement.							
FUTURE IMPACT ON OPERATING COSTS	By replacing these old trailers we will reduce our maintenance and operating costs with the more efficient operation of new trailers.							
FUNDING SOURCE AND AMOUNT	County Tax Dollars				\$	30,000		
	ACCOUNT DESCRIPTION	CURRENT YEAR	2012	2013	2014	2015	2016	2011 - 2016 TOTAL
	Vehicle & Machinery Over \$5K	-	-	-	30,000	-	-	\$ 30,000
	-	-	-					\$ -
								\$ -
								\$ -
	TOTAL	\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	12	DEPT	0		PROJ#	420-2005	
PROJECT TITLE	Vehicle Replacement						
PRIORITY	39						
DESCRIPTION / LOCATION	Community Services Vehicle Fleet						
PURPOSE / JUSTIFICATION	To maintain a reliable vehicle fleet for Community Services.						
FUTURE IMPACT ON OPERATING COSTS	Reduce Maintenance Costs						
FUNDING SOURCE AND AMOUNT	Fund Balance				\$	50,000	
	CURRENT						2011 - 2016
ACCOUNT DESCRIPTION	YEAR	2012	2013	2014	2015	2016	TOTAL
Vehicle & Machinery Over \$5K	50,000	50,000	50,000	50,000	50,000	50,000	\$ 300,000
Vehicle & Machinery Over \$5K	-	-					\$ -
							\$ -
							\$ -
TOTAL	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 300,000

**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	2	DEPT	Parks				PROJ#	520-1001
PROJECT TITLE	Milford Mine Memorial Park							
PRIORITY	29							
DESCRIPTION / LOCATION	Milford Mine Memorial Park is dedicated to the 41 miners that lost their lives in 1924. Milford Mine is located approximately 6 miles north of Crosby, MN off CR 30.							
PURPOSE / JUSTIFICATION	Milford Mine Memorial Park is dedicated to the 41 miners that lost their lives in 1924. To provide a passive educational park for the residents of Crow Wing County as well as visitors to the area.							
FUTURE IMPACT ON OPERATING COSTS	Operating costs will increase as regular maintenance will be required when completed.							
FUNDING SOURCE AND AMOUNT	Fund Balance					\$	-	
	CURRENT							2011 - 2016
ACCOUNT DESCRIPTION	YEAR	2012	2013	2014	2015	2016	TOTAL	
Site or Grounds Imp. Over \$5K	35,000	45,000	-	-	-	-	\$	80,000
-	-	-					\$	-
							\$	-
							\$	-
TOTAL	\$ 35,000	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$	80,000

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**CROW WING COUNTY
CAPITAL IMPROVEMENT PLAN
CAPITAL PROJECT REQUEST FORM**

FORM A

FUND	22	DEPT	County Land Management		PROJ#	670-2004
PROJECT TITLE	Snowmobile Replacement					
PRIORITY	32					
DESCRIPTION / LOCATION	Snowmobile - 2 Replacements					
PURPOSE / JUSTIFICATION	In order to maintain a reliable snowmobile fleet, there is a need to schedule replacements at appropriate times. The two sleds to replace were purchased in 1998					
FUTURE IMPACT ON OPERATING COSTS	Reduced maintenance costs.					
FUNDING SOURCE AND AMOUNT	Fund Balance				\$	-

	CURRENT YEAR	2012	2013	2014	2015	2016	2011 - 2016 TOTAL
Vehicle & Machinery Over \$5K	9,000	9,000	-	-	-	-	\$ 18,000
-	-	-					\$ -
							\$ -
							\$ -
TOTAL	\$ 9,000	\$ 9,000	\$ -	\$ -	\$ -	\$ -	\$ 18,000

CROW WING COUNTY

2009-2013

Highway Improvement Plan



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Responsibilities and Road System



Responsibilities

- The highway department is responsible for the construction (or improvements) and maintenance of more than 610 miles of local secondary roads and 84 bridges – including engineering design, construction management, signing, maintenance of all kinds (snowplowing, patching potholes, smoothing surfaces, mowing roadsides, cleaning culverts, etc.) and administration of all aspects of the local road system.

Roads

- Within the County system of roads there are two different categories. There are about 380 miles of County State Aid Highways (CSAH) which are supported by the “gas tax” or what is referred to as the Minnesota Highway Users Tax Distribution Fund made up primarily of gas tax and vehicle license or registration fees. And, there are about 180 miles of County Roads (CR) which are supported entirely by local property taxes of the Road & Bridge Levy.
- In Crow Wing County, the County State Aid Highways are identified by one and two digit numbers, such as CSAH 2, the Dewing Highway, or CSAH 11 from Pequot Lakes to the Aitkin County Line. The County Roads are identified by three digit numbers, such as CR 113 in the Pine Center area or CR 145 in the Jenkins/Hay Lake area.
- In addition to CSAHs and CRs, the highway department is responsible for the maintenance of 54 miles of Town Roads in the Unorganized Territories. (This highway improvement plan does not incorporate these roadways)

Goals



Goals of the highway improvement plan :

1. Preserve and enhance the county highway system within funding constraints by:
 - a. Striving to protect the integrity of high traffic CSAHs by ensuring they are in “Good”* condition.
 - b. Attempting to keep low traffic CSAHs and CRs in “Fair to Good”* condition.
 - c. Improving safety by reconstructing roads to State Aid standards, improving intersections and providing proactive safety measures.
 - d. Paving gravel roads where feasible to reduce maintenance costs.
2. Identify rehabilitation, reconstruction and spot improvement projects that can and should be implemented within 5 years (2009-2013).
3. Identify other projects that should be considered or are already planned beyond 5 years. (Shown as 2014+).
4. Report the condition of the highway system using Pavement Management System data and incorporate identified deficiencies into the plan where possible.

* See Page 22 – Pavement Management Data for description of condition ratings.

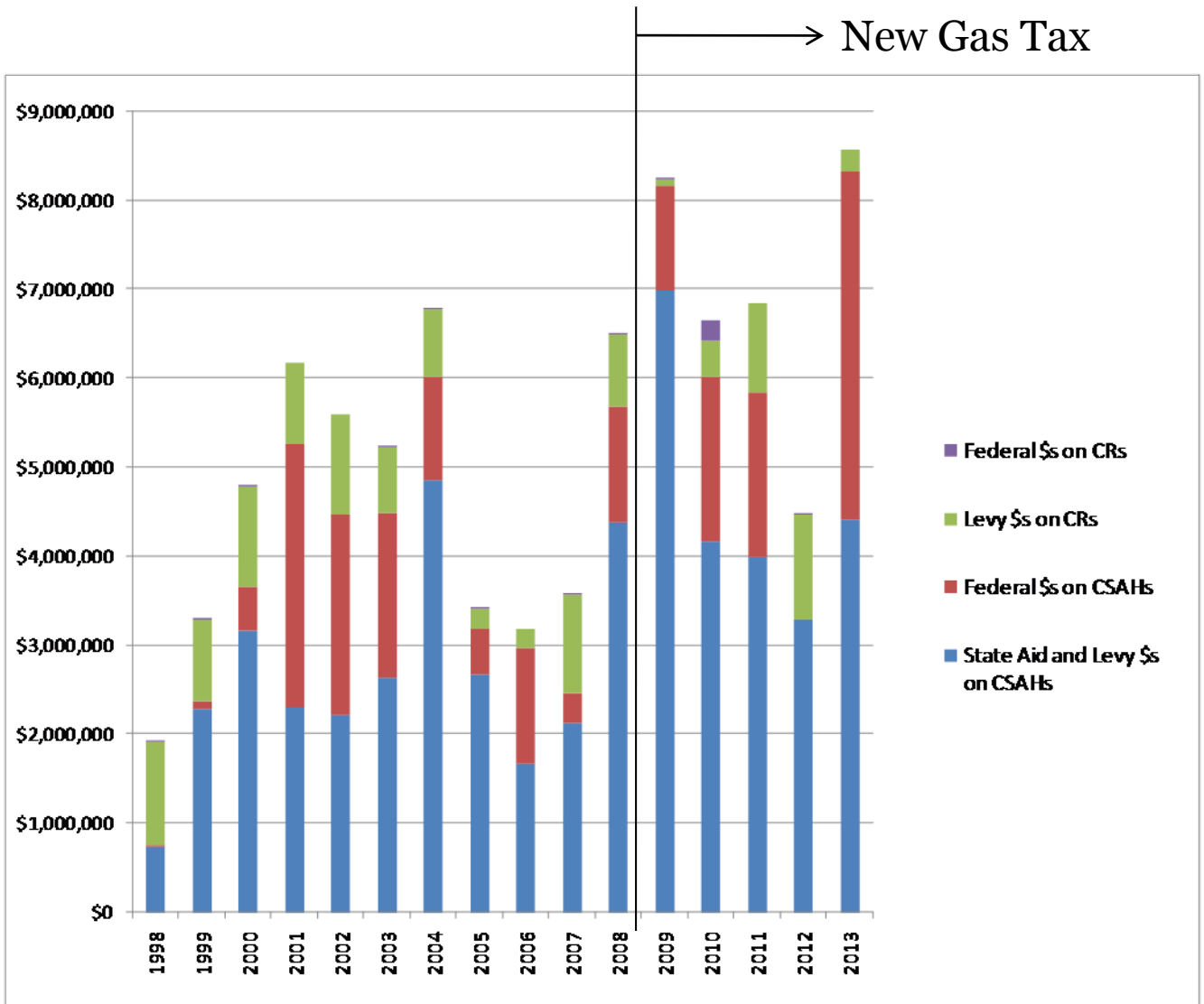
Funding



- **Funding sources for the county highway system:**

1. County State Aid Highway Funds (Gas Tax, License Tabs Fees, Motor Vehicle Registration)
2. County Road and Bridge Levy (Property Tax)
3. Federal Funds (SAFETEA-LU – expires Sept 09 – New bill being drafted):
 - a. Surface Transportation Program (STP)
 - Reconstruction and rehabilitation of linear projects. Only major collectors eligible.
 - b. Highway Safety Improvement Program (HSIP)
 - Low cost safety mitigation projects.
 - c. Safe Routes to School (SRTS)
 - Projects to encourage biking and walking to school.
 - d. High Priority Projects (HPP)
 - Special appropriations or earmarks from US Congress.
4. State Funds:
 - a. County Turnback Funds (CTB) – (Gas tax, etc)
 - Restoration of former trunk highways. An example is Mill Avenue : was TH 25 and is now CSAH 3.
 - b. Local Road Improvement Program (LRIP)
 - State bonds used for local roads that usually have limited other funding sources.
 - c. State Bridge Bonds for replacement of deficient bridges.
5. Miscellaneous:
 - a. Town Bridge Account (Gas tax, etc) for replacement of deficient township bridges
 - b. State Park Road Fund (Gas tax, etc.) for roads providing access to recreational areas.
 - c. City cost share and developer improvements

Funding History and Projections

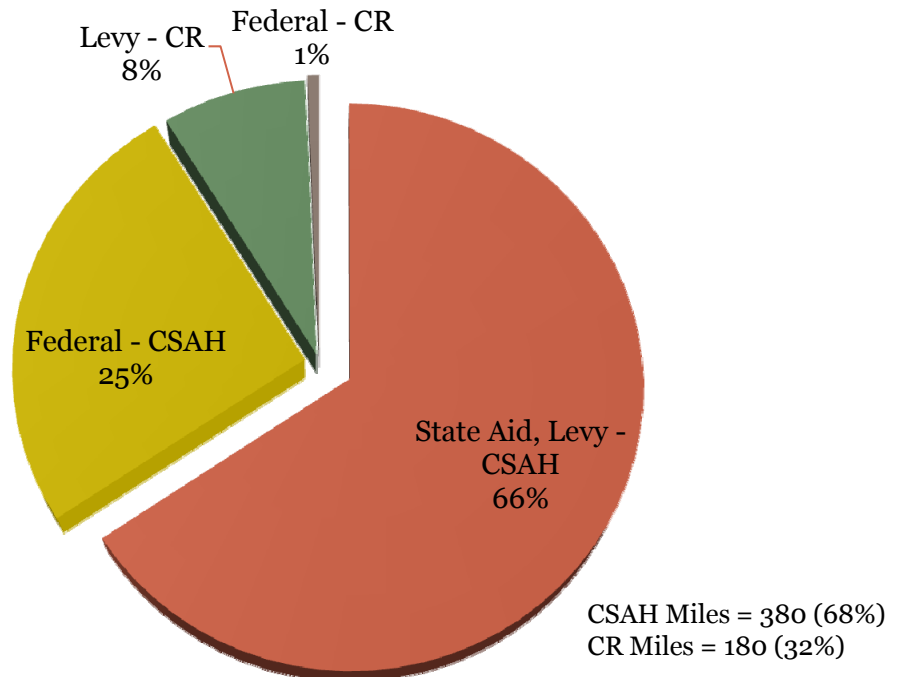


History and Projected Expenditures
on County System

Summary of 5-Yr Improvement Costs



2009-2013 Expected Expenditures On County System (inc. Construction, ROW and Engineering)



Year	State Aid, Levy - CSAH	Federal - CSAH	Levy - CR	Federal - CR	Total
2009	\$6,987,465	\$1,177,149	\$65,251	\$9,771	\$8,239,636
2010	\$4,157,536	\$1,850,036	\$416,131	\$216,964	\$6,640,667
2011	\$3,990,357	\$1,847,688	\$1,005,755	\$0	\$6,843,800
2012	\$3,284,786	\$0	\$1,177,547	\$0	\$4,462,333
2013	\$4,405,700	\$3,904,000	\$247,500	\$0	\$8,557,200
5 YR Totals:	\$ 22,825,844	\$ 8,778,873	\$ 2,912,184	\$ 226,735	\$34,743,636

Approximate Average Annual Funding for Construction, ROW, and Engineering:

State Aid = \$3,000,000.

Levy = \$1,500,000.

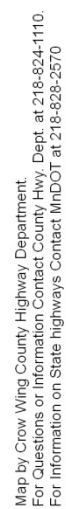
Federal = \$2,500,000.(normally closer to \$1,500,000)

2009-2014+ Maps and Funding Tables



- 2009-2013 Highway Improvement Map.
- Individual Maps and Funding Tables by Year.
 - 2009
 - 2010
 - 2011
 - 2012
 - 2013
- 2014+ Map and Funding Table





July 14, 2009

CROW WING COUNTY

2009 Construction Program



Legend

Reconstruction

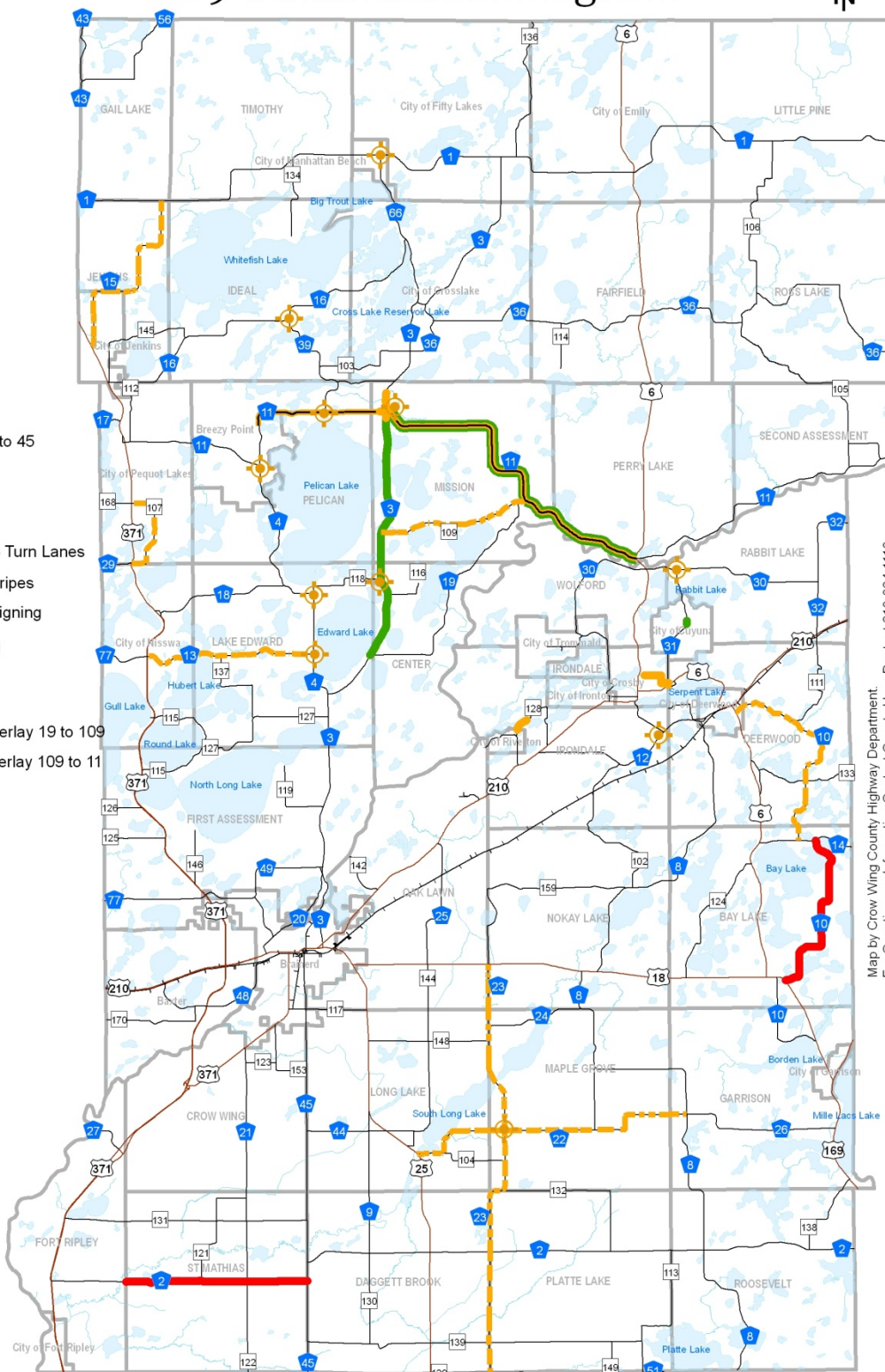
- CSAH 10 18 to 14
- CSAH 2 Koering Rd to 45

Spot Improvement

- CSAH 48 Trail
- CSAH 11 at CSAH 3 Turn Lanes
- CSAH 11 Rumble Stripes
- Curve Delineation Signing
- Intersection Lighting

Rehabilitation

- CSAH 3 Mill and Overlay 19 to 109
- CSAH 3 Mill and Overlay 109 to 11
- CSAH 11 Seal Coat



Map by Crow Wing County Highway Department.
For Questions or Information Contact County Hwy. Dept. at 218-824-1110.
For Information on State Highways Contact MnDOT at 218-828-2570

7/8/09

CROW WING COUNTY HIGHWAY DEPARTMENT

2009 Highway Improvement Plan

7/7/2009

Road	Project #	Description	FUNDING SOURCE							Total Payment by County	Notes
			County	State Aid	Federal	State	City/Town	Other Agency	Bonds		
Rehabilitation											
3	18-603-18	Milling/Surfacing from CSAH 19 to CR 109		\$995,432						\$995,432	Bid Ammount: 4.2 miles - delayed from 2008
3	18-603-18	Milling/Surfacing from CR 109 to CSAH 11		\$833,161						\$833,161	Bid Ammount: 4.0 miles - SA Coming
11	18-611-	CSAH 11 Seal Coat from CSAH 3 to TH 6		\$218,566						\$218,566	Bid Ammount
	18-200-	Pavement Marking, County Wide	\$115,580							\$115,580	Bid Ammount
Sub Total Rehabilitation			\$115,580	\$2,047,159						\$2,162,739	
Reconstruction											
2	18-602-25	Reconstruction from Koering Road to CSAH 45		\$1,200,000						\$1,200,000	Carryover from 2008
10	18-610-05	Reconstruction from TH 18 to CSAH 14		\$2,228,677	\$954,000					\$3,182,677	Bid Ammount
Sub Total Reconstruction				\$3,428,677	\$954,000					\$4,382,677	
Spot Improvement (shoulders, turn lanes, lighting, etc.)											
3	18-603-20	Turn Lanes at CSAH 3 and CSAH 11 Rumble Stripes from Ski Chalet Dr. to TH 6		\$73,920		\$84,388				\$158,308	Bid Ammount: LRIP Funds
11	18-611-	Seperated Trail from College Drive to 4th		\$6,680	\$60,120					\$66,800	16.7 miles.
48	18-648-08	Curve Delineation Signing - 7 roadways			\$163,998			\$40,999		\$204,997	DNR to pay local match - Delayed from 2008
	18-030-	Intersection Lighting - 11 Locations	\$5,600	\$11,200	\$34,200					\$51,000	15, 107, 109, 13, 10, 22, 23, 1/66, 16/39, 11/4, 11/39, 11/3, 118/4, 118/3, 13/4, 30/31, 12/28, 22/23.
	18-030-			\$15,400	\$138,600					\$154,000	
Sub Total Spot Improvement			\$5,600	\$107,200	\$396,918	\$84,388		\$40,999		\$635,105	
2009 CONSTRUCTION TOTALS			\$121,180	\$5,583,036	\$1,350,918	\$84,388		\$40,999		\$7,180,521	

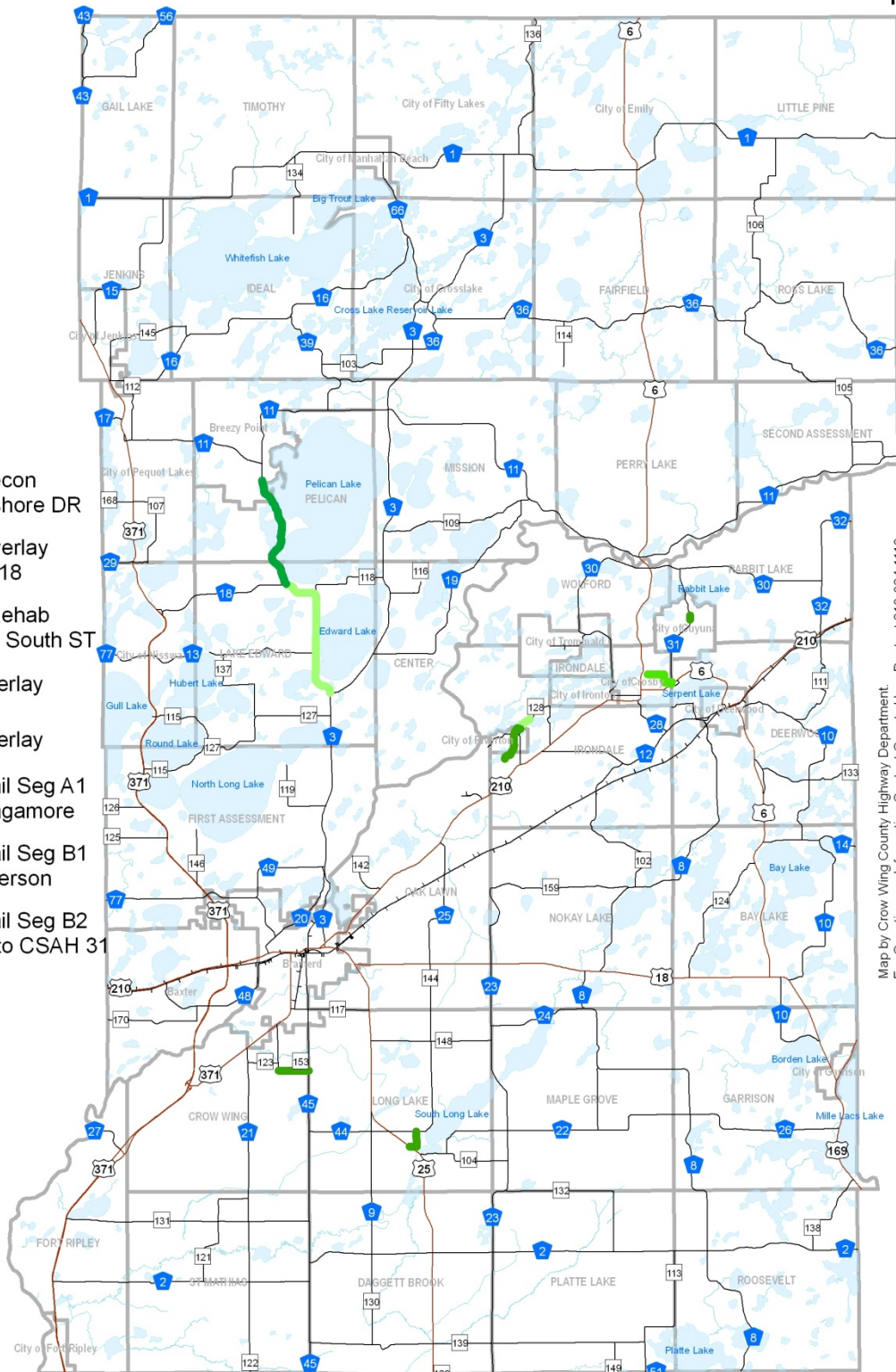
CROW WING COUNTY

2010 Highway Improvement Plan



Legend

- CSAH 4 Recon
18 to Lakeshore DR
- CSAH 4 Overlay
CSAH 3 to 18
- CSAH 31 Rehab
North ST to South ST
- CR 143 Overlay
- CR 153 Overlay
- Cuyuna Trail Seg A1
Rowe to Sagamore
- Cuyuna Trail Seg B1
Rowe to Iverson
- Cuyuna Trail Seg B2
Croft Mine to CSAH 31



Map by Crow Wing County Highway Department.
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For Information on State Highways Contact MnDOT at 218-828-2570

6/02/09

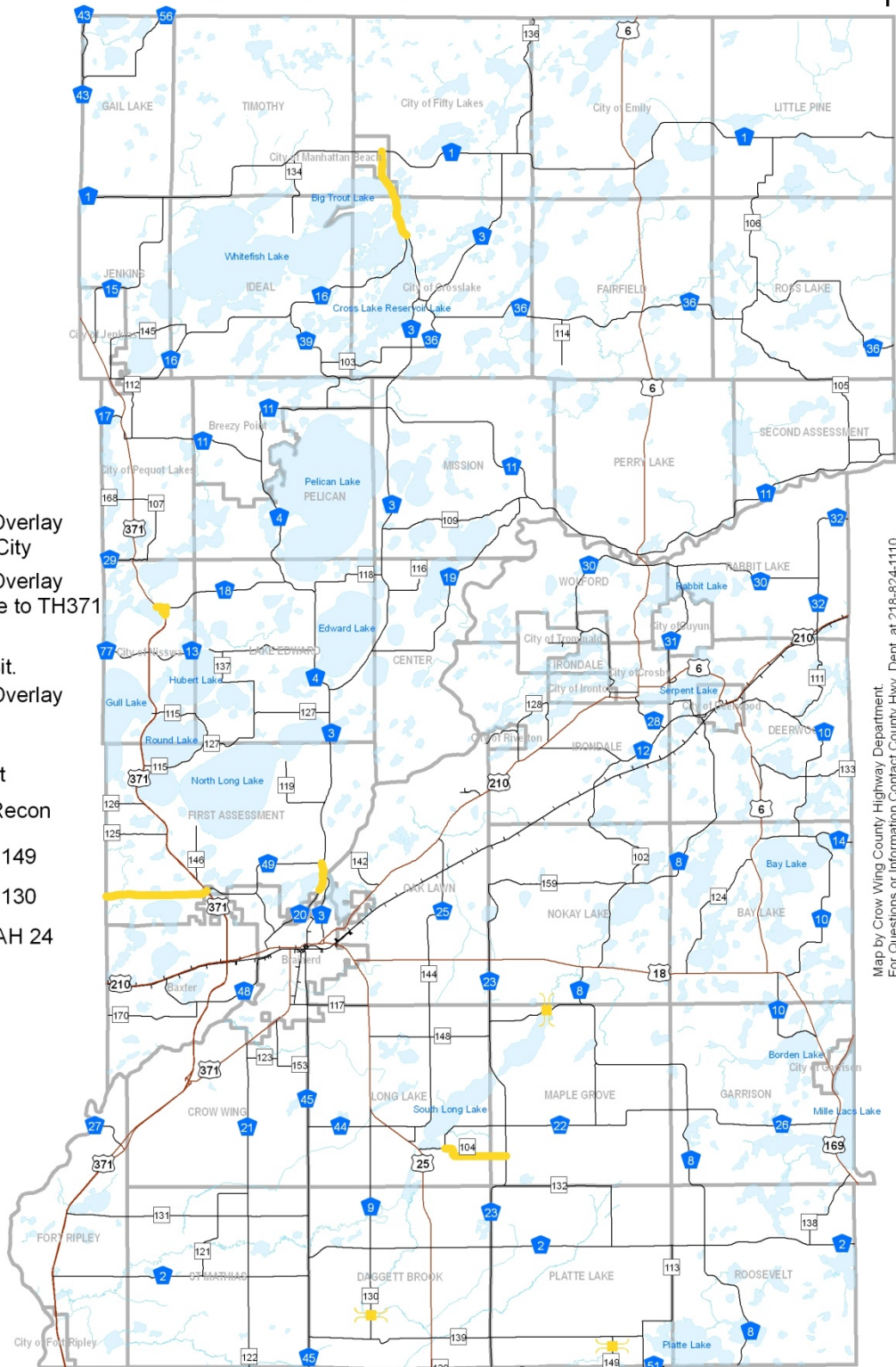
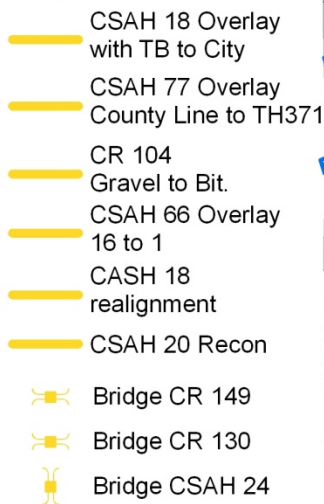
CROW WING COUNTY HIGHWAY DEPARTMENT

2010 Highway Improvement Plan

7/7/2009

Road	Project #	Description	FUNDING SOURCE							Total Payment by County	Notes
			County	State Aid	Federal	State	City/Town	Other Agency	Bonds		
<u>Rehabilitation</u>											
	4 18-604-08	Milling/Surfacing from CSAH 3 to CSAH 18		\$1,094,000						\$1,094,000	4.7 miles
	31 18-631-	CSAH 31 Rehab in Cuyuna		\$75,000						\$75,000	
	143 18-143-	Bituminous overlay from TH25 to CSAH 44	\$81,667							\$81,667	0.7 miles - Possible Turnback
	153 18-153-	Bituminous overlay from CSAH 45 to 1 mile west.	\$140,000							\$140,000	1.0 mile
		Bridge Maintenance - County Wide	\$50,000							\$50,000	
		Crack Seal Program	\$100,000							\$100,000	
		Seal Coat Program	\$250,000							\$250,000	
	18-200-	Pavement Marking, County Wide	\$35,000		\$675,000			\$35,000		\$745,000	Joint HSIP Project w/Morrison Co. 6" County-Wide
Sub Total Rehabilitation			\$656,667	\$1,169,000	\$675,000			\$35,000		\$2,535,667	
<u>Reconstruction</u>											
	4 18-604-07	Reconstruction from CSAH 18 to Lakeshore Drive		\$2,138,000	\$912,000		\$50,000			\$3,100,000	
Sub Total Reconstruction				\$2,138,000	\$912,000		\$50,000			\$3,100,000	
<u>Spot Improvement (shoulders, turn lanes, lighting, etc.)</u>											
	18-090-03	Cuyuna Lake Trail from Sagamore Pit to Rowe Road			\$230,400			\$57,600		\$288,000	Segment A1: 0.6 miles, DNR (92-090-33) to pay local match
	18-090-04	Cuyuna Lake Trail from Rowe Road to Iverson Road and Croft Mine/8th St to CSAH 31/TH210			\$264,000			\$66,000		\$330,000	Segment B1 and B2: 1.6 miles, DNR (92-090-33) to pay local match
Sub Total Spot Improvement					\$494,400			\$123,600		\$618,000	
2010 CONSTRUCTION TOTALS			\$656,667	\$3,307,000	\$2,081,400		\$50,000	\$158,600		\$6,253,667	

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Map by Crow Wing County Highway Department.
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For Information on State highways Contact MnDOT at 218-828-2570

CROW WING COUNTY BOARD

CROW WING COUNTY HIGHWAY DEPARTMENT

2011 Highway Improvement Plan

7/8/2009

			FUNDING SOURCE							Total Payment by County	
Road	Project #	Description	County	State Aid	Federal	State	City/Town	Other Agency	Bonds		Notes
Rehabilitation											
66	18-666-	Milling/Surfacing from CSAH 16 to CSAH 1		\$696,000						\$696,000	3.0 miles
77S	18-677-	Milling/Surfacing from Cass County Line to TH371		\$817,200						\$817,200	3.4 miles
18	18-018-	Milling/Surfacing for turnback from TH371 to new 18	\$226,200							\$226,200	1.0 miles +/- (includes both legs): Turnback to Nisswa
104	18-104-	Bituminous paving from CSAH 22 to CSAH 23	\$330,000							\$330,000	2.2 miles gravel to bituminous
		Bridge Maintenance - County Wide	\$50,000							\$50,000	
		Crack Seal Program	\$150,000							\$150,000	
		Seal Coating Program	\$250,000							\$250,000	
	18-200-	Pavement Marking, County Wide	\$120,000							\$120,000	
Sub Total Rehabilitation			\$1,126,200	\$1,513,200						\$2,639,400	
Reconstruction											
18	18-618-09	Realignment from TH 371 east in Nisswa		\$449,000	\$376,000		\$75,000			\$900,000	0.6 miles
20	18-620-11	Reconstruction of Riverside Drive from N. Ahrens Hill to CSAH 49		\$428,312	\$1,471,688					\$1,900,000	Project federal FY 2012
24		L 2840 Bridge Replacement over Noakasippi River		\$119,013		\$119,013				\$238,025	State Bridge Bonds
130		92404 Bridge Replacement over Daggett Brook	\$112,313			\$262,063				\$374,375	Structurally Deficient - State Bridge Bonds
149		L 2844 Bridge Replacement over Little Nokasippi	\$57,600			\$134,400				\$192,000	State Bridge Bonds
Sub Total Reconstruction			\$169,913	\$996,325	\$1,847,688	\$515,475	\$75,000			\$3,604,400	
Spot Improvement (shoulders, turn lanes, lighting, etc.)											
Sub Total Spot Improvement											
2011 CONSTRUCTION TOTALS			\$1,296,113	\$2,509,525	\$1,847,688	\$515,475	\$75,000			\$6,243,800	

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July 14, 2009

CROW WING COUNTY HIGHWAY DEPARTMENT

2012 Highway Improvement Plan

7/8/2009

Road	Project #	Description	FUNDING SOURCE							Total Payment by County	Notes
			County	State Aid	Federal	State	City/Town	Other Agency	Bonds		
Rehabilitation											
3	18-603-	Milling/Surfacing from CSAH 11 to 0.1 miles S. of CSAH 66		\$870,000						\$870,000	3.9 miles
11	18-611-	Milling/Surfacing from E. CR 112 to CSAH 4		\$1,119,100						\$1,119,100	4.4+/- miles (leave gap for interchange?)
28	18-628-	Milling/Surfacing from CSAH 12 to TH 210		\$358,900						\$358,900	1.53 miles
127	18-127	Bituminous Overlay from CR 115 to CR 137	\$394,333							\$394,333	2.6 miles
139	18-139-	Bituminous Paving from CSAH 45 to TH25	\$600,000							\$600,000	4.0 miles gravel to bituminous - 5Ton (1 lift)
		Bridge Maintenance - County Wide	\$50,000							\$50,000	
		Crack Seal Program	\$100,000							\$100,000	
		Seal Coating Program	\$200,000							\$200,000	
	18-200-	Pavement Marking, County Wide	\$120,000							\$120,000	
Sub Total Rehabilitation			\$1,464,333	\$2,348,000						\$3,812,333	
Reconstruction											
Sub Total Reconstruction											
Spot Improvement (shoulders, turn lanes, lighting, etc.)											
	18-090-03	Cuyuna Lake Trail from CSAH 31/TH 210 to TH 210/TH 6			\$280,000			\$70,000		\$350,000	Segment C: 3.5 miles, DNR (92-090-33) to pay local match
Sub Total Spot Improvement					\$280,000			\$70,000		\$350,000	
2012 CONSTRUCTION TOTALS			\$1,464,333	\$2,348,000	\$280,000			\$70,000		\$4,162,333	

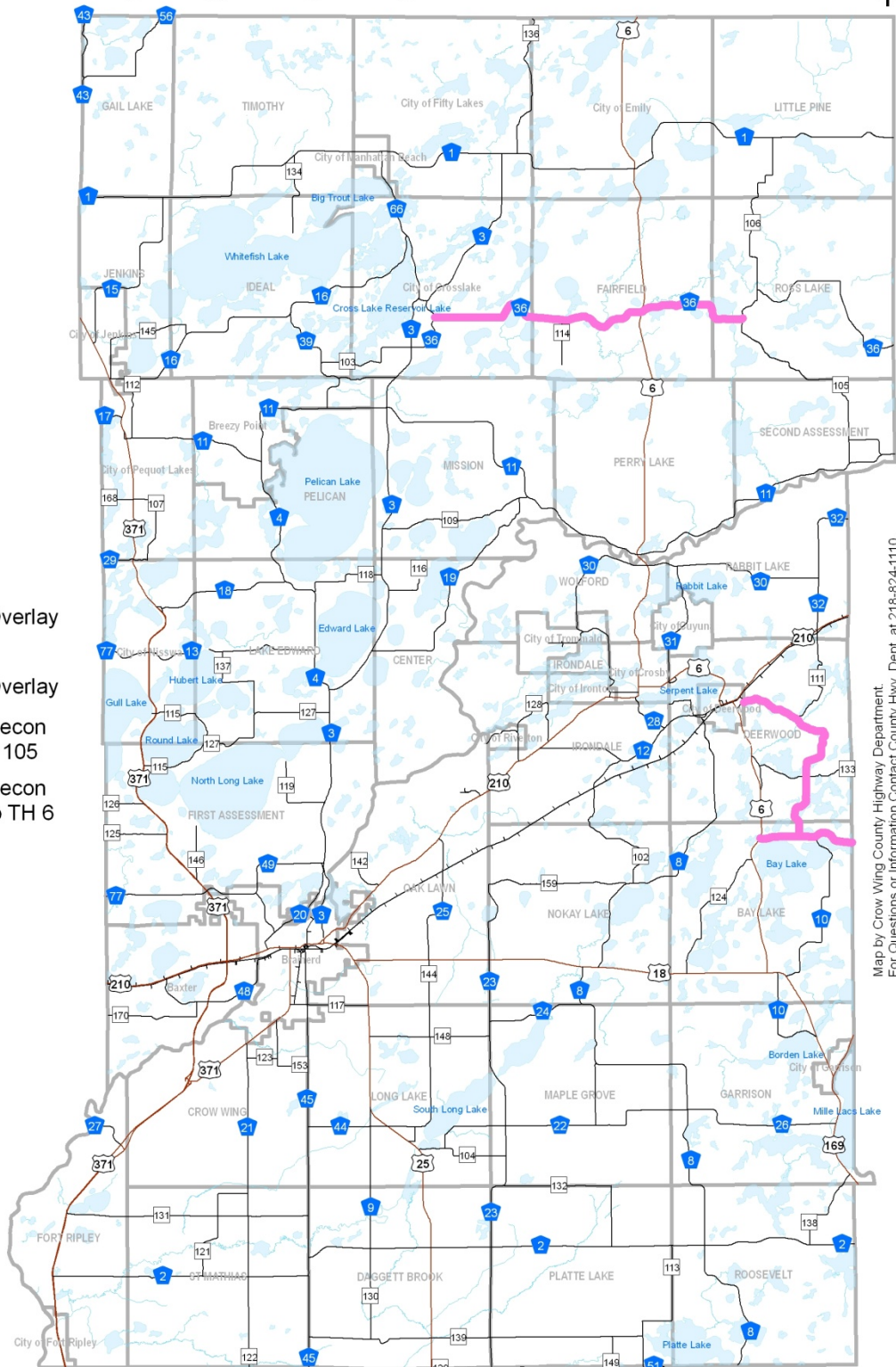
CROW WING COUNTY

2013 Highway Improvement Plan



Legend

- CSAH 10 Overlay
14 to TH 6
- CSAH 14 Overlay
- CSAH 36 Recon
TH 6 to CR 105
- CSAH 36 Recon
CSAH 37 to TH 6



Map by Crow Wing County Highway Department.
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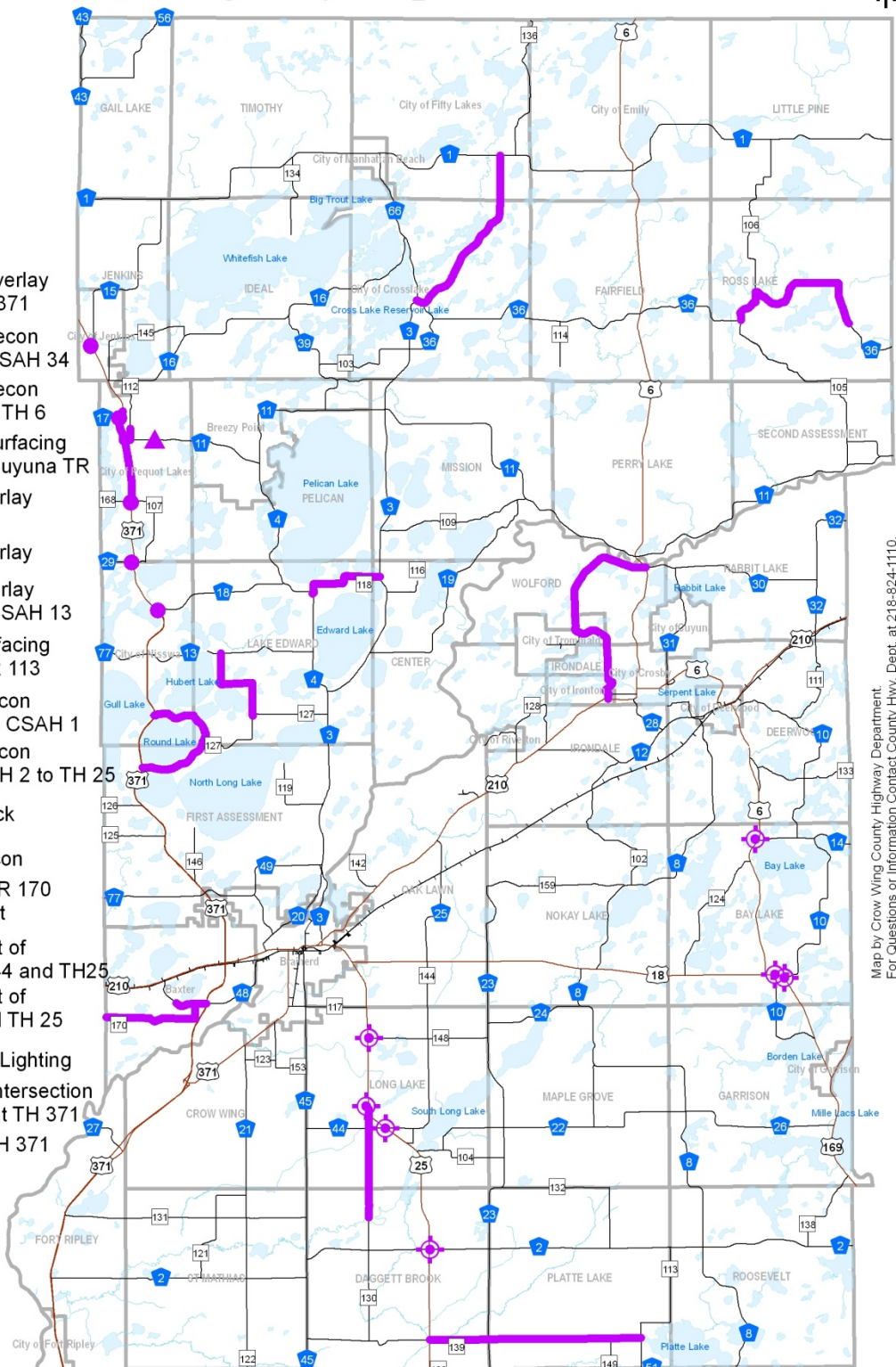
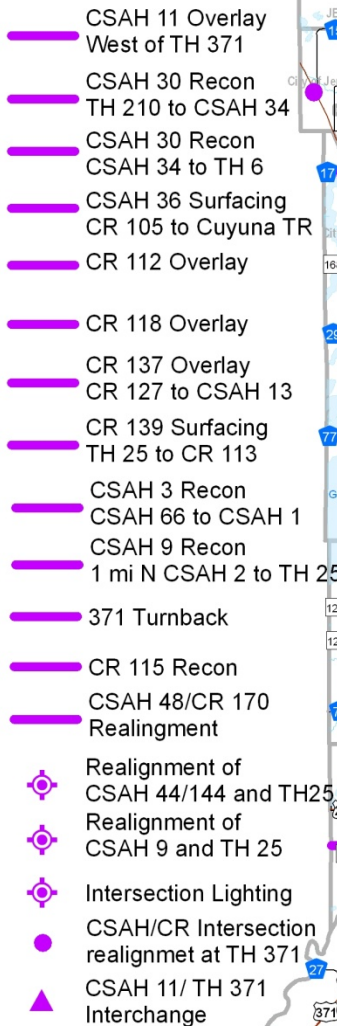
CROW WING COUNTY HIGHWAY DEPARTMENT

2013 Highway Improvement Plan

7/8/2009

Road	Project #	Description	FUNDING SOURCE							Total Payment by County	Notes
			County	State Aid	Federal	State	City/Town	Other Agency	Bonds		
<u>Rehabilitation</u>											
10	18-610-06	Bituminous Overlay from CSAH 14 to TH 6	\$1,177,200							\$1,177,200	7.53 miles - Can not use State Aid - will not meet
14	02-614-	Milling/Surfacing from TH 6 to Aitkin County Line		\$176,000	\$704,000					\$880,000	3.2 miles
		Bridge Maintenance - County Wide	\$50,000							\$50,000	
		Crack Seal Program	\$100,000							\$100,000	
		Seal Coating Program	\$250,000							\$250,000	
	18-200-	Pavement Marking, County Wide	\$120,000							\$120,000	
Sub Total Rehabilitation			\$1,697,200	\$176,000	\$704,000					\$2,577,200	
<u>Reconstruction</u>											
36	18-636-	Reconstruction from CSAH 37 to TH 6		\$800,000	\$3,200,000					\$4,000,000	7.7 miles. HPP Funding
36	18-636-	Reconstruction from TH 6 to CR 105		\$1,480,000						\$1,480,000	3.7 miles
Sub Total Reconstruction				\$2,280,000	\$3,200,000					\$5,480,000	
<u>Spot Improvement (shoulders, turn lanes, lighting, etc.)</u>											
Sub Total Spot Improvement											
2013 CONSTRUCTION TOTALS			\$1,697,200	\$2,456,000	\$3,904,000					\$8,057,200	

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CROW WING COUNTY BOARD

CROW WING COUNTY HIGHWAY DEPARTMENT

2014+ Highway Improvement Plan

7/8/2009

Road	Project #	Description	FUNDING SOURCE							Total Payment by County	Notes
			County	State Aid	Federal	State	City/Town	Other Agency	Bonds		
Rehabilitation											
11	18-011-	Mill/Surfacing Turnback of CSAH 11, west of TH371	\$73,900								0.29 miles: Turnback to Pequot
36	18-636-	Bituminous Surfacing from CR 105 to Cuyuna Trail	\$884,500							\$884,500	6.1 miles gravel to bituminous. 5 Ton (1 lift).
112	18-112-	Bituminous Overlay from CSAH 11 to 0.7 miles north	\$100,800								0.72 miles: Turnback to Pequot
118	18-118-	Bituminous Overlay from CSAH 4 to CSAH 3	\$432,833							\$432,833	2.65 miles
137	18-137-	Bituminous Overlay from CR 127 to CSAH 13	\$400,400							\$400,400	3.12 miles
139	18-139-	Bituminous Paving from TH25 to CR 113	\$1,080,000							\$1,080,000	7.2 miles gravel to bituminous. 5 Ton (1 lift)
		Bridge Maintenance - County Wide	\$50,000							\$50,000	
		Crack Seal Program	\$100,000							\$100,000	
		Seal Coating Program	\$250,000							\$250,000	
	18-200-	Pavement Marking, County Wide	\$120,000							\$120,000	
Sub Total Rehabilitation			\$3,492,433							\$3,317,733	
Reconstruction											
3	18-603-	Reconstruction from CSAH 37 to CSAH 1		\$455,200	\$1,820,800					\$2,276,000	5.7 miles = Potential Federal Funds
9	18-609-	Reconstruction from 1 mile north of CSAH 2 to TH 25		\$1,400,000						\$1,400,000	3.5 miles. Could do simple overlay with County Levy
11	18-611-	Enhancement from old TH 371 to new TH 371		\$45,000	\$980,000		\$200,000			\$1,225,000	2018 - 0.5 miles: Curb and Gutter, streetscape, etc - Pot. Fed. HPP
30	18-630-	Reconstruction from TH 210 to CSAH 34		\$1,244,000						\$1,244,000	3.11 miles
30	18-630-	Reconstruction from CSAH 34 to TH 6		\$1,824,000						\$1,824,000	4.56 miles
115	18-115-	Reconstruction TH371 S to TH371 N							\$6,955,200	\$6,955,200	4.83 miles - curb and gutter - Funding Problem - Possible Bonding?
170/48	18-648-	Realignment of CR 170/CSAH 48, recon to W County Line		\$700,000	\$2,800,000					\$3,500,000	4.5 miles+/- Potential Federal Funds?
OLD 371		Turnback of TH371 from CR 168 to N of CSAH 17		\$200,000		\$900,000				\$1,100,000	2018 - 2.7 miles
TH 371		CSAH and CRs Intersections on TH371		\$800,000	\$3,200,000					\$4,000,000	2018 - 9 intersections: 18, 29/107, OLD 371/168/107, 11, OLD 371/112, 17, 16, 145, 15. Interchange at 11. Potential Federal HPP
Sub Total Reconstruction				\$6,668,200	\$8,800,800	\$900,000	\$200,000		\$6,955,200	\$23,524,200	
Spot Improvement (shoulders, turn lanes, lighting, etc.)											
9	18-609-	Re-alignment of CSAH 44 and CR 144 at TH25 to eliminate skew.		\$20,000	\$80,000						RSA - Potential HSIP federal funds
44	18-644-	Re-alignment of CSAH 9 at TH25 to eliminate skew or Cul-de-sac + lighting		\$10,000	\$40,000						RSA - Potential HSIP federal funds
	18-030-	Intersection Lighting - 5 Locations		\$15,400	\$138,600					\$154,000	RSA - TH25/CR148, TH25/CSAH2, TH25/CSAH10(N), TH25/CSAH10/Katrine Dr., TH6/CSAH14 - Potential Federal HSIP
Sub Total Spot Improvement				\$45,400	\$258,600					\$154,000	
2014+ CONSTRUCTION TOTALS			\$3,492,433	\$6,713,600	\$9,059,400	\$900,000	\$200,000		\$6,955,200	\$26,995,933	

Pavement Management Data



This section contains the following:

- Description of pavement condition ratings.
- Summary of Needs, Costs, Performance
- County State Aid Highways Condition Report and Map.
- County Roads Condition Report and Map.
- Gravel Roads Report and Map.
- Entire Highway System Report.

Pavement Condition Ratings

Pavement condition is measured as Pavement Quality Index (PQI).

PQI is a combination of Ride Quality Index (RQI) or “roughness” and Surface Rating (SR) or “level of surface distress” (cracking, rutting etc) and both are measured by MnDOT. Generally RQI is used to determine when a rehabilitation is needed and the SR helps determine what type of rehabilitation is needed.

The highway department uses RQI and traffic volume to prioritize pavement rehabilitation

RQI ranges

Very Good	81-100
Good	61-80
Fair	41-60
Poor	21-40
Very Poor	0-20

Generally road users complain about condition when RQI is 50 or less.



Summary of Needs, Costs, Performance



- Pavement Ratings

- Improvement priority is based on Traffic Volume and Ride Quality
 - **County State Aid Highways**
 - ADT ≥ 5000 and RQI ≤ 60 (Strive to keep high traffic CSAHs in “Good” condition)
 - ADT ≥ 2000 and < 5000 and RQI ≤ 56 (lower volumes CSAHs in “Fair” condition)
 - ADT ≥ 500 and < 2000 and RQI ≤ 52
 - ADT < 500 and RQI ≤ 48
 - **County Roads**
 - ADT ≥ 5000 and RQI ≤ 58
 - ADT ≥ 2000 and < 5000 and RQI ≤ 54
 - ADT ≥ 500 and < 2000 and RQI ≤ 52
 - ADT < 500 and RQI ≤ 48

RQI ranges	
Very Good	81-100
Good	61-80
Fair	41-60
Poor	21-40
Very Poor	0-20

Very Good	81-100
Good	61-80
Fair	41-60
Poor	21-40
Very Poor	0-20

- Needs/Costs

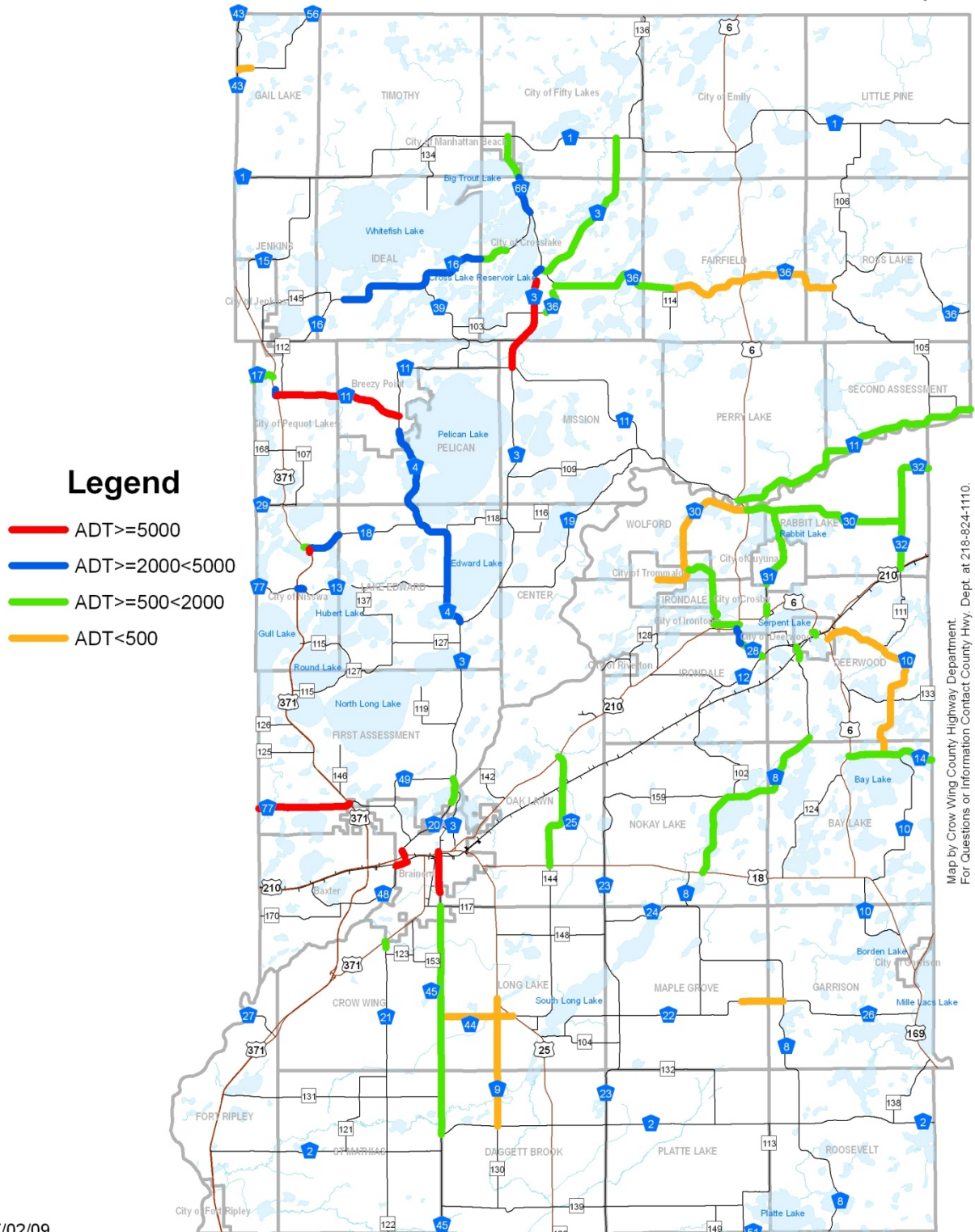
- Cost to improve paved CSAHs = \$35,722,716, miles = 130.1
- Avg. annual funding for CSAHs = 5,000,000 -> **7 + Years**
- Cost to improve paved CRs = \$10,770,333, miles = 33.0
- Avg. annual funding for CRs = \$750,000 -> **14+ Years**
- Cost to pave gravel CSAHs & CRs = \$7,005,000, miles = 46.7
 - Funding these reduce maintenance costs but require \$ from the pavement rehab. program.
- Funding shortfall for 5 years = **\$17,743,049**

- Performance (Measure of County Wide Pavement Condition)

- 50% of the paved CSAH and CR system is in Good or Very Good condition. **60% is a good performance target** (MnDOT uses 65%)
- 10% of the paved CSAH and CR system is in Poor or Very Poor condition. **5% is a good performance target** (MnDOT uses 3%)
- So out of 512 miles, 15% or **77 miles** do not meet an adequate pavement condition performance standard .
- Using an average rehab. cost of \$200,000 per mile, **\$15,400,000** is needed to bring the system up to adequate quality.

CROW WING COUNTY

CSAH Road Condition Report



Map by Crow Wing County Highway Department.
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7/02/09

CROW WING COUNTY HIGHWAY DEPARTMENT

Condition Report for Paved County State Aid Highway System

LOCATION				HISTORY			Traffic		Condition		GEOMETRICS					IMPROVEMENT OPTION COSTS						
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED/EST	YEAR SURFACED	AGE	2007 SEALED ADT	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHLD WIDTH	SHLD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING	Recommended Improvement	Improvement Cost		
3	30	1.1	CSAH-11 TO S LIMS CROSSLAKE	1987	1988	21	5400	52	71	24	BIT	6	GRAVEL	\$440,000	\$1,584,000	\$184,000	\$154,000	\$53,900	Mill and Overlay	\$237,900		
3	40	2.8	S LIMS CROSSLAKE TO 0.12 MILES S OF CSAH-66	1987	1987	22	5500	48	58	40	BIT	8	BIT	\$1,120,000	\$4,480,000	\$632,100	\$653,333		Mill and Overlay	\$632,100		
11	21	0.19	S JCT TH-371 TO CR 112	1966	1990	19	8500	30	51	48	BIT	10	URBAN	\$76,000	\$364,800	\$48,400	\$53,200		Mill and Overlay	\$48,400		
11	30	0.08	CR 112 TO 0.08 MIE	1969	1990	19	5600	36	56	48	BIT	10	URBAN	\$32,000	\$153,600	\$20,400	\$22,400		Mill and Overlay	\$20,400		
11	31	1.97	0.08 MIE OF CR112 TO W L M BREE	1969	1990	19	5600	48	62	25	BIT	10	GRAVEL	\$788,000	\$2,836,800	\$336,800	\$287,292	\$160,900	Mill and Overlay	\$497,700		
11	40	2.46	W LIMS BREEZY POINT TO CSAH-4	1969	1990	19	5600	50	60	25	BIT	10	GRAVEL	\$984,000	\$3,542,400	\$420,500	\$358,750	\$200,900	Mill and Overlay	\$621,400		
18	10	0.15	S JCT TH-371 TO 0.15 M I N	1963	2002	7	5700	40	58	65	BIT		URBAN	\$60,000	\$390,000	\$47,600	\$56,875		Mill and Overlay	\$47,600		
20	10	0.23	TH-210 TO JACKSON ST.	2003	2003	6	11500	48	69	52	BIT		URBAN	\$92,000	\$478,400	\$62,000	\$69,767		Mill and Overlay	\$62,000		
45	50	1	0.5 MIN OF CR-117 TO OAK ST	1968	1997	12	7200	54	71	44	BIT	10	URBAN	\$400,000	\$1,760,000	\$240,400	\$256,667		Mill and Overlay	\$240,400		
45	60	0.39	OAK ST TO 200' N OF BN RR TRACKS	1977	1997	12	7200	36	58	44	BIT	10	URBAN	\$156,000	\$686,400	\$93,700	\$100,100		Mill and Overlay	\$93,700		
45	80	0.11	200' N BN RR TRACKS TO TH-210	1977	1997	12	7700	44	64	40	BIT	8	URBAN	\$44,000	\$176,000	\$24,800	\$25,667		Mill and Overlay	\$24,800		
48	60	0.4	LAUREL ST TO SW 4th ST BRAINERD	1973	1996	13	5300	60	73	44	BIT	10	URBAN	\$160,000	\$704,000	\$96,100	\$102,667		Mill and Overlay	\$96,100		
77	20	3	W CO LN TO INGLEWOOD DR	1979	1979	30	5100	44	60	44	BIT	10	BIT	\$1,200,000	\$5,280,000	\$721,100	\$770,000		Mill and Overlay	\$721,100		
77	30	0.4	INGLEWOOD DR TO TH-371	1979	1979	30	5100	44	60	44	BIT	10	BIT	\$160,000	\$704,000	\$96,100	\$102,667		Mill and Overlay	\$96,100		
Total Miles		14.28																Total Cost:		\$3,439,700		

*MILL AND OVERLAY ESTIMATES BASED ON 1.5" MILL/FLL AND 2" BITUMINOUS OVERLAY.
 *OVERLAY ESTIMATES BASED ON 1" LEVELING AND 1.5" BITUMINOUS WEARING COURSE.
 *SHOULDER PAVING ESTIMATES BASED ON 2" BITUMINOUS MATERIAL.

Table Condition Limitations:

RQI ≤ 60
 ADT ≥ 5000

Segments in borders are programmed in this 2009-2013 Highway Improvement Plan

CROW WING COUNTY HIGHWAY DEPARTMENT

Condition Report for Paved County State Aid Highway System

LOCATION			HISTORY			Traffic		Condition		GEOMETRICS				IMPROVEMENT OPTION COSTS							
ROAD	SEGMENT	LENGTH	TERMIN	YEAR GRADED/EST	YEAR SURFACED	AGE	2007 SEALED ADT	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHLD WIDTH	SHLD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING	Recommended Improvement	Improvement Cost	
3	50	0.28	CSAH-66 TO CSAH-37	1986	1986	23	2002	48	69	44	BIT	10	BIT	\$112,000	\$492,800	\$67,300	\$71,867		Mill and Overlay	\$67,300	
4	10	4.7	CSAH-3 TO CSAH-18	1960	1984	25	2001	3450	42	58	24	BIT	8	GRAVEL	\$1,880,000	\$6,768,000	\$786,300	\$658,000		Mill and Overlay	\$1,093,400
4	20	3.2	CSAH-18 TO S LIMS BREEZY POINT	1966	1981	28	2001	2400	38	51	24	BIT	2	GRAVEL	\$1,280,000	\$4,608,000	\$536,300	\$448,000		Recon Rural/Urban	\$3,100,000
4	30	0.62	S LIMS BREEZY POINT TO LAKESHORE DRIVE	1966	1981	28	2001	2400	52	62	24	BIT	2	GRAVEL	\$248,000	\$892,800	\$103,700	\$86,800		Recon Rural/Urban	
11	20	0.29	N JCT TH-371 TO S JCT TH-371	1966	1990	19	2001	3500	50	67	48	BIT	10	URBAN	\$116,000	\$556,800	\$73,900	\$81,200		Mill and Overlay	\$73,900
13	9	0.23	TH-371 TO 23 MI EAST	1935	1987	22	2000	2100	36	56	22	BIT	3	GRAVEL	\$92,000	\$331,200	\$36,800	\$29,517		Mill and Overlay	\$42,400
16	20	4	PEORIA ROAD TO 0.6 MI E CSAH-39	1987	1987	22	3100	52	64	40	BIT	8	BIT	\$1,600,000	\$6,400,000	\$903,000	\$933,333		Mill and Overlay	\$903,000	
16	30	2.1	0.6 MI E CSAH-39 TO W LIMS CROSSLAKE	1989	1989	20	2005	2350	54	71	40	BIT	8	BIT	\$940,000	\$3,360,000	\$474,100	\$490,000		Mill and Overlay	\$474,100
18	20	0.16	0.15 MI N OF S JCT TH-371 TO 1.13 MI W OF E LIMS NISSWA	1963	1981	28	2004	2750	42	60	44	BIT	10	URBAN	\$64,000	\$281,600	\$38,500	\$41,067		Mill and Overlay	\$38,500
18	21	0.42	1.13 MI W OF E LIMS NISSWA TO NORWAY LN	1963	1989	20	2004	2750	52	67	24	BIT	8	GRAVEL	\$168,000	\$604,800	\$70,300	\$58,800		Mill and Overlay	\$97,700
18	25	0.71	NORWAY LN TO E LIMS NISSWA	1963	1989	20	2004	2750	52	67	24	BIT	8	GRAVEL	\$284,000	\$1,022,400	\$118,800	\$99,400		Mill and Overlay	\$165,200
28	30	0.4	0.8 MI N TO 1.2 MI N CSAH-12	1984	1984	25	3050	40	58	40	BIT	8	BIT	\$160,000	\$640,000	\$90,300	\$93,333		Mill and Overlay	\$90,300	
28	40	0.1	1.2 MI N CSAH-12 TO S LIMS CROSBY	1984	1984	25	3050	34	53	44	BIT	10	URBAN	\$40,000	\$176,000	\$24,000	\$25,667		Mill and Overlay	\$24,000	
28	50	0.23	S LIMS CROSBY TO TH-210	1984	1984	25	3050	26	47	44	BIT	10	URBAN	\$92,000	\$404,800	\$55,300	\$59,033		Mill and Overlay	\$55,300	
66	20	0.77	CSAH-16 TO 0.77 MI N	1985	1985	24	3100	52	69	40	BIT	8	BIT	\$308,000	\$1,232,000	\$173,800	\$179,667		Mill and Overlay	\$173,800	
66	30	0.63	0.77 MI N CSAH-16 TO S LN MAN BEACH	1985	1985	24	3100	48	64	44	BIT	10	URBAN	\$252,000	\$1,108,800	\$151,400	\$161,700		Mill and Overlay	\$151,400	
Total Miles		18.84																	Total Cost:	\$6,550,300	

*MILL AND OVERLAY ESTIMATES BASED ON 1.5" MILL/FILL AND 2" BITUMINOUS OVERLAY.
 *OVERLAY ESTIMATES BASED ON 1" LEVELING AND 1.5" BITUMINOUS WEARING COURSE.
 *SHOULDER PAVING ESTIMATES BASED ON 2" BITUMINOUS MATERIAL.

Table Condition Limitations:
 RQI ≤ 56
 ADT >= 2000 ~ 5000

Segments in borders are programmed in this 2009-2013 Highway Improvement Plan

CROW WING COUNTY HIGHWAY DEPARTMENT Condition Report for Paved County State Aid Highway System

LOCATION				HISTORY				Traffic		Condition		GEOMETRICS				IMPROVEMENT OPTION COSTS							
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED/EST	SURFACED	AGE	YEAR SEALED	2007 ADT	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHLD WIDTH	SHLD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING	Recommended Improvement	Improvement Cost		
3	51	0.17	CSAH-37 TO 0.17 MI N	1986	1986	23	2002	1600	48	69	40	BIT	8	BIT	\$68,000	\$272,000	\$38,400	\$39,667		Rural Recon	\$68,000		
3	60	2.41	0.17 MI N CSAH-37 TO 2.88 MI N CSAH-37	1926	1987	22	2002	1600	38	51	24	BIT	3	GRAVEL	\$964,000	\$3,470,400	\$403,200	\$337,400	\$59,000	Rural Recon	\$964,000		
3	61	1.78	2.88 MI N OF CSAH-37 TO S LIMS FIFTY LAKES	1926	1988	21	2002	1050	32	47	24	BIT	3	GRAVEL	\$712,000	\$2,563,200	\$297,800	\$249,200	\$36,800	Rural Recon	\$712,000		
3	70	1.5	S LIMS FIFTY LAKES TO CSAH-1	1926	1988	21	2002	1050	34	44	24	BIT	3	GRAVEL	\$600,000	\$2,160,000	\$250,900	\$210,000	\$43,600	Rural Recon	\$600,000		
8	30	7.7	TH-18 TO 7.7 MI N	1991	1991	18	2006	960	44	62	24	BIT	4	GRAVEL	\$3,080,000	\$11,088,000	\$1,288,200	\$1,078,000	\$251,500	Simple Overlay	\$1,329,500		
8	50	0.2	S LIMS DEERWOOD TO CSAH-12	1994	1995	14	2006	750	46	62	24	BIT	4	GRAVEL	\$80,000	\$288,000	\$33,500	\$28,000	\$6,500	Simple Overlay	\$34,500		
11	90	10	TH-6 TO E CO LINE	1973	1997	12	2000	530	52	64	24	BIT	3	GRAVEL	\$4,000,000	\$14,400,000	\$1,672,900	\$1,400,000	\$245,000	Simple Overlay	\$1,645,000		
14	10	0.8	TH-6 TO 0.8 MI E	1986	1986	23		1500	32	53	44	BIT	10	URBAN	\$320,000	\$1,408,000	\$192,300	\$205,333		Mill and Overlay	\$192,300		
14	20	1	0.8 MI E TH-6 TO S JCT CSAH-10	1986	1986	23		1500	48	64	24	BIT	8	GRAVEL	\$400,000	\$1,440,000	\$167,300	\$140,000	\$85,300	Simple Overlay	\$205,300		
14	30	1.4	S JCT CSAH-10 TO E CO LN	1986	1986	23		870	42	60	24	BIT	6	GRAVEL	\$560,000	\$2,016,000	\$234,200	\$196,000	\$68,600	Simple Overlay	\$264,600		
16	40	1.06	W LIMS CROSS LAKE TO WEST SHORE DRIVE	1989	1989	20	2005	1400	52	67	40	BIT	8	BIT	\$424,000	\$1,696,000	\$239,300	\$247,333		Simple Overlay	\$247,333		
17	10	0.84	W CO LN TO TH-371	1926	1994	15		1450	50	64	28	BIT	1	GRAVEL	\$336,000	\$1,209,600	\$152,800	\$137,200	\$6,900	Simple Overlay	\$144,100		
18	11	0.22	0.15 MI N OF S JCT TH-371 TO N JCT TH-371	1963	1981	28	2004	1450	38	56	65	BIT	1	URBAN	\$98,000	\$572,000	\$69,800	\$83,417		Mill and Overlay	\$69,800		
20	60	0.9	N AHPENS HILL RD TO CSAH-49	1934	1956	53	2006	1600	24	42	20	BIT	2	GRAVEL	\$360,000	\$1,296,000	\$137,400	\$105,000	\$14,700	Urban Recon	\$1,900,000		
21	40	0.1	0.1 MI S TH-371 TO TH-371	1960	1986	23	2000	1350	30	49	24	BIT	4	GRAVEL	\$40,000	\$144,000	\$16,700	\$14,000	\$3,300	Simple Overlay	\$16,700		
25	10	4.4	TH-18 TO TH-210	1964	1989	20	2007	1050	52	64	24	BIT	3	GRAVEL	\$176,000	\$6,336,000	\$736,100	\$616,000	\$107,800	Simple Overlay	\$723,800		
28	10	0.2	CSAH-12 TO 0.2 MI N	1984	1984	25		1700	20	40	40	BIT	8	BIT	\$80,000	\$320,000	\$45,200	\$46,667		Simple Overlay	\$46,667		
28	20	0.6	0.2 MI N TO 0.8 MI N CSAH-12	1984	1984	25		1700	34	53	44	BIT	10	URBAN	\$240,000	\$1,056,000	\$144,200	\$154,000		Mill and Overlay	\$144,200		
30	30	0.13	0.22 MI N OF SW LIMS CROSSBY TO NW LIMS CROSSBY	1939	1991	18		760	26	42	24	BIT	2	GRAVEL	\$52,000	\$187,200	\$21,700	\$18,200	\$2,100	Rural Recon	\$52,000		
30	40	0.08	NW LIMS CROSSBY TO 0.08 MI N	1939	1991	18		760	34	53	24	BIT	2	GRAVEL	\$32,000	\$115,200	\$13,400	\$11,200	\$1,300	Rural Recon	\$32,000		
30	50	1.08	0.08 MI N OF NW LIMS CROSSBY TO N LIMS CROSSBY	1939	1991	18		760	52	64	24	BIT	2	GRAVEL	\$432,000	\$1,555,200	\$180,700	\$151,200	\$17,600	Rural Recon	\$432,000		
30	60	1.19	N LIMS CROSSBY TO CSAH-34	1939	1991	18		760	44	64	24	BIT	2	GRAVEL	\$476,000	\$1,713,600	\$199,100	\$166,600	\$19,400	Rural Recon	\$476,000		
30	120	1.1	TH-6 TO CSAH-31	1959	1989	20	2006	1300	38	56	24	BIT	2	GRAVEL	\$440,000	\$1,584,000	\$184,000	\$154,000	\$18,000	Rural Recon	\$440,000		
30	130	4.7	CSAH-31 TO CSAH-32	1962	1989	20	2006	520	42	58	24	BIT	2	GRAVEL	\$1,880,000	\$6,768,000	\$786,300	\$658,000	\$76,800	Rural Recon	\$1,880,000		
31	15	0.75	8TH ST TO N LIMS CROSSBY	1991	1991	18	2000	1250	50	67	24	BIT	8	GRAVEL	\$300,000	\$1,080,000	\$125,500	\$105,000		Simple Overlay	\$105,000		
31	20	1.23	0.76 MI N OF S LIMS CROSSBY TO SOUTH STREET CUYU	1991	1991	18	2000	1250	46	62	24	BIT	8	GRAVEL	\$492,000	\$1,771,200	\$205,800	\$172,200	\$80,400	Simple Overlay	\$252,600		
31	21	0.25	SOUTH ST TO NORTH ST CUYUNA	1991	1991	18	2000	1250	24	44	44	BIT	10	URBAN	\$100,000	\$440,000	\$60,100	\$64,167		Mill and Overlay	\$60,100		
31	30	0.9	NORTH ST CUYUNA TO N LIMS CUYUNA	1977	1995	14	2000	1650	48	64	32	BIT	4	BIT	\$360,000	\$1,296,000	\$176,900	\$168,000		Simple Overlay	\$168,000		
31	40	0.7	N LIMS CUYUNA TO CSAH-30	1974	1995	14	2000	1650	46	67	32	BIT	4	BIT	\$280,000	\$1,008,000	\$137,600	\$130,667		Simple Overlay	\$130,667		
32	10	4.6	TH-210 TO E CO LN	1973	1992	17	2006	640	36	47	28	BIT	2	GRAVEL	\$1,840,000	\$6,624,000	\$836,800	\$751,333	\$75,100	Simple Overlay	\$826,433		
33	10	0.21	CSAH-30 TO E LIMS IRONTON	1967	1990	19		740	38	56	42	BIT	10	URBAN	\$94,000	\$352,800	\$48,900	\$51,450		Mill and Overlay	\$48,900		
33	20	0.74	W LIMS CROSSBY TO TH-210	1967	1990	19		1900	46	62	42	BIT	10	URBAN	\$296,000	\$1,243,200	\$172,500	\$181,300		Mill and Overlay	\$172,500		
36	11	0.5	0.72 MI E TO 1.22 MI E CSAH-3	1984	1984	25	2004	900	46	62	24	BIT	6	GRAVEL	\$200,000	\$720,000	\$83,600	\$70,000	\$24,500	Simple Overlay	\$94,500		
36	20	3.6	CSAH-37 TO E LIMS CROSS LAKE	1947	1987	22		900	34	49	24	BIT	2	GRAVEL	\$1,440,000	\$5,184,000	\$602,300	\$504,000	\$58,800	Rural Recon	\$1,440,000		
36	30	1.1	E LIMS CROSS LAKE TO CR-114	1947	1987	22		900	34	53	24	BIT	2	GRAVEL	\$440,000	\$1,584,000	\$184,000	\$154,000	\$18,000	Rural Recon	\$440,000		
45	20	8.2	N JCT CSAH-2 TO S LIMS BRANERD	1970	1993	16	2000	960	52	67	25	BIT	8.5	GRAVEL	\$3,280,000	\$11,808,000	\$1,401,800	\$1,195,833	\$569,200	Simple Overlay	\$1,765,033		
45	35	0.36	S LIMS BRANERD TO CR-117	2004	2004	5		960	50	67	25	BIT	8	GRAVEL	\$144,000	\$518,400	\$52,500	\$52,500	\$23,500	Simple Overlay	\$76,000		
47	10	0.18	TH-210 & TH-6 TO TH-210	1989	1989	20		670	40	60	44	BIT	10	URBAN	\$72,000	\$316,800	\$43,300	\$46,200		Mill and Overlay	\$43,300		
66	40	0.18	S LIMS MAN BEACH TO 0.18 MI N	1985	1985	24		1600	52	60	44	BIT	10	URBAN	\$72,000	\$316,800	\$43,300	\$46,200		Mill and Overlay	\$43,300		
66	50	0.33	0.18 MI N TO 0.51 MI N S LIMS MAN BEACH	1985	1985	24		1600	46	62	40	BIT	8	BIT	\$132,000	\$528,000	\$74,500	\$77,000		Mill and Overlay	\$74,500		
66	60	0.16	0.51 MI N TO 0.67 MI N S LIMS MAN BEACH	1985	1985	24		1600	48	62	44	BIT	10	URBAN	\$64,000	\$261,600	\$38,500	\$41,067		Mill and Overlay	\$38,500		
66	70	0.95	0.67 MI N S LIMS MAN BEACH TO CSAH-1	1985	1985	24		1600	38	53	40	BIT	8	BIT	\$380,000	\$1,520,000	\$214,500	\$221,667		Mill and Overlay	\$214,500		
Total Miles														68.5								\$18,613,633	

*MILL AND OVERLAY ESTIMATES BASED ON 1.5" MILL FILL AND 2" BITUMINOUS OVERLAY.

*OVERLAY ESTIMATES BASED ON 1" LEVELING AND 1.5" BITUMINOUS WEARING COURSE.

*SHOULDER PAVING ESTIMATES BASED ON 2" BITUMINOUS MATERIAL.

Table Condition Limitations:

RQI's 52

ADT >=500<2000

Segments in borders are programmed in this 2008-2013 Highway Improvement Plan

CROW WING COUNTY HIGHWAY DEPARTMENT

Condition Report for Paved County State Aid Highway System

LOCATION				HISTORY				Traffic		Condition		GEOMETRICS				IMPROVEMENT OPTION COSTS					
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED/EST	YEAR SURFACED	AGE	YEAR SEALED	2007 ADT	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHLD WIDTH	SHLD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING	Recommended Improvement	Improvement Cost
9	10	0.7	CSAH-2 TO 0.7 MI N	1950	1995	14	2005	260	48	64	24	BIT	4	GRAVEL	\$280,000	\$1,008,000	\$117,100	\$98,000	\$22,900	Simple Overlay	\$120,900
9	11	0.3	0.7 MI N TO 1.0 MI N CSAH-2	1993	1993	16	1999	260	46	64	24	BIT	4	GRAVEL	\$120,000	\$432,000	\$50,200	\$42,000	\$9,800	Simple Overlay	\$51,800
9	12	3.5	1 MI N CSAH-2 TO TH-25	1950	1952	57	1999	260	38	49	20	BIT	4	GRAVEL	\$1,400,000	\$5,040,000	\$534,400	\$408,333	\$114,300	Simple Overlay	\$522,633
10	30	7.2	CSAH-14 TO E LIMS DEERWOOD	1953	1989	20		380	32	51	22	BIT	2	GRAVEL	\$2,880,000	\$10,368,000	\$1,151,900	\$924,000	\$117,600	Simple Overlay	\$1,041,600
10	40	0.33	E LIMS DEERWOOD TO TH-6	1953	1989	20		380	28	47	22	BIT	2	GRAVEL	\$132,000	\$475,200	\$52,800	\$42,350	\$5,400	Simple Overlay	\$47,750
22	60	1	RADATZ RD TO CSAH-8	1957	1997	12	2005	225	48	60	24	BIT	1.5	GRAVEL	\$400,000	\$1,440,000	\$167,300	\$140,000	\$12,300	Simple Overlay	\$152,300
30	70	0.26	CSAH-34 TO N LIM TROMMALD	1939	1987	22	2006	300	8	24	22	BIT	2	GRAVEL	\$104,000	\$374,400	\$41,600	\$33,367	\$4,200	Rural Recon	\$104,000
30	80	0.1	N LIM TROMMALD TO W LIM TROMMALD	1939	1987	22	2006	465	24	44	22	BIT	2	GRAVEL	\$40,000	\$144,000	\$16,000	\$12,833	\$1,600	Rural Recon	\$40,000
30	90	0.4	W LIM TROMMALD TO N LIM TROMMALD	1939	1987	22	2006	465	34	51	22	BIT	2	GRAVEL	\$160,000	\$576,000	\$64,000	\$51,333	\$6,500	Rural Recon	\$160,000
30	100	0.8	N LIM TROMMALD TO 0.8 MI N	1939	1987	22	2006	465	36	40	22	BIT	2	GRAVEL	\$320,000	\$1,152,000	\$128,000	\$102,667	\$13,100	Rural Recon	\$320,000
30	110	3	0.8 MI N TROMMALD TO TH-6	1959	1987	22	2006	465	42	49	24	BIT	4	GRAVEL	\$1,200,000	\$4,320,000	\$501,900	\$420,000	\$98,000	Rural Recon	\$1,200,000
34	10	1.37	1ST AVE W TO CSAH 30	1955	1955	54	2000	370	48	67	24	BIT	2	GRAVEL	\$548,000	\$1,972,800	\$229,200	\$191,800	\$22,400	Simple Overlay	\$214,200
36	31	3	CR-114 TO TH-6	1940	1988	21	2005	340	38	58	24	BIT	2	GRAVEL	\$1,200,000	\$4,320,000	\$501,900	\$420,000	\$49,000	Rural Recon	\$1,200,000
36	40	3.7	TH-6 TO CR-105	1936	1951	58		265	32	47	24	BIT	3	GRAVEL	\$1,480,000	\$5,328,000	\$619,000	\$518,000	\$90,700	Rural Recon	\$1,480,000
44	10	2.6	CSAH-45 TO TH-25	1941	1993	16		330	40	62	24	BIT	3	GRAVEL	\$1,040,000	\$3,744,000	\$435,000	\$364,000	\$63,700	Simple Overlay	\$427,700
56	10	0.2	CSAH-43 TO 0.2 MI N	1986	1988	21		175	48	64	24	BIT	5	GRAVEL	\$90,000	\$288,000	\$33,500	\$28,000	\$8,200	Simple Overlay	\$36,200
Total miles		28.46																		Total Cost:	\$7,119,083

*MILL AND OVERLAY ESTIMATES BASED ON 1.5" MILL/FILL AND 2" BITUMINOUS OVERLAY.
 *OVERLAY ESTIMATES BASED ON 1" LEVELING AND 1.5" BITUMINOUS WEARING COURSE.
 *SHOULDER PAVING ESTIMATES BASED ON 2" BITUMINOUS MATERIAL.

Table Condition Limitations:

RQI ≤ 48

ADT < 500

Segments in borders are programmed in this 2009-2013 Highway Improvement Plan

$$\frac{A}{Z}$$


July 14, 2009

CROW WING COUNTY HIGHWAY DEPARTMENT

Condition Report for Paved County Road System

LOCATION				HISTORY				Traffic		Condition		GEOMETRICS				IMPROVEMENT OPTION COSTS					
ROAD	SEGMENT	LENGTH	TERMIN	YEAR GRADED/EST	SURFACED	AGE	YEAR SEALED	2007 ADT	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHLD WIDTH	SHLD TYPE	RUCAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING	Recommended Improvement	Improvement Cost
102	20	1.54	4.61 MI N CSAH-8 TO CSAH-12	1960	1992	17	2006	710	50	62	28	BIT	2	GRAVEL	\$616,000	\$2,217,600	\$280,100	\$251,533	\$25,200	Simple Overlay	\$251,533
110	10	1.28	CSAH-12 TO W LIM DEERWOOD TWP	1957	2001	8		510	46	64	20	BIT	2	GRAVEL	\$512,000	\$1,843,200	\$195,400	\$149,333	\$20,300	Simple Overlay	\$149,333
115	10	4.83	S JCT TH-371 to N JCT TH-371	1937	1985	24		1550	34	51	22	BIT	2	GRAVEL	\$1,932,000	\$6,955,200	\$772,700	\$619,850	\$78,900	Recon Urban	\$6,955,200
115	20	0.1	N JCT TH-371 to PUBLIC ACCESS	1937	1985	24			42	62	22	BIT	1	GRAVEL	\$40,000	\$144,000	\$16,000	\$12,833	\$800	Simple Overlay	\$12,833
117	20	2	CSAH-45 TO TH-25	1963	1997	12	2000	3300	48	67	24	BIT	4	GRAVEL	\$800,000	\$2,880,000	\$334,600	\$280,000	\$65,300	Recon Rural	\$800,000
119	10	2.58	CSAH-3 TO NORTH LONG LAKE	1956	1995	14		620	44	62	23	BIT	2	GRAVEL	\$1,032,000	\$3,715,200	\$422,200	\$346,150	\$42,100	Simple Overlay	\$346,150
121	10	1.31	CSAH-2 TO 1.31 MI N	1947	1991	18	1998	205	46	64	24	BIT	4	GRAVEL	\$524,000	\$1,886,400	\$219,200	\$183,400	\$42,800	Simple Overlay	\$183,400
124	10	4.93	TH-18 TO TH-6	1956	1993	16		340	46	62	24	BIT	2	GRAVEL	\$1,972,000	\$7,099,200	\$824,800	\$690,200	\$80,500	Simple Overlay	\$690,200
127	10	2.6	CR-115 TO CR-137	1956	1994	15		830	44	64	26	BIT	1	GRAVEL	\$1,040,000	\$3,744,000	\$454,000	\$394,333	\$21,200	Simple Overlay	\$394,333
127	11	0.65	NE COR SEC 33 TO .65 MI S (PARADISE DR)	1964	1989	20		60	28	49	22	BIT	2	GRAVEL	\$260,000	\$936,000	\$104,000	\$83,417	\$10,600	Simple Overlay	\$83,417
134	10	2.89	LOWER WHITEFISH LAKE TO CSAH-1	1950	1995	14	2004	420	46	62	22	BIT	1	GRAVEL	\$1,156,000	\$4,161,600	\$462,400	\$370,883	\$23,600	Simple Overlay	\$370,883
135	10	0.46	W JCT TH-210 TO E JCT TH-210	1966	1988	21		180	44	56	19	BIT	2.5	GRAVEL	\$184,000	\$662,400	\$68,600	\$50,983	\$9,400	Simple Overlay	\$50,983
137	10	3.12	CR-127 TO CSAH-13	1959	1992	17		270	48	67	22	BIT	2	GRAVEL	\$1,248,000	\$4,492,800	\$499,200	\$400,400	\$51,000	Simple Overlay	\$400,400
143	10	0.7	TH-25 TO CR-144	1966	1966	43		70	50	62	20	BIT	2	GRAVEL	\$280,000	\$1,008,000	\$106,900	\$81,667	\$11,400	Simple Overlay	\$81,667
148	10	4	TH-25 TO CSAH-23	1987	1999	10	2007	830	52	64	24	BIT	2	GRAVEL	\$1,600,000	\$5,760,000	\$689,200	\$560,000	\$65,300	Simple Overlay	\$560,000
Total Miles		32.99																		Total Cost	\$10,770,333

*MILL AND OVERLAY ESTIMATES BASED ON 1.5" MILL/FILL AND 2" BITUMINOUS OVERLAY.

*OVERLAY ESTIMATES BASED ON 1" LEVELING AND 1.5" BITUMINOUS WEARING COURSE.

*SHOULDER PAVING ESTIMATES BASED ON 2" BITUMINOUS MATERIAL.

Table Condition Limitations:

RQI ≤ 48, ADT < 500

RQI ≤ 52, ADT < 2000 > = 500

RQI ≤ 54, ADT < 5000 > = 2000

RQI ≤ 58, ADT > = 5000

PQI < 62 (Accounts for lower Surface Rating (SR) and ride (RQI))

Segments in borders are programmed in this 2009-2013 Highway Improvement Plan

$$\frac{A}{Z}$$


July 14, 2009

CROW WING COUNTY HIGHWAY DEPARTMENT

Condition Report for Gravel Road System

LOCATION				HISTORY			Bituminous
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED/ EST	YEAR SURFACED	AGE	Surfacing, 1-lift w/ Subgrade work
36	50	1.3	CR-105 TO CR-106	1937	GRAVEL	72	\$195,000
36	60	4.8	CR-106 TO CUYUNA TRAIL	1937	GRAVEL	72	\$720,000
56	20	3.9	0.2 MI N CSAH-43 TO N CO LN	1958	GRAVEL	51	\$585,000
56	30	0.3	ALONG N CO LN	1958	GRAVEL	51	\$45,000
104	10	2.2	CSAH-22 TO CSAH-23	1928	GRAVEL	81	\$330,000
105	20	4.27	MCNEAL ROAD TO CSAH-36	1942	GRAVEL	67	\$640,500
106	10	0.69	CSAH-36 TO 0.69 MI N	1942	GRAVEL	67	\$103,500
106	20	5.23	0.69 MI N CSAH-36 TO CSAH-1	1942	GRAVEL	67	\$784,500
121	30	1.8	CR-131 TO CSAH-21	1947	GRAVEL	62	\$270,000
129	10	2	TH-25 TO CSAH 23	1946	GRAVEL	63	\$300,000
132	10	5.54	CSAH-23 TO CSAH-2	1949	GRAVEL	60	\$831,000
139	10	11.2	CSAH-45 TO CR-113	1956	GRAVEL	53	\$1,680,000
141	10	1.51	CR-105 TO CSAH-11	1956	GRAVEL	53	\$226,500
142	20	0.82	1.58 MI W TH-210 TO FRENCH RAPIDS	1956	GRAVEL	53	\$123,000
149	10	1.14	CR-139 TO S CO LN	1956	GRAVEL	53	\$171,000

Total Miles 46.7

Total

\$7,005,000

Segments in borders are programmed in this 2009-2013 Highway Improvement Plan

CROW WING COUNTY HIGHWAY DEPARTMENT

County State Aid Highways and County Roads Inventory - 2009

LOCATION			HISTORY			TRAFFIC			Condition			GEOMETRICS				IMPROVEMENT OPTION COSTS			
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED	YEAR SURFACED	AGE	YEAR SEALED	ADT	MOD. POI	Measured RQI	Measured PQI	SURF. WIDTH	SURF. TYPE	SHLD. TYPE	RECON. RURAL	RECON. URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING
1	10	2.8	W CO LN TO CSAH-15	1960	2001	8	2006	1250	72	68	76	36	BIT	6	BIT	\$1,120,000	\$4,032,000	\$591,200	\$598,000
1	15	1	CSAH-15 TO 1.2 MILES EAST	1960	2001	8	2006	1250	77	70	80	36	BIT	6	BIT	\$480,000	\$1,728,000	\$253,400	\$252,000
1	20	4.1	1.2 MILES E OF CSAH-15 TO CR-134	1960	2001	8	2006	920	76	70	80	36	BIT	6	BIT	\$1,540,000	\$5,904,000	\$865,700	\$861,000
1	30	2	CR-134 TO W LIMS MANHATTAN BEACH	1961	2001	8	2006	1350	77	70	80	36	BIT	6	BIT	\$900,000	\$2,880,000	\$422,300	\$420,000
1	31	1	W LIMS MANHATTAN BEACH TO CSAH-66	1961	2001	8	2006	1350	80	72	82	36	BIT	6	BIT	\$400,000	\$1,440,000	\$211,100	\$210,000
1	40	0.25	CSAH-66 TO W LIMS FIFTY LAKES	1959	2002	7	2003	940	72	70	80	24	BIT	6	GRAVEL	\$100,000	\$360,000	\$41,800	\$35,000
1	50	2.99	W LIMS FIFTY LAKES TO 2.99 MI E	1959	2002	7	2003	1700	78	70	80	24	BIT	6	GRAVEL	\$1,196,000	\$4,305,600	\$500,200	\$418,600
1	60	1.2	2.99 MI E OF W LIMS FIFTY LAKES TO CSAH-3	1952	2002	7	2003	1700	76	70	80	24	BIT	6	GRAVEL	\$480,000	\$1,728,000	\$200,800	\$168,000
1	70	1.2	CSAH-3 TO W LIMS EMILY	1940	2002	7	2003	1700	77	72	82	24	BIT	6	GRAVEL	\$480,000	\$1,728,000	\$200,800	\$168,000
1	80	3.27	W LIMS EMILY TO 0.23 MI W OF TH-6	1940	2002	7	2003	2000	77	68	80	24	BIT	6	GRAVEL	\$1,308,000	\$4,708,800	\$547,800	\$467,800
1	81	0.23	0.23 MI W OF TH-6 TO TH-6	1940	2002	7	2003	2000	70	78	87	24	BIT	4	GRAVEL	\$92,000	\$331,200	\$38,500	\$32,200
1	90	0.99	TH-6 TO .99 MI E	1981	2004	5	2003	890	75	70	82	32	BIT	4	URBAN	\$356,000	\$1,425,600	\$194,600	\$164,600
1	91	2.65	.99 MI E EAST OF TH-6 TO EAST LIMITS EMILY	1954	2004	5	2003	890	77	74	84	24	BIT	2	GRAVEL	\$1,060,000	\$3,816,000	\$443,300	\$371,000
1	100	2.3	EAST LIMITS EMILY TO CO RD 106	1954	2004	5	2003	435	81	72	82	24	BIT	2	GRAVEL	\$920,000	\$3,312,000	\$384,600	\$322,000
1	105	2	CO RD 106 TO LITTLE PINE RD	1954	2004	5	2003	215	81	72	82	24	BIT	2	GRAVEL	\$800,000	\$2,880,000	\$354,600	\$270,000
1	110	2.2	LITTLE PINE RD TO EAST CO LINE	2006	2006	3	2006	215	86	72	82	24	BIT	2	GRAVEL	\$980,000	\$3,168,000	\$308,000	\$35,900
2	10	2.7	TH-371 TO 2.7 MI E	1984	2007	2	2007	265	87	78	87	28	BIT	4	GRAVEL	\$1,080,000	\$3,888,000	\$491,200	\$441,000
2	11	5.9	2.7 MI E TH-371 TO CSAH-45	2009	2009	2	2009	265	90	80	90	22	BIT	3	GRAVEL	\$2,360,000	\$8,496,000	\$943,900	\$757,167
2	20	0.9	CSAH-45 TO 0.90 MI EAST	1970	1997	12	2001	600	64	60	73	24	BIT	6	GRAVEL	\$360,000	\$1,296,000	\$150,600	\$126,000
2	21	3.3	0.90 MI E CSAH-45 TO TH-25	1966	1997	12	2001	600	72	60	73	24	BIT	6	GRAVEL	\$1,320,000	\$4,752,000	\$562,100	\$462,000
2	30	9.1	TH-25 TO CSAH-8	1967	2006	3	2001	1650	86	74	84	28	BIT	4	GRAVEL	\$3,940,000	\$13,104,000	\$1,655,400	\$1,486,333
2	40	5.1	CSAH-8 TO E CO LN	1959	2005	4	2001	1450	85	74	84	28	BIT	4	GRAVEL	\$2,940,000	\$9,744,000	\$927,700	\$833,000
3	1	1.08	TH-210 TO 1.08 MI N	2008	2008	1	2008	11900	89	68	82	45	BIT	4	URBAN	\$432,000	\$1,944,000	\$263,500	\$293,500
3	3	0.39	1.08 MI N OF TH-210 TO N LIMS BRAINERD	2008	2008	1	2008	11900	89	68	82	45	BIT	4	URBAN	\$156,000	\$792,000	\$95,200	\$102,375
3	5	0.4	N LIMS BRAINERD TO 0.4 MILES NORTH	1956	1998	11	2008	9800	71	70	78	48	BIT	10	BIT	\$160,000	\$768,000	\$102,000	\$120,000
3	7	0.7	0.4 MILES NORTH OF N LIMS BRAINERD TO CSAH 49	1956	1998	11	2008	9800	75	70	78	48	BIT	10	BIT	\$280,000	\$1,344,000	\$178,500	\$196,000
3	9	4.6	CSAH 49 TO CRYSTAL LAKE ROAD	1966	1998	11	1999	8600	71	70	78	48	BIT	10	BIT	\$1,840,000	\$6,832,000	\$1,172,900	\$1,288,000
3	10	0.2	CRYSTAL LAKE ROAD TO 0.2 MILES N	1965	2007	2	2007	8600	87	80	84	40	BIT	8	URBAN	\$80,000	\$384,000	\$51,000	\$56,000
3	11	0.3	0.2 MILES N OF CRYSTAL LAKE ROAD TO CR-127	1965	2007	2	2007	8700	87	80	84	40	BIT	8	BIT	\$120,000	\$480,000	\$67,700	\$70,000
3	12	0.8	CR-127 TO CSAH-4	1965	2007	2	2007	7000	87	76	82	40	BIT	8	BIT	\$320,000	\$1,280,000	\$180,600	\$166,667
3	15	2	CSAH 4 TO CSAH-19	1965	2007	2	2007	5000	87	76	84	40	BIT	8	BIT	\$800,000	\$3,200,000	\$451,500	\$466,667
3	20	2.7	CSAH-19 TO CR 118	1965	2009	2	2009	5000	90	80	90	26	BIT	7	GRAVEL	\$1,080,000	\$3,888,000	\$471,400	\$409,500
3	21	5.7	CR 118 TO CSAH-11	1966	2009	2	2009	4100	90	80	90	26	BIT	7	GRAVEL	\$2,280,000	\$8,208,000	\$995,200	\$864,500
3	30	1.1	CSAH-11 TO S LIMS CROSSLAKE	1987	1988	21	2002	5400	57	52	71	24	BIT	6	GRAVEL	\$440,000	\$1,584,000	\$184,000	\$154,000
3	40	2.8	S LIMS CROSSLAKE TO 0.12 MILES S OF CSAH-66	1987	1987	22	2005	5500	60	48	58	40	BIT	8	BIT	\$1,120,000	\$4,480,000	\$632,100	\$553,333
3	45	0.12	0.12 MILES S OF CSAH-66 TO CSAH-66	1987	2005	4	2002	5400	67	60	87	44	BIT	10	URBAN	\$48,000	\$221,200	\$28,800	\$33,800
3	50	0.28	CSAH-66 TO CSAH-37	1986	1986	23	2002	2500	61	48	69	44	BIT	10	BIT	\$112,000	\$492,800	\$67,300	\$71,867
3	51	0.17	CSAH-37 TO 0.17 MI N	1986	1986	23	2002	1600	61	48	69	44	BIT	8	BIT	\$98,000	\$272,000	\$36,000	\$39,667
3	60	2.41	0.17 MI N CSAH-37 TO 2.58 MI N CSAH-37	1926	1987	21	2002	1600	54	38	51	24	BIT	3	GRAVEL	\$984,000	\$3,470,400	\$403,200	\$337,400
3	61	1.78	2.58 MI N CSAH-37 TO S LIMS FIFTY LAKES	1926	1988	21	2002	1050	50	32	47	24	BIT	3	GRAVEL	\$712,000	\$2,563,200	\$297,800	\$246,200
3	70	1.5	S LIMS FIFTY LAKES TO CSAH-1	1926	1988	21	2002	1050	48	34	44	24	BIT	3	GRAVEL	\$900,000	\$2,160,000	\$250,900	\$210,000
4	10	4.7	CSAH-3 TO CSAH-18	1960	1984	25	2001	3450	54	42	56	24	BIT	8	GRAVEL	\$1,880,000	\$6,768,000	\$786,300	\$658,000
4	20	3.2	CSAH-18 TO S LIMS BREEZY POINT	1956	1981	28	2001	2400	49	38	51	24	BIT	2	GRAVEL	\$1,280,000	\$4,608,000	\$355,300	\$408,000
4	30	0.62	S LIMS BREEZY POINT TO LAKESHORE DRIVE	1956	1981	28	2001	2400	53	52	62	24	BIT	2	GRAVEL	\$298,000	\$1,192,000	\$173,100	\$184,800
4	35	0.72	LAKESHORE DRIVE TO CSAH-11	2000	2000	9	2001	2900	80	80	80	44	BIT	8	URBAN	\$298,000	\$1,192,000	\$173,100	\$184,800
5	10	0.38	CSAH-20 TO NOTHOWN STREET	2006	2006	3	2008	2750	86	66	66	36	BIT	8	URBAN	\$152,000	\$608,000	\$74,000	\$124,133
5	20	1.14	NORTH TOWN STREET TO CSAH-49	2006	2006	3	2008	2750	86	72	84	44	BIT	8	URBAN	\$456,000	\$2,008,400	\$274,000	\$292,600
8	10	4.9	S COUNTY LINE TO CSAH-2	1983	2001	8	2005	680	77	72	80	24	BIT	5	GRAVEL	\$1,960,000	\$7,056,000	\$819,700	\$866,000
8	20	0.3	CSAH-2 TO 0.3 MI N CSAH-2	2000	2001	8	2002	340	80	72	82	24	BIT	3	GRAVEL	\$120,000	\$432,000	\$50,200	\$74,000
8	22	4.7	0.3 MI N CSAH-2 TO CSAH-22/26	2000	2001	8	2002	340	78	72	82	24	BIT	3	GRAVEL	\$1,880,000	\$6,768,000	\$786,300	\$658,000
8	25	6.7	CSAH-22/26 TO 0.1 MI E CSAH-24	1999	2001	8	2002	490	80	72	82	24	BIT	3	GRAVEL	\$2,680,000	\$9,648,000	\$1,120,900	\$938,000
8	28	1.3	0.1 MI E CSAH-24 TO TH-18	1977	2001	8	2002	1000	77	70	78	24	BIT	6	GRAVEL	\$3,080,000	\$11,088,000	\$1,288,200	\$1,078,000
8	30	7.7	TH-18 TO 7.7 MI N	1991	1991	18	2006	960	59	44	62	24	BIT	4	GRAVEL	\$3,080,000	\$11,088,000	\$1,288,200	\$1,078,000
8	40	2.9	7.7 MI N TH-18 TO S LIMS DEERWOOD	1994	1995	14	2006	600	64	54	69	24	BIT	4	GRAVEL	\$1,160,000	\$4,176,000	\$485,100	\$406,000
8	50	0.2	S LIMS DEERWOOD TO CSAH-12	1994	1995	14	2006	750	66	46	62	24	BIT	4	GRAVEL	\$80,000	\$288,000	\$33,500	\$26,000
9	10	0.7	CSAH-2 TO 0.7 MI N	1950	1995	14	2005	260	64	48	64	24	BIT	4	GRAVEL	\$260,000	\$1,008,000	\$117,100	\$96,000

CROW WING COUNTY HIGHWAY DEPARTMENT

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LOCATION				HISTORY			Traffic		Condition		GEOMETRICS			IMPROVEMENT OPTION COSTS						
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED	YEAR SURFACED	AGE	YEAR SEALED	ADT 2007	MOD PQI	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHLD WIDTH	SHLD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING
9	11	0.3	0.7 MI N TO 1.0 MI N CSAH-2	1993	1993	16	1999	260	61	46	64	24	BIT	4	GRAVEL	\$120,000	\$432,000	\$50,200	\$42,000	\$9,800
9	12	3.5	1 MI N CSAH-2 TO TH-25	1960	1992	57	1999	260	48	38	48	20	BIT	4	GRAVEL	\$1,400,000	\$5,040,000	\$534,400	\$408,333	\$114,300
10	10	0.8	S JCT TH-18 TO 0.8 MI W	1941	1995	14	1989	380	64	54	71	22	BIT	2	GRAVEL	\$320,000	\$1,120,000	\$128,000	\$102,667	\$13,100
10	11	0.5	0.8 MI TO 1.3 MI W OF S JCT TH-18	1941	1995	14	1989	380	61	54	67	22	BIT	2	GRAVEL	\$200,000	\$720,000	\$80,000	\$64,167	\$8,200
10	12	2.1	1.3 MI W S JCT TH-18 TO N JCT TH-18	1941	1995	14	1989	290	67	58	71	22	BIT	2	GRAVEL	\$840,000	\$3,024,000	\$336,000	\$268,500	\$34,300
10	20	4.6	N JCT TH-18 TO N BRIGHTON POINT RD	2009	2009		1989	780	90	80	90	20	BIT	2	GRAVEL	\$2,430,000	\$8,624,000	\$702,300	\$538,667	\$75,100
10	21	0.9	N BRIGHTON POINT RD TO 0.6 MI S CSAH 14	2009	2009		1989	780	90	80	90	18	BIT	3	GRAVEL	\$1,296,000	\$4,596,000	\$130,800	\$94,500	\$22,100
10	22	0.6	0.6 MI SO CSAH-14 TO CSAH 14	2009	2009		1989	780	90	80	90	24	BIT	6	GRAVEL	\$984,000	\$3,542,400	\$100,400	\$84,000	\$29,400
10	30	7.2	CSAH-14 TO E LIMS DEERWOOD	1953	1989	20	1993	380	49	32	51	22	BIT	2	GRAVEL	\$2,880,000	\$10,368,000	\$1,151,900	\$924,000	\$117,600
10	40	0.33	E LIMS DEERWOOD TO TH-6	1953	1989	20	1993	380	49	28	47	22	BIT	2	GRAVEL	\$132,000	\$475,200	\$52,800	\$42,350	\$5,400
11	20	0.29	N JCT TH-371 TO S JCT TH-371	1966	1990	19	2001	3500	57	50	67	48	BIT	10	URBAN	\$116,000	\$556,800	\$73,900	\$61,200	
11	21	0.19	S JCT TH-371 TO CR 112	1966	1990	19	2004	8500	45	30	51	48	BIT	10	URBAN	\$76,000	\$364,800	\$48,400	\$53,200	
11	30	0.08	CR 112 TO 0.8 MI E	1969	1990	19	2004	5900	55	36	56	48	BIT	10	URBAN	\$32,000	\$153,600	\$20,400	\$22,400	
11	31	1.97	0.08 MI E OF CR112 TO W LIM BREE	1969	1990	19	2005	5600	69	48	62	25	BIT	10	GRAVEL	\$788,000	\$2,836,800	\$336,800	\$287,292	\$160,900
11	40	2.46	W LIMS BREEZY POINT TO CSAH-4	1969	1990	19	2005	5600	68	50	80	25	BIT	10	GRAVEL	\$984,000	\$3,542,400	\$420,500	\$359,750	\$200,900
11	50	0.75	CSAH-4 TO 0.75 MI NORTH	1996	1997	12	2004	3450	75	66	78	44	BIT	10	URBAN	\$300,000	\$1,320,000	\$160,500	\$192,500	
11	51	4.7	0.75 MI N OF CSAH-4 TO E LIM BREEZY PT	1996	1996	13	2007	2900	75	68	80	40	BIT	8	BIT	\$1,880,000	\$7,520,000	\$1,061,000	\$1,096,667	
11	60	0.5	E LIMS BREEZY POINT TO CSAH-3	1996	1997	12	2007	2900	75	68	80	40	BIT	8	BIT	\$200,000	\$800,000	\$112,900	\$116,667	
11	70	6.9	CSAH-3 TO CSAH-19	2000	2004	5	2008	1400	77	74	84	24	BIT	6	GRAVEL	\$2,760,000	\$9,936,000	\$1,154,300	\$966,000	\$338,100
11	75	0.4	CSAH-19 TO 0.4 MI E CSAH-19	2003	2003	6		1400	75	68	78	36	BIT	6	BIT	\$160,000	\$576,000	\$84,500	\$84,000	
11	80	4	0.4 MI E CSAH-19 TO TH-6	1980	2004	5		1400	75	68	78	36	BIT	6	BIT	\$1,600,000	\$5,760,000	\$844,600	\$940,000	
11	90	10	TH-6 TO E CO LINE	1973	1997	12	2000	530	64	52	64	24	BIT	3	GRAVEL	\$4,000,000	\$14,400,000	\$1,672,900	\$1,400,000	\$246,000
12	10	4.7	TH-210 TO CSAH-28	1972	2005	4	2008	5300	84	82	84	44	BIT	10	BIT	\$1,880,000	\$8,272,000	\$1,129,700	\$1,206,333	
12	20	1.3	CSAH-28 TO W LIMS DEERWOOD	1972	2005	4	2008	5300	84	80	87	44	BIT	10	BIT	\$520,000	\$2,288,000	\$332,500	\$333,667	
12	30	0.87	W LIMS DEERWOOD TO TH-210	1972	2005	4	2008	6500	84	82	87	44	BIT	10	BIT	\$348,000	\$1,531,200	\$209,100	\$223,300	
13	9	0.23	TH-371 TO 23 MI EAST	1935	1987	22	2000	2100	55	36	56	22	BIT	3	GRAVEL	\$92,000	\$331,200	\$36,800	\$29,517	\$5,600
13	10	1.47	23 MI E OF TH-371 TO E LIM NISSWA	1935	1997	12	2000	1600	67	62	73	22	BIT	3	GRAVEL	\$588,000	\$2,116,800	\$235,200	\$188,650	\$36,000
13	19	1	E LIMS NISSWA TO CR-137	1935	1997	12	2000	1600	68	62	76	22	BIT	4	GRAVEL	\$400,000	\$1,440,000	\$160,000	\$128,333	\$32,700
13	20	3.1	CR-137 TO CSAH-4	1935	1998	11	2000	1200	66	58	71	22	BIT	4	GRAVEL	\$1,240,000	\$4,464,000	\$466,000	\$397,833	\$101,300
14	10	0.8	TH-6 TO 0.8 MI E	1986	1986	23	1990	1500	49	32	53	44	BIT	10	URBAN	\$320,000	\$1,080,000	\$192,300	\$205,333	
14	20	1	0.8 MI E TH-6 TO S JCT CSAH-10	1986	1986	23	1990	1500	64	48	64	24	BIT	8	GRAVEL	\$400,000	\$1,440,000	\$167,300	\$140,000	\$65,300
14	30	1.4	S JCT CSAH-10 TO E CO LN	1986	1986	23	1990	870	55	42	60	24	BIT	6	GRAVEL	\$560,000	\$2,016,000	\$234,200	\$196,000	\$68,600
15	10	2.81	TH-371 TO NE LIMS JENKINS	1997	1997	12	2004	1000	72	66	78	36	BIT	6	BIT	\$1,124,000	\$4,046,400	\$593,300	\$590,100	
15	20	1.4	NE LIMS JENKINS TO 1.4 MI NE	1997	1997	12	2004	1000	75	68	80	36	BIT	6	BIT	\$560,000	\$2,016,000	\$295,600	\$294,000	
15	30	2.6	1.4 MI NE OF JENKINS TO CSAH-1	1971	1997	12	2004	550	70	62	89	36	BIT	6	BIT	\$1,040,000	\$3,744,000	\$549,000	\$546,000	
16	10	0.36	TH-371 TO E LIMS JENKINS	1982	2007	2		3000	87	74	80	40	BIT	8	BIT	\$144,000	\$576,000	\$81,300	\$84,000	
16	15	1.13	E LIMS JENKINS TO N LIMS PEQUOT LAKES	1982	2007	2		3100	87	74	80	40	BIT	8	BIT	\$452,000	\$1,808,000	\$255,100	\$263,667	
16	17	2.3	N LIMS PEQUOT LAKES TO PEORIA ROAD	1982	2007	2		3100	87	74	80	40	BIT	8	BIT	\$920,000	\$3,680,000	\$519,200	\$536,667	
16	20	4	PEORIA ROAD TO 0.6 MI E CSAH-39	1987	1987	22	2004	3100	63	52	64	40	BIT	8	BIT	\$1,600,000	\$6,400,000	\$903,000	\$833,333	
16	30	2.1	0.6 MI E CSAH-39 TO W LIMS CROSSLAKE	1989	1989	20	2005	2350	62	54	71	40	BIT	8	BIT	\$840,000	\$3,360,000	\$474,100	\$490,000	
16	40	1.06	W LIMS CROSSLAKE TO WEST SHORE DRIVE	1989	1989	20	2005	1400	67	52	67	40	BIT	8	BIT	\$424,000	\$1,696,000	\$239,300	\$247,333	
16	50	1.82	WEST SHORE DRIVE TO CSAH-66	1991	1991	18	2007	2400	66	58	67	40	BIT	8	BIT	\$728,000	\$2,912,000	\$410,900	\$424,667	
17	10	0.84	W CO LN TO TH-371	1926	1994	15	2008	1450	59	50	64	28	BIT	1	GRAVEL	\$336,000	\$1,209,600	\$152,800	\$137,200	\$6,900
17	10	0.15	S JCT TH-371 TO 0.15 MI N	1963	2002	7	2006	5700	51	40	58	65	BIT	-	URBAN	\$60,000	\$390,000	\$47,600	\$56,875	
18	11	0.22	0.15 MI N OF S JCT TH-371 TO N JCT TH-371	1963	1981	26	2004	1450	51	38	56	65	BIT	-	URBAN	\$88,000	\$572,000	\$69,800	\$93,417	
18	20	0.16	0.15 MI N OF S JCT TH-371 TO 1.13 MI W OF E LIMS NISSWA	1963	1981	26	2004	2750	51	42	60	44	BIT	10	URBAN	\$64,000	\$281,600	\$38,500	\$41,067	
18	21	0.42	1.13 MI W OF E LIMS NISSWA TO NORWAY LN	1963	1989	20	2004	2750	53	52	67	24	BIT	8	GRAVEL	\$168,000	\$604,800	\$70,300	\$58,800	\$27,400
18	25	0.71	NORWAY LN TO E LIMS NISSWA	1963	1989	20	2004	2750	53	52	67	24	BIT	8	GRAVEL	\$284,000	\$1,022,400	\$118,800	\$99,400	\$46,400
18	30	3.1	EAST LIMITS NISSWA TO CSAH-4	1963	1989	20	2004	1600	66	58	71	24	BIT	8	GRAVEL	\$1,240,000	\$4,464,000	\$518,800	\$434,000	\$202,500
19	10	5	CSAH-3 TO 5.0 MILES NORTH	2001	2001	8	2007	810	82	80	89	32	BIT	4	BIT	\$2,000,000	\$7,200,000	\$982,600	\$933,333	
19	15	2.1	5.0 MI N CSAH-3 TO MISSION CUTOFF	2004	2005	4		810	82	78	87	32	BIT	4	BIT	\$940,000	\$3,024,000	\$412,700	\$392,000	
19	20	1.4	MISSION CUTOFF TO CR-109	2004	2005	4		810	80	78	87	32	BIT	4	BIT	\$560,000	\$2,016,000	\$275,100	\$267,333	
19	30	0.3	CR-109 TO CSAH-11	2004	2005	4		810	75	66	80	32	BIT	4	BIT	\$120,000	\$432,000	\$59,000	\$56,000	
20	10	0.23	TH-210 TO JACKSON ST	2003	2003	6	2008	11500	64	48	69	52	BIT		URBAN	\$32,000	\$47,600	\$62,000	\$69,767	
20	20	0.47	JACKSON ST TO BEAVER DAM RD	2003	2003	6	2008	5300	75	68	82	48	BIT		URBAN	\$180,000	\$692,400	\$119,800	\$131,600	
20	30	0.54	BEAVER DAM RD TO MCKAY RD	2004	2004	5	2008	1600	84	78	87	44	BIT	10	URBAN	\$216,000	\$950,400	\$129,800	\$138,600	

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ROAD			LOCATION		HISTORY			TRAFFIC		CONDITION		GEOMETRICS			IMPROVEMENT OPTION COSTS						
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED EST.	YEAR SURFACED	AGE	YEAR SEALED	MOD PQI	2007 ADT	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHLD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING		
20	40	1.12	MCKAY RD TO ASHLIN RD	2004	2004	5	2008	81	1600	76	87	44	BIT	10	URBAN	\$448,000	\$1,971,200	\$269,200	\$287,467		
20	50	0.26	ASHLIN RD TO S AHRENS HILL RD	2004	2004	5	2008	81	1600	81	76	34	BIT	4	URBAN	\$104,000	\$374,400	\$53,000	\$51,567		
20	55	0.2	S AHRENS HILL RD TO S AHRENS HILL RD	2006	2006	3	2008	86	1600	86	87	32	BIT	4	URBAN	\$80,000	\$288,000	\$39,300	\$37,333		
20	60	0.9	N AHRENS HILL RD TO CSAH49	1934	1956	53	2006	48	1600	48	24	42	20	BIT	2	GRAVEL	\$360,000	\$1,296,000	\$137,400	\$105,000	\$14,700
21	10	2	CSAH2 TO CR-131	1980	1987	22	2000	320	320	57	52	69	24	BIT	5	GRAVEL	\$800,000	\$2,880,000	\$334,600	\$280,000	\$81,700
21	20	5.3	CR-131 TO CR-123	1965	1987	22	2000	1350	62	60	73	24	BIT	5	GRAVEL	\$2,120,000	\$7,632,000	\$986,600	\$742,000	\$26,400	
21	30	0.4	CR-123 TO 0.1 MI S TH-371	1965	1987	22	2000	1350	61	64	76	24	BIT	7	GRAVEL	\$160,000	\$576,000	\$66,900	\$66,000	\$22,900	
21	40	0.1	0.1 MI S TH-371 TO TH-371	1960	1986	23	2000	1350	44	30	49	24	BIT	4	GRAVEL	\$40,000	\$144,000	\$16,700	\$14,000	\$3,300	
22	10	1.4	TH-25 TO 1.4 MILES EAST	1940	1988	11	2005	560	72	64	78	24	BIT	3	GRAVEL	\$560,000	\$2,016,000	\$234,200	\$196,000	\$34,300	
22	20	0.7	1.4 MI E TH-25 TO 2.1 MI E TH-25	1940	1988	11	2005	560	70	60	76	20	BIT	3	GRAVEL	\$280,000	\$1,008,000	\$106,900	\$81,667	\$17,200	
22	30	1.5	2.1 MI E TH-25 TO CSAH23	1953	1988	11	2005	315	72	62	76	24	BIT	2	GRAVEL	\$900,000	\$3,240,000	\$250,900	\$210,000	\$24,500	
22	40	3.5	CSAH23 TO MEADOWVIEW RD	1957	1987	12	2005	225	64	50	67	24	BIT	1.5	GRAVEL	\$1,400,000	\$5,040,000	\$585,500	\$490,000	\$42,900	
22	50	2	MEADOWVIEW RD TO RADDAITZ RD	1957	1987	12	2005	225	64	52	69	24	BIT	3	GRAVEL	\$800,000	\$2,880,000	\$334,600	\$280,000	\$49,000	
22	60	1	RADDAITZ RD TO CSAH48	1957	1987	12	2005	225	65	48	60	24	BIT	1.5	GRAVEL	\$400,000	\$1,440,000	\$167,300	\$140,000	\$12,300	
23	10	4	S CO LN TO CSAH2	1958	1994	15	2006	405	64	54	69	24	BIT	2	GRAVEL	\$1,600,000	\$5,760,000	\$669,200	\$560,000	\$65,300	
23	20	1.7	CSAH2 TO 1.7 MI N CSAH2	1940	1984	15	2006	405	62	54	69	24	BIT	4	GRAVEL	\$800,000	\$2,880,000	\$284,400	\$238,000	\$35,500	
23	21	0.9	1.7 MI N CSAH2 TO 2.6 MI N CSAH-2	1994	1995	14	2006	405	70	64	73	24	BIT	4	GRAVEL	\$360,000	\$1,296,000	\$150,600	\$126,000	\$29,400	
23	22	1.8	2.6 MI N CSAH-2 TO CSAH-22	1940	1984	15	2006	405	58	50	62	24	BIT	4	GRAVEL	\$720,000	\$2,592,000	\$301,100	\$252,000	\$58,800	
23	30	0.5	CSAH22 TO 0.5 MI N	1940	1984	15	2006	700	72	64	78	24	BIT	6	GRAVEL	\$200,000	\$720,000	\$83,600	\$70,000	\$24,500	
23	31	2.6	0.5 MI N CSAH22 TO 3.1 MI N	1961	1984	15	2006	700	63	58	71	24	BIT	6	GRAVEL	\$1,040,000	\$3,744,000	\$435,000	\$364,000	\$127,400	
23	40	2.5	3.1 MI N CSAH22 TO TH-18	1961	1984	15	2006	930	62	54	64	24	BIT	6	GRAVEL	\$1,000,000	\$3,600,000	\$418,200	\$340,000	\$122,500	
24	10	0.9	CSAH23 TO CSAH8	1962	1989	20	2006	520	62	62	76	24	BIT	3.5	GRAVEL	\$1,280,000	\$4,608,000	\$535,300	\$448,000	\$91,500	
25	10	4.4	TH-18 TO TH-210	1964	1989	20	2007	1050	62	52	64	24	BIT	3	GRAVEL	\$1,760,000	\$6,336,000	\$736,100	\$616,000	\$107,800	
26	10	5.3	CSAH8 TO TH-169	1992	1992	17	2007	440	58	52	62	24	BIT	5	GRAVEL	\$2,120,000	\$7,632,000	\$886,600	\$742,000	\$216,400	
27	10	1.3	TH-371 TO 1.3 MI W	2003	2003	6	2005	65	74	74	80	24	BIT	8	BIT	\$520,000	\$1,872,000	\$217,500	\$182,000		
28	10	0.2	CSAH12 TO 0.2 MI N	1984	1984	25	2006	1700	48	20	40	40	BIT	8	BIT	\$80,000	\$320,000	\$45,200	\$46,667		
28	20	0.6	0.2 MI N TO 0.8 MI N CSAH-12	1984	1984	25	2006	1700	57	34	53	44	BIT	10	URBAN	\$240,000	\$1,056,000	\$144,200	\$154,000		
28	30	0.4	0.8 MI N TO 1.2 MI N CSAH-12	1984	1984	25	2006	3050	57	40	58	40	BIT	8	BIT	\$160,000	\$640,000	\$90,300	\$93,333		
28	40	0.1	1.2 MI N CSAH-12 TO S LIM CROSBY	1984	1984	25	2006	3050	49	34	53	44	BIT	10	URBAN	\$40,000	\$176,000	\$24,000	\$25,667		
28	50	0.23	S LIM CROSBY TO TH-210	1984	1984	25	2006	3050	49	26	47	44	BIT	10	URBAN	\$92,000	\$404,800	\$55,300	\$59,033		
29	10	1.09	W CO LN TO TH-371	1996	1997	12	2005	1200	70	66	78	24	BIT	6	GRAVEL	\$436,000	\$1,569,600	\$182,300	\$152,600	\$53,400	
30	10	0.3	TH-210 TO PENNINGTON ACCESS ROAD	1993	1993	16	2006	760	68	64	78	24	BIT	10	BIT	\$120,000	\$480,000	\$72,100	\$71,000		
30	20	0.11	PENNINGTON ACCESS ROAD TO SW LIMS CROSBY	1993	1993	16	2006	760	70	60	76	24	BIT	6	GRAVEL	\$44,000	\$156,400	\$18,400	\$15,400	\$5,400	
30	21	0.22	SW LIMS CROSBY TO 0.22 MI N	1993	1993	16	2006	760	66	54	69	24	BIT	6	GRAVEL	\$88,000	\$316,800	\$36,800	\$30,800	\$10,800	
30	30	0.13	0.22 MI N OF SW LIM CROSBY TO NW LIM CROSBY	1939	1991	18	2006	760	49	26	42	24	BIT	2	GRAVEL	\$52,000	\$187,200	\$21,700	\$18,200	\$2,100	
30	40	0.08	NW LIMS CROSBY TO 0.08 MI N	1939	1991	18	2006	760	49	34	53	24	BIT	2	GRAVEL	\$32,000	\$115,200	\$13,400	\$11,200	\$1,300	
30	50	1.08	0.08 MI N OF NW LIM CROSBY TO N LIMS CROSBY	1939	1991	18	2006	760	45	52	64	24	BIT	2	GRAVEL	\$432,000	\$1,555,200	\$180,700	\$151,200	\$17,600	
30	60	1.19	N LIMS CROSBY TO CSAH-34	1939	1991	18	2006	760	53	44	64	24	BIT	2	GRAVEL	\$476,000	\$1,713,600	\$199,100	\$166,600	\$19,400	
30	70	0.26	CSAH-34 TO N LIM TROMMALD	1939	1987	22	2006	405	300	22	8	24	22	BIT	2	GRAVEL	\$104,000	\$374,400	\$41,600	\$33,367	\$4,200
30	80	0.1	N LIM TROMMALD TO W LIM TROMMALD	1939	1987	22	2006	465	45	24	44	22	BIT	2	GRAVEL	\$40,000	\$144,000	\$16,000	\$12,833	\$1,600	
30	90	0.4	W LIM TROMMALD TO N LIM TROMMALD	1939	1987	22	2006	465	46	34	51	22	BIT	2	GRAVEL	\$160,000	\$576,000	\$64,000	\$51,333	\$6,500	
30	100	0.8	N LIM TROMMALD TO 0.8 MI N	1939	1987	22	2006	465	39	36	40	22	BIT	2	GRAVEL	\$320,000	\$1,152,000	\$128,000	\$102,667	\$13,100	
30	110	3	0.8 MI N TROMMALD TO TH 6	1959	1987	22	2006	465	45	42	49	24	BIT	4	GRAVEL	\$1,200,000	\$4,320,000	\$501,900	\$420,000	\$96,000	
30	120	1.1	TH 6 TO CSAH 31	1959	1989	20	2006	1300	43	38	56	24	BIT	2	GRAVEL	\$440,000	\$1,584,000	\$184,000	\$154,000	\$18,000	
30	130	4.7	CSAH31 TO CSAH 32	1962	1989	20	2006	520	48	42	58	24	BIT	2	GRAVEL	\$1,880,000	\$6,768,000	\$786,300	\$668,000	\$76,800	
31	10	0.33	TH-210 TO 8TH ST N	1991	1991	18	2000	1250	65	54	71	24	BIT	24	BIT	\$132,000	\$475,200	\$55,200	\$46,200		
31	15	0.75	8TH ST N TO N LIMS CROSBY	1991	1991	18	2000	1250	65	50	67	24	BIT	8	GRAVEL	\$300,000	\$1,080,000	\$125,500	\$105,000		
31	20	1.23	0.76 MI N OF S LIM CROSBY TO SOUTH STREET CUYU	1991	1991	18	2000	1250	51	46	62	24	BIT	8	GRAVEL	\$492,000	\$1,771,200	\$205,800	\$172,200	\$80,400	
31	21	0.25	SOUTH ST TO NORTH ST CUYUNA	1991	1991	18	2000	1250	53	24	44	44	BIT	4	URBAN	\$100,000	\$440,000	\$60,100	\$64,167		
31	30	0.9	NORTH ST CUYUNA TO N LIMS CUYUNA	1977	1995	14	2000	1650	62	48	64	32	BIT	4	BIT	\$360,000	\$1,296,000	\$176,900	\$168,000		
31	40	0.7	N LIMS CUYUNA TO CSAH-30	1974	1995	14	2000	1650	64	46	67	32	BIT	4	BIT	\$280,000	\$1,008,000	\$137,600	\$130,667		
32	10	4.6	TH-210 TO E CO LN	1973	1992	17	2006	640	52	36	47	28	BIT	2	GRAVEL	\$1,840,000	\$6,624,000	\$836,800	\$751,333	\$75,100	
33	10	0.21	CSAH-30 TO E LIMS IRONTON	1967	1990	19	2006	740	61	38	56	42	BIT	10	URBAN	\$84,000	\$352,800	\$48,900	\$51,450		
33	20	0.74	W LIMS CROSBY TO TH-210	1987	1980	19	2006	1900	57	46	62	42	BIT	10	URBAN	\$286,000	\$1,043,200	\$122,900	\$181,300		
34	10	1.37	1ST AVE W TO CSAH 30	1955	1955	54	2000	370	54	48	67	24	BIT	2	GRAVEL	\$548,000	\$1,972,800	\$229,200	\$191,800	\$22,400	
36	10	0.72	CSAH-3 TO 0.72 MI E	1936	2001	8	2004	900	59	54	71	24	BIT	2	GRAVEL	\$288,000	\$1,036,800	\$120,500	\$100,800	\$11,800	

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ROAD	SEGMENT	LENGTH	LOCATION	HISTORY			Traffic			Condition			GEOMETRICS				IMPROVEMENT OPTION COSTS			
				YEAR GRADED EST.	YEAR SURFACED	AGE	YEAR SEALED	2007 ADT	MOD PQI	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SULD WIDTH	SULD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING
36	11	0.5	0.72 MI E TO 1.22 MI CSAH-37	1984	1984	25	2004	900	57	46	62	24	BIT	6	GRAVEL	\$200,000	\$720,000	\$83,600	\$70,000	\$24,500
36	12	0.38	1.22 MI E CSAH-37 TO CSAH-33	1986	1986	23	2004	900	57	58	69	24	BIT	6	GRAVEL	\$152,000	\$47,200	\$93,600	\$53,200	\$18,600
36	20	3.6	CSAH-37 TO E LIMS CROSSLAKE	1947	1987	22	2004	900	51	34	49	24	BIT	2	GRAVEL	\$1440,000	\$5,184,000	\$602,300	\$504,000	\$58,800
36	30	1.1	E LIMS CROSSLAKE TO CR-114	1947	1987	22	2004	900	53	34	53	24	BIT	2	GRAVEL	\$440,000	\$1,884,000	\$184,000	\$154,000	\$18,000
36	31	3	CR 114 TO TH-6	1940	1988	21	2005	340	56	38	58	24	BIT	2	GRAVEL	\$1,200,000	\$4,320,000	\$501,900	\$420,000	\$49,000
36	40	3.7	TH-6 TO CR-105	1936	1951	58	2005	265	45	32	47	24	BIT	3	GRAVEL	\$1,480,000	\$5,528,000	\$619,000	\$518,000	\$90,700
36	50	1.3	CR-105 TO CR-106	1937	GRAVEL	72	115					24	GRAVEL			N/A	\$520,000	\$1,872,000	\$217,900	\$182,000
36	60	4.8	CR-106 TO CUYUNA TRAIL	1937	GRAVEL	72	45					24	GRAVEL			\$1,920,000	\$6,912,000	\$803,000	\$672,000	
36	70	2.1	CUYUNA TRAIL TO E CO LN	2005	2005	4	45	84	84	54	73	24	BIT	4	GRAVEL	\$840,000	\$3,024,000	\$351,300	\$294,000	\$68,600
37	10	0.67	CSAH-38 TO CSAH-3	1986	1986	23		950	57	58	73	24	BIT	6	GRAVEL	\$288,000	\$964,800	\$112,100	\$93,800	\$32,800
39	10	1.31	CSAH-11 TO N LIM BREEZY POINT	1981	2003	6	2004	1200	80	80	87	24	BIT	6	GRAVEL	\$524,000	\$1,886,400	\$219,200	\$183,400	\$64,200
39	20	2.1	N LIM BREEZY POINT TO 2.1 MI N	2002	2003	6	2004	1200	82	78	87	24	BIT	1	GRAVEL	\$840,000	\$3,024,000	\$351,300	\$294,000	\$17,200
39	30	0.9	2.1 MI N OF N LIM BREEZY PT TO 1000 FT S OF CSAH-16	2002	2003	6	2004	1000	77	72	84	22	BIT	1	GRAVEL	\$360,000	\$1,296,000	\$144,000	\$115,500	\$7,400
39	40	0.2	1000 FT S OF CSAH-16 TO CSAH-16	1987	2003	6	2004	1000	75	72	84	22	BIT	1	GRAVEL	\$80,000	\$288,000	\$32,000	\$25,667	\$1,600
43	10	0.7	ALONG W CO LN TO CSAH-56	1986	1988	21		230	64	64	78	24	BIT	5	GRAVEL	\$280,000	\$1,008,000	\$117,100	\$98,000	\$28,600
43	20	0.7	CSAH-56 TO 0.7 MI N	1986	2005	4		230	77	64	78	24	BIT	2	GRAVEL	\$280,000	\$1,008,000	\$117,100	\$98,000	\$17,400
44	40	2.6	CSAH-45 TO TH-25	1941	1983	16		330	57	40	62	24	BIT	3	GRAVEL	\$1,040,000	\$3,744,000	\$435,000	\$364,000	\$63,700
45	10	3.6	S CO LN TO N JCT CSAH-2	1998	1999	10	2000	580	72	66	78	24	BIT	8	GRAVEL	\$1,440,000	\$5,184,000	\$602,300	\$504,000	\$235,200
45	20	8.2	N JCT CSAH-2 TO S LIMS BRANNERD	1970	1983	16	2000	960	61	52	67	25	BIT	8.5	GRAVEL	\$3,280,000	\$11,808,000	\$1,401,800	\$1,195,833	\$569,200
45	35	0.36	S LIMS BRANNERD TO CR-117	2004	2004	5		960	68	50	67	25	BIT	8	GRAVEL	\$144,000	\$518,400	\$61,500	\$52,500	\$29,500
45	40	0.5	CR-117 TO 0.5 MI NORTH	1968	1987	12	2000	6300	70	62	73	40	BIT	8	BIT	\$200,000	\$900,000	\$112,900	\$116,667	
45	50	1	0.5 MI N OF CR-117 TO OAK ST	1968	1987	12	2001	7200	70	54	71	44	BIT	10	URBAN	\$400,000	\$1,760,000	\$240,400	\$256,667	
45	60	0.39	OAK ST TO 200' N OF BN RR TRACKS	1977	1987	12	2001	7200	58	36	58	44	BIT	10	URBAN	\$156,000	\$686,400	\$93,700	\$100,100	
45	80	0.11	200' N BN RR TRACKS TO TH-210	1977	1987	12	2001	7700	67	44	64	40	BIT	8	URBAN	\$44,000	\$176,000	\$24,800	\$25,667	
47	10	0.18	TH-210 & TH-4 TO TH-210	1989	1989	20		670	53	40	60	44	BIT	10	URBAN	\$72,000	\$316,800	\$43,300	\$48,200	
48	10	0.47	TH-210 TO 0.47 MI N	1972	1986	13	1988	3750	70	62	78	42	BIT	4	BIT	\$188,000	\$789,600	\$109,500	\$115,150	
48	15	0.31	0.47 MI N TO 0.718 MI S TH-210	1972	1986	13	1988	3750	70	62	78	40	BIT	8	BIT	\$124,000	\$496,000	\$70,700	\$72,333	
48	20	0.33	0.718 MI S TO 1.11 MI S OF TH-210	2003	2003	6		3750	77	62	78	36	BIT	8	N/A	\$132,000	\$475,200	\$69,700	\$69,300	
48	23	0.88	1.11 MI S OF TH-210 TO TH-371	1972	1986	13	1988	3750	70	62	78	40	BIT	8	BIT	\$356,000	\$1,424,000	\$200,900	\$207,667	
48	25	2.8	TH-371 TO COLLEGE DRIVE	1972	1986	13	1988	5800	69	62	71	40	BIT	8	BIT	\$1,120,000	\$4,480,000	\$652,100	\$653,333	
48	40	0.3	COLLEGE DRIVE TO INDUSTRIAL PARK ROAD	1972	1986	13	1988	4050	64	60	73	40	BIT	8	BIT	\$120,000	\$480,000	\$67,700	\$70,000	
48	50	0.22	INDUSTRIAL PARK ROAD TO LAUREL ST.	1972	1986	13	1988	4100	76	60	73	44	BIT	10	URBAN	\$98,000	\$387,200	\$52,900	\$56,467	
48	60	0.4	LAUREL ST TO SW 4th ST BRANNERD	1973	1996	13	1998	5300	76	60	73	44	BIT	10	URBAN	\$160,000	\$704,000	\$96,100	\$102,667	
49	10	0.8	TH-371 TO DANIELSON RD	1982	2007	2	2008	6300	87	78	84	40	BIT	8	BIT	\$320,000	\$1,280,000	\$180,600	\$186,667	
49	20	1.19	DANIELSON RD TO N LIMITS OF BRANNERD	1982	2007	2	2008	6300	87	76	84	40	BIT	8	BIT	\$476,000	\$1,904,000	\$288,600	\$277,667	
49	25	1.2	N LIMITS OF BRANNERD TO 1.2 MI E	1982	2007	2	2008	6300	87	82	84	40	BIT	8	BIT	\$480,000	\$1,920,000	\$270,900	\$280,000	
49	30	1.6	1.2 MI E OF N LIMITS OF BRANNERD TO CSAH 20	1992	2007	2	2008	6300	87	78	82	40	BIT	8	BIT	\$640,000	\$2,560,000	\$371,200	\$373,333	
49	40	0.1	CSAH-20 TO CSAH-3	1992	2007	2	2008	6300	87	78	82	52	BIT	3	URBAN	\$40,000	\$208,000	\$27,000	\$30,333	
49	50	0.4	CR-113 TO S CO LN	1963	1989	10	2008	230	72	66	80	24	BIT	3	GRAVEL	\$160,000	\$576,000	\$66,900	\$66,000	\$9,800
56	10	0.2	CSAH-43 TO 0.2 MI N	1986	1988	21		175	66	48	64	24	BIT	5	GRAVEL	\$80,000	\$288,000	\$33,500	\$28,000	\$9,200
56	20	3.9	0.2 MI N CSAH-43 TO N CO LN	1958	GRAVEL	51	175					24	GRAVEL			\$1,560,000	\$5,616,000	\$652,400	\$546,000	
56	30	0.3	ALONG N CO LN	1958	GRAVEL	51	175					24	GRAVEL			N/A	\$432,000	\$50,200	\$42,000	
59	10	0.4	TH-210 TO S LIMS RIVERTON	2000	2000	9	2004	580	82	78	87	36	BIT	6	BIT	\$160,000	\$576,000	\$84,500	\$84,000	
59	20	0.7	S LIMS RIVERTON TO 70 MI N	2000	2000	9	2004	580	84	74	84	36	BIT	6	BIT	\$280,000	\$1,008,000	\$147,800	\$147,000	
59	30	0.06	70 MI N OF S LIMS RIVERTON TO RR TRACKS	2000	2000	9	2004	215	75	74	84	36	BIT	6	BIT	\$24,000	\$86,400	\$12,700	\$12,600	
66	10	2.17	CSAH-3 TO CSAH-16	1979	2005	4	2004	6100	85	70	82	44	BIT	10	URBAN	\$968,000	\$3,871,200	\$521,600	\$556,967	
66	20	0.77	CSAH-16 TO 0.77 MI N	1985	1985	24		3100	48	52	69	40	BIT	8	BIT	\$308,000	\$1,232,000	\$179,800	\$179,667	
66	30	0.63	0.77 MI N CSAH-16 TO S LN MAN BEACH	1985	1985	24		3100	49	48	64	44	BIT	10	URBAN	\$252,000	\$1,008,800	\$151,400	\$161,700	
66	40	0.18	S LN MAN BEACH TO 0.18 MI N	1985	1985	24		1600	55	52	60	44	BIT	10	URBAN	\$72,000	\$316,800	\$43,300	\$46,200	
66	50	0.33	0.18 MI N TO 0.51 MI N S LIM MAN BEACH	1985	1985	24		1600	59	46	62	40	BIT	8	BIT	\$132,000	\$528,000	\$74,500	\$77,000	
66	60	0.16	0.51 MI N TO 0.67 MI N S LIM MAN BEACH	1985	1985	24		1600	55	48	62	44	BIT	10	URBAN	\$84,000	\$381,600	\$38,500	\$41,067	
66	70	0.96	0.67 MI N S LIM MAN BEACH TO CSAH-1	1985	1985	24		1600	43	38	53	40	BIT	8	BIT	\$380,000	\$1,520,000	\$214,500	\$221,667	
77	10	1.47	W CO LN TO 1.47 MILES EAST	2002	2002	7	2004	5100	88	78	87	40	BIT	8	BIT	\$688,000	\$2,352,000	\$331,900	\$343,000	
77	11	0.15	1.47 MI E OF W COUNTY LINE TO TH-371	2002	2002	7	2004	5100	88	78	87	40	BIT	8	BIT	\$60,000	\$240,000	\$33,900	\$33,000	
77	20	3	W CO LN TO INGLEWOOD DR	1979	1979	30		5100	58	44	60	44	BIT	10	BIT	\$1,200,000	\$5,280,000	\$721,100	\$770,000	
77	30	0.4	INGLEWOOD DR TO TH-371	1979	1979	30		5100	58	44	60	44	BIT	10	BIT	\$160,000	\$704,000	\$96,100	\$102,667	

CROW WING COUNTY HIGHWAY DEPARTMENT

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LOCATION				HISTORY		Traffic		Condition		GEOMETRICS			IMPROVEMENT OPTION COSTS							
ROAD	SEGMENT	LENGTH	TERMINI	YEAR GRADED EST.	YEAR SURFACED	AGE	YEAR SEALED	ADT 2007	MOD PQI	Measured RQI	Measured PQI	SURF WIDTH	SURF TYPE	SHD WIDTH	SHD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING
101	10	0.44	CR-110 TO CSAH-12	1965	2001	8					50	67	24	BIT	1.5	BIT	\$176,000	\$633,600	\$73,600	\$61,600
102	10	4.61	CSAH-8 TO 4.61 MI N	1960	2000	9	2006	225		82	89	24	BIT	4	GRAVEL	\$1,844,000	\$6,638,400	\$771,200	\$945,400	\$150,600
102	20	1.54	4.61 MI N CSAH-8 TO CSAH-12	1960	1992	17	2006	710		50	62	28	BIT	2	GRAVEL	\$616,000	\$2,217,600	\$280,100	\$251,533	\$25,200
103	10	3.8	CSAH-39 TO JCT CSAH-3 & CSAH-36	1948	2001	8	2003	1250		70	82	20	BIT	2	GRAVEL	\$1,520,000	\$5,472,000	\$580,200	\$443,333	\$62,100
104	10	2.2	CSAH-22 TO CSAH-23	1928	GRAVEL	81		40				24	GRAVEL		N/A	\$980,000	\$3,168,000	\$368,000	\$308,000	
105	10	3.1	CSAH-11 TO MCNEAL ROAD	1942	2000	9	2005	175		58	71	24	BIT	2	GRAVEL	\$1,240,000	\$4,464,000	\$516,600	\$434,000	\$60,600
105	20	4.27	MCNEAL ROAD TO CSAH-36	1942	GRAVEL	67		105				32	GRAVEL		N/A	\$1,708,000	\$6,148,800	\$714,300	\$597,800	
106	10	0.69	CSAH-36 TO 0.69 MI N	1942	GRAVEL	67		105				32	GRAVEL		N/A	\$276,000	\$993,600	\$135,600	\$128,800	
106	20	5.23	0.69 MI N CSAH-36 TO CSAH-1	1942	GRAVEL	67		105				26	GRAVEL		N/A	\$2,092,000	\$7,531,200	\$913,200	\$793,217	
107	10	3	S JCT TH-371 TO 3 MIE	1938	2001	8	2004	200		60	73	22	BIT	3	GRAVEL	\$1,200,000	\$4,320,000	\$480,000	\$385,000	\$73,500
107	11	0.65	S JCT CR-107 TO N JCT TH-371	1956	2001	8	2004	415		62	76	22	BIT	2	GRAVEL	\$260,000	\$936,000	\$104,000	\$83,477	\$10,600
108	10	2.07	CSAH-22 TO CSAH-8	2008		1		150		68	80	24	BIT	1	GRAVEL	\$828,000	\$2,980,800	\$346,300	\$289,800	\$16,900
109	10	3.65	CSAH-3 TO MISSION CUTOFF RD	1956	2000	9	2001	780		68	80	24	BIT	2	GRAVEL	\$1,460,000	\$5,256,000	\$610,600	\$511,000	\$69,600
109	11	1.21	MISSION CUTOFF RD TO CSAH-19	1956	2000	9	2001	510		64	78	24	BIT	2	GRAVEL	\$484,000	\$1,742,400	\$202,400	\$169,400	\$19,800
110	10	1.28	CSAH-12 TO W LIM DEERWOOD TWP	1957	2001	8	2001	510		46	64	20	BIT	2	GRAVEL	\$512,000	\$1,843,200	\$195,400	\$149,333	\$20,900
111	10	3.83	CSAH-10 TO TH-210	1956	2002	7		175		50	69	22	BIT	2	GRAVEL	\$1,532,000	\$5,515,200	\$612,700	\$491,517	\$62,600
112	10	112	CSAH-10 TO CSAH-16	1952	1985	14	2004	1750		54	67	22	BIT	2	GRAVEL	\$800,000	\$2,880,000	\$320,000	\$256,667	\$32,700
113	10	1	CSAH-51 TO CR-139	1947	2003	6	2004	145		62	78	22	BIT	2	GRAVEL	\$1,440,000	\$5,000,000	\$560,000	\$450,000	\$16,300
113	20	3.94	CR-139 TO CSAH-2	1940	2003	6	2004	140		66	80	22	BIT	2	GRAVEL	\$1,576,000	\$5,673,600	\$630,300	\$505,633	\$64,400
114	10	1.5	CSAH-36 TO MISSION TWP LN	1960	2001	8	2005	230		54	71	22	BIT	1.5	GRAVEL	\$600,000	\$2,160,000	\$240,000	\$192,500	\$18,400
115	10	4.83	S JCT TH-371 TO MISSION LAKE ACCESS	1937	1985	24		1550		34	51	22	BIT	2	GRAVEL	\$1,832,000	\$6,955,200	\$772,700	\$619,850	\$78,900
115	20	0.1	N JCT TH-371 TO PUBLIC ACCESS	1963	1988	11		510		42	62	22	BIT	1	GRAVEL	\$400,000	\$1,600,000	\$216,000	\$12,833	\$800
116	10	1.37	CSAH-3 TO MISSION LAKE ACCESS	1963	1988	11		510		64	76	22	BIT	1	GRAVEL	\$548,000	\$1,972,800	\$219,200	\$175,817	\$11,200
117	10	0.65	TH-371 TO CSAH-46	1963	2004	5	1991	5900		60	78	54	BIT	4	URBAN	\$260,000	\$1,404,000	\$180,000	\$204,750	\$65,300
117	20	2	CSAH-46 TO TH-25	1963	1997	12	2000	3300		48	67	28	BIT	1	GRAVEL	\$800,000	\$2,880,000	\$334,600	\$280,000	\$55,300
118	10	2.65	CSAH-4 TO CSAH-3	1956	1984	25		1050		58	73	28	BIT	1	GRAVEL	\$1,060,000	\$3,816,000	\$482,100	\$382,833	\$21,600
119	10	2.58	CSAH-3 TO NORTH LONG LAKE	1956	1995	14	2001	620		44	62	22	BIT	2	GRAVEL	\$1,032,000	\$3,715,200	\$422,200	\$346,150	\$42,100
120	10	1.918	CSAH-39 TO CSAH-3	2007	2007	2		120		72	84	32	BIT	4	BIT	\$767,200	\$2,761,920	\$376,900	\$358,027	
121	10	1.31	CSAH-2 TO 1.31 MI N	1947	1981	18	1988	205		46	64	24	BIT	4	GRAVEL	\$524,000	\$1,886,400	\$219,200	\$183,400	\$42,800
121	20	0.94	1.31 MI N CSAH-2 TO CR-131	1947	2008	1		120		74	84	24	BIT	1	GRAVEL	\$736,000	\$1,353,600	\$157,300	\$131,600	\$7,700
121	30	1.8	CR-131 TO CSAH-21	1947	GRAVEL	62		120				22	GRAVEL		N/A	\$720,000	\$2,592,000	\$285,000	\$231,000	
122	10	2.99	S CO LN TO JCT CSAH-2 & CSAH-21	1939	2008	1	2005	155		76	84	24	BIT	1	GRAVEL	\$1,196,000	\$4,305,600	\$500,200	\$418,600	\$24,400
123	10	2.29	CSAH-21 TO CR-153	1948	2001	8	2005	340		62	76	22	BIT	1	GRAVEL	\$916,000	\$3,297,600	\$366,400	\$293,883	\$18,700
124	10	4.93	TH-18 TO TH-6	1956	1993	16		2500		46	62	24	BIT	2	GRAVEL	\$1,972,000	\$7,099,200	\$824,800	\$690,200	\$80,500
125	10	2	W CO LN TO TH-371 (GULL DAM RD)	1937	2004	5	2005	2500		74	84	36	BIT	6	BIT	\$800,000	\$2,880,000	\$422,300	\$420,000	
126	10	1.23	W CO LN TO TH-371 (GREEN GABLES RD)	1937	2008	1		2050		72	82	24	BIT	1	GRAVEL	\$492,000	\$1,771,200	\$205,800	\$172,200	\$10,000
127	10	2.6	CR-115 TO CR-137	1956	1964	15	830			44	64	26	BIT	1	GRAVEL	\$1,040,000	\$3,744,000	\$454,000	\$394,333	\$21,200
127	11	0.65	NE COR SEC 33 TO 65 MI S (PARADISE DR)	1964	1989	20		60		28	49	22	BIT	2	GRAVEL	\$260,000	\$936,000	\$104,000	\$83,417	\$21,600
128	10	2.87	CR-137 TO CSAH-3	1956	1995	14	830			60	77	28	BIT	1	GRAVEL	\$1,148,000	\$4,132,800	\$522,100	\$468,767	\$23,400
128	20	1.25	TH-210 TO 1.25 MI N	1965	2003	6	2004	180		60	78	22	BIT	3	GRAVEL	\$500,000	\$1,800,000	\$200,000	\$160,417	\$30,600
128	20	0.94	1.25 MI N TH-210 TO IVERSON RD	1965	2003	6	2004	260		60	78	22	BIT	3	GRAVEL	\$376,000	\$1,353,600	\$159,400	\$120,633	\$22,000
128	30	0.75	IVERSON RD TO CSAH-59	1965	1988	11	2004	260		70	82	34	BIT	5	BIT	\$300,000	\$1,080,000	\$152,900	\$148,750	
129	10	2	TH-25 TO CSAH-23	1946	GRAVEL	63		60				22	GRAVEL		N/A	\$800,000	\$2,880,000	\$320,000	\$256,667	
130	20	1	CSAH-23 TO 1 MIE OF CSAH-23	1946	2004	5	2005	155		70	82	22	BIT	2	GRAVEL	\$400,000	\$1,440,000	\$160,000	\$128,333	\$16,300
130	130	2.99	CR-139 TO JCT CSAH-2 & CSAH-9	1948	2004	5	2005	155		74	84	24	BIT	1	GRAVEL	\$1,196,000	\$4,305,600	\$500,200	\$418,600	\$24,400
131	10	8.03	TH-371 TO CSAH-46 (SLEEPY HOLLOW RD)	1949	2002	7	2003	425		68	80	22	BIT	2	GRAVEL	\$3,212,000	\$11,563,200	\$1,284,700	\$1,030,517	\$131,200
132	10	5.54	CSAH-23 TO CSAH-2	1949	GRAVEL	60		60				25	GRAVEL		N/A	\$2,216,000	\$7,977,600	\$947,000	\$807,917	
133	10	1.2	S JCT TH-6 TO N JCT TH-6 (OLD TH-6)	1962	2004	5	2005	295		62	78	22	BIT	2	GRAVEL	\$480,000	\$1,728,000	\$192,000	\$154,000	\$19,600
133	20	1.66	OLD TH-6 TO CSAH-10	1949	2004	5	2005	295		60	76	25	BIT	2	GRAVEL	\$684,000	\$2,390,400	\$283,800	\$242,083	\$27,100
133	21	1.64	CSAH-10 TO E CO LN	1949	2004	5	2005	295		60	76	22	BIT	2	GRAVEL	\$656,000	\$2,361,600	\$262,400	\$210,467	\$26,800
134	10	2.89	LOWER WHITEFISH LAKE TO CSAH-1	1950	1995	14	2004	420		46	62	22	BIT	1	GRAVEL	\$1,156,000	\$4,161,600	\$462,400	\$370,883	\$23,600
135	10	0.46	W JCT TH-210 TO E JCT TH-210	1965	1988	21		180		44	56	19	BIT	2.5	GRAVEL	\$184,000	\$662,400	\$68,600	\$50,983	\$9,400
136	10	2.18	CSAH-1 TO 2.18 MI N	1958	2000	9	2004	520		60	76	24	BIT	2	GRAVEL	\$872,000	\$3,136,200	\$354,700	\$305,200	\$35,600
137	11	2.82	2.18 MI N CSAH-1 TO N CO LN	1958	2000	9	2004	480		54	67	24	BIT	5	GRAVEL	\$1,128,000	\$4,060,800	\$471,800	\$384,800	\$115,200
137	10	3.12	CR-127 TO CSAH-13	1959	1992	17		270		48	67	22	BIT	2	GRAVEL	\$1,248,000	\$4,492,800	\$499,200	\$400,400	\$51,000
138	10	3.14	CSAH-2 TO TH-169	1956	2004	5	2005	235		68	80	24	BIT	1	GRAVEL	\$1,256,000	\$4,321,600	\$525,300	\$439,600	\$25,600

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LOCATION										HISTORY			Traffic		Condition		GEOMETRICS				IMPROVEMENT OPTION COSTS			
ROAD	SEGMENT	LENGTH	TERMINI	GRADED EST.	YEAR SURFACED	AGE	YEAR SEALED	2007 ADT	MOD PQL	Measured RQI	Measured PQL	SURF WIDTH	SURF TYPE	SHLD WIDTH	SHLD TYPE	RECON RURAL	RECON URBAN	MILL & OVERLAY	SIMPLE OVERLAY	SHOULDER PAVING				
139	10	11.2	CSAH-45 TO CR-113	1956	GRAVEL	53		85				24	GRAVEL		N/A	\$4,480,000	\$16,128,000	\$1,873,700	\$1,568,000					
141	10	1.51	CR-105 TO CSAH+11	1956	GRAVEL	53		15				24	GRAVEL		N/A	\$604,000	\$2,174,400	\$252,600	\$211,400					
142	10	0.11	TH-210 TO 0.11 MI W	1956	2006	3	2007	1100		76	82	28	BIT	4	GRAVEL	\$44,000	\$158,400	\$20,000	\$17,967	\$3,600				
142	11	1.47	0.11 MI W TO 1.58 MI W TH-210	1956	2006	3	2007	1100		76	82	28	BIT	4	GRAVEL	\$688,000	\$2,116,800	\$267,400	\$240,100	\$48,000				
142	20	0.82	1.58 MI W TH-210 TO FRENCH RAPIDS	1956	GRAVEL	53		90				28	GRAVEL		N/A	\$328,000	\$1,180,800	\$149,200	\$133,933					
143	10	0.7	TH-25 TO CR-144	1966	1966	43		70		50	62	20	BIT	2	GRAVEL	\$280,000	\$1,008,000	\$106,900	\$81,667	\$11,400				
144	10	1.76	TH-25 TO 1.75 MI N	1956	2005	4	2007	275		68	80	22	BIT	2	GRAVEL	\$700,000	\$2,520,000	\$280,000	\$224,583	\$28,600				
144	20	4.75	1.75 MI N TH-25 TO TH-18	2005	2005	4	2007	225		72	82	22	BIT	2	GRAVEL	\$1,900,000	\$6,840,000	\$759,900	\$609,583	\$77,600				
145	10	3	TH-371 TO 3 MI E	1942	2003	6	2004	620		66	78	24	BIT	1.5	GRAVEL	\$1,200,000	\$4,320,000	\$501,900	\$420,000	\$36,800				
145	11	0.33	3 MI E TH-371 TO OLD WHISKEY RD	1942	2003	6	2004	620		66	78	24	BIT	4	GRAVEL	\$132,000	\$475,200	\$55,200	\$46,200	\$10,800				
145	12	0.31	OLD WHISKEY RD TO CSAH-16	1942	2003	6	2004	560		66	78	24	BIT	2	GRAVEL	\$124,000	\$446,400	\$51,900	\$43,400	\$5,100				
146	10	0.5	TH-371 TO GOULD GREY RD	1970	1988	11	2007	830		56	67	22	BIT	2	GRAVEL	\$200,000	\$720,000	\$80,000	\$64,167	\$6,200				
146	20	1	0.5 MI N TH-371 TO B.I.R.	1970	1989	10	2007	830		56	67	22	BIT	2	GRAVEL	\$400,000	\$1,440,000	\$160,000	\$128,333	\$16,300				
147	10	0.15	TH-210 TO CO LANDFILL	1972	2001	8	2008	285		60	64	24	BIT	2	GRAVEL	\$60,000	\$216,000	\$25,100	\$21,000	\$2,500				
148	10	4	TH-25 TO CSAH-23	1967	1969	10	2007	830		52	64	24	BIT	2	GRAVEL	\$1,600,000	\$5,760,000	\$669,200	\$560,000	\$65,300				
149	10	1.14	CR-139 TO S COLIN	1956	GRAVEL	53		50				28	GRAVEL		N/A	\$456,000	\$1,641,600	\$199,000	\$172,900					
153	10	1	CSAH-45 TO 1 MI WEST	1965	1965	44	2005	700		58	73	24	BIT	1	GRAVEL	\$400,000	\$1,440,000	\$167,300	\$140,000	\$8,200				
153	20	2.5	1 MI WEST OF CSAH-45 TO TH-371	2001	2001	8	2002	700		58	73	28	BIT	2	BIT	\$1,000,000	\$3,600,000	\$436,500	\$379,167					
159	10	2.71	TH-18 TO WOODROW RD	1938	2007	2		130		74	84	22	BIT	2	GRAVEL	\$1,084,000	\$3,902,400	\$433,600	\$347,783	\$44,300				
159	20	4.71	WOODROW RD TO CSAH-8	1951	2007	2		130		74	84	22	BIT	2	GRAVEL	\$1,884,000	\$6,782,400	\$753,500	\$604,450	\$76,900				
168	10	1	N JCT TH-371 TO W COLIN	1956	1995	14	2004	1050		56	69	28	BIT	4	GRAVEL	\$400,000	\$1,440,000	\$181,900	\$163,333	\$32,700				
170	10	1.34	WEST COUNTY LINE TO 1.34 MI E	2005	2005	4		1800		66	80	22	BIT	2	GRAVEL	\$536,000	\$1,929,600	\$214,400	\$171,967	\$21,900				
170	20	0.66	1.34 MI E OF WEST COUNTY LINE TO MOUNTAIN ASH DR	2004	2005	4		1800		70	82	22	BIT	2	GRAVEL	\$264,000	\$950,400	\$105,600	\$84,700	\$10,800				
170	30	0.6	MOUNTAIN ASH DR. TO JASPERWOOD DR.	2002	2002	7		1800		70	82	32	BIT	4	BIT	\$240,000	\$864,000	\$117,900	\$112,000					
170	40	1	JASPERWOOD DRIVE TO CSAH-48	2000	2000	9		1800		70	82	32	BIT	4	BIT	\$400,000	\$1,440,000	\$196,500	\$186,667					
Total Miles		556.568																		\$67,520,685				

*MILL AND OVERLAY ESTIMATES BASED ON 1.5" MILLFILL AND 2" BITUMINOUS OVERLAY

*OVERLAY ESTIMATES BASED ON 1" LEVELING AND 1.5" BITUMINOUS WEARING COURSE

*SHOULDER PAVING ESTIMATES BASED ON 2" BITUMINOUS MATERIAL

Bridge Management Data



- Replacement Priority List/Bridge Information

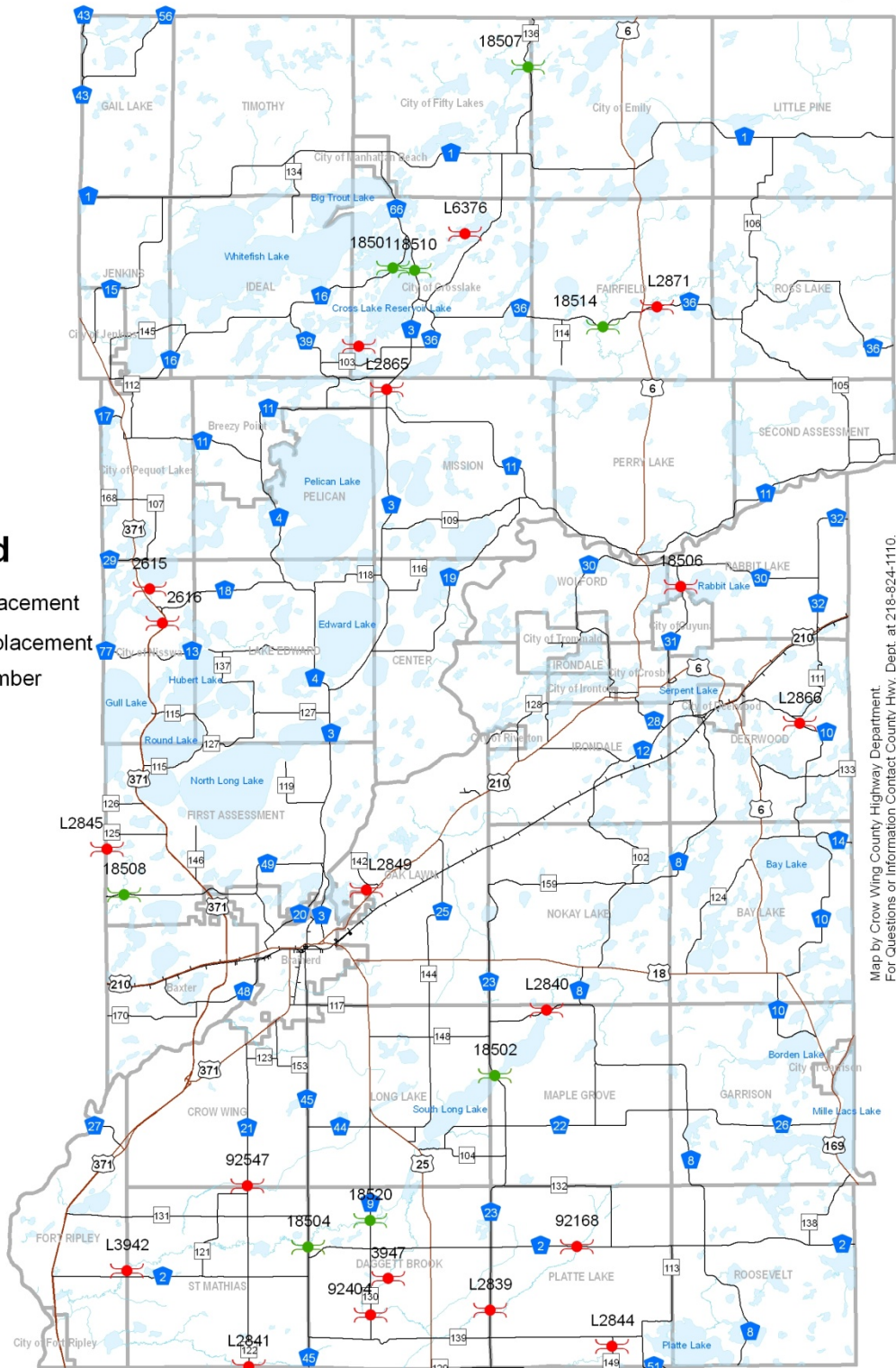


CROW WING COUNTY

Bridge Priority List



- Legend**
-  Deck Replacement
 -  Bridge Replacement
 - L2865 Bridge Number



Map by Crow Wing County Highway Department.
For Questions or Information Contact County Hwy. Dept. at 218-824-1110.
For Information on State Highways Contact MnDOT at 218-828-2570

4/08/09

CROW WING COUNTY HIGHWAY DEPARTMENT

Bridge Replacement Priority List

	Bridge Number	Location	Road System	Year Built	ADT	Suff. Rating	Replacement Cost	Funding	Remarks
1	2615	Nisswa (Lower Cullen Rd.)	City	1917	1,870	(2008)	\$132,000	State Bonding	Posted at 18/30 tons. General deterioration occurring. Through road serving residential and recreational developments.
2	2616	Nisswa (Hazelwood Dr.)	City	1928	850	(2008)	\$132,000	State Bonding	Posted at 18/30 tons. General deterioration occurring. Through road serving residential and recreational developments.
3	L4090	Crosslake (Sunrise Island Dr.)	City	1960	20	(1986)	\$900,400	State Bonding	FUNCTIONALLY OBSOLETE. Posted at 17/28 tons. Dead end road to island.
4	L2845	UTW/N (Gull River Rd.)	Twsp	1943	250	(2006)	\$324,400	Town Bridge	FUNCTIONALLY OBSOLETE. Posted at 19/34/33 tons. Through road serving residential and recreational developments.
5	92404	CR 130 Daggett Brook)	Cnty	1968	200	(2005)	\$374,375	State Bonding	STRUCTURALLY DEFICIENT. Two railway tank cars approx. 90 years old. N. has bulges on the inside.
6	3947	Daggett Brook (30th St.)	Twsp	1923	58	(2008)	\$164,900	Town Bridge	FUNCTIONALLY OBSOLETE. Through road serving ag. Area.
7	L2840	CSAH 24 (Noka. River)	CSAH	1962	560	(2005)	\$238,025	State Bonding/State Aid	General Deterioration. Wood culvert. Settlement is taking place segment beginning to pull away from each other.
8	L2844	CR 149 (Plate River)	Cnty	1961	50	(2005)	\$192,000	State Bonding	General Deterioration. Wood culvert. Settlement is taking place segments beginning to pull away from each other and large sag in the middle of the pipe.
9	L6376	Crosslake (Dream Island Rd.)	City	1960	30	(1989)	\$106,700	State Bonding	Rotation and general deterioration of the abutments. Superstructure was replaced in 1988. Dead end road to residential development on Dream Island.
10	L2849	Oak Lawn (Jordan Rd.)	Twsp	1915	20	(1991)	\$101,800	Town Bridge	Deteriorated conditions. Dead end road, old TH 210 segment, providing access to limited residential properties.
11	L2839	CSAH 23 (Daggett Brook)	CSAH	1952	415	(2005)	\$220,600	State Bonding/State Aid	General deterioration. Extensive insect damage was found and repaired in 1990 when bridge was widened.
12	L3942	St. Mathias (Koering Rd.)	Twsp	1908	20	(1973)	\$398,800	Town Bridge	CLOSED. Out of service since 1987. Through "town line" road.
13	18506	CSAH 31 (Rabbit Lake)	CSAH	1974	1,450	(2005)	\$212,600	State Bonding/State Aid	Deteriorating condition of the superstructure. Rusting occurring in the steel bridge beams.

Bridges shown in bold are currently in design

CROW WING COUNTY HIGHWAY DEPARTMENT

Bridge Replacement Priority List

	Bridge Number	Location	Road System	Year Built	ADT	Suff. Rating	Replacement Cost	Funding	Remarks
14	18504	CSAH 45 (Noka. River)	CSAH	1970	870	(2005)	\$472,600	State Bonding/State Aide	Deteriorating condition of the superstructure. Longitudinal cracks in lower legs of the channels.
15	L2871	CSAH 36 (Mud Brook)	CSAH	1936	235	(2005)	\$127,700	State Bonding/State Aide	General Deterioration. Too narrow for current traffic level.
16	18502	CSAH 23 (Noka. River)	CSAH	1960	680	(2005)	\$453,700	State Bonding/State Aide	Deteriorating condition of the superstructure. Longitudinal cracks in lower legs of the channels.
17	L2865	CSAH 3 (Pelican Brook)	CSAH	1958	5,100	(2005)	\$123,400	State Bonding/State Aide	Galvanized steel plate culvert. Rusting at the waterline.
18	L2841	CR 122 (Little Noka. River)	Cnty	1955	240	(2005)	\$101,800	State Bonding/State Aide	Galvanized steel plate culvert. Rusting at the waterline.
19	92168	CSAH 2 (Daggett Brook)	CSAH	1967	1,850	(2005)	\$220,600	State Bonding/State Aide	Galvanized steel plate culvert. Rusting at the waterline.
20	92547	CSAH 21 (Hay Creek)	CSAH	1960	1,200	(2005)	\$123,400	State Bonding	Galvanized steel plate culvert. Rusting at the waterline.
21	L2866	CSAH 10 (Cedar Brook)	CSAH	1953	155	(2005)	\$108,200	State Bonding/State Aide	General Deterioration. Too narrow for current traffic level.
						Total Cost	\$5,230,000		

Bridges shown in bold are currently in design

Contact Information



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RACHEL REABE-NYSTROM – DISTRICT 3
ROSEMARY FRANZEN – DISTRICT 4
DOUG HOUGE - DISTRICT 5**