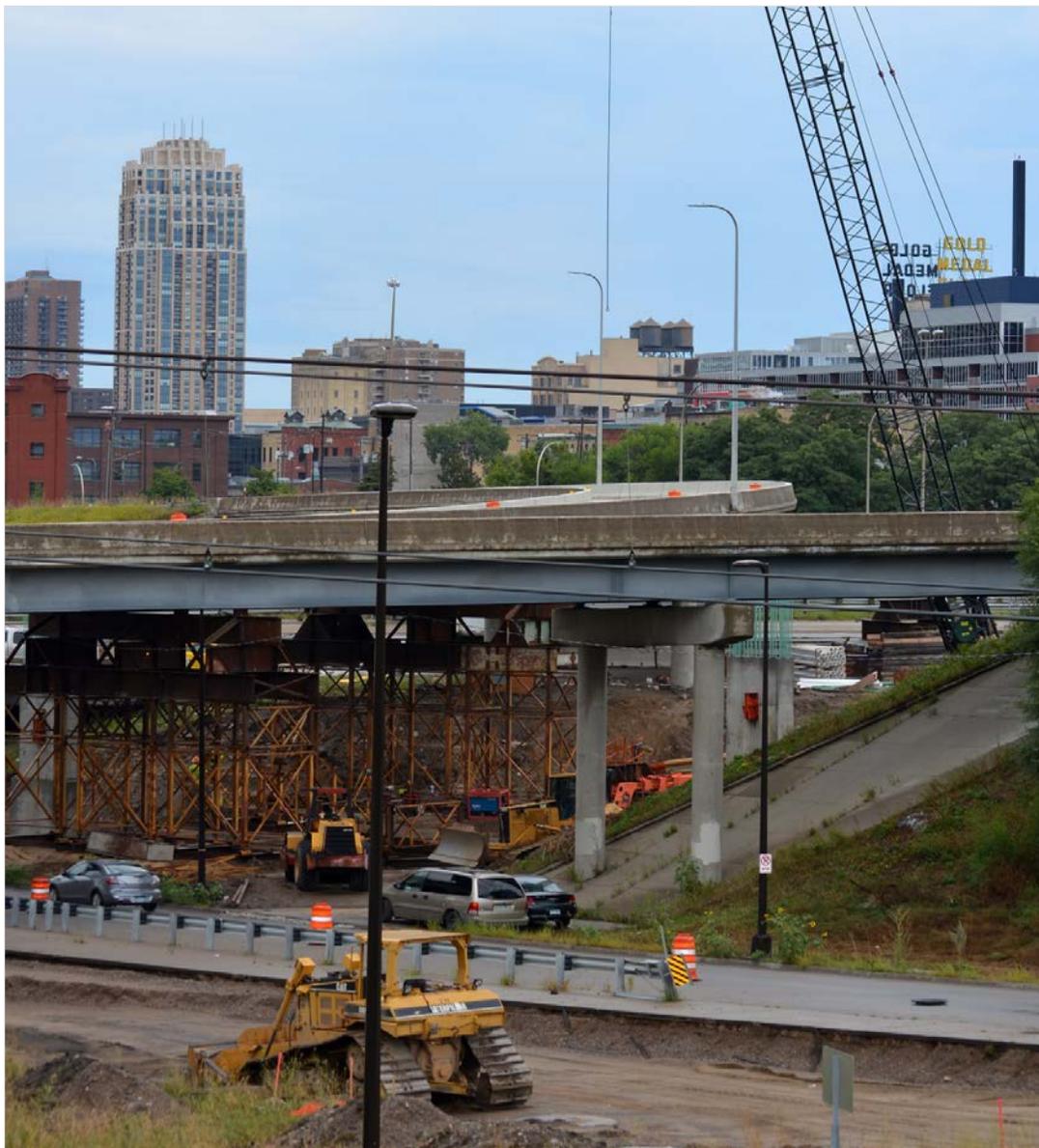




Report on

Major Highway Projects, Trunk Highway Fund Expenditures, and Efficiencies

December 2015



Prepared by

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Contents

Contents	3
Legislative Request.....	5
Purpose and Scope of the Report	7
Introduction	7
Summary of contents	8
Major Highway Projects Summary.....	10
State highway investment planning process	10
Project selection.....	12
Impacts of cost changes to the overall program.....	13
Project prioritization	13
Project summary sheets	14
Environmental Mitigation and Compliance Analysis	15
Metro District project: Highway 101/ Highway 144 (Rogers).....	15
Greater Minnesota project: Highway 29 in Benson	17
Trunk Highway Fund Expenditures	19
Products and Services Budget and Spending.....	21
Methodology	21
Agency Overhead	21
2015 Products and Services Summary	22
2015 Products and Services Framework	22
Division Summary	24
Offices and Districts by Division.....	27
Productivity Measures	37
Introduction.....	37
Bridges: Inspection cost per square foot of deck area	39
Bridges: Maintenance cost per square foot of deck area	42
Snow and ice: Cost per plow-mile driven	48
Pavement markings: Cost per mile striped	50
Transit: MnDOT administrative cost per transit passenger trip	52
Freight: MnDOT cost per oversize/overweight permit issued	54
Program Planning and Delivery to Construction Expenditure Ratio.....	56
Efficiencies.....	59
Appendix A: Products and Services Summary List and Descriptions	69
2015 Products and Services Framework	69

Products and services descriptions	70
Appendix B: Glossary of Terms	74
Appendix C: Major Highway Project Summaries	78
Appendix D: Future Major Highway Projects (planned 2020 – 2031)	327-331

Legislative Request

This report was completed to comply with [Minnesota Statute 174.56](#) and the [2014 Laws of Minnesota, Chapter 312, Article 11, Section 33](#).

Minn. Stat. 174.56 Report on Major Highway Projects, Trunk Highway Fund Expenditures, and Efficiencies.

Subdivision 1. Report required.

(a) The commissioner of transportation shall submit a report by December 15 of each year on (1) the status of major highway projects completed during the previous two years or under construction or planned during the year of the report and for the ensuing 15 years, and (2) trunk highway fund expenditures, and (3) beginning with the report due in 2016, efficiencies achieved during the previous two fiscal years.

(b) For purposes of this section, a "major highway project" is a highway project that has a total cost for all segments that the commissioner estimates at the time of the report to be at least (1) \$15,000,000 in the metropolitan highway construction district, or (2) \$5,000,000 in any nonmetropolitan highway construction district.

Subd. 2. Report contents; major highway projects.

For each major highway project the report must include:

- (1) a description of the project sufficient to specify its scope and location;
- (2) a history of the project, including, but not limited to, previous official actions by the department or the appropriate area transportation partnership, or both, the date on which the project was first included in the state transportation improvement plan, the cost of the project at that time, the planning estimate for the project, the engineer's estimate, the award price, the final cost as of six months after substantial completion, including any supplemental agreements and cost overruns or cost savings, the dates of environmental approval, the dates of municipal approval, the date of final geometric layout, and the date of establishment of any construction limits;
- (3) the project's priority listing or rank within its construction district, if any, as well as the reasons for that listing or rank, the criteria used in prioritization or rank, any changes in that prioritization or rank since the project was first included in a department work plan, and the reasons for those changes;
- (4) past and potential future reasons for delay in letting or completing the project, details of all project cost changes that exceed \$500,000, and specific modifications to the overall program that are made as a result of delays and project cost changes;
- (5) two representative trunk highway construction projects, one each from the department's metropolitan district and from greater Minnesota, and for each project report the cost of environmental mitigation and compliance; and
- (6) the annual budget for products and services for each Department of Transportation district and office, with comparison to actual spending and including measures of productivity for the previous fiscal year.

Subd. 2a. **Report contents; trunk highway fund expenditures.**

The commissioner shall include in the report information on the total expenditures from the trunk highway fund during the previous fiscal year, for each Department of Transportation district, in the following categories: road construction; planning; design and engineering; labor; compliance with environmental regulations; administration; acquisition of right-of-way, including costs for attorney fees and other compensation for property owners; litigation costs, including payment of claims, settlements, and judgments; maintenance; and road operations.

Subd. 3. **Department resources.**

The commissioner shall prepare and submit the report with existing department staff and resources.

[2014 Laws of Minnesota, Chapter 312, Article 11, Section 33](#)

Sec. 33. **Transportation Efficiencies.**

The commissioner of transportation shall include in the report under Minnesota Statutes, section 174.56, due by December 15, 2015, information on efficiencies implemented in fiscal year 2015 in planning and project management and delivery, along with an explanation of the efficiencies employed to achieve the savings and the methodology used in the calculations. The level of savings achieved must equal, in comparison with the total state road construction budget for that year, a minimum of five percent in fiscal year 2015. The report must identify the projects that have been advanced or completed due to the implementation of efficiency measures.

Report cost

The cost of preparing the report elements required by Minn. Stat. 174.56 is approximately \$85,000.

The costs reported for the 2015 Major Highway Projects, Trunk Highway Expenditures, and Efficiencies report includes the costs to gather the data needed to report on the budget by products and services and productivity measures.

Purpose and Scope of the Report

Introduction

The first legislative report on Major Highway Projects was delivered by the Minnesota Department of Transportation to the legislature in January 2009.

The Major Highway Projects, Trunk Highway Fund Expenditures and Efficiencies report, MHPR, provides a snapshot of MnDOT's programming and delivery for all large construction projects meeting the cost thresholds laid out in statute. The scope of the report and the information it contains are meant to inform the reader about MnDOT's business planning, building, operating and maintaining Minnesota's transportation system.

This is one of MnDOT's most comprehensive reports. The purpose of the report is to provide the reader with information about major projects, financial management, budgeting by products and services, and efficiencies achieved. The report breaks down, in high-level detail, various parts of a major project. This is consistent with the agency's focus on delivering high quality projects on time and within budget.

Some of the details reported about major projects include the following:

- location and scope
- funding
- cost savings / overruns
- environmental costs
- delays
- project history
- cost estimates

Together, this information provides the 2015 picture of MnDOT's performance in planning, building, operating and maintaining a safe, accessible, efficient and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally and around the world.

The report is organized into the following sections:

- Trunk highway fund expenditures
- Environmental mitigation and compliance costs
- Products and services budget expenditures report
- Productivity measures
- Efficiencies
- Major highway project summary sheets

Summary of contents

Major highway projects

This section of the annual report identifies major projects on the state trunk highway system, which includes the interstate and national highway systems. Per Minn. Stat. 174.56, this report includes projects with cost estimates equal to or in excess of \$15 million in the Twin Cities Metro District and with cost estimates equal to or in excess of \$5 million in Greater Minnesota.

This report includes information on projects that meet the total project cost estimate criteria and are either under construction, programmed or planned within the next 15 years. For each project completed in the past two fiscal years (2014-2015) or identified for construction in the next four years (2016-2019), a project summary is included that provides detailed information on project location, purpose, scope, schedule, and cost. Each project planned for construction in 2020-2030 is included in Appendix D and contains the basic information on project location, description, schedule and cost.

All the projects are arranged by MnDOT district. A district map highlighting the locations of the projects within the area and a list of projects precede the project summary pages for each district. The information provided in this report is current as of November 2015.

Environmental mitigation and compliance costs

To comply with the legislative requirement in subd. 2, (5), the cost of environmental mitigation and compliance was analyzed for two representative projects.

1. The Trunk Highway 101 and CSAH Highway 144 project, in Hennepin County in MnDOT's Metro District in the city of Rogers was chosen in part because it represents the types of mitigation that is common within metro-area projects.
2. The TH 29 project, located in Chippewa and Swift counties in MnDOT's District 4 in the city of Benson, was chosen because it represents the commitment MnDOT makes to working with other state agencies to meet both agencies' objectives efficiently.

Trunk highway fund expenditures

Fiscal year 2015 expenditure information is provided for each of the categories specified in the statute.

Product and service line budget

MnDOT developed a new product and service framework that organizes and describes its products and services. The expenses and budgets provided in this report, by products and services, represent the department's annual budget for fiscal year 2015, as appropriated. It also includes expenses for services that may have been rendered in fiscal year 2014, but due to processing time would have been paid in fiscal year 2015.

Key concepts to remember when reviewing this section include:

- Timing differences between the two years of a biennium cause variances that would not be present if the report was prepared on a biennial basis. For example, carry over from the first year of the biennium to the second year impacts the data for the second year.
- Some spending may not match budgets exactly because funds may have been encumbered in one year and expended in another.

- Uncommitted and carry-over budgets may seem to exhibit spending in excess of the total budget; however, this spending occurs within a biennium and is allowed by statute.
- The 2015 budget values were based on previous fiscal products and services analysis.

Productivity measures

Productivity measures are an effort to identify, create, examine, and document current levels of productivity within MnDOT. This project reports measures of MnDOT productivity for the most recent 10 years of data (where available).¹

Performance measures are not new at MnDOT. Traditional performance measures used by MnDOT are measures of product and service delivery effectiveness. Productivity measures align well with the department goal of enhancing financial effectiveness and are the next step to evaluate how efficiently MnDOT's products and services are delivered.

The report includes the following measures reported last year, along with new freight and program, planning and delivery measures:

- Bridges:
 - Inspection cost per square foot of deck area
 - Maintenance cost per square foot of deck area
- Pavement: Cost per roadway mile-year added
- Snow and ice: Cost per plow mile driven
- Pavement markings: Cost per mile striped
- Transit: MnDOT administrative cost per transit passenger trip
- Freight: MnDOT cost per oversize / overweight permit issued (new)
- Program Planning and Delivery to construction expenditure ratio (new)

The background for each productivity measure is presented along with data through the previous 10 years where possible. Each measure includes a discussion about why the measure presented is an effective measure of productivity and lists major influencing factors.

Two of the eight productivity measures show the inflation-adjusted unit costs declining. Specifically, pavement markings cost per mile striped and cost per oversize/overweight permit issued all show declining inflation-adjusted unit costs. Four of the eight measures show an overall flat trend. Specifically, the bridge inspections cost per square foot of bridge deck area inspection, cost per roadway mile-year added, cost per plow-mile driven, and MnDOT administrative cost per transit trip all remained relatively flat over the analysis period. There is insufficient data on the program, planning and delivery to construction expenditure ratio measure to determine a trend at this time.

Efficiencies

MnDOT has always aimed to be good stewards of public funds and recently the department has taken a more targeted approach to identify and quantify these efficiencies, while looking for additional best practices and improvements. In FY 2015, MnDOT identified an estimated \$63.5 million in savings from efficient practices deployed across the organization. The majority of these efficiencies identified in FY 2015 came from construction program delivery and project development. Savings identified in the analysis led to program and project costs that were lower than if the efficient strategies had not been implemented. The cost savings can be directly correlated with the strategies. MnDOT used the FY 2015 savings to help balance the FY 2015 program.

Major Highway Projects Summary

This annual report identifies major projects constructed within the past two years, and all major projects programmed or planned for construction on the state trunk highway system over the next 15 years, including the interstate and national highway systems. As directed in Minn. Stat. 174.56, this report includes projects with cost estimates equal to or in excess of \$15 million in the Metro District and projects with cost estimates equal to or in excess of \$5 million in Greater Minnesota. This report includes 452 projects that met the statutory cost threshold. The information provided in this report is current as of November 2015.

Figure 1: Projects included in 2015 Major Highway Projects report

MnDOT District	Number of projects completed, under construction or listed in the STIP	Projects in years 2019-2030	Total Projects
1	32	46	78
2	26	21	47
3	27	44	71
4	27	18	45
6	38	26	64
7	40	18	58
8	13	18	31
Metro	28	30	58
TOTAL State	231	221	452

Of the 452 projects reported this year, 58 are in the Twin Cities metro area and 394 are in Greater Minnesota. Projects vary in type, and include pavement preservation, bridge replacement and rehabilitation and mobility projects based on the priorities established in the [MnDOT's 20-year State Highway Investment Plan, also known as MnSHIP](#).

State highway investment planning process

[MnSHIP](#) is an important link between the guiding principles in the [Minnesota GO 50-Year Vision](#), the strategies in the [Statewide Multimodal Transportation Plan](#) and the capital improvements made to the state highway system. MnSHIP sets a fiscally constrained framework for future capital improvements by identifying investment needs and priorities for available funding. This plan will serve as the framework for statewide investment on trunk highways for the next two years before a new 20-year investment plan is produced. The investment levels identified in MnSHIP are being adhered to and MnDOT is on track to deliver on the fiscally constrained decisions from the plan.

Figure 2: Planning mechanisms and plans



MnSHIP covers three planning periods: years 1-4, years 5-10 and years 11-20. Projects identified for years 1-4 (FY 2016-19) are those listed in the [2015-2018 Statewide Transportation Improvement Program, also known as the STIP](#). MnDOT intends to deliver these projects during the next four years, although the programmed year of construction may be adjusted if actual revenues increase or decrease.

Investments identified for years 5-10 (FY 2020-25) include general funding levels for certain improvement categories (e.g., pavement preservation, traveler safety), and construction cost estimates for several specific projects within the improvement categories. These projects and their cost estimates should be considered preliminary, as revenue forecasts are uncertain.

Specific projects are not identified for years 11-20 (FY 2026-34); instead, MnSHIP has set broad investment priorities associated with funding allocations, which focus primarily on preserving the transportation assets MnDOT currently owns. Such elements include, but are not limited to:

- Pavement within MnDOT right of way
- Bridges
- Bike and pedestrian facilities
- Drainage structures
- Barriers, guardrails and fences
- Lighting and intelligent transportation system features
- Signs
- Noise walls

Investment priorities may change as a result of system performance conditions, legislative initiatives or federal requirements related to the MAP-21 transportation program.

MnDOT began the process by:

- Reviewing current investment priorities, asset conditions and other system needs
- Projecting the amount of federal and state funds that will be available for investment on the state highway system during the next 20 years
- Reviewing agency policy and federal and state transportation laws
- Identifying emerging significant risks that may affect investment priorities

Next, MnDOT established a range of potential investment levels for nine categories of highway investment priorities. These investment levels were combined into example investment scenarios to solicit feedback from the public. For investment direction for the 20-year plan, MnDOT considered stakeholder input, legislative direction, federal requirements and system-wide risks and outcomes to develop a final mix of investment priorities. This investment direction guided statewide and district

investment goals. These goals are achieved by districts developing a schedule of projects that comprise their investment programs and designed to make progress towards these goals.

Project selection

MnDOT selects projects through several different planning and programming processes, all designed to address performance-based needs and achieve key objectives on the trunk highway system. These processes are the methods used by MnDOT to decide how to use authorized federal and state funds and revenue from the sale of trunk highway bonds. The primary framework for project selection is outlined below.

10-year work plan¹

The existing investment plan known as MnSHIP created two programs to guide project selection at a state and regional level for the next 10 years. They are the Statewide Performance Program and the regional District Risk Management Program. The purpose of establishing these two programs is to ensure the department efficiently and effectively works toward common statewide goals. These goals consist of meeting Governmental Accounting Standards Board thresholds for pavements and bridges, and meeting MAP-21 performance targets, while simultaneously maintaining regional flexibility to address unique risks and circumstances at the district level.

Statewide Performance Program

MAP-21, the previous federal transportation bill, placed greater emphasis on National Highway System performance and required MnDOT to make progress toward national performance goal areas, including those related to asset condition, safety and congestion. If MnDOT failed to adequately progress towards the national goals, some federal funding flexibility was at risk. Further, an analysis highlighted the expectation that MnDOT maintain the state's most important routes in a good repair. In response, MnDOT developed the Statewide Performance Program to ensure that federal and state performance targets are met on the NHS and that the condition of these routes meets public and MnDOT expectations.

District Risk Management Program

The Statewide Performance Program focuses funding on addressing key performance targets on National Highway System routes, while the District Risk Management Plan, or DRMP, focuses funding on other non-NHS highway needs on all state highways. The majority of the program supports pavement and bridge rehabilitation or replacement projects. The DRMP project selection process is structured to give districts the flexibility to address their greatest regional and local risks. Districts are also able to make additional investments on the NHS system if the proposed project is in response to a high risk issue.

In the DRMP, each MnDOT district is responsible for selecting projects that mitigate its highest risks in the areas of asset management, traveler safety, critical connections, and projects, which are a regional and community improvement priority. MnDOT distributes different levels of funding to the districts for this program based on a revenue distribution method that accounts for various

¹ Years 1-2: Projects identified for FY 2016 were based on investment priorities established in the 2009 State Highway Investment Plan and in the existing [State Transportation Improvement Program](#), covering 2016-19. In general, MnDOT considers projects listed in the STIP as commitments. As a result, the existing investment plan known as MnSHIP did not shape project selection for years 1-2.

system factors. MnDOT districts collaborate with Area Transportation Partnerships metropolitan planning organizations and other key partners to select projects.

MnSHIP directs 45 percent of MnDOT's annual revenues toward DRMP projects or approximately \$337 million per year, not including the cost of delivering those projects, such as right of way acquisition, consulting services, cost overruns and supplemental agreements. The DRMP's share of MnDOT's annual program may vary in the future depending on the outcomes of MnDOT's ongoing risk-based and performance-based planning efforts. The investment category mixes for each district vary depending on the system characteristics and conditions unique to that area of the state.

Impacts of cost changes to the overall program

Changes to project costs and schedules affect the state trunk highway capital investment program. These effects are most directly seen through annual revisions to the [STIP](#), which lists projects that MnDOT is planning to complete in the next four construction seasons. Seventy-five percent of the projects listed in the STIP are let and completed in their originally scheduled construction season. The completion date for other projects may be adjusted, and project scope and costs may increase or decrease after being listed in the STIP.

Project costs may change for a variety of reasons including: changes in economic conditions, inflationary factors, scope changes, supplemental agreements, cost overruns, right of way acquisition, etc. These costs may change prior to letting or after a contract is awarded. Changes in project costs prior to letting are handled through the STIP process. The STIP process allows projects to be added, revised or removed on an annual basis. Cost changes to a project post-letting are managed at the district level. If cost changes are higher than anticipated, set-asides are primarily used to handle the change. If project costs are lower than projected, other projects may be advanced to an earlier construction date, or funds may be directed to cover funding gaps and/or cost overruns on other projects. Project cost overruns, as well as cost savings, are managed on an aggregate program level.

If the statewide performance program has cumulative cost estimate changes resulting in a significant amount of uncommitted funds, a specific, one-time program may be implemented, such as the recent Better Roads for a Better Minnesota, which focused on achieving statewide performance objectives for overall pavement condition. To deliver the Better Roads program, projects that most effectively achieved these performance objectives and were at an appropriate stage in the project development process were accelerated so they could be completed earlier than previously programmed.

Conversely, if cumulative project cost estimate changes increase by a significant enough level to necessitate revisions to the STIP, a number of projects may be delayed or removed, based on the fiscal ability to fully deliver each annual construction program. Projects that have not yet progressed through the project development process are more subject to these schedule delays or cost revisions.

Project prioritization

All projects identified within the 2016-19STIP can be funded with current revenue projections and are high priority projects to the locals, districts and Area Transportation Partnerships. Projects within the 2020-29 mid-range and long-range planning periods are a priority, but revenue forecasts, federal program requirements and funding sources are more uncertain and full funding may not

have been identified. The [20-year Minnesota Highway Investment Plan](#) details how investments at a program level are prioritized in this mid-range and long-range timeframe.

Project summary sheets

See Appendix C for one-page summaries, statewide maps, district maps, and an indexed table of all major highway projects. An explanation of the information included for each project, common abbreviations and definitions are also included in the Appendix B.

Environmental Mitigation and Compliance Analysis

The two projects below were chosen to represent the types of environmental mitigation and compliance issues MnDOT faces. Both were completed in 2014-15.

The Highway 101 & Highway 144 intersection in Hennepin County is in MnDOT's Metro District. This project was highlighted because it represents some of the types of mitigation that are commonly part of projects in Minnesota's metropolitan areas. To effectively mitigate environmental issues, MnDOT works in close partnership with local cities and counties. In metropolitan areas where workspace may be confined, erosion and sediment control and permanent stormwater solutions can be a challenge.

As MnDOT focuses on bridge and culvert safety, floodplain improvements are sometimes a necessary part of a project. The Highway 29 project in District 4 was chosen because it represents the commitment MnDOT makes to working with other state agencies, such as the Department of Natural Resources, to meet both agencies' objectives as efficiently as possible. This project replaced three bridges with dual stage culvert systems, providing the benefits of both floodplain improvements and a wildlife corridor. The wildlife corridor has been MnDOT's standard bridge design for river crossings since 2011.

Metro District project: Highway 101/ Highway 144 (Rogers)

This grade-separated interchange was constructed at the 141st Ave N intersection in the City of Rogers, Hennepin County. Highway 144 was reconstructed from a two-lane roadway to a four-lane roadway in the project area.

The purpose of the project was to improve safety at the Highway 101 and Highway 144 intersection for motorized vehicles, pedestrians, and bicyclists. In addition, the project was intended to improve traffic flow and operations on the Highway 101 mainline, which is considered a principal arterial roadway. When redeveloping an existing roadway, it can be difficult to completely avoid wetlands and to find onsite solutions for stormwater runoff.

Environmental mitigation and compliance costs of \$2.1 million are detailed below and account for approximately 10 percent of project costs.

Environmental mitigation costs: Highway 101 / Highway 144 in Rogers

The total project cost (also detailed below) was \$20.9 million. The construction cost of the project was \$14.9 million, right of way land-related costs were \$3 million and project engineering costs were \$1.8 million.

Table 1: Environmental Mitigation Percentage for Highway 101 / Highway 144 in Rogers

Environmental Mitigation & Compliance Costs Breakdown: Hwy 101 / Hwy 144 in Rogers	
Environmental Documents: Costs NOT included in the mitigation cost total	
Categorical Exclusion Determination	\$210,050
TOTAL	\$210,050
Environmental Investigation Costs	
Historical / Cultural Resources	\$290
Contamination	\$30,840
Sub-Total	\$31,130
Preconstruction Engineering Costs	
Ponds	\$134,390
Wetlands	\$55,000
Erosion Control	\$66,640
Sub-Total	\$256,030
Construction Engineering / Administration Costs	
Ponds	\$89,590
Erosion Control	\$44,430
Sub-Total	\$134,020
Right of Way Costs (land related only)	
Wetlands (credits)	\$14,290
Sub-Total	\$14,290
Construction Costs	
Ponds	\$1,119,880
Erosion Control	\$555,340
Sub-Total	\$1,675,220
Total Environmental Mitigation and Compliance Costs	
TOTAL	\$2,110,690
Project Delivery Costs (Engineering)	
Preconstruction Engineering	\$1,789,870
Construction Engineering / Administration	\$1,193,240
Sub-Total	\$2,983,110
Right of Way Costs (land only)	
Total Project Right of Way Costs	\$2,970,000
Sub-Total	\$2,970,000
Construction Costs	
Total Project Construction Costs	\$14,915,550
Sub-Total	\$14,915,550
Total Project Costs	
Total Project Construction Costs	\$14,915,550
Total Right of Way Costs	\$2,970,000
Total Project Delivery Costs (Engineering)	\$2,983,110
TOTAL	\$20,868,660
Percentage of Project Costs for Environmental Mitigation & Compliance	
Total Environmental Mitigation Costs divided by Total Project Construction Costs	
\$2,110,690 divided by \$20,868,660 =	10.1%

Greater Minnesota project: Highway 29 in Benson

Located in MnDOT's District 4, in both Chippewa and Swift counties on Highway 29, this project involved milling the roadway, repaving with bituminous, replacing centerline pipes, and replacing a culvert and three bridges. MnDOT worked with the Department of Natural Resources to make sure the new bridges were an improvement in regards to animal passage. The dual stage culverts (bridges) provide the added benefit of floodplain mitigation. MnDOT also took measures that will improve water quality by removing and not replacing the cattle crossing.

Environmental mitigation and compliance costs of \$613,580 are detailed below and account for approximately 7.4 percent of project costs.

The total project cost (also detailed below) was \$8.3 million. The construction cost of the project was \$6.9 million, right of way land-related costs were \$8,500, and project engineering costs were \$1.4 million.

Table 2: Environmental Mitigation Percentage for Highway 29 in Benson

Environmental Mitigation & Compliance Costs Breakdown: Hwy 29 in Benson	
Environmental Documents: Costs NOT included in the mitigation cost total	
Categorical Exclusion Determination	\$2,430
TOTAL	\$2,430
Environmental Investigation Costs	
Historical / Cultural Resources	\$290
Contamination	\$130
Regulated Materials	\$3,320
Sub-Total	\$3,740
Preconstruction Engineering Costs	
Floodplain Improvement / Wildlife Corridor	\$48,360
Erosion Control	\$11,880
Sub-Total	\$60,240
Construction Engineering / Administration Costs	
Floodplain Improvement / Wildlife Corridor	\$32,240
Erosion Control	\$7,920
Sub-Total	\$40,160
Construction Costs	
Floodplain Improvement / Wildlife Corridor	\$402,960
Erosion Control	\$100,130
Cattle Crossing Removal	\$6,350
Sub-Total	\$509,440
Total Environmental Mitigation and Compliance Costs	
TOTAL	\$613,580

Project Delivery Costs (Engineering)	
Preconstruction Engineering	\$830,180
Construction Engineering / Administration	\$553,450
Sub-Total	\$1,383,630
Right of Way Costs (land only)	
Total Project Right of Way Costs	\$8,500
Sub-Total	\$8,500
Construction Costs	
Total Project Construction Costs	\$6,918,150
Sub-Total	\$6,918,150
Total Project Costs	
Total Project Construction Costs	\$6,918,150
Total Right of Way Costs	\$8,500
Total Project Delivery Costs (Engineering)	\$1,383,630
TOTAL	\$8,310,280
Percentage of Project Costs for Environmental Mitigation & Compliance	
Total Environmental Mitigation Costs divided by Total Project Construction Costs	
\$613,580 divided by \$8,310,280 =	7.4%

Trunk Highway Fund Expenditures

The following contains fiscal year 2015 cost information for each of the categories listed in the graph below. The graph lists the expenditures by category. A brief explanation follows, describing what is included in each cost category.

Figure 3: Trunk highway fund expenditures by category

Number	Category Name	TH Fund Expenditures
1	Road construction	\$1,216.6
2	Design and engineering	\$206.1
3	Labor	\$373.2
4	Acquisition of right of way	\$65.9
5	Litigation	\$4.2
6	Maintenance	\$115.2
7	Road operations	\$245.8
8	Planning	\$15.7
9	Environmental compliance	\$15.7
10	Administration	\$91.8

**In \$ millions*

1. Road construction costs include all actual costs and encumbrances for road and bridge construction contracts. It includes both the design and engineering and construction cost portions of design/build contracts.
2. Design and engineering costs include all costs and encumbrances for design, pre-design, construction, and other engineering activities performed internally by MnDOT employees and by consultants.
3. Labor costs include all MnDOT expenditures to pay MnDOT employee wages and salaries including overtime and benefits for full-time, part-time, and unclassified employees.
4. Right of way acquisition costs include all costs and encumbrances to acquire and manage land assets for the trunk highway system.
5. Litigation costs include the following: payments to the State Attorney General's Office for legal services, costs paid for expert witness fees, court reporters and transcribers, tort claims, and general and administrative costs related to legal services.
6. Maintenance costs include all costs and encumbrances to operate and maintain the trunk highway system.

7. Road operations costs are all costs and encumbrances related to such activities as snow removal, clear roads, rest area maintenance, traffic management, traffic devices operation and maintenance, road equipment, roadside and auxiliary infrastructure and traveler information.
8. Planning costs are all costs for planning related to construction and maintenance of the trunk highway system, paid either to MnDOT employees or consultants.
9. Environmental compliance costs are derived from the completion of environmental review processes, documentation of review processes (e.g. Categorical Exclusions, also called CatExs), environmental assessment worksheets (EAs/EAWs), environmental impact statements (EISs), and environmental plans. Both internal employee and consultant costs are included for the Office of Environmental Stewardship at MnDOT's Central Office, but not district costs.
10. Administration costs include all general and administrative costs related to the construction, maintenance and general support of the trunk highway system.

PLEASE NOTE:

- Debt service is not included in the road construction category.
- These 10 categories, required by the statute, do not represent all Trunk Highway Fund expenditures.

These 10 categories are not mutually exclusive; some expenditures may be reported in more than one category, such as labor and road operations.

Products and Services Budget and Spending

Over the past three years, MnDOT implemented and refined reporting of expenditures by products and services as required by statute. The budget and spending information in this section is for fiscal year 2015.

Methodology

The financial information is presented by MnDOT office and district. Spending for each office and district is shown by MnDOT's products and services. This shows how each office and district contributes to the products and services that MnDOT delivered. Budget and expenditure amounts include bond proceeds.

Notes about the data

- Timing differences between the two years of a biennium cause variances that would not be present if the report was prepared on a biennial basis. For example, carry over from the first year of the biennium to the second year impacts the data for the second year.
- Some spending may not match budgets exactly because funds may have been encumbered in one year and expended in another.
- Uncommitted and carry-over budgets may seem to exhibit spending in excess of the total budget; however, this spending occurs within a biennium and is allowed by statute.
- Negative spending amounts exist when corrections from the prior period are made in the current period.

Agency Overhead

Agency overhead includes services such as: leave time, fleet support, buildings, building services and maintenance, finance and accounting, human resources and workforce relations, training, supervision, IT, inventory and equipment (FY15 does not include inventory and equipment as overhead), legal services, government relations, audit, research, communication, citizen participation, customer relations, management and administration, risk reserve, workers' compensation, insurance and unemployment.

2015 Products and Services Summary

2015 Products and Services Framework

Program	
Budget Activity	Product and Service
Multimodal Systems	
Aeronautics	Airports Aviation Safety Operations and Regulation
Freight	Commercial Truck and Bus Safety Freight Rail Improvements Freight System Planning Port Improvements Rail Crossing Safety
Passenger Rail	Intercity Passenger Rail Improvement
Transit	Bicycle and Pedestrian Planning and Grants Light and Commuter Rail Transit Planning and Grants
State Roads	
Trunk Highway Program Planning and Delivery	Develop Highway Improvement Projects Highway Construction Management Oversight Plan Highway System Research and Development
Trunk Highway State Road Construction	Other Trunk Highway System Improvements Trunk Highway System Expansion Trunk Highway System Preservation
Trunk Highway Debt Service	Trunk Highway Debt Service
Trunk Highway Operations and Maintenance	Bridges and Structures Inspection and Maintenance Roadside and Auxiliary Infrastructure
Statewide Radio Communications	Radio Towers and Communications
Local Roads	
County State Aid Roads	County State Aid Highway
Municipal State Aid Roads	Municipal State Aid Highway

Note: External Partner Support can be used by any office and any budget activity.

Department Summary

Department Summary	2014 Totals		2015 Totals	
	Budget	Spent	Budget	Spent
Products and Services				
Airports	107,262	38,681	108,502	50,028
Aviation Safety Operation and Regulation	15,031	13,472	13,644	17,601
Bicycle and Pedestrian Planning and Grants	66	0	66	13,081
Bridges and Structures Inspection and Maintenance	8,833	8,317	12,611	10,647
Commercial Truck and Bus Safety	3,645	3,428	3,134	3,641
County State Aid Highway	865,970	775,858	930,583	879,055
Develop Highway Improvement Projects	55,047	59,091	65,864	92,032
External Partner Support	117,505	87,024	191,558	83,474
Freight Rail Improvements	2,817	1,686	1,758	2,002
Freight System Planning	576	351	568	457
Highway Construction Management Oversight	33,574	41,697	42,694	45,857
Intercity Passenger Rail Improvement	9,069	1,971	2,740	7,365
Light and Commuter Rail	18,884	559	6,004	589
Municipal State Aid Highway	156,022	163,455	169,162	183,273
Other Trunk Highway System Improvements	151,504	235,283	93,870	260,038
Plan Highway System	26,628	15,975	26,675	16,827
Port Improvements	609	393	32	1,047
Radio Towers and Communications	11,968	27,023	5,464	28,665
Rail Crossing Safety	8,196	7,491	9,563	5,127
Research and Development	13,462	7,631	17,458	8,992
Roadside and Auxiliary Infrastructure	15,337	13,933	18,877	20,366
Snow and Ice	21,475	29,642	81,602	80,153
System Roadway Structures Maintenance	29,052	26,054	38,546	41,742
Traffic Devices Operation and Maintenance	28,571	29,102	44,471	46,191
Transit Planning and Grants	130,515	115,012	140,436	80,179
Trunk Highway Debt Service	158,417	144,282	199,739	157,024
Trunk Highway System Expansion	465,906	352,611	456,537	491,210
Trunk Highway System Preservation	629,174	467,267	505,217	584,081
Direct	3,085,115	2,667,289	3,187,375	3,210,744
Agency Overhead	414,937	383,215	270,600	317,481
Grand Total	3,500,051	3,050,503	3,457,975	3,528,225

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Note: Upon continued products and services maturity, the FY15 Agency Direct Expense now includes fleet and inventory of \$94M. Fleet and inventory in FY14 in the sum of \$90M remain within Agency Overhead.

Note: The Agency Overhead amounts above include items such as workers compensation, severance (medical portion), unemployment, and risk reserve. The budget was \$21,938 and the spent amount was \$12,857.

Division Summary

Division Summary	Chief Counsel Division		Chief of Staff Division		Commissioners Office Division	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Airports						
Aviation Safety Operation and Regulation						
Bicycle and Pedestrian Planning and Grants						
Bridges and Structures Inspection and Maintenance						
Commercial Truck and Bus Safety						
County State Aid Highway						
Develop Highway Improvement Projects	853	571				
External Partner Support						
Freight Rail Improvements						
Freight System Planning						
Highway Construction Management Oversight	482	475				
Intercity Passenger Rail Improvement						
Light and Commuter Rail						
Municipal State Aid Highway						
Other Trunk Highway System Improvements						
Plan Highway System	2,485	1,573				
Port Improvements						
Radio Towers and Communications						
Rail Crossing Safety						
Research and Development						
Roadside and Auxiliary Infrastructure						
Snow and Ice						
System Roadway Structures Maintenance						
Traffic Devices Operation and Maintenance						
Transit Planning and Grants						
Trunk Highway Debt Service						
Trunk Highway System Expansion						
Trunk Highway System Preservation						
Direct	3,820	2,619	0	0	0	0
Agency Overhead	5,652	5,234	4,308	3,987	3,372	2,946
Grand Total	9,472	7,853	4,308	3,987	3,372	2,946

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Division Summary (continued)	Corporate Services Division		Engineering Services Division		Modal Planning & Program Management Division	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Airports					108,502	50,028
Aviation Safety Operation and Regulation					13,644	17,601
Bicycle and Pedestrian Planning and Grants					66	13,081
Bridges and Structures Inspection and Maintenance			2,378	1,410		
Commercial Truck and Bus Safety					3,134	3,641
County State Aid Highway					1,932	
Develop Highway Improvement Projects	546	622	19,493	25,493	608	206
External Partner Support	118	98	179,465	71,924	1,204	1,379
Freight Rail Improvements					1,758	2,002
Freight System Planning					568	457
Highway Construction Management Oversight	376	303	6,041	7,491	55	(78) ²
Intercity Passenger Rail Improvement					2,740	7,365
Light and Commuter Rail					6,004	388
Municipal State Aid Highway						
Other Trunk Highway System Improvements					4,361	15,986
Plan Highway System	325	5	3,466	1,720	15,408	10,158
Port Improvements					32	1,047
Radio Towers and Communications						
Rail Crossing Safety					9,563	5,127
Research and Development	19	9	3,653	1,835	8,502	4,286
Roadside and Auxiliary Infrastructure			466	701		99
Snow and Ice			64	24		
System Roadway Structures Maintenance			32	124		
Traffic Devices Operation and Maintenance			372	227	140	276
Transit Planning and Grants					140,436	80,179
Trunk Highway Debt Service					199,739	157,024
Trunk Highway System Expansion					54,815	9,378
Trunk Highway System Preservation				8	10,260	4,224
Direct	1,384	1,037	215,430	110,957	583,471	383,854
Agency Overhead	44,199	55,514	33,683	32,532	12,570	12,813
Grand Total	45,583	56,551	249,113	143,489	596,041	396,667

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

² Payroll expense correction for Federal State Planning and Research (SPR), in the Office of Transportation System Management (OTSM).

Division Summary (continued)	Operations Division		State Aid for Local Transportation Division	
	Budget	Spent	Budget	Spent
Products and Services				
Airports				
Aviation Safety Operation and Regulation				
Bicycle and Pedestrian Planning and Grants				
Bridges and Structures Inspection and Maintenance	10,233	9,237		
Commercial Truck and Bus Safety				
County State Aid Highway			928,651	879,055
Develop Highway Improvement Projects	44,364	65,140		
External Partner Support	7,990	6,751	2,781	3,322
Freight Rail Improvements				
Freight System Planning				
Highway Construction Management Oversight	35,740	37,666		
Intercity Passenger Rail Improvement				
Light and Commuter Rail		201		
Municipal State Aid Highway			169,162	183,273
Other Trunk Highway System Improvements	89,509	244,052		
Plan Highway System	4,991	3,371		
Port Improvements				
Radio Towers and Communications	40		5,424	28,665
Rail Crossing Safety				
Research and Development	5,284	2,862		
Roadside and Auxiliary Infrastructure	18,411	19,566		
Snow and Ice	81,538	80,129		
System Roadway Structures Maintenance	38,514	41,618		
Traffic Devices Operation and Maintenance	43,959	45,688		
Transit Planning and Grants				
Trunk Highway Debt Service				
Trunk Highway System Expansion	401,722	481,832		
Trunk Highway System Preservation	494,957	579,849		
Direct	1,277,252	1,617,962	1,106,018	1,094,315
Agency Overhead	144,727	187,703	151	3,895
Grand Total	1,421,979	1,805,665	1,106,169	1,098,210

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Offices and Districts by Division

Chief Counsel Division	Chief Counsel		Civil Rights		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent
Develop Highway Improvement Projects			853	571	853	571
Highway Construction Management Oversight			482	475	482	475
Plan Highway System			2,485	1,573	2,485	1,573
Direct	0	0	3,820	2,619	3,820	2,619
Agency Overhead	4,692	4,340	960	894	5,652	5,234
Grand Total	4,692	4,340	4,780	3,513	9,472	7,853

Chief of Staff Division	Chief of Staff		Communications		Customer Relations		Equity & Diversity		Government Affairs		Ombudsman		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Agency Overhead	519	325	1,079	1,041	978	733	495	610	748	872	489	406	4,308	3,987
Grand Total	519	325	1,079	1,041	978	733	495	610	748	872	489	406	4,308	3,987

Commissioner's Office Division	Audit		Commissioner's Staff		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent
Agency Overhead	1,686	1,653	1,686	1,293	3,372	2,946
Grand Total	1,686	1,653	1,686	1,293	3,372	2,946

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Corporate Services Division	Administration		Financial Management		Human Resources		Technology Investment Management		Corporate Services Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services												
Develop Highway Improvement Projects					546	622					546	621
External Partner Support	118	98									118	98
Highway Construction Management Oversight					376	303					376	303
Plan Highway System			252		73	5					325	5
Research and Development					19	9					19	9
Direct	118	98	252	0	1,014	939	0	0	0	0	1,384	1,037
Agency Overhead	11,567	11,443	7,629	8,769	5,394	4,835	15,775	29,075	3,834	1,392	44,199	55,514
Grand Total	11,685	11,541	7,881	8,769	6,408	5,774	15,775	29,075	3,834	1,392	45,583	56,551

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Engineering Services Division	Bridges		Construction & Innovative Contracting		Environmental Stewardship		Land Management		Materials & Road Research	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services										
Bridges and Structures Inspection and Maintenance	1,278	1,068								
Develop Highway Improvement Projects	3,955	4,021	350	102	2,139	1,693	4,666	5,461	2,031	3,455
External Partner Support	179,099	71,555	83	83	168	74	61	63	49	135
Highway Construction Management Oversight	965	1,080	912	1,123	113	105	568	437	2,376	3,662
Plan Highway System	4	81			158	339	23	8	2,394	12
Research and Development	111	76			2	84			3,060	1,215
Roadside and Auxiliary Infrastructure	15	16			165	164	284	231		
Snow and Ice					64	21				
System Roadway Structures Maintenance		73			2	18			30	
Traffic Devices Operation and Maintenance	1	13				1				
Trunk Highway System Preservation										
Direct	185,428	77,983	1,345	1,308	2,810	2,499	5,602	6,200	9,940	8,479
Agency Overhead	3,704	3,817	2,601	3,135	1,902	2,200	4,986	6,678	6,289	6,198
Grand Total	189,132	81,800	3,946	4,443	4,712	4,699	10,588	12,878	16,229	14,677

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Engineering Services Division (continued)	Project Management and Technical Support		Engineering Services Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Bridges and Structures Inspection and Maintenance	1,100	342			2,378	1,410
Develop Highway Improvement Projects	6,352	10,761			19,493	25,493
External Partner Support	5	14			179,465	71,924
Highway Construction Management Oversight	1,107	1,084			6,041	7,491
Plan Highway System	887	1,280			3,466	1,720
Research and Development	480	460			3,653	1,835
Roadside and Auxiliary Infrastructure	3	290			466	701
Snow and Ice		3			64	24
System Roadway Structures Maintenance		33			32	124
Traffic Devices Operation and Maintenance	371	213			372	227
Trunk Highway System Preservation		8				8
Direct	10,305	14,488	0	0	215,430	110,957
Agency Overhead	13,064	8,557	1,137	1,947	33,683	32,532
Grand Total	23,369	23,045	1,137	1,947	249,113	143,489

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Modal Planning & Program Management Division	Aeronautics		Freight & Commercial Vehicle Operations		Passenger Rail		Transit	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services								
Airports	108,502	50,028						
Aviation Safety Operation and Regulation	13,644	17,601						
Bicycle and Pedestrian Planning and Grants							66	13,081
Commercial Truck and Bus Safety			3,134	3,641				
County State Aid Highway							1,932	
Develop Highway Improvement Projects								61
External Partner Support	6		1,000	1,008	20	37	22	22
Freight Rail Improvements			1,758	2,002				
Freight System Planning			568	457				
Highway Construction Management Oversight								
Intercity Passenger Rail Improvement					2,740	7,365		
Light and Commuter Rail							6,004	388
Other Trunk Highway System Improvements								
Plan Highway System								
Port Improvements			32	1,047				
Rail Crossing Safety			9,563	5,127				
Research and Development								
Roadside and Auxiliary Infrastructure				99				
Traffic Devices Operation and Maintenance				68				
Transit Planning and Grants							140,436	80,179
Trunk Highway Debt Service								
Trunk Highway System Expansion								
Trunk Highway System Preservation								
Direct	122,152	67,629	16,055	13,449	2,760	7,402	148,460	93,731
Agency Overhead	2,941	2,336	2,926	3,011	4	151	1,058	1,284
Grand Total	125,093	69,965	18,981	16,460	2,764	7,553	149,518	95,015

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Modal Planning & Program Management Division (continued)	Transportation System Management		Modal Planning & Program Management Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Airports					108,502	50,028
Aviation Safety Operation and Regulation					13,644	17,601
Bicycle and Pedestrian Planning and Grants					66	13,081
Commercial Truck and Bus Safety					3,134	3,641
County State Aid Highway					1,932	0
Develop Highway Improvement Projects	608	144			608	206
External Partner Support	156	312			1,204	1,379
Freight Rail Improvements					1,758	2,002
Freight System Planning					568	457
Highway Construction Management Oversight	55	(78) ³			55	(78) ³
Intercity Passenger Rail Improvement					2,740	7,365
Light and Commuter Rail					6,004	388
Other Trunk Highway System Improvements	4,361	15,986			4,361	15,986
Plan Highway System	15,408	10,158			15,408	10,158
Port Improvements					32	1,047
Rail Crossing Safety					9,563	5,127
Research and Development	8,502	4,286			8,502	4,286
Roadside and Auxiliary Infrastructure					0	99
Traffic Devices Operation and Maintenance	140	208			140	276
Transit Planning and Grants					140,436	80,179
Trunk Highway Debt Service	199,739	157,024			199,739	157,024
Trunk Highway System Expansion	54,815	9,378			54,815	9,378
Trunk Highway System Preservation	10,260	4,224			10,260	4,224
Direct	294,044	201,643	0	0	583,471	383,854
Agency Overhead	4,764	5,352	877	679	12,570	12,813
Grand Total	298,808	206,995	877	679	596,041	396,667

³ Payroll expense correction for Federal State Planning and Research (SPR), in the Office of Transportation System Management (OTSM).

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Operations Division	District 1		District 2		District 3		District 4	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services								
Bridges and Structures Inspection and Maintenance	1,049	996	510	587	550	657	265	353
Develop Highway Improvement Projects	4,915	17,017	2,796	3,020	4,462	4,038	2,553	2,688
External Partner Support	1,042	75	12	16	10	120		
Highway Construction Management Oversight	4,440	3,003	2,153	1,899	3,716	4,004	2,358	2,398
Light and Commuter Rail								
Other Trunk Highway System Improvements	7,870	1,888	2,947	22,201	16,677	11,408	5,179	26,039
Plan Highway System	179	277	235	321	304	254	132	214
Radio Towers and Communications								
Research and Development	7		1		1	7	1	
Roadside and Auxiliary Infrastructure	1,302	1,473	1,176	1,344	1,261	1,685	1,150	1,164
Snow and Ice	10,520	10,203	6,496	6,438	10,012	9,177	7,526	7,182
System Roadway Structures Maintenance	4,243	5,991	2,420	3,168	4,625	5,180	3,450	3,308
Traffic Devices Operation and Maintenance	1,360	2,232	826	787	2,375	2,444	1,078	1,240
Trunk Highway System Expansion	23,782	23,884	6,832	1,542	40,553	44,244	6,190	21,120
Trunk Highway System Preservation	60,423	49,423	46,209	34,858	54,866	39,861	42,029	47,672
Direct	121,132	116,462	72,613	76,181	139,412	123,079	71,911	113,378
Agency Overhead	9,253	12,706	5,222	8,440	10,262	13,376	5,626	9,545
Grand Total	130,385	129,168	77,835	84,621	149,674	136,455	77,537	122,923

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Operations Division (continued)	District 6		District 7		District 8		Metro District	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Bridges and Structures Inspection and Maintenance	1,314	1,697	717	732	603	712	5,182	3,489
Develop Highway Improvement Projects	4,826	12,818	3,129	4,830	2,201	1,830	19,208	17,476
External Partner Support	457	690	24	9			6,259	5,754
Highway Construction Management Oversight	4,459	5,194	2,828	2,339	2,168	1,960	13,543	16,271
Light and Commuter Rail							0	201
Other Trunk Highway System Improvements	5,952	14,657	5,710	16,090	3,925	9,275	25,757	129,062
Plan Highway System	414	389	284	223	604	265	1,366	1,368
Radio Towers and Communications								
Research and Development	12	6	2	1	3		114	147
Roadside and Auxiliary Infrastructure	1,855	2,031	1,592	1,714	614	980	6,125	4,684
Snow and Ice	9,884	10,182	7,182	7,168	5,046	5,700	24,393	22,910
System Roadway Structures Maintenance	4,550	4,587	3,982	4,334	2,316	2,760	12,927	12,290
Traffic Devices Operation and Maintenance	2,304	2,456	1,077	1,008	757	896	20,303	22,660
Trunk Highway System Expansion	33,900	121,323	13,282	19,622	1,321	485	274,862	249,612
Trunk Highway System Preservation	130,635	110,480	34,861	82,127	30,303	40,840	92,131	173,712
Direct	200,562	286,510	74,670	140,197	49,861	65,703	502,170	659,636
Agency Overhead	9,692	15,206	6,372	10,876	6,852	7,818	38,799	44,001
Grand Total	210,254	301,716	81,042	151,073	56,713	73,521	540,969	703,637

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Operations Division (continued)	Maintenance		Traffic, Safety & Technology		Operations Division Administration		Total	
	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services								
Bridges and Structures Inspection and Maintenance	34	10	9	4			10,233	9,237
Develop Highway Improvement Projects			274	1,423			44,364	65,140
External Partner Support	50		73	71	63	16	7,990	6,751
Highway Construction Management Oversight			75	598			35,740	37,666
Light and Commuter Rail							0	201
Other Trunk Highway System Improvements			15,492	13,432			89,509	244,052
Plan Highway System			1,473	60			4,991	3,371
Radio Towers and Communications	40						40	0
Research and Development			5,143	2,701			5,284	2,862
Roadside and Auxiliary Infrastructure	3,336	4,491					18,411	19,566
Snow and Ice	476	989	3	180			81,538	80,129
System Roadway Structures Maintenance	1						38,514	41,618
Traffic Devices Operation and Maintenance	8,026	9,627	5,853	2,338			43,959	45,688
Trunk Highway System Expansion			1,000				401,722	481,832
Trunk Highway System Preservation			3,500	876			494,957	579,849
Direct	11,963	15,117	32,895	21,683	63	16	1,277,252	1,617,962
Agency Overhead	44,962	60,019	3,051	2,413	4,636	3,303	144,727	187,703
Grand Total	56,925	75,136	35,946	24,096	4,699	3,319	1,421,979	1,805,665

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

State Aid Division	State Aid for Local Transportation		Statewide Radio Communications		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
County State Aid Highway	928,651	879,055			928,651	879,055
External Partner Support	620	959	2,161	2,363	2,781	3,322
Municipal State Aid Highway	169,162	183,273			169,162	183,273
Radio Towers and Communications			5,424	28,665	5,424	28,665
Direct	1,098,433	1,063,287	7,585	31,028	1,106,018	1,094,315
Agency Overhead	0	1,208	151	2,687	151	3,895
Grand Total	1,098,433	1,064,495	7,736	33,715	1,106,169	1,098,210

Note: The dollar amounts listed in the tables are in thousands. Totals may not add up due to rounding.

Productivity Measures

Introduction

Traditional performance measures used by MnDOT are measures of product and service delivery effectiveness. Performance measures have been used at MnDOT since the 1990s. Productivity measures help to evaluate how efficiently MnDOT's products and services are delivered.

Project background

The productivity measures are an effort to identify, create, examine and document current levels of productivity within MnDOT for MnDOT's core products and services. This project is aimed at complying with the requirement to annually report measures of MnDOT productivity for the previous fiscal year.

The report includes the following measures reported last year, along with new freight and program, planning and delivery measures:

- Bridges:
 - Inspection cost per square foot of deck area
 - Maintenance cost per square foot of deck area
- Pavement: Cost per roadway mile-year added
- Snow and ice: Cost per plow mile driven
- Pavement markings: Cost per mile striped
- Transit: MnDOT administrative cost per transit passenger trip
- Freight: MnDOT administrative cost per oversize/overweight permit issued (new)
- Program planning and delivery to construction expenditure ratio (new)

These areas represent a subset of MnDOT's products and services.

Purpose and scope

The productivity measures contained in this report were identified and developed by each respective operational area. The data is repeatable, verifiable and auditable. Measures of productivity should be viewed in the context of MnDOT's drive to deliver a safe and reliable multi-modal transportation system for Minnesotans. While measures of effectiveness are not included in this report, they can be found within MnDOT's [Annual Performance Report](#).

Costs are presented in both inflation adjusted and unadjusted terms. The base year for inflation adjusted data is 2015; therefore, the adjusted and unadjusted values for 2015 are identical. Inflation factors were selected for each measure based upon the nature of the work performed and the expenses incurred. For measures where the bulk of costs are labor related, a 2 percent inflation factor is used based on historic MnDOT labor inflation rates. For measures where the bulk of costs are maintenance related, a 3 percent inflation factor is used based on average inflation in MnDOT's maintenance and operations commodities and labor from 2008-2015.

For the pavement measure, actual values are used from MnDOT's pavement surfacing index. The surfacing index has been volatile, but increased an average of 7 percent per year over the last 10 years. For the program planning and delivery to construction expenditure ratio, two different inflation factors were applied. For the program planning and delivery side of the ratio, the 2 percent labor inflation factor is applied since those expenditures are primarily labor. For the construction

expenditure side of the ratio, actual MnDOT construction cost index values are used. This index has been volatile, but increased an average of 6 percent per year for the last 10 years.

Project challenges

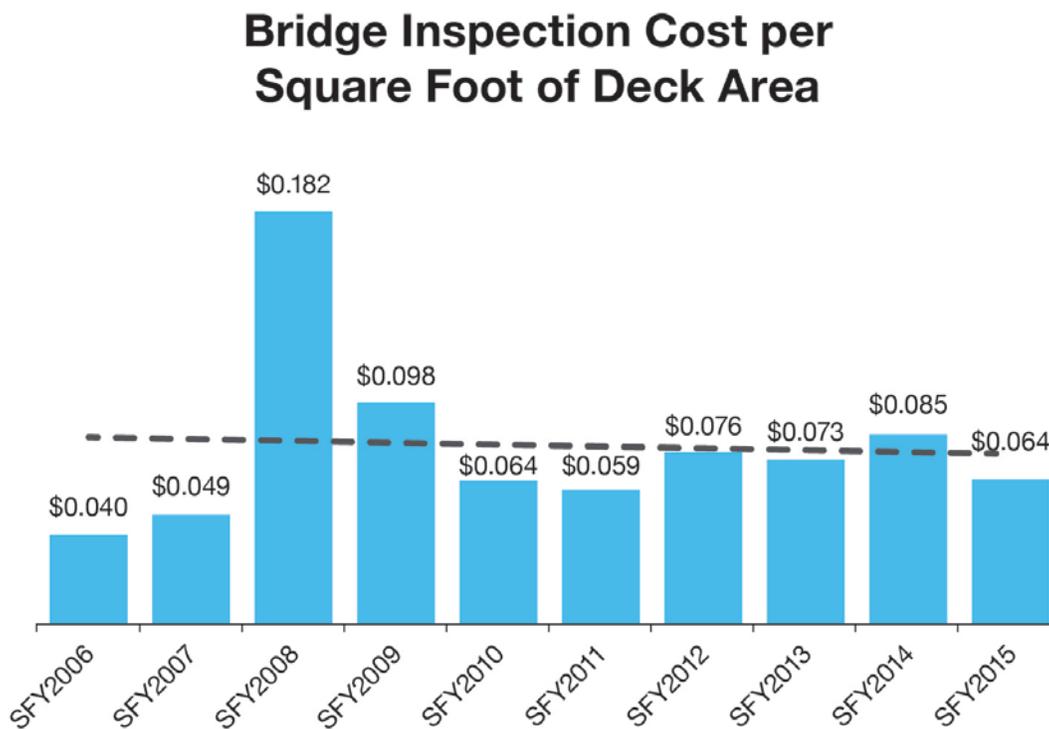
Data used in reports must be repeatable, auditable and tied to the system of record. Subject matter experts identified gaps in the capacity of current systems to track and report data used in measuring productivity. Historical numbers for the bridge inspection, bridge maintenance, pavement markings and transit productivity measures were adjusted this year following a review of the assumptions used to query the data. MnDOT continues to identify mitigation strategies to address these challenges and gaps.

Bridges: Inspection cost per square foot of deck area

Routine and fracture critical bridge safety inspections play key roles in maintaining a safe transportation system, ensuring the structural integrity of bridges and keeping MnDOT in compliance with state and federal laws. Bridge safety inspections also provide the condition assessment data that supports MnDOT investment decisions regarding bridge repair, rehabilitation and replacement.

Measure definition

The bridge inspection productivity measure tracks dollars spent on routine and fracture critical bridge inspections (labor and equipment costs) against the total deck area of bridges inspected to calculate the average inspection cost per square foot. Note that these average inspection costs are not necessarily directly proportional to the square footage of a particular bridge. Many factors affect inspection costs such as bridge design type complexity, access, traffic-control requirements, equipment requirements and the bridge's level of deterioration.



The square foot of deck area for 2006–2011 does not include all bridges inspected due to previous cost accounting practices and software limitations. Data from 2012 forward is accurate with regard to both cost and square foot of deck area inspected. Costs were adjusted to 2015 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

Results and analysis

The cost per square foot for bridge inspections appears to have stabilized over the last six years following a spike in 2008 and 2009. Bridge inspection expenses and cost per square foot peaked in fiscal year 2008 when the governor mandated accelerated inspections for all bridges. Other primary factors that affected annual costs include:

- A change to the federal National Bridge Inspection Standards, which increased the frequency of Fracture Critical inspections to every 24 months. Previous to 2008 these inspections were performed every 48 months. Fracture Critical inspections take more time and are more expensive per square foot of bridge deck area than routine inspections.
- Age of infrastructure results in more deterioration to monitor and increases inspection times.
- Trends toward certain new and reconstructed bridges as complex bridges also add inspection time and create access issues.
- Increases in the necessary amount of traffic control and the cost of equipment and materials.

Inflation-adjusted bridge inspection cost per square foot of deck area

State Fiscal Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bridge inspection expenses (\$1,000)	\$1,327	\$1,431	\$7,311	\$3,118	\$2,069	\$1,845	\$1,959	\$2,135	\$2,120	\$1,984
Sq. ft. of bridge deck inspected (1,000)	32,968	29,217	40,191	31,804	32,243	31,236	25,752	29,220	24,934	31,044
Cost per sq. ft. of inspection	\$0.040	\$0.049	\$0.182	\$0.098	\$0.064	\$0.059	\$0.076	\$0.073	\$0.085	\$0.064

Costs were adjusted to 2015 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

Actual (unadjusted) bridge inspection cost per square foot of deck area

State Fiscal Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bridge inspection expenses (\$1,000)	\$1,110	\$1,222	\$6,365	\$2,768	\$1,874	\$1,705	\$1,846	\$2,052	\$2,079	\$1,984
Sq. ft. of bridge deck inspected (1,000)	32,968	29,217	40,191	31,804	32,243	31,236	25,752	29,220	24,934	31,044
Cost per sq. ft. of inspection	\$0.034	\$0.042	\$0.158	\$0.087	\$0.058	\$0.055	\$0.072	\$0.070	\$0.083	\$0.064

Numbers within the table are not adjusted for inflation.

Major influencing factors

Primary factors that influence this measure include changes to:

- fracture critical inspection frequency
- bridges with advanced deterioration require additional time and effort to inspect
- large and complex bridges require more advanced equipment and inspection techniques
- traffic control requirements, access and equipment requirements

Also, since 2012, a possible factor influencing MnDOT time and effort on bridge inspections is the National Bridge Inspection Oversight Program established by FHWA in 2011. This program evaluates state bridge inspection programs for compliance annually using 23 metrics. These metrics were put in place to ensure consistency among states' programs and to ensure bridges are safe, reduce liability for bridge owners and increase public confidence. This program resulted in more administrative costs to the states, and has possibly impacted the amount of time spent reporting bridge inspection information. Because of the numerous contributing factors, the cost per square foot for bridge inspections is not necessarily directly proportional to the bridge deck area.

Bridges: Maintenance cost per square foot of deck area

Bridge preservation keeps bridges in sound condition and slows their deterioration through preventative and reactive maintenance. Preventive maintenance includes routine maintenance activities performed on a cyclical basis, as well as periodic minor repairs. Reactive maintenance includes those activities scheduled in response to an identified condition that may compromise ride, public safety or bridge structural function. Preventive maintenance on newer bridges is cost effective and will keep them in good condition longer. Reactive maintenance when needed will delay the need for extensive rehabilitation or replacement.

Measure definition

The bridge maintenance productivity measure compares dollars spent on preventive and reactive maintenance (labor, equipment and material costs) against the total deck area of Minnesota’s trunk highway bridges to calculate the average cost per square foot of deck area maintained. Note that these average maintenance costs are not necessarily directly proportional to the square footage of a particular bridge. Many factors affect maintenance costs such as bridge design type and complexity, access, traffic-control requirements, scope of work, equipment requirements, and the bridge’s level of deterioration.

Bridge Maintenance Cost per Square Foot of Deck Area



Costs were adjusted to 2015 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Results and analysis

Over the last decade, between \$0.156 and \$0.234 per square foot was spent on average to perform preventive and reactive maintenance adjusting for inflation. As a reference, it costs an average of \$150 per square foot to construct a new bridge.

The overall trend is flat, although costs have trended downward over the last couple of years. MnDOT's ability to perform bridge preventive maintenance was enhanced from FY 2006-2009 due to a budget shift from State Road Construction to Operations and Maintenance. This may partially account for the temporary rise in maintenance costs per square foot.

With additional funding MnDOT can address medium and low priority reactive maintenance needs that might otherwise wait. Consequently, higher costs per square foot in one year help prevent more urgent and costly repairs in the future. As the bridge system ages, maintenance costs per square foot may trend upwards as the amount of reactive maintenance required is expected to increase.

Inflation-adjusted bridge maintenance cost per square foot of deck area

Calendar Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Preventive Maintenance Expenditures (\$1,000)	\$2,950	\$5,154	\$4,309	\$3,984	\$4,209	\$3,645	\$4,155	\$2,904	\$2,628	\$2,928
Reactive Maintenance Expenditures (\$1,000)	\$4,212	\$4,313	\$3,925	\$5,196	\$6,899	\$6,334	\$5,920	\$6,913	\$6,672	\$5,626
Total Bridge Deck sq. ft. (1,000)	45,945	46,257	47,124	47,576	47,373	47,531	47,543	47,567	48,034	50,003
Maintenance Cost / sq. ft.	\$0.156	\$0.205	\$0.175	\$0.193	\$0.234	\$0.210	\$0.212	\$0.206	\$0.194	\$0.171

Costs were adjusted to 2015 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Actual (unadjusted) bridge maintenance costs

Calendar Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Preventive Maintenance Expenditures (\$1,000)	\$2,195	\$3,950	\$3,401	\$3,239	\$3,525	\$3,145	\$3,692	\$2,658	\$2,477	\$2,843
Reactive Maintenance Expenditures (\$1,000)	\$3,134	\$3,306	\$3,098	\$4,225	\$5,778	\$5,463	\$5,260	\$6,326	\$6,289	\$5,462
Total Bridge Deck sq. ft. (1,000)	45,945	46,257	47,124	47,576	47,373	47,531	47,543	47,567	48,034	50,003
Maintenance Cost / sq. ft.	\$0.116	\$0.157	\$0.138	\$0.157	\$0.196	\$0.181	\$0.188	\$0.189	\$0.182	\$0.166

Costs are not adjusted for inflation.

Major influencing factors

Budget allocations and the condition of Minnesota's overall bridge system are factors that influence this measure. As the condition of the bridge system trends toward good and satisfactory, preventive maintenance becomes the predominant treatment. As the condition of the bridge system trends toward fair and poor, reactive maintenance needs increase.

Other factors that influence this measure include bridge design type and complexity, traffic control requirements, access and equipment requirements. Because of the numerous contributing factors, the cost per square foot for bridge maintenance is not necessarily directly proportional to the bridge deck area. These costs are very high level and are appropriate for monitoring the overall trend.

This report includes only the costs associated with MnDOT-performed preventive and reactive maintenance activities. MnDOT generally self-performs the majority of bridge preservations, but future reporting efforts may include contract maintenance work.

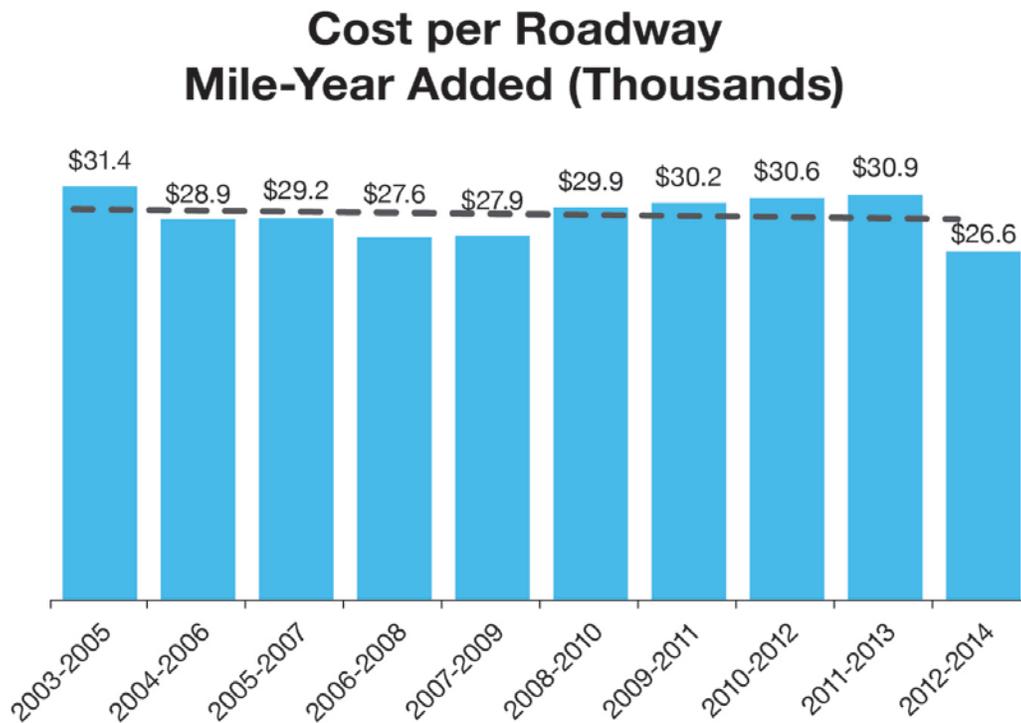
Pavement: Cost per roadway mile-year added

Preserving the functional and structural integrity of Minnesota’s highways is a priority for MnDOT because timely repair and replacement reduces long-term costs and because highway smoothness greatly affects Minnesotans’ satisfaction with overall state highway maintenance. MnDOT performs a variety of rehabilitation activities that extend the remaining service life of roadways. Remaining service life is the time in years until the roughness of a pavement section is predicted to reach the point where travelers feel the road is rough. A roadway with zero years of service life remaining can still be driven on, but it has reached the point when some sort of rehabilitation is warranted.

Measure definition

The pavement productivity measure compares MnDOT’s estimated pavement preservation investments against the number of mile-years it adds to Minnesota’s trunk highway system for MnDOT’s contracted work. Mile-years are defined as the number of miles of roadway that receive treatment in a given year multiplied by the design life (in years) of that treatment. For example, one mile of roadway that receives a fix expected to last 10 years would be calculated as 10 mile-years.

The investment numbers represent MnDOT’s contracted work for the following program categories: reconstruction, recondition, resurfacing, and road repair. Work performed by MnDOT labor, such as patching pot holes, is not included. A three-year rolling average is used to smooth financial data that is in fiscal years and condition data that is in calendar years. Additionally, any improvement in condition is captured the year after the investment is made.



Costs were adjusted to 2015 dollars using the actual annual Pavement Surfacing Index from the MnDOT Construction Cost Index that has been volatile but increased an average of 7 percent per year for the last 10 years.

Rehabilitation activities that extend service life will add a considerable number of years to the remaining service life of a pavement but are typically more costly. Less expensive short-term fixes may increase the pavement smoothness in the near term, but will not add many additional years of remaining service life. This measure provides a way of looking at the makeup of the pavement program. Long life fixes, while adding considerable life to a roadway, are very costly. Fixes with short lives, while fairly inexpensive, do not add much life to the system. A good balance of long and short term fixes is desired. When budgets are tight, the program will trend toward increased miles of low cost, short life fixes, so as to keep the system in serviceable condition. As funds increase, a greater number of the higher cost, long life fixes can be part of the program.

Results and analysis

The results show the trend in cost per roadway mile-year added is flat over time. It should be noted that this measure only includes an analysis of the contracted work that was performed. It does not suggest whether the overall investment in the system is adequate. One must look at the condition of the system, and projected condition based on programmed investment, to see how the system condition is changing over time.

Inflation-adjusted cost per roadway mile-year added

3-year averages	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
Pavement Preservation spending (millions)	\$295.6	\$331.5	\$333.7	\$278.6	\$327.8	\$379.3	\$432.9	\$462.4	\$517.2	\$511.6
Mile-Years added (1000s)	9.4	11.5	11.4	10.1	11.8	12.7	14.3	15.1	16.7	19.2
Cost per roadway mile year added (1000s)	\$31.4	\$28.9	\$29.2	\$27.6	\$27.9	\$29.9	\$30.2	\$30.6	\$30.9	\$26.6

Costs were adjusted to 2015 dollars using the actual annual Pavement Surfacing Index from the MnDOT Construction Cost Index that has been volatile but increased an average of 7 percent per year for the last 10 years.

Actual (unadjusted) cost per roadway mile-year added

3-year averages	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
Pavement Preservation spending (millions)	\$149.7	\$184.8	\$208.8	\$205	\$255.9	\$307.3	\$349.8	\$394.3	\$461.4	\$478
Mile-Years added (1000s)	9.4	11.5	11.4	10.1	11.8	12.7	14.3	15.1	16.7	19.2
Cost per roadway mile year added (1000s)	\$15.9	\$16.1	\$18.2	\$20.3	\$21.8	\$24.2	\$24.4	\$26.1	\$27.6	\$24.8

Costs were not adjusted for inflation.

Major influencing factors

Inflation in construction costs is a major influencing factor for MnDOT's construction program. Pavement is especially impacted by inflation since asphalt and concrete prices have increased disproportionately compared to other construction activities and commodities in recent history.

In addition, many pavement projects are chosen due to reasons that are not primarily related to pavement condition. The need to improve safety and/or mobility along a route often is a primary reason the project is selected. Although the pavement is repaired or replaced as part of the project, the cost of the project is higher, in some cases much higher, due to the non-pavement related work, such as culvert or underground drainage structure repairs. This makes it difficult to derive a good relationship between the number of years of life added and the dollar spent on pavement repairs. Some years, MnDOT's program has more of these types of projects than others, making it difficult to analyze yearly trends. Finally, as new materials and construction techniques are developed, the lives of the various fixes will hopefully increase, when compared to our current methods. If the added cost of the new method provides a substantial increase in pavement life, it will be reflected in this measure.

Snow and ice: Cost per plow-mile driven

The primary goal of MnDOT's snow and ice operations is the safety of Minnesota's traveling public. Citizens expect to be able to carry out normal activities through most weather events and to have transportation facilities that safely accommodate travel shortly after an event has passed. In addition, the snow and ice program works to prevent the accumulation of snow and ice through snow fences and the application of anti-icing chemicals prior to a snow event.

Measure definition

The snow and ice productivity measure compares dollars spent on MnDOT's snow and ice program against the number of plow miles driven during the snow and ice season. The data includes miles driven to get to and from routes, since those miles are required to deliver snow and ice operations.

Cost per Snow Plow-Mile Driven



Costs were adjusted to 2015 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Results and analysis

The chart above shows the cost per plow-mile driven was stable over nine of the last 10 years. The exceptionally low cost per plow-mile driven in SFY2010 is the result of an exceptionally mild winter.

Inflation-adjusted cost per snow plow-mile driven

State Fiscal Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Costs (\$millions)	\$85.9	\$75.1	\$102.6	\$109.4	\$88	\$120.7	\$67.7	\$119.1	\$140.3	\$87.9
Plow Miles Driven (1000s)	4,389	3,814	5,445	6,111	7,068	6,235	3,306	6,583	7,282	4,800
Cost per Mile	\$19.56	\$19.70	\$18.85	\$17.91	\$12.44	\$19.35	\$20.49	\$18.10	\$19.27	\$18.32

Costs were adjusted to 2015 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Actual (unadjusted) cost per snow plow-mile driven

State Fiscal Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Costs (\$millions)	\$65.8	\$59.3	\$83.5	\$91.7	\$75.9	\$107.2	\$62	\$112.3	\$136.2	\$87.9
Plow Miles Driven (1000s)	4,389	3,814	5,445	6,111	7,068	6,235	3,306	6,583	7,282	4,800
Cost per Mile	\$14.99	\$15.55	\$15.33	\$15.00	\$10.73	\$17.19	\$18.75	\$17.06	\$18.71	\$18.32

Numbers within the table are not adjusted for inflation.

Major influencing factors

Factors that influence higher expenses are congestion, winter severity, type of weather, event timing, wind, clean-up, inventorying materials, maintenance of storage facilities, salt brine production and terrain. MnDOT is looking at ways to control more of these factors when measuring productivity.

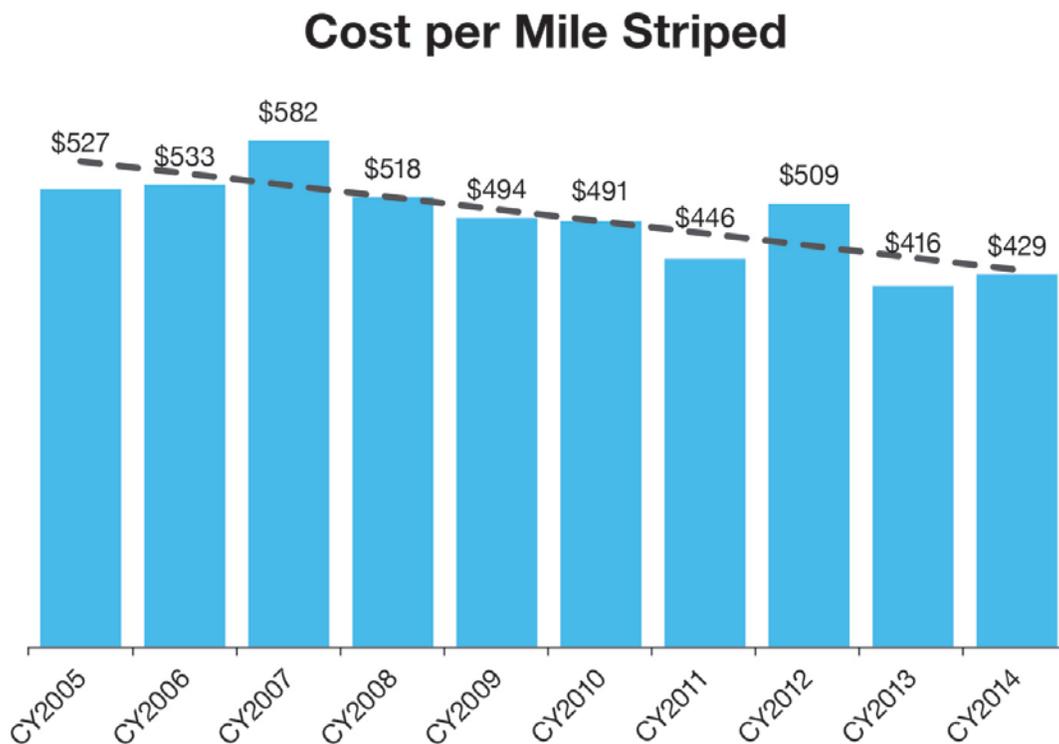
Contributing to added efficiency are innovative technologies and practices including tow plows, anti-icing, pre-wetting, de-icing, comprehensive snowfighter training, snow fences and enhanced materials.

Pavement markings: Cost per mile striped

Pavement markings perform an important function in managing, directing and controlling traffic. In some cases, they are used to supplement the regulations or warnings of other devices, such as traffic signs or signals. Sometimes, they are used alone and produce results that cannot be obtained by the use of any other device.

Measure definition

The pavement markings productivity measure compares dollars spent marking pavements on Minnesota's trunk highway system against the number of miles striped.



Costs were adjusted to 2015 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Results and analysis

Striping cost per mile trends downward over the reporting period, although it does fluctuate from year-to-year due to the influencing factors listed below.

Inflation-adjusted cost per mile striped

Calendar Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Striping Costs (1000s)	\$9,614	\$8,950	\$9,423	\$9,700	\$8,876	\$7,909	\$6,709	\$8,484	\$6,003	\$6,484
Miles Striped (1000s)	18.2	16.8	16.2	18.7	18	16.1	15	16.7	14.4	15.1
Cost per mile	\$527	\$533	\$582	\$518	\$494	\$491	\$446	\$509	\$416	\$429

Costs were adjusted to 2015 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Actual (unadjusted) cost per mile striped

Calendar Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Striping Costs (1000s)	\$7,153	\$6,859	\$7,438	\$7,887	\$7,433	\$6,822	\$5,960	\$7,764	\$5,658	\$6,295
Miles Striped (1000s)	18.2	16.8	16.2	18.7	18	16.1	15	16.7	14.4	15.1
Cost per mile	\$392	\$408	\$460	\$421	\$414	\$424	\$396	\$466	\$392	\$417

Costs were unadjusted for inflation.

Major influencing factors

Equipment, labor and material costs, along with organization, management, supervision, weather, planning and coordination all influence this measure. The materials used also vary greatly, ranging from less costly and less durable markings such as latex, to the midrange product epoxy, to polymer pre-formed tape, which has a long service life and is used for markings that will be exposed to high levels of roadway traffic.

Transit: MnDOT administrative cost per transit passenger trip

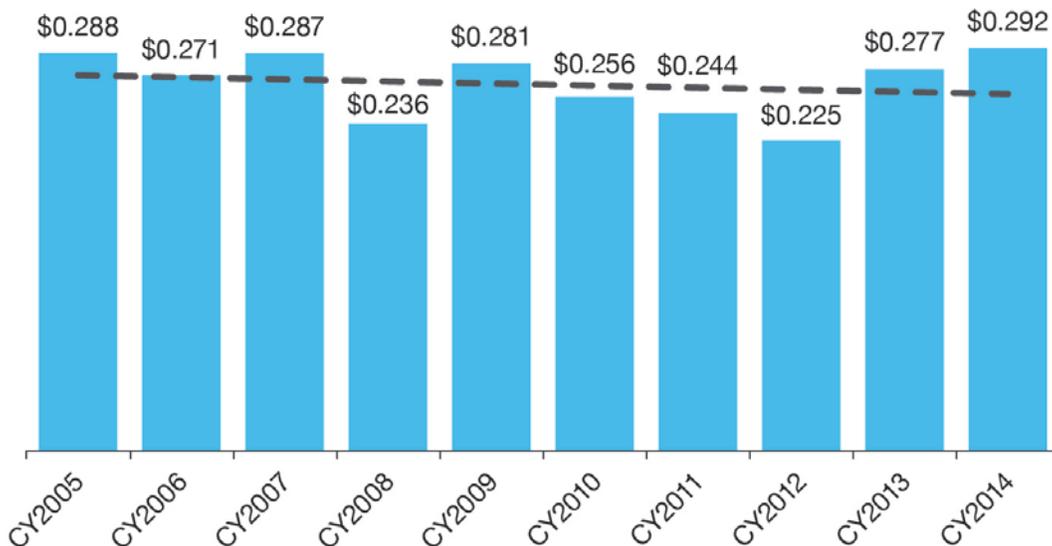
Transit connects people to jobs, family, schools, shopping, health care centers, sports and cultural events. These systems enhance the mobility of the elderly, low-income and persons with disabilities in communities across the state by providing a reliable transportation option. Transit can be an alternative to driving that can reduce congestion, fuel consumption and greenhouse gas emissions.

Greater Minnesota's 51 public transit systems are operated by local governments and non-profits. MnDOT supports these systems through planning, research, technical assistance, and the management of state and federal transit grants for funding programs that administer capital and operational funding. MnDOT's Transit Office also supports transportation for seniors and individuals with disabilities statewide, contributes a share to Northstar Commuter Rail, and administers federal dollars for transit in the rural parts of the seven-county metro area.

Measure definition

The Greater Minnesota transit productivity measure compares dollars spent by MnDOT's Transit Office providing grant contracts and overseeing transit fund recipients against the number of passenger trips provided by those grantees. This measure does not capture the total average cost per passenger trip as it does not include local, state and federal dollars granted directly to local transit providers nor does it include funding collected at the fare box.

MnDOT Transit Office Administrative Cost per Passenger Trip



Costs were adjusted to 2015 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

Results and analysis

The MnDOT Transit Office administrative cost per passenger trip has remained relatively flat over the period of analysis, with moderate fluctuations due to factors listed below.

Inflation-adjusted MnDOT administrative cost per transit passenger trip

Calendar Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Expenses (\$1,000)	\$2,864	\$2,808	\$3,149	\$2,864	\$3,429	\$3,273	\$3,218	\$3,005	\$3,824	\$4,035
Greater MN Ridership (1,000s)	9,958	10,361	10,954	12,128	12,216	12,772	13,189	13,368	13,826	13,839
Cost per Ride	\$0.288	\$0.271	\$0.287	\$0.236	\$0.281	\$0.256	\$0.244	\$0.225	\$0.277	\$0.292

Costs were adjusted to 2015 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

Actual (unadjusted) MnDOT administrative cost per transit passenger trip

Calendar Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Expenses (\$1,000)	\$2,350	\$2,350	\$2,687	\$2,493	\$3,045	\$2,965	\$2,973	\$2,832	\$3,675	\$3,956
Greater MN Ridership (1,000's)	9,958	10,361	10,954	12,128	12,216	12,772	13,189	13,368	13,826	13,839
Cost per Ride	\$0.236	\$0.227	\$0.245	\$0.206	\$0.249	\$0.232	\$0.225	\$0.212	\$0.266	\$0.286

Costs were not adjusted for inflation.

Major influencing factors

Factors that cause fluctuations in MnDOT's administrative cost per passenger trip include regulatory changes such as the introduction of new grant programs necessitating educational outreach and more intensive oversight, increases and decreases in available funding, and the 2011 state government shutdown. As part of its "Transit for Our Future" initiative, MnDOT's Transit Office is working to increase cooperation with local providers to improve service for the traveling public and to build transit providers' administrative capacity to comply with state and federal rules with minimal assistance from MnDOT transit staff.

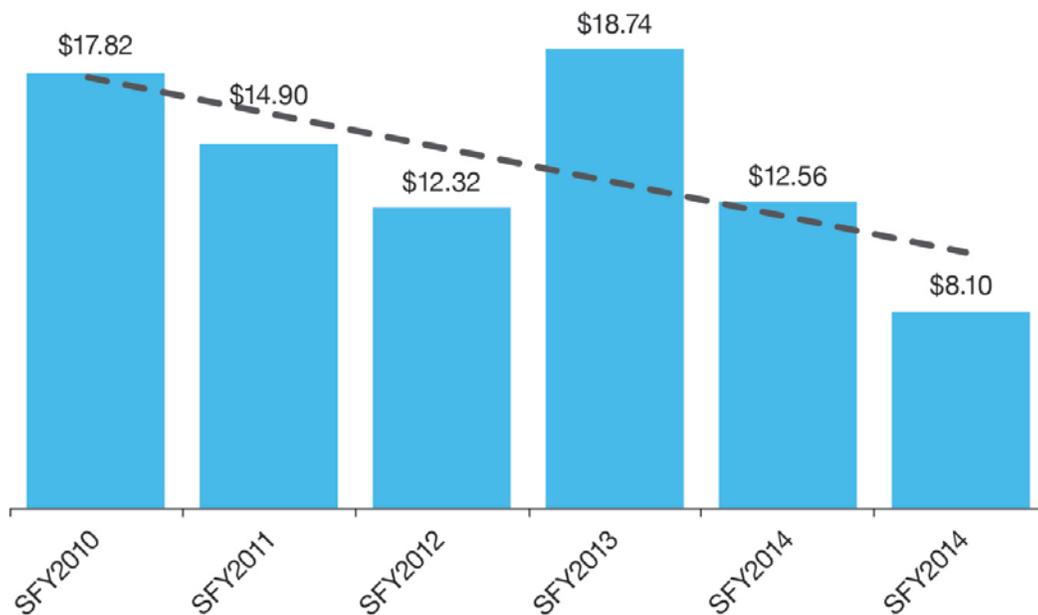
Freight: MnDOT cost per oversize/overweight permit issued

Oversize/overweight permitting protects and preserves Minnesota's transportation infrastructure by directing oversized and/or overweight loads toward routes that can safely accommodate them. The permitting process benefits freight haulers by helping them identify a compliant route before a truck departs. The permitting process also benefits the public by minimizing the costs of expensive repairs to infrastructure due to damage caused by bridge strikes or damage to pavement from overloading of a roadway or bridge. Applications are currently submitted online, in person, via e-mail, or by U.S. mail. Simple applications are typically processed on the same day with some online applications processed automatically. For applications requiring special handling due to especially large or heavy loads, the permitting unit conducts a more detailed review, coordinating with relevant engineering and district staff.

Measure definition

The oversize/overweight permit productivity measure tracks dollars spent processing permit requests and directly supporting that work against total permits issued each year. Note that the average cost per permit will differ significantly between simple permit and those that require special handling. Due to data retention limitations of the oversize/overweight load routing software, SFY 2010 is the earliest year that a count of issued permits is available.

Cost Per Oversize/Overweight Permit Issued



Costs were adjusted to 2015 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

Results and analysis

The cost per oversize/overweight permit issued trended downward over the last six state fiscal years, primarily due to the expanded use of technology and automation in the permitting process. A notable exception to the downward trend was the spike in SFY2013 that was due to significant enhancements to the permitting software and changes to the payment service.

Inflation-adjusted MnDOT administrative cost per oversize/overweight permit issued

State Fiscal Year	2010	2011	2012	2013	2014	2015
Expenses (\$1,000)	\$1,359	\$1,292	\$1,096	\$1,694	\$1,126	\$704
Permits Issued	76,271	86,756	89,028	90,372	89,679	86,969
Cost per Permit	\$17.82	\$14.90	\$12.32	\$18.74	\$12.56	\$8.10

Costs were adjusted to 2015 dollars using a 2 percent annual inflation factor based on historic MnDOT labor inflation.

Actual (unadjusted) MnDOT administrative cost per oversize/overweight permit issued

State Fiscal Year	2010	2011	2012	2013	2014	2015
Expenses (\$1,000)	\$1,231	\$1,194	\$1,033	\$1,628	\$1,104	\$704
Permits Issued	76,271	86,756	89,028	90,372	89,679	86,969
Cost per Permit	\$16.14	\$13.76	\$11.60	\$18.01	\$12.31	\$8.10

Costs were not adjusted for inflation.

Major influencing factors

Factors that cause fluctuations in MnDOT's administrative cost per oversize/overweight permit issued include:

- total number of permit applications received
- volume of applications submitted by mail, fax, or telephone versus through an online application
- development or purchase of technology that improves the application or route analysis process
- the mix of simple permit applications versus those requiring special handling
- availability of routes for oversized or overweight vehicles on Minnesota's trunk highway network.

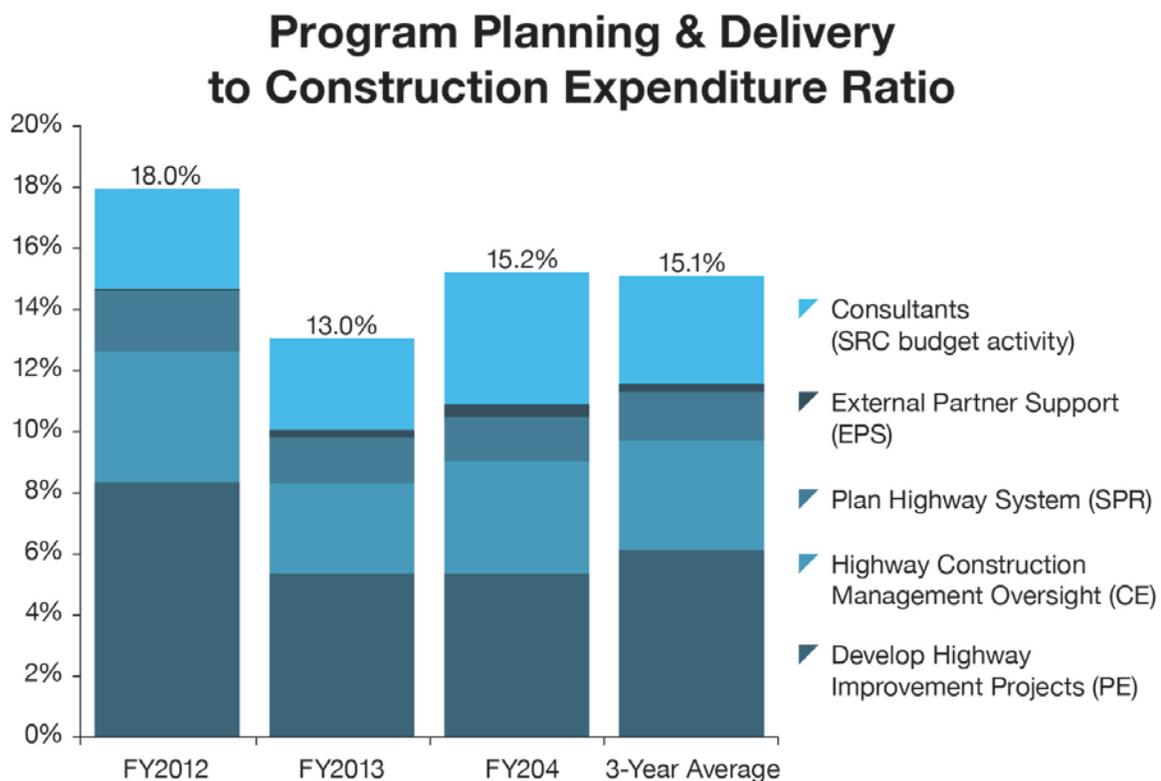
For loads big or heavy enough to require special handling, incremental increases to a load's size or weight can substantially increase the complexity of a permit.

Program Planning and Delivery to Construction Expenditure Ratio

MnDOT manages and delivers the State Road Construction or SRC program. This includes planning at the state and district level; and, developing and managing state highway projects from project initiation through completion of construction. MnDOT employees perform the majority of program planning and delivery activities, however consultants are regularly contracted to plan and lead projects. Program planning and delivery includes preliminary engineering, design, construction contract administration, and indirect costs associated with delivering our construction program. Private contractors typically construct SRC projects. For this measure, consultant led program planning and delivery costs are subtracted from SRC expenditures and added into program planning and delivery expenditures.

Measure Definition

The program planning and delivery to construction expenditure ratio examines dollars spent on program planning and delivery and compares the amount to construction expenditures. For this measure, consultant led program planning and delivery costs are subtracted from SRC expenditures and added into program planning and delivery expenditures. A three-year rolling average is used for this measure because projects typically require multi-year planning and construction expenditures.



Amounts reflect budgetary commitments (expenditures and encumbrances) and include consultant led program planning and delivery. Program delivery expenditures were adjusted to 2015 dollars using a 2 percent annual inflation rate. Construction expenditures were adjusted to 2015 dollars using the actual annual MnDOT Construction Cost Index that has been volatile but increased an average of 6 percent per year for the last 10 years.

Inflation-adjusted planning and delivery to construction expenditure ratio

State Fiscal Year	2012	2013	2014	3 Year Average
Develop Highway Improvement Projects (PE)	74,634,817	71,625,145	60,271,935	68,843,965
Highway Construction Management Oversight (CE)	38,101,438	39,080,554	42,531,314	39,904,435
Plan Highway System (SPR)	17,764,941	19,535,020	16,291,852	17,863,938
External Partner Support (EPS)	627,833	3,033,360	5,178,861	2,946,685
Consultants (SRC budget activity)	29,355,127	39,730,168	49,155,212	39,413,502
Program Planning and Delivery Expenditures	160,484,156	173,004,246	173,429,174	168,972,525
State Road Construction Expenditures	892,735,900	1,326,156,085	1,138,335,216	1,119,075,734
Program Delivery Expenditure / Construction Expenditure Ratio	18.0%	13.0%	15.2%	15.1%

Amounts reflect budgetary commitments (expenditures and encumbrances) of direct costs and include consultant led program planning and delivery. Program delivery expenditures were adjusted to 2015 dollars using a 2% annual inflation rate. Construction expenditures were adjusted to 2015 dollars using the actual annual MnDOT Construction Cost Index that has been volatile but increased an average of 6 percent per year for the last 10 years.

Unadjusted planning and delivery to construction expenditure and ratio

State Fiscal Year	2012	2013	2014	3 Year Average
Develop Highway Improvement Projects (PE)	70,330,055	68,843,853	59,090,132	66,088,013
Highway Construction Management Oversight (CE)	35,903,836	37,563,008	41,697,367	38,388,070
Plan Highway System (SPR)	16,740,301	18,776,451	15,972,404	17,163,052
External Partner Support (EPS)	591,621	2,915,571	5,077,315	2,861,502
Consultants (SRC budget activity)	27,661,992	38,187,397	48,191,384	38,013,591
Program Planning and Delivery Expenditures	151,227,805	166,286,280	170,028,602	162,514,229
State Road Construction Expenditures	786,409,150	1,125,971,738	1,086,197,725	999,526,205
Program Delivery Expenditure / Construction Expenditure Ratio	19.2%	14.8%	15.7%	16.3%

Amounts reflect budgetary commitments (expenditures and encumbrances) and include consultant led program planning and delivery. Costs were not adjusted for inflation.

Results and analysis

The graph above shows the program planning and delivery to construction expenditures ratio for the most recent three years, along with a three-year average broken out by products and services. Comparable data is not reasonably attainable for fiscal years prior to 2012 due to a change in accounting systems that year (from MAPS to SWIFT).

Adjusted for inflation, the three-year average program planning and delivery to construction expenditure ratio is 15.1 percent. In other words, to deliver the construction program, MnDOT spends \$0.151 in program planning and delivery direct expenditures for every dollar of construction expenditure based on a \$1.1 billion average construction program.

The direct expenditures refer to labor, equipment and materials that are specifically related to the program, planning and delivery activities, such as design and preliminary engineering.

In addition, indirect costs of delivering MnDOT's construction program, such as time charged to customer service, public outreach and feedback, governance and consultant management activities are not included. These costs are generally unique to a public agency. A majority of the indirect costs have not been included in the direct cost. Improvements in timesheet coding, i.e., creation/refinement of new and existing source codes and improvements in how indirect costs are cost allocated across the agency are needed to better define these indirect costs.

Major influencing factors

Program delivery expenditures such as scoping, environmental review, and design typically precede construction expenditures, frequently by several years. Therefore the program delivery expenditures don't exactly line up with the construction program delivered in the same year. In addition, construction funding has fluctuated with one time programs such as Corridors of Commerce, the American Recovery and Reinvestment Act and the 2008 Chapter 152 bridge-bonding program. The agency is using a three-year rolling average for this measure because projects typically require multi-year planning and construction expenditures. The three-year rolling average reduces the influence of fluctuating appropriations on the delivery/construction ratio.

While inflation affects all measures, this one includes diverging costs. Labor costs are rising at lower rates than construction costs. If all else is equal, this adjustment would show increasing efficiency over time. There are other factors that could influence this ratio as well, for example an increased level of effort due to added statutory or regulatory requirements such as endangered species and storm water treatment.

Efficiencies

MnDOT has always aimed to be good stewards of public funds and recently the department takes a more targeted approach to identify and quantify these efficiencies, while looking for additional best practices and improvements. In FY 2015, MnDOT identified an estimated \$63.5 million in savings from efficient practices deployed across the organization. The majority of these efficiencies identified in FY 2015 came from construction program delivery and project development. Savings identified in the analysis led to program and project costs that were lower than if the efficient strategies had not been implemented. The cost savings can be directly correlated with the strategies. MnDOT used the FY 2015 savings to help balance the FY 2015 program.

Background

In advance of embarking on the analysis, MnDOT conducted research of efficiency measurement throughout the country at other state DOTs. There are only three other state DOTs reporting their overall department efficiencies to the public: Florida, Utah, and Missouri. Florida and Utah highlight illustrative examples of efficiency on a case by case basis. Missouri's efficiency and performance measurement tracker summarizes its savings by benchmarking its use of 'practical design', innovation, and value engineering. Missouri also analyzes how savings from construction bids that come in lower than estimated are reallocated. MnDOT uses an approach similar to that of Missouri. However, MnDOT's analysis is much more conservative in its efficiency measurement by only tracking savings that are directly attributed to deliberate decisions in planning, project management, and delivery that advance efficient outcomes. Although external market forces can have an impact on our ability to stretch each dollar further, MnDOT is not counting savings that can be attributed to external market forces in this analysis.

Methodology

Overview

MnDOT analyzes and evaluates its performance in a number of different ways to measure overall organizational effectiveness. MnDOT evaluates the conditions and service levels being provided to the public through its traditional performance measures.

Although efficiency is always a consideration, there are other priorities MnDOT considers such as equitably providing transportation access regardless of geographic location. The ability to maximize efficiency is often limited by the more significant directive to equitably provide transportation services to all Minnesotans. This is a charge that is not easily measured using traditional performance measures. To add to these measures, MnDOT is evaluating and identifying the efficiency with which it operates.

Efficiency measurement looks at an organization's ability to maximize the output from a given set of input resources.⁴ There are different ways to identify and evaluate levels of efficiency, each with its own strengths and weaknesses. Benchmarking best practices is a common tool for identifying best cases given certain constraints. It analyzes what has worked, why it has worked, in what conditions it

⁴ Palmer, A. (1993). Performance Measurement in Local Government. *Public Money & Management*, 31-36.

has worked, and how it may work in the future⁵. The analysis looks to isolate key decisions and strategies that are maximizing outputs without compromising outcomes to the public⁶.

Internal efficiencies are essentially all the ways MnDOT maximizes the use of financial resources through deliberate decisions and business processes that allow MnDOT to directly save money, avoid costs or provide a higher quality outcome. Efficiencies that provide cost savings and cost avoidance are pursued as long as they do not compromise the organization's legal requirements, or the quality of the final product delivered. The evaluation analyzes internal efficiencies and also looks to note decisions that affect the public, but that may limit the organization's options in saving money. Strategic choices that do not provide cost savings, but still enhance MnDOT's service to the public are noted as external impacts.

Data Limitations

MnDOT has been asked to evaluate the efficiency of the organization for fiscal year 2015. Projects usually take years to be developed, so to identify efficient practices that produced programmatic savings in the current fiscal year, the department analyzed practices and processes that were implemented in previous years, which had an impact on the overall project cost. For example, projects that are constructed in SFY 2015 have been in development for six to 10 years. Many of the decisions have already been made that would lead to significant project savings.

Approach

MnDOT used a best practice case-analysis approach to evaluate and measure efficiency. Best practice evaluation reviews dimensions of efficiency in quality, time and cost⁷. It analyzes what has worked, why it has worked, in what conditions it has worked, and how it may work in the future⁸. MnDOT analyzed each case for implementation of cost saving strategies, designs and processes. Efficiencies were determined by evaluation against the sample of cases across the state. Best cases were determined by comparison of the standard approaches being employed.

1. A comparative process
2. An action
3. A linkage between the action and an outcome or goal

Figure 1: Best practice evaluation components (Bretschneider, Marc-Aurele, & Wu, 2005)

MnDOT is a large organization serving a diverse mission for the state of Minnesota. Strategic decisions and changes to business processes made in one part of the organization often have effects on other parts of MnDOT. To account for this, efficiency measurement was separated into two key areas of the organization to ensure efficiencies are not quantified more than once.

- State Road Construction - Development and delivery of construction projects that are funded through Minnesota's state road construction budget.
- Administration, Maintenance & Operations - The administration of the organization including all daily maintenance and operation of transportation systems.

⁵ Behn, R. D. (1993). Case-analysis research and managerial effectiveness. *Public management: The state of the art*, 40-54.

⁶ Holzer, Ph.D., M., Fry, J., Charbonneau, E., Riccucci, Ph.D., N., Kwak, S., & Burnash, E. (2009). *Literature Review and Analysis Related to Measurement of Local Government Efficiency*.

⁷ Bretschneider, S., Marc-Aurele, F. J., & Wu, J. (2005). "Best Practices" Research: A Methodological Guide for the Perplexed. *Journal of Public Administration Research and Theory*, 307-323.

⁸ Behn, R. D. (1993). Case-analysis research and managerial effectiveness. *Public management: The state of the art*, 40-54.

State Road Construction was analyzed for efficiency at the project level, while all other business lines were evaluated at a program level. This distinction reflects where critical decisions are being made and the financial magnitude of those decisions. Transportation construction projects cost millions of dollars with each one involving complex tradeoffs and design considerations that can affect a project's cost by hundreds of thousands of dollars.

Some MnDOT offices were analyzed for efficiency at the program level. Efficient strategies and business process improvements were evaluated against former approaches. In order to have a basis for comparison, only emerging strategies that began scaling after the Chapter 152 program in 2008 were used. The efficiencies were analyzed for cost savings by calculating the present value of the approach being taken inclusive of the upfront costs and ongoing cost savings.

Below are the best practice areas that were identified in the efficiency analysis:

State Road Construction

- Pavement Design Methodology
- Performance-based Practical Design
- Innovative Construction Staging
- Value Engineering
- Alternative Technical Concepts

Administration, Maintenance and Operations

- Automated Flagger Assistance Devices
- Dynamic Message Sign Defrosters
- LED Ramp Meters
- LED Roadway Lighting
- Maintenance Decision Support System
- MnPASS Contracting
- MnSTEP
- Portable Signals
- Tow Plows
- Printing Business Practices

State Road Construction

Efficiencies identified in FY 2015 came throughout project development for each project over \$10 million let in FY 2015. Savings identified in the analysis led to project costs that were lower than if the efficient strategies were not implemented. MnDOT employs a number of strategies to reduce the overall cost of the projects before delivery. The analysis looked at key business processes directly linked to more efficient project delivery. The projects were evaluated on how well the business process improvements were implemented. The five areas linked to more efficient outcomes are: improved Pavement Design Methodology, Performance-based Practical Design, Innovative Construction Staging, Value Engineering, and Alternative Technical Concepts. A summary of the savings on major projects can be found in Table 3.

Table 3: Total Efficiency Savings for the State Road Construction program

Project	Total Estimated Efficiency Savings
I-90 - Unbonded Concrete Overlay/ Bituminous M+O (55 miles Total)	\$2,810,000
I-35 - SB Unbonded Concrete Overlay (14 miles), Drainage and Guardrail	\$2,118,000
Hwy 610 - Construct 4 Lane Freeway (2.5 miles), 9 Bridges and 3 Interchanges	\$12,689,000
Hwy 10 - Unbonded Concrete Overlay (2 miles)	\$4,721,000
Hwy 14 - Mill and Overlay (16 miles), Culverts, ramps, and Turn Lanes	\$335,000
I-90 WB - Unbonded Concrete Overlay (12.2 miles), Br 85817, Culverts	\$2,342,000
Hwy 14 - 2 to 4 lane Expansion and Nicollet Bypass (9 miles)	\$4,500,000
I-494 from I-394 to the Fish Lake interchange	\$1,740,000
Hwy 32 - Thief River Falls Pavement Repair and Urban Reconstruction	\$130,000
Hwy 2 - Installation of Passing Lanes and Turn Lanes Cass Lake to Ball Club	\$329,000
Hwy 60 - Mountain Lake to Butterfield	\$385,000
Hwy 10/15 in St. Cloud Unbonded Concrete Overlay	\$605,000
Hwy 53 - South of Keyes Road to Crescent Drive in International Falls	\$150,000
Hwy 5 - Bridge 9300 over Mississippi River	\$50,000
I-35E - Unbonded Concrete Overlay	\$5,659,000
Hwy 43 - New Winona Bridge	\$925,000
Hwy 43 - Winona Bridge	\$790,000
Hwy 29 - 50th Avenue in Alexandria to County Road 28	\$2,918,000
Hwy 9 - Doran to Herman	\$850,000
Hwy 210 - Jay Cooke DB Fixed Price ER Project-Flood Damage Repair	\$1,180,000
Hwy 23 Bridge over Kingsbury Creek	\$320,000
Hwy 24 - Clearwater Bridge Replacement over Mississippi River	\$5,550,000
Hwy 100 - Eight Bridges	\$795,000
Hwy 75 Near Kent	\$7,750,000
Total	\$59,641,000

Table 4: Total Detailed Efficiency Savings for the State Road Construction program

Project	Total Estimated Efficiency Savings
I-90 - Unbonded Concrete Overlay/ Bituminous M+O (55 miles Total)	\$2,810,000
Pavement Design Methodology	\$750,000
Performance-based Practical Design	\$2,060,000
I-35 - SB Unbonded Concrete Overlay (14 miles), Drainage and Guardrail	\$2,118,000
Pavement Design Methodology	\$1,627,000
Performance-based Practical Design	\$44,000
Innovative Construction Staging	\$447,000
Hwy 610 -Construct 4 Lane Freeway (2.5 miles), 9 Bridges and 3 Interchanges	\$12,689,000
Value Engineering	\$4,377,000
ATCs	\$3,710,500
Pavement Design Methodology	\$430,000
Performance-based Practical Design	\$4,171,500
Hwy 10 - Unbonded Concrete Overlay (2 miles)	\$4,721,000
Value Engineering	\$4,021,000
Performance-based Practical Design	\$200,000
Innovative Construction Staging	\$500,000
Hwy 14 - Mill and Overlay (16 miles), Culverts, ramps, and Turn Lanes	\$335,000
Performance-based Practical Design	\$335,000
I-90 WB - Unbonded Concrete Overlay (12.2 miles), Br 85817, Culverts	\$2,342,000
Pavement Design Methodology	\$1,608,000
Performance-based Practical Design	\$226,000
Innovative Construction Staging	\$508,000
Hwy 14 - 2 to 4 lane Expansion and Nicollet Bypass (9 miles)	\$4,500,000
Pavement Design Methodology	\$1,500,000
Performance-based Practical Design	\$3,000,000
I-494 from I-394 to the Fish Lake interchange	\$1,740,000
Performance-based Practical Design	\$990,000
Innovative Construction Staging	\$750,000
Hwy 32 – Thief River Falls Pavement Repair and Urban Reconstruction	\$130,000
Performance-based Practical Design	\$80,000
Innovative Construction Staging	\$50,000
Hwy 2 - Installation of Passing Lanes and Turn Lanes Cass Lake to Ball Club	\$329,000
Performance-based Practical Design	\$329,000
Hwy 60 - Mountain Lake to Butterfield	\$385,000
Pavement Design Methodology	\$310,000
Innovative Construction Staging	\$75,000
Hwy 10/15 in St. Cloud Unbonded Concrete Overlay	\$605,000
Pavement Design Methodology	\$590,000
Innovative Construction Staging	\$15,000
Hwy 53 - South of Keyes Road to Crescent Drive in International Falls	\$150,000
Performance-based Practical Design	\$150,000

Table 4: Total Detailed Efficiency Savings for the State Road Construction program (continued)

Project	Total Estimated Efficiency Savings
Hwy 5 - Bridge 9300 over Mississippi River	\$50,000
Performance-based Practical Design	\$50,000
I-35E - Unbonded Concrete Overlay	\$5,659,000
Performance-based Practical Design	\$5,159,000
Innovative Construction Staging	\$500,000
Hwy 43 - New Winona Bridge	\$925,000
Performance-based Practical Design	\$925,000
Hwy 43 - Winona Bridge	\$790,000
Performance-based Practical Design	\$790,000
Hwy 29 - 50th Avenue in Alexandria to County Road 28	\$2,918,000
Value Engineering	\$1,200,000
Performance-based Practical Design	\$1,688,000
Innovative Construction Staging	\$30,000
Hwy 9 - Doran to Herman	\$850,000
Pavement Design Methodology	\$500,000
Performance-based Practical Design	\$350,000
Hwy 210 -Jay Cooke DB Fixed Price ER Project-Flood Damage Repair	\$1,180,000
Performance-based Practical Design	\$1,180,000
Hwy 23 Bridge over Kingsbury Creek	\$320,000
Performance-based Practical Design	\$320,000
Hwy 24 - Clearwater Bridge Replacement over Mississippi River	\$5,550,000
Value Engineering	\$350,000
Performance-based Practical Design	\$5,200,000
Hwy 100 - Eight Bridges	\$795,000
Performance-based Practical Design	\$795,000
Hwy 75 Near Kent	\$7,750,000
Performance-based Practical Design	\$7,750,000
TOTAL	\$59,641,000

Note: Two other projects were reviewed

Estimated savings identified in the analysis, led to costs that were lower than if the efficient strategies were not implemented. The estimated savings identified in FY 2015 were the product of decisions made throughout project development – often over the course of 4 years. It was not feasible to retroactively calculate where each estimated dollar was repurposed to. The agency is working to develop tracking software to better calculate the movement of funds during project development, but is not equipped to currently measure at that minute level of detail currently. Additionally, actions were evaluated once a project was selected for construction. Decisions being made before a project was selected to be built were deemed to be too abstract to determine causal relationships between actions and more efficient outcomes.

Pavement Design Methodology

In 2015, MnDOT began implementing a new pavement design strategy for its MnPAVE flexible pavement design. Based on findings from Minnesota's Cold Weather Pavement Testing facility, also known as MnROAD, concrete pavement depths were recalibrated to reduce concrete pavement thickness without sacrificing the life of the pavement. This new calibration allows MnDOT to resurface pavements with the thinnest layers possible while maintaining the service life and smooth ride expected. With the new Pavement Design Methodology, paving projects let in FY 2015 saved an estimated \$7.3 million.

Performance-based Practical Design

Performance-based design uses sophisticated analytical tools, flexible design criteria and a value-conscious approach to balance competing objectives, optimize return on investment, and increase local and system-level performance. It uses in-depth analysis and risk assessment to more closely scrutinize the use of funds and the effects on resources and communities. It focuses on building only what is needed while maintaining and improving safety. This is done by scoping projects to stay within the core purpose and need. By eliminating nonessential project design elements, the resulting project is lower cost and has improved return on investment. Through implementation of Performance-based Practical Design, projects let in FY 2015 saved an estimated \$35.8 million.

Innovative Construction Staging

MnDOT is working to reduce the need to purchase permanent and temporary property. These acquisitions can be costly. Acquiring property can be so costly that project managers are increasingly using innovate staging strategies to help reduce and mitigate MnDOT's project costs, including the manner in which property is purchased. Through implementation of Innovative Construction Staging, projects let in FY 2015 saved an estimated \$2.9 million.

Value Engineering

Value Engineering is a systematic method to improve the "value" of goods or products and services by using an examination of function. Value, as defined, is the ratio of function to cost. Value can therefore be increased by either improving the function or reducing the cost. Through implementation of Value Engineering practices, projects let in FY 2015 saved an estimated \$9.9 million.

Alternative Technical Concepts

Alternative Technical Concepts allow for innovation and flexibility during the bidding process. The ATC process allows design-build firms to propose "equal or better" alternatives to the project requirements during the bidding process. The process is used to allow innovation and flexibility in the design and/or construction of a particular element of the project. Through implementation of ATC, projects let in FY 2015 saved an estimated \$3.7 million.

Administration, Maintenance & Operations

Emerging strategies and business process improvements were evaluated at a program level. Specific actions were evaluated in comparison to the former approach. Only emerging strategies that began after the adoption of the Chapter 152 program in 2008 were evaluated. An interdisciplinary team of engineers, planners and performance measurement staff evaluated these emerging strategies. They

evaluated new approaches being taken, compared them to former processes, and determined if a link existed between the new approach and a more efficient outcome. Efficiencies were analyzed for cost savings by calculating the present value of the approach being taken inclusive of the upfront costs and ongoing cost savings. The costs and savings were then distributed over the life cycle of the new approach (Five to 10 years depending on the program type). Summaries of the areas reviewed are listed in the following table.

Table 5: Total Efficiency Savings for the Administration, Maintenance and Operations

Program	Total Estimated Efficiency Savings (Annualized savings inclusive of costs)
Automated Flagger Assistance Devices (AFAD)	\$13,000
Dynamic Message Sign Defrosters (DMSD)	\$120,000
LED Ramp Meters	\$1,900,000
LED Roadway Lighting	\$65,000
Maintenance Decision Support System (MDSS)	\$380,000
MnPASS Contracting	\$200,000
MnSTEP	\$130,000
Portable Signs	\$100,000
Tow Plows	\$490,000
Printing Business Practices	\$89,000
TOTAL	\$3,487,000

Efficiencies identified in FY 2015 led to administrative, maintenance and operations costs that were lower than if the efficient strategies were not implemented. Staff time savings were reallocated to administrative, maintenance and operational priorities. Capital savings such as snow plow purchases avoided through the use of tow plows allowed MnDOT to reinvest in needed capital priorities.

Automatic Flagger Assistance Devices

Automated Flagger Assistance Devices are portable traffic control devices used by flagging personnel instead of traditional flagging equipment. The deployment of AFADs increases safety and efficiency of flagging operations. Efficiencies are realized through the reduction of personnel needed for flagging operations. For example, where a traditional flagging operation requires four people, a flagging operation using AFADs may require only one or two people. The reduction in personnel required for flagging allows for reassignment of people to other aspects of the scheduled work, resulting in quicker turn around and faster project completion. Including all associated costs to implement this program, MnDOT is saving an estimated \$13,000 a year by using AFADs.

Dynamic Message Sign Defrosters

Dynamic Message Signs were originally designed with defrosters because of the potential for frost and condensation to cause problems with the previous generation of electronics and reduce the readability of the displays. Metro Freeway Operations staff analyzed the cost of electricity for using the defrosters, contacted sign manufacturers for recommendations based on experience with deployments in similar climates and conducted tests on a limited number of the DMS. The results

showed DMS would operate well without any long term maintenance impacts without using the defrosters. Including all associated costs to implement, MnDOT is saving an estimated \$120,000 a year.

LED Ramp Meters

The installation of low-maintenance LED bulbs on Twin Cities ramp meters reduced electricity usage and freed staff to do other preventative maintenance work. MnDOT replaced all incandescent bulbs in its 430 ramp meter signal locations with longer service life and higher efficiency LED bulbs. Each ramp meter location has a total of 12 individual bulbs. There is an initial cost outlay for the LED installations, but the savings in electrical utility cost and elimination of the need to replace bulbs over the service life of the ramp metering infrastructure is greatly offset. Including all associated costs to implement, MnDOT is saving an estimated \$1.9 million a year through the use of LEDs on ramp meters.

MDSS

The Maintenance Decision Support System, Mobile Data Computers and Automated Vehicle Location are the three technologies that together provide critical information about real-time weather and pavement condition for the most efficient distribution of drivers and equipment for roadway maintenance. The most useful application of MDSS is during snow and ice clearance. The MDSS assists drivers with determining the correct amount of material to apply to the roadway surface, which is usually significantly less than most plow drivers would normally apply. In addition to minimizing environmental impacts of salt and chemical usage, the MDSS also presents significant financial savings for the department. Including all associated costs to implement, the potential for savings is an estimated \$3.8 million a year on this new business approach. Due to external circumstances the system was not completely utilized in FY 2015. The department was able to use some of the algorithms with the savings during that time estimated to be \$380,000. MDSS is now in full use for FY 2016.

MnPASS System

The MnPASS system was an innovative conversion of an existing High Occupancy Vehicle lane with a first of its kind dynamic pricing component. This system carefully regulates the number of paying single occupant vehicles within these lanes. Including all associated costs to implement, MnDOT is saving an estimated \$200,000 a year compared to using an old system on this new business process.

Portable Signals

Portable Signal Systems are traffic control devices used instead of traditional flagging personnel and equipment. Efficiencies are realized through elimination of personnel needed for flagging traffic through the work area. The reduction in personnel required for flagging allows for reassignment of people to other projects, resulting in quicker turn around and faster project completion. Including all associated costs to implement, MnDOT is saving an estimated \$100,000 a year on this new business process.

Tow Plows

The operational gap of snow plow trucks needed to deliver snow and ice removal services versus the number of snow plow trucks available in the fleet is partially addressed by the deployment of an existing tandem axle truck outfitted with an unmanned tow plow. It is a 26-foot plow that is mounted on a trailer pulled by a tandem axle snow plow truck. With a pull of a lever by the truck operator, the plow moves to the right side of the truck. It has the capability to clear a path in excess of 24 feet wide. Including all associated costs to implement, MnDOT is saving an estimated \$490,000 a year on this new tool.

Printing Business Practices

Printing materials and documents represent a large cost category within the administrative areas of the organization. Beginning in FY 2011 three strategies were implemented to reduce overall printing costs. Administrative documents are now being signed & processed electronically, document transfer is now done electronically and printers are defaulted to duplex and black and white printing. Including all associated costs to implement, MnDOT is saving an estimated \$89,000 a year using these new business processes.

Appendix A: Products and Services Summary List and Descriptions

2015 Products and Services Framework

Program	
Budget Activity	Product and Service
Multimodal Systems	
Aeronautics	Airports Aviation Safety Operations and Regulation
Freight	Commercial Truck and Bus Safety Freight Rail Improvements Freight System Planning Port Improvements Rail Crossing Safety
Passenger Rail	Intercity Passenger Rail Improvement
Transit	Bicycle and Pedestrian Planning and Grants Light and Commuter Rail Transit Planning and Grants
State Roads	
Trunk Highway Program Planning and Delivery	Develop Highway Improvement Projects Highway Construction Management Oversight Plan Highway System Research and Development
Trunk Highway State Road Construction	Other Trunk Highway System Improvements Trunk Highway System Expansion Trunk Highway System Preservation
Trunk Highway Debt Service	Trunk Highway Debt Service
Trunk Highway Operations and Maintenance	Bridges and Structures Inspection and Maintenance Roadside and Auxiliary Infrastructure Snow and Ice System Roadway Structures Maintenance Traffic Devices Operation and Maintenance
Statewide Radio Communications	Radio Towers and Communications
Local Roads	
County State Aid Roads	County State Aid Highway
Municipal State Aid Roads	Municipal State Aid Highway

Note: External partner support can be used by any office and any budget activity.

Products and services descriptions

Aeronautics

Airports: Funding and administering airport grants, assisting local units of government, and installing and operating navigational aids.

Aviation Safety Operations and Regulation: Protecting aviation users, promoting aeronautics safety and developing aviation policies and regulations in Minnesota.

Freight

Commercial Truck and Bus Safety: Issuing appropriate registrations, certificates, and permits; conducting audits, reviews and safety inspections; and providing information, education and technical assistance related to commercial motor carriers.

Freight Rail Improvements: Funding provided to regional railroad authorities, railroads and shippers to improve rail facilities through the Minnesota Rail Service Improvement program. This includes developing related agreements and administering related grants and loans from other funding sources.

Freight System Planning: Developing plans and information to support an integrated system of freight transportation in Minnesota, including statewide plans related to freight, rail and ports and waterways.

Port Improvements: Funding provided to public port authorities through the Port Development Assistance Program. This includes developing related agreements and administering related grants and loans.

Rail Crossing Safety: Identifying and developing safety improvements at railroad grade crossings: coordinating rail crossing safety and rail regulatory activities and monitoring functions of railroad track and structures.

Passenger Rail

Intercity Passenger Rail Improvement: Activities and grants related to high speed and intercity rail. Includes system planning; project scoping; environmental documents; public hearings; preliminary engineering; final design; rolling stock procurement; acquisitions (including right of way); construction; field inspections; negotiating with the railroads; developing financial, project management and operating plans; value engineering; entering into cost sharing agreements with other public and private entities; carrying out the provisions of the High Speed Rail Compact on behalf of the state; and other technical activities.

Transit

Light and Commuter Rail: All work and grants related to light rail transit, including planning, project scoping, environmental documents, public hearings, preliminary engineering, value engineering, final design, acquisitions (including right of way), construction, field inspection and other technical activities.

Bicycle and Pedestrian Planning and Grants: Developing and implementing the Statewide Bicycle System Plan, Pedestrian System Plan, State Bikeway Route development, State Bicycle Map, bicycle and pedestrian design guidance and program administration. Administering Safe Routes to School grant programs and managing the ABC Ramps.

Transit Planning and Grants: Developing and implementing the Greater Minnesota Transit Investment Plan and other planning activities. This includes programming and administering grants funded by the Federal Transit Administration and state appropriations.

Trunk Highway Program Planning & Delivery

Highway Construction Management Oversight: Managing or monitoring the overall progress of a state highway project through completion of construction and final project documentation. Includes early project coordination to address project specific or procurement method requirements and constraints. Work primarily includes field inspections, oversight, quality management, testing, project scheduling, and monitoring for compliance with the schedule and specifications. Work also involves managing and advising appropriate implementation of State Road Construction and federal funding allocations including fiscal management, financial tracking and regulatory conformity.

Develop Highway Improvement Projects: Managing or monitoring the overall progress of a state highway project from project initiation through completion of the project delivery package for procurement and letting. This includes ongoing project coordination as needed to address project specifics and procurement method requirements and constraints; activity coordination to ensure delivery of projects using appropriate scheduling and monitoring tools to ensure efficient delivery on time and within budget; managing and advising appropriate implementation of State Road Construction and federal funding allocations including fiscal management, financial tracking and regulatory conformity. This encompasses all direct and supporting activities necessary for preparing the contract documents and supporting documentation for construction contract procurement and as needed to support the procurement process. The time frame usually begins once a project is identified and ends prior to letting, but can extend into the construction time frame.

Research and Development: Administering and monitoring MnDOT's research program. Guiding policy decisions by developing, refining and testing methods for best practices and by using appropriate economic, demographic and labor market analysis. Providing strategic direction and establishing outcomes and performance measures for MnDOT's research program. Fostering the exchange of technical information and providing access to results of external and internal research.

Plan Highway System: Managing and integrating current data and best practices for multi-modal policy formation and investment packaging; coordinating transportation system plans and policies with other government entities; preparing updates of the statewide plan; applying long-range statewide transportation policies and performance measures at the district level to guide district transportation project/investment decisions both within the district and in regional and inter-regional corridors which may cross district lines; using mobility performance targets to monitor corridor performance, identify problem areas, and assess where additional management and/or investments are needed to improve under-performing areas. This includes the technical assistance provided to districts and local partners by MnDOT's Central Office.

Trunk Highway State Road Construction

Trunk Highway System Expansion: Hard construction dollars used for expansion on roads and bridges shoulder to shoulder.

Other Trunk Highway System Improvements: Hard construction dollars used for stand-alone projects outside of the highway shoulder, including intelligent transportation systems.

Trunk Highway System Preservation: Hard construction dollars used for preservation of roads and bridges shoulder to shoulder.

Trunk Highway Debt Service

Trunk Highway Debt Service: Repayment of bond debt.

Trunk Highway Operations and Maintenance

Bridges and Structures Inspection and Maintenance: Inspecting, maintaining and operating bridges and structures (bridges, box culverts and overhead sign structures). Conducting bridge inspections, providing inspection training, monitoring and certification; maintaining and repairing bridges; inspecting, maintaining and repairing non-bridge structures such as earth retaining systems (retaining walls), noise walls, tower lighting, roadway lighting, and traffic signal systems.

Roadside and Auxiliary Infrastructure: Maintaining rest areas, fixed scale sites, roadside erosion, vegetation, mowing, and regulatory functions such as land management permits, encroachments, noxious weed control, MS4, etc.

Snow and Ice: All work related to keeping the roads clear of snow and ice. Major activities include winter stockpiling, setup and transfer of de-icing materials, plowing and sanding, preparing, inspecting and cleaning equipment, installing snow fences, and post storm cleanup.

Traffic Devices Operation and Maintenance: Inspecting maintaining, operating and managing the highway traffic safety system through signal timing, freeway management/operations, speed zoning, signals, signing, lighting, guardrail, cable median barrier, crash attenuators, pavement markings, traffic management systems (i.e. ramp meters, cameras), and other activities and devices.

System Roadway Structures Maintenance: Inspecting, maintaining and operating the state highway system roadway structures, including pavement, shoulders and drainage.

Statewide Radio Communications

Radio Towers and Communications: Making major wireless or electronic systems upgrades or improvements; providing a shared public safety radio system among state agencies; deploying electronic and wireless communications systems at regional Transportation Operations Communications Centers, maintaining wireless two-way radio communications systems, towers, and electronic equipment.

County State Aid Roads

County State Aid Highway: Distributing and administering construction and maintenance funds to counties for eligible roads and bridges.

Municipal State Aid Roads

Municipal State Aid Highway: Distributing and administering construction and maintenance funds to cities with a population greater than 5,000 for eligible roads and bridges.

External Partner Support

External Partner Support (can occur in any of the products and services): Used for dedicated appropriations, including agreements and partnerships. These services are for outside partners, such as cities, counties, other agencies, states, countries or other governmental entities. This can be used by any program or budget activity.

Appendix B: Glossary of Terms

The glossary of terms provides definitions of specific terms used in this report.

Area Transportation Partnership: An ATP is a group of traditional and non-traditional transportation partners including representatives from MnDOT, Metropolitan Planning Organizations, Regional Development Commissions, counties, cities, tribal governments, special interests, and the public that have the responsibility of developing a regional transportation improvement program for their area of the state.

The ATP process was introduced in the early 1990s to ensure stakeholder participation in the investment of federal transportation funding. The ATP process provides for early and continuous involvement in the development of the State Transportation Improvement Plan a four year list of projects that are expected to be done within that timeframe.

Construction cost index: The Minnesota construction cost index is an indicator of price trends for highway construction. It is composed of six indicator items: roadway excavation, to indicate the price trends for all roadway excavation; concrete pavement and plant-mixed bituminous, to indicate the price trend for all surfacing types; and reinforcing steel, structural steel, and structural concrete, to indicate the price trend for structures.

Cost - Indirect: Indirect costs are those costs that cannot be directly tied to a specific output, e.g. depreciation, routine building maintenance, and other administrative and support costs. Indirect costs are frequently referred to as “the cost to keep the lights on.”

Cost - Direct: Direct costs occur when expenditures are tied directly to a project number that can be tracked to a customer deliverable. That is, dollars which buy products and/or services delivered directly to the traveling public.

District Risk Management Program: Focuses funding on all non-National Highway System highway needs on all state highways. The majority of the program supports pavement and bridge rehabilitation or replacement projects. The DRMP project selection process is structured to give districts the flexibility to address their greatest regional and local risks. Districts are also able to make additional investments on the NHS system if the proposed project is in response to a high risk issue.

Effectiveness: Performance measure focused on achieving the end goal and takes into consideration any variables that may change in the future. Effectiveness encourages innovation as it demands innovation to meet desired goal(s).

Efficiency: Efficiency is often confused with effectiveness as the output to input ratio and focuses on getting the maximum output with minimum resources and still meet effectiveness measures. Efficiency focuses on doing things right and demands documentation and repetition. An efficiency is a deliberate decision or business process improvement that provides cost savings without compromising the quality of outcomes to the state of Minnesota.

Inflation factor: For unit cost growth across all operations and maintenance activities, MnDOT is using a 3 percent inflation factor based on historical data. It incorporates labor compensation rates as well as pricing for major commodity materials and services, such as fuel, asphalt, utilities, and salt. A 2 percent inflation factor is used when the bulk of the costs are labor, based on historical MnDOT labor costs.

Internal Efficiency Savings: Internal efficiencies are essentially all the ways MnDOT maximizes the use of financial resources, such as through deliberate decisions and business processes that allow MnDOT to directly save money, avoid costs, or provide a higher quality outcome. Efficiencies that provide cost savings and cost avoidance are pursued as long as they do not compromise the organization's legal requirements or the quality of the final product delivered.

Metropolitan Planning Organization: A metropolitan planning organization is a federally mandated and federally funded transportation policy-making organization in the United States that is made up of representatives from local government and governmental transportation authorities.

MPOs, representing local governments and working in coordination with state departments of transportation and major providers of transportation services, have responsibility for the regional transportation planning processes in urbanized areas. A core function of MPOs is to establish and manage a fair and impartial setting for effective transportation decision making in an urbanized area.⁹

Minnesota GO: The Minnesota Department of Transportation’s 50-year vision to better align the transportation system with what Minnesotans expect for their quality of life, economy and natural environment. The vision focuses on an understanding that transportation is a means to other ends, not an end in itself. It also recognizes that infrastructure is only one of many elements necessary to achieving a high quality of life, a competitive economy and a healthy environment.

This 50-year vision for transportation requires consistency and collaboration across jurisdictions and sectors. Although MnDOT initiated the effort to develop the vision, this is a vision for all forms of transportation, and ownership of the vision is a shared responsibility.

Minnesota’s multimodal transportation system maximizes the health of people, the environment and our economy. The system:

- Connects Minnesota’s primary assets—the people, natural resources and businesses within the state—to each other and to markets and resources outside the state and country
- Provides safe, convenient, efficient and effective movement of people and goods
- Is flexible and nimble enough to adapt to changes in society, technology, the environment and the economy

Quality of Life	Environmental Health	Economic Competitiveness
Recognizes and respects the importance, significance and context of place – not just as destinations, but also where people live, work, learn, play, and access services Is accessible regardless of socio-economic status or individual ability.	Is designed in such a way that it enhances the community around it and is compatible with natural systems. Minimizes resource use and pollution.	Enhances and supports Minnesota’s role in a globally competitive economy as well as the international significance and connections of Minnesota’s trade centers Attracts human and financial capital to the state.

⁹ {[United States Government Accountability Office \(GAO\) Report-GAO-09-868, entitled, “Metropolitan Planning Organizations: Options Exist to Enhance Transportation Planning Capacity and Federal Oversight”](#). September 2009. Pages 3-4.}

[Minnesota State Highway Investment Plan](#): The 20-Year Minnesota State Highway Investment Plan 2014-2033 supports the guiding principles from the Minnesota GO vision and links the policies and strategies laid out in the [Statewide Multimodal Transportation Plan](#) to improvements on the [state highway system](#).

National Highway System: The National Highway System consists of roadways important to the nation's economy, defense, and mobility, and was developed by the Department of Transportation in cooperation with the states, local officials, and metropolitan planning organizations. The NHS includes the following subsystems of roadways (a specific highway route may be on more than one subsystem):

Interstate - The Eisenhower Interstate System of highways retains its separate identity within the NHS.

Other Principal Arterials - These are highways in rural and urban areas which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.

Strategic Highway Network - This is a network of highways which are important to the United States' strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes.

Major Strategic Highway Network Connectors - These are highways that provide access between major military installations and highways that are part of the Strategic Highway Network.

Intermodal Connectors - These highways provide access between major intermodal facilities and the other four subsystems making up the National Highway System

Performance measures: Quantifiable indicators used to assess how well, or how effectively, an organization is achieving its desired objectives. Much of the time results are compared against established targets to determine if improvement is needed.

Productivity: The measure of production or output per unit, not necessarily measure in monetary terms.

Project full cost: Actual transaction amounts plus applied overhead cost rates established by MnDOT based on the previous year's activity.

Regional Community Improvement Priority: Regional Community Improvement Priorities are investments that respond to regional concerns and collaboration opportunities, beyond system performance needs, in order to support economic competitiveness and quality of life in Minnesota. While these investments may improve highway performance, they do not constitute an improvement necessary to meet MnDOT's system-wide performance targets.

[Statewide Multimodal Transportation Plan](#): As the Statewide Multimodal Transportation Plan, this document is reflective of Minnesotans' voices, as expressed throughout this intensive engagement and review process. The content is strategically organized into chapters that address the most pertinent questions facing Minnesota's transportation system. The result is a transportation policy framework for all Minnesota partners and transportation modes for the next 20 years. The plan will focus on multimodal solutions that ensure a high return-on-investment while considering the context of place and how land use and transportation systems should be better integrated.

State Transportation Improvement Plan: The State Transportation Improvement Program is Minnesota's four year transportation improvement program. The STIP identifies the schedule and funding of transportation projects by state fiscal year (July 1 through June 30). It includes all state and local transportation projects with federal highway and/or federal transit funding along with 100 percent state funded transportation projects. Rail, port and aeronautic projects are included for information purposes. The STIP is developed/updated on an annual basis.

Statewide Performance Program: The statewide planning process establishes a cooperative, continuous and comprehensive framework for making transportation investment decisions throughout the state. Oversight of the process is a joint responsibility of the Federal Highway Administration and the Federal Transit Administration.

Performance-Based Planning

- The statewide planning process will establish and use a performance-based approach to transportation decision making to support the national goals (MAP-21 [23 USC §150](#); [Fact Sheet on Performance Management, National performance goals](#)).
- Each state will establish performance targets that address the performance measures, where applicable, to use in tracking progress toward attainment of critical outcomes for the state.
- The state will select performance targets in coordination with the relevant Metropolitan Planning Organizations to ensure consistency, to the maximum extent practicable.
- In urbanized areas not represented by a MPO, the state will select performance targets in coordination with the providers of public transportation, to the maximum extent practicable, to ensure consistency with sections 5326(c) and 5329(d) of title 49.
- States will integrate into the statewide transportation planning process other performance-based plans and processes

Trend analysis: The practice of collecting information and developing a pattern or trend in the information. In project management, trend analysis technique uses historical results to predict future outcome.

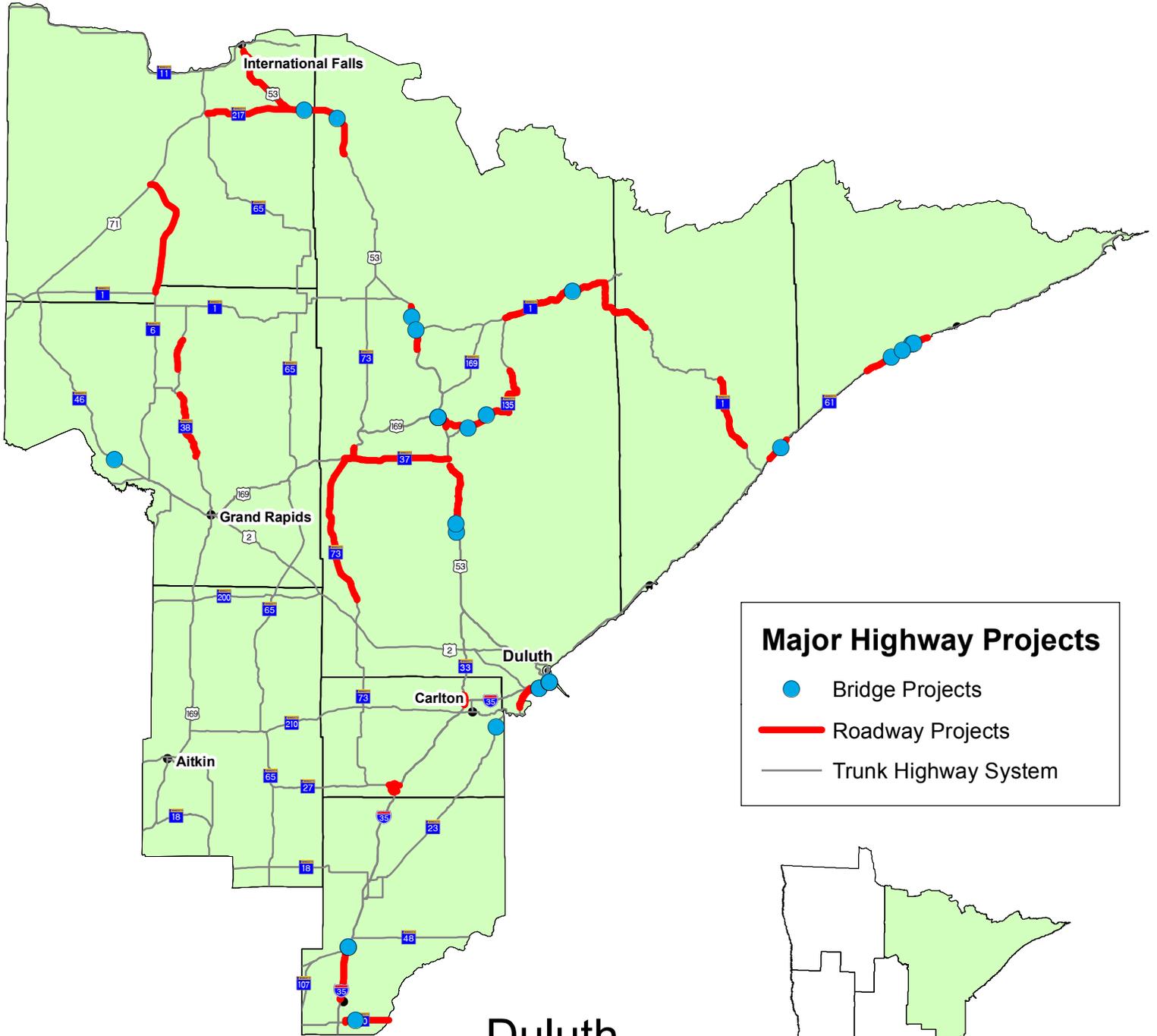
Appendix C: Major Highway Project Summaries

Appendix C: Major Highway Project Summaries



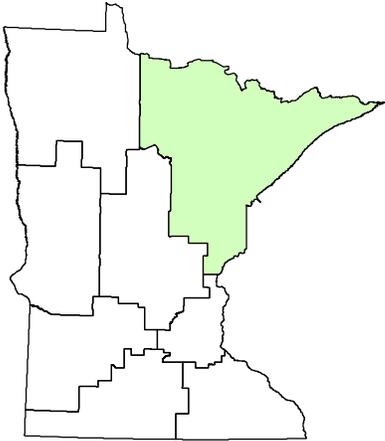
Major Highway Projects 2015

District 1



Major Highway Projects

- Bridge Projects
- Roadway Projects
- Trunk Highway System



Duluth

District Project Summary

District 1

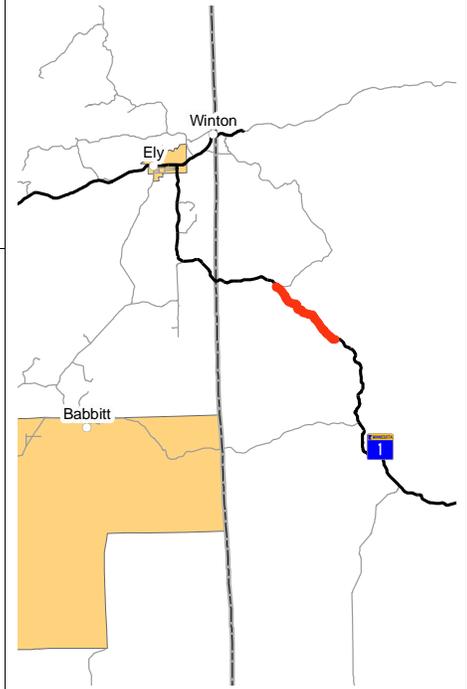
Route	State Project #	Project Location	Page
Hwy 1	3801-92	Located about a half mile north of the Kawishiwi River on Hwy 1 for 5 miles; and, another segment for 14 miles on Hwy 1 from one mile south of CR 2 to Isabella	A 2
Hwy 1	6904-46	Six Mile Lake Road to Bradach Road in St. Louis County	A 3
Hwy 1	6904-49	Tower to Ely	A 4
Hwy 1	3803-34	From Isabella and National Forest Rd. to Salverson Rd.	A 5
Hwy 2	6937-69100D	Bong Bridge over Saint Louis River	A 6
Hwy 6	3603-14	On Hwy 6 from just north of Hwy 1 to Big Falls	A 7
Hwy 23	6910-96	In Duluth From Becks Road to 84th Avenue West	A 8
Hwy 23	0901-67	Hwy 23 near intersection with County Road 18	A 9
Hwy 23	6910-89	I-35 to Becks Road	A 10
Hwys 27, 73 & 289	8821-200	Moose Lake Area	A 11
Hwy 33	0905-53	I-35 to 1.4 miles north in Cloquet	A 12
Hwy 37	6947-50	From Highway 169 in Hibbing to Highway 53	A 13
Hwy 38	3108-70	County Road 19 to the City of Marcell	A 14
Hwy 38 & Hwy 286	3108-76	On Hwy 38 from Horseshoe Lake Rd to Bigfork and on Hwy 286 from Hwy 6 to Marcell	A 15
Hwy 53	6918-86	Between Eveleth and Virginia, relocate Hwy 53 away from United Taconite Operations	A 16
Hwy 53	6917-142	On Hwy 53 south of the Hwy 37/Lion Spring area, from the Peat Plant Road to County Road 690.	A 17
Hwy 53	6917-141	Southbound from the Paleface River to Augusta Lake Rd	A 18
Hwy 53	6920-48	CR 652 (Goodell Road) to the southern limits of Cook	A 19
Hwy 53	3608-49	From Keyes Rd to Crescent Dr in International Falls	A 20
Hwy 61	3808-35	North of Hwy 1 to south of township road 81 (Little Marais area)	A 21
Hwy 61	1602-49	South of County Road 5 to north of County Road 7	A 22
Hwy 70	5811-12	East of Hwy 361 to the Minnesota/Wisconsin state line	A 23
Hwy 73	6928-28	Various locations on Highway 73 and Highway 2 that include the City of Cromwell and the City of Floodwood	A 24
Hwy 135	6912-77	From Hwy 53 to just south of County Road 558	A 25
Hwy 169	3116-142	County Road 15 to County Road 7	A 26
Hwy 169	6934-116	In Hibbing, from the intersection of Hwy 73 to east of County Road 5.	A 27
Hwy 169	6935-89	In Virginia from County Road 109 to Hoover Rd	A 28
Hwy 217	3614-20	Little Fork to Hwy 53	A 29
I-35	5880-180	North of Pine County Rd 33 to south of the Carlton County line	A 30
I-35	5880-186	Replace two bridges on I-35 over the BNSF railroad south of Hwy 48	A 31
I-35	5880-191	South of County Road 11 to 1 mile south of Hinckley	A 32
I-535	6981-9030L	On the I-535 Blatnik Bridge over the St. Louis River between Duluth, MN and Superior, WI.	A 33

PROJECT SUMMARY

Hwy 1

Located about a half mile north of the Kawishiwi River on Hwy 1 for 5 miles; and, another segment for 14 miles on Hwy 1 from one mile south of CR 2 to Isabella

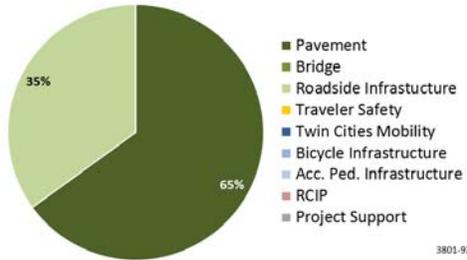
State Project No. 3801-92



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



3801-92

Project Description:

The northerly project segment is 5 miles long and located south of the Kawishiwi River. The southerly project segment is 14 miles long and located between Lake County Road 2 and Isabella. The work for both projects includes bituminous resurfacing, drainage improvements and the removal of rock outcroppings in some areas.

Recent Changes and Updates

The project is programmed for construction in 2016. A large portion of the project is located in the Superior National Forest. In this area, MnDOT does not own any highway right-of-way; so, easements will need to be obtained from the Superior National Forest and permanent right-of-way from a number of private land owners.

Project History:

The north project segment was initially planned to be reconstructed, however, funding for reconstruction is no longer available. This segment will now be resurfaced along with drainage improvements and the removal of rock outcroppings in some areas.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.6	\$ 5.7
Other Construction Elements:	\$ 0.4	\$ 0.5
Engineering:	\$ 1.4	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.4	\$ 7.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate was prepared in February of 2014. It includes the cost for pavement resurfacing and drainage improvements. The cost has been reduced as project scoping has progressed, which showed the need for fewer drainage improvements.

Project Risks:

A substantial amount of culvert replacement work is required. There may be challenges in obtaining highway easements from the Superior National Forest due to federal environmental/NEPA processes.

There is potential for sulfides to exist in the rock outcroppings. If encountered, it could require avoidance or mitigation due to acid drainage runoff.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 02/27/2012
 Current Letting Date: 2/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/15/2015

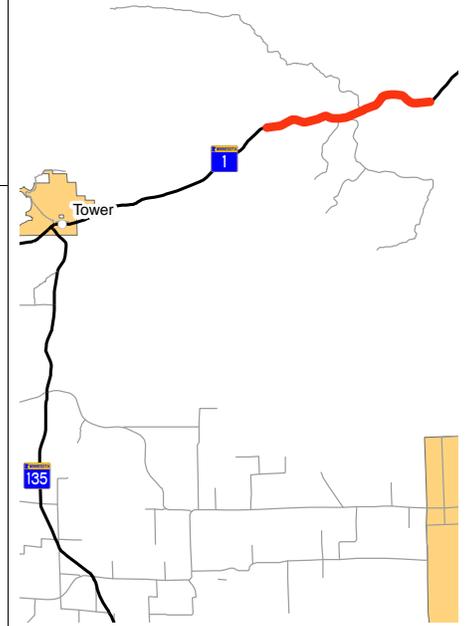
PROJECT SUMMARY

Hwy 1

Six Mile Lake Road to Bradach Road in St. Louis County

State Project No. 6904-46

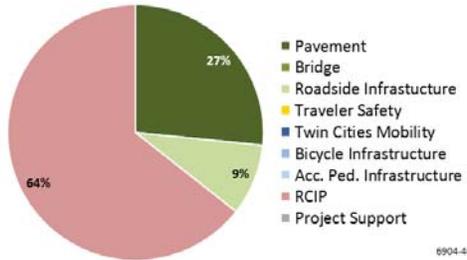
<http://www.dot.state.mn.us/d1/projects/Hwy169eagles>



Primary Purpose:

Regional & community improvement priority

Investment Category:



Project Description:

Reconstruction of Six Mile Lake Road to Bradach Road in the Eagles Nest Lake Area.

Recent Changes and Updates

Awaiting analysis/documentation from Federal Highway Administration and from the US Fish and Wildlife Service regarding the threatened species of the Northern Long-Eared Bat. Also, rock exploration is currently underway to further evaluate the sulfide potential in the proposed rock excavation. This work is being completed in an effort to reduce the amount of risk encountered during construction. Project design is continuing and on schedule for delivery in July 2016.

Project History:

Because of concerns with Hwy 169 between Virginia and Winton, a task force formed.

The Hwy 1/169 segment from Six Mile Lake Road to Clear Lake was recommended by the task force as a priority for reconstruction. \$18.4 million in federal funds is provided in SAFETEA-LU for highway improvements. Ultimately, it was decided that less money would be spent in the Thirteen Hills Area and more would be spent in the Eagles Nest Area.

In May 2013 the letting date was changed to July 2016.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2007

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.5	\$ 18.7
Other Construction Elements:	\$ 0.5	\$ 1.4
Engineering:	\$ 2.2	\$ 5.0
Right of Way:	\$ 1.2	\$ 1.2
Total:	\$ 14.4	\$ 25.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate was based on the premise that equal amounts of money would be spent in two priority areas-the Eagles Nest Lake Area and the Thirteen Hills Area. The current construction letting estimate is based on the total amount of FHWA High Priority Project funds available for this project after constructing the Thirteen Hills Area project and after letting a project to clear the trees in advance of this project. A separate tree clearing contract is needed in order to protect the Northern Long Eared Bat.

Project Risks:

Private property impacts include: environmental concerns surrounding the Northern Long Eared Bat habitat, wetlands and potential acid drainage runoff associated with sulfides in the rock. Other impacts include the use of Federal High Priority Project funds, and the relatively low traffic volume coupled with high construction costs.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: 06/1/2015
 Original Letting Date: 12/17/2010
 Current Letting Date: 07/22/2016
 Construction Season: 2016/2017
 Estimated Substantial Completion: Fall 2017



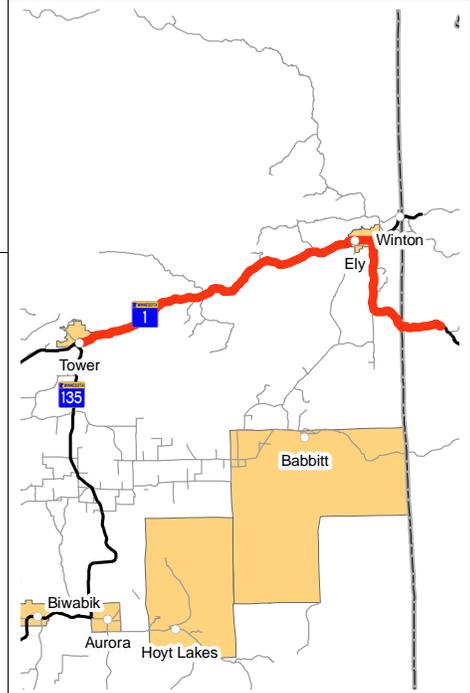
Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/15/2015

PROJECT SUMMARY

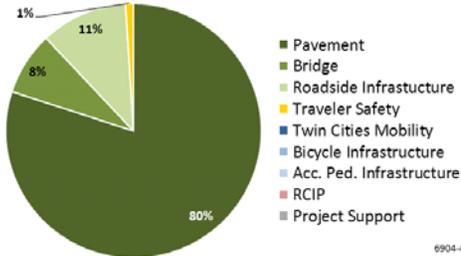
Hwy 1
Tower to Ely
Bridge 69X14
State Project No. 6904-49
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

Pavement resurfacing for 26 miles of Hwy 1 located in three separate segments:
1) Tower to Six Mile Lake Road
2) Bradach Road to Ely
3) Ely to Halfway Road

Recent Changes and Updates

The project was substantially complete in July of 2014.

Project History:

This two-lane roadway has deteriorating pavement resulting in a rough ride, high maintenance costs and reduced load carrying capacity. Previous pavement repairs included bituminous overlays in 1989 and 1992 and spot repairs in 2001. The project construction started in 2013. The final bituminous pavement was completed in the summer of 2014 on the segment west of Ely as well as all work south of Ely.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.3	\$ 7.1
Other Construction Elements:	\$ 0.5	\$ 0.2
Engineering:	\$ 2.0	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 11.8	\$ 7.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project was let in June of 2013. The current estimate is based on actual costs to date. The hydraulic needs were less than originally anticipated and the bituminous bid prices were much lower than anticipated.

Project Risks:

The project is complete. There are no remaining risks.

Schedule:

Environmental Approval Date: 04/23/2013
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 03/22/2013
Current Letting Date: 06/07/2013
Construction Season: 2013/2014
Estimated Substantial Completion: Summer 2014



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

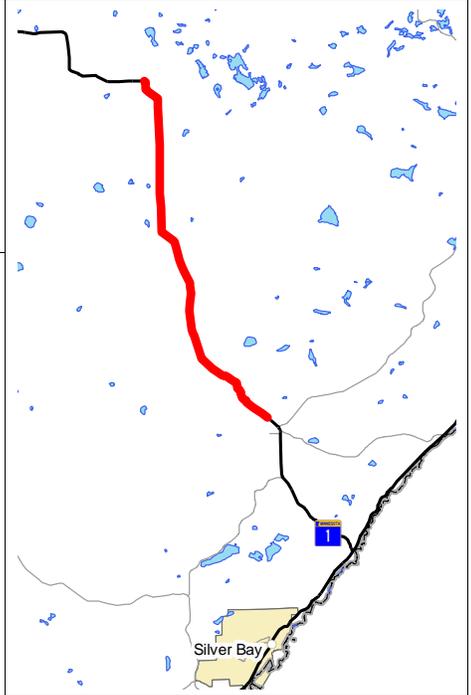
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 1

From Isabella and National Forest Rd. to Salverson Rd.

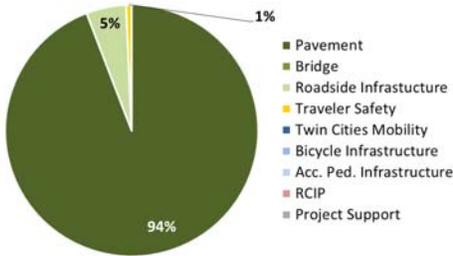
State Project No. 3803-34



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

On Hwy 1 from Isabella to Salverson Road, for a total length of 15.2 miles. The project will include resurfacing, frost heave correction and minor drainage repair.

Recent Changes and Updates

This project is new to the report.

Project History:

The project is new in the report.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 4.6
Other Construction Elements:	\$ 0.3	\$ 0.4
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.1	\$ 5.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current cost estimate was prepared in August of 2015. The estimate includes costs for pavement resurfacing with some short areas of reconstruction. The cost change is based on a reduced need for reconstruction.

Project Risks:

The amount of pavement that will require reconstruction is not known.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 01/01/2019
 Current Letting Date: 01/25/2019
 Construction Season: 2019
 Estimated Substantial Completion: 2019



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Roberta Dwyer

Revised Date: 12/15/2015

PROJECT SUMMARY

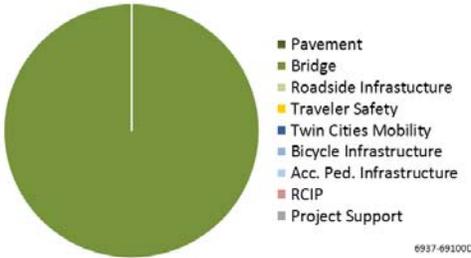
Hwy 2
Bong Bridge over Saint Louis River
Bridge 69100
State Project No. 6937-69100D



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project is for the rehabilitation of Bridge 69100, which carries Hwy 2 over the St. Louis River. This is a joint project of the Minnesota and Wisconsin Departments of Transportation. The work includes bridge deck replacement, joint replacement, spot concrete repairs, support cable work and painting.

Recent Changes and Updates

The Wisconsin Department of Transportation is the lead agency on this project. This project was let in January 2014. The Minnesota bound work was completed in the fall of 2014 and the Wisconsin bound work is currently under construction.

Project History:

The Hwy 2 Bong Bridge over the St. Louis River between Duluth and Superior was built in 1982. This is a fracture critical bridge.

The proposed rehabilitation work will extend the useful service life of this bridge and decrease the amount of future maintenance needed to keep it operational.

Work planned for Bridges 69101, 69102 and 69109 was removed from this project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.2	\$ 7.0
Other Construction Elements:	\$ 1.0	\$ 0.5
Engineering:	\$ 4.7	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 28.9	\$ 8.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline cost includes the cost of both WisDOT's and MnDOT's share. The project was let in January of 2014. The current estimate is based on actual bid costs and includes only MnDOT's share of the costs for bridge.

Project Risks:

The project will result in inconveniences in the movement of traffic between the communities and requires ongoing attention throughout construction.

Schedule:

Environmental Approval Date: 06/26/2012
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 02/28/2004
 Current Letting Date: 01/14/2014
 Construction Season: 2014 & 2015
 Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

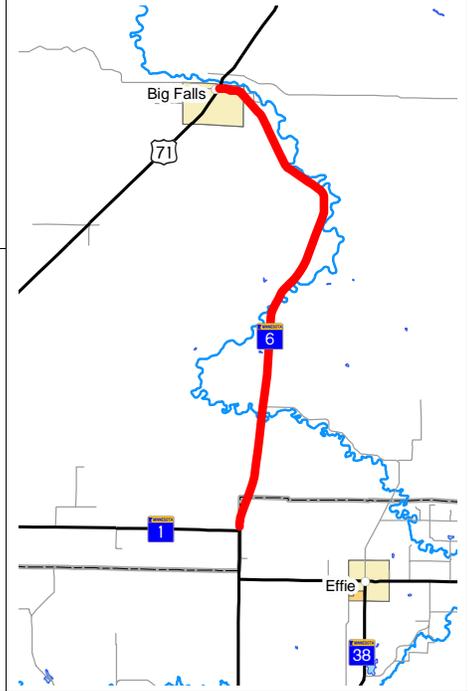
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 6

On Hwy 6 from just north of Hwy 1 to Big Falls

State Project No. 3603-14



Primary Purpose:

Performance-based Need: pavement condition.

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

This pavement resurfacing project is programmed for construction in calendar year 2019.

Project History:

The need for the project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs and reduced load carrying capacity.

Project Description:

The project is 25 miles long on Hwy 6 between the north junction of Hwy 1 and Hwy 71 in Big Falls. The work includes bituminous pavement resurfacing and drainage improvements. Edge-line rumble strips will also be added to improve safety.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.2	\$ 8.5
Other Construction Elements:	\$ 0.5	\$ 0.8
Engineering:	\$ 1.3	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 9.0	\$ 11.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The base cost estimate was prepared in December of 2014 before the project was scoped. The estimate includes costs for pavement resurfacing. The current estimate was prepared in August of 2015 with a higher contingency providing for the possibility that a thicker pavement surface may be required.

Project Risks:

The extent of the pavement repair has not been fully determined.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 01/01/2019
 Current Letting Date: 05/17/19
 Construction Season: 2019
 Estimated Substantial Completion: Fall of 2019



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/15/2015

PROJECT SUMMARY

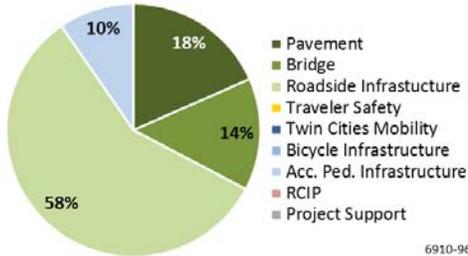
Hwy 23
 In Duluth From Becks Road to 84th Avenue West
 Bridge 69091
 State Project No. 6910-96



Primary Purpose:

Performance-based Need: Pavement, bridge & roadside infrastructure condition

Investment Category:



6910-96

Project Description:

This is an urban/rural project in West Duluth from Becks Road to 84th Avenue West. The work includes pavement resurfacing, bridge construction over Knowlton Creek, as well as drainage, safety, and sidewalk improvements.

Recent Changes and Updates

This project is currently being designed.

Project History:

The work in this project was previously included in SP 6910-89. The project was divided in order to accommodate the construction of a bridge at Knowlton Creek.

This project has just been developed.

The need for this project is because the pavement in this area is nearing the end of its remaining service life, and without preventative maintenance, the pavement will require major reconstruction.

The purpose of the project is to improve ride quality and extend the useful life of the highway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 9.6
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.4	\$ 2.1
Right of Way:	\$ 0.8	\$ 0.5
Total:	\$ 11.5	\$ 12.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The base estimate was prepared in March of 2014 and includes costs for bituminous milling and paving, bridge construction, drainage improvements, signal construction and ADA improvements. The current cost estimate was prepared in July of 2015 and includes additional costs for bridge construction, slope repairs, sidewalk and some pavement reconstruction.

Project Risks:

The project requires an extensive amount of drainage reconstruction with uncertain costs. The project also has potential cost risks based on the ability to either raise or replace the Munger Trail Bridge. If the DNR is able to fund a Munger Trail culvert replacement, MnDOT will also replace the culvert that goes under Hwy 23. These two culverts are connected and must be replaced as individual culverts, but at the same time. There is also a risk to the project letting due to a right of way acquisition.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: 8/27/2014
 Geometric Layout Approval Date: 8/29/2014
 Construction Limits Established Date: Unknown
 Original Letting Date: 02/26/2016
 Current Letting Date: 02/26/2016
 Construction Season: 2016
 Estimated Substantial Completion: Fall 2016/Summer 2017



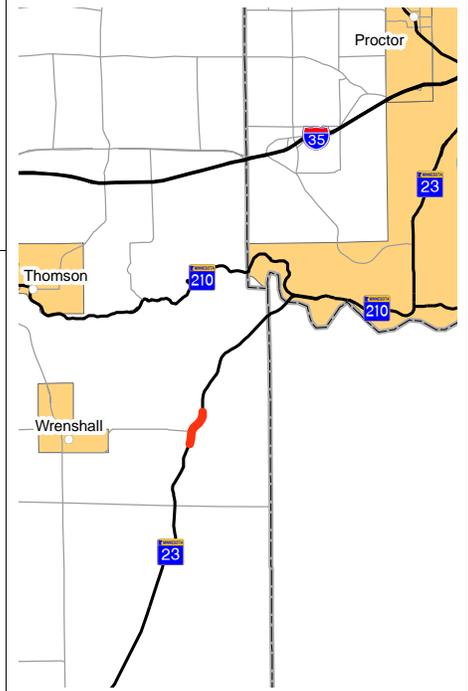
Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/15/2015

PROJECT SUMMARY

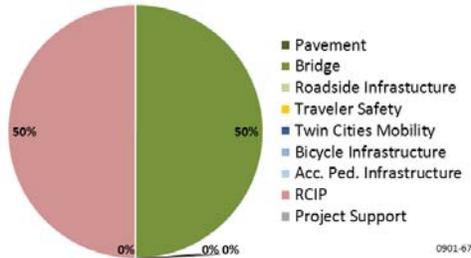
Hwy 23
 Hwy 23 near intersection with County Road 18
 Bridge 5470
 State Project No. 0901-67



Primary Purpose:

Performance-based Need: Bridge condition

Investment Category:



Project Description:

This project replaces the bridge that carries Hwy 23 over the Burlington Northern Santa Fe railroad. The bridge is being constructed on a new alignment so the existing bridge can continue to be used during construction. The project is located approximately 16 miles NE of the south Carlton County line.

Recent Changes and Updates

This two-year project is under construction and on schedule. MnDOT continues to coordinate the development of this project with the BNSF railroad.

Project History:

Bridge 5470 was built in 1936 and consists of a steel beam span with a cast in place concrete deck. This bridge is classified as structurally deficient. In 1973 the bridge received repairs to the deck, abutments, pier caps, and new concrete.

A conceptual sketch was developed and shared with the railroad in August 2013. The project impacts a local township road and MnDOT has met and coordinated with the local government.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 3.2
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.0	\$ 0.7
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.3	\$ 4.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project was let in December of 2014. The current estimate is based on the bid cost. The project cost was reduced from the base cost as result of refining the roadway alignment and bridge design.

Project Risks:

The project has been let. Risks remaining include potential construction changes.

Schedule:

Environmental Approval Date: 09/17/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 06/14/2013
 Construction Limits Established Date: 12/26/2013
 Original Letting Date: 06/27/2003
 Current Letting Date: 11/21/2014
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2016



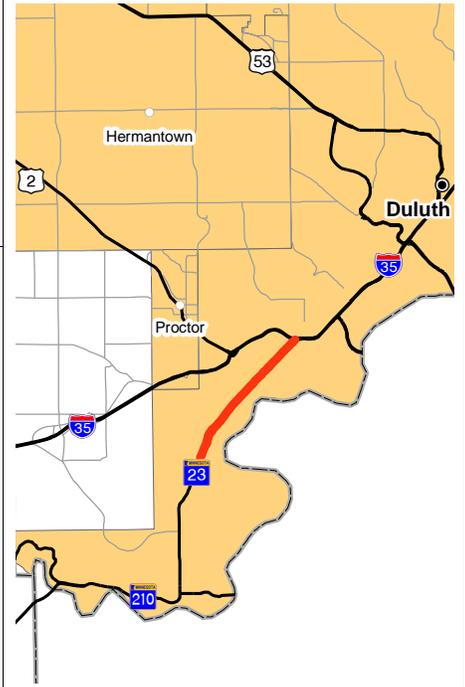
Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/15/2015

PROJECT SUMMARY

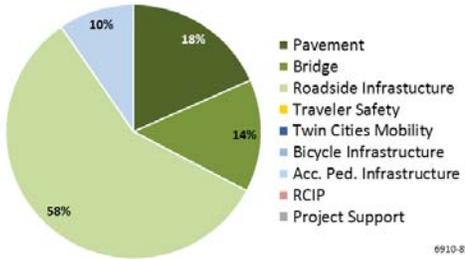
Hwy 23
I-35 to Becks Road
Bridge 88544A
State Project No. 6910-89



Primary Purpose:

Performance-based Need: Pavement Condition, Bridge Condition, Regional and Community Improvement Priority: CIMS

Investment Category:



Project Description:

This is an urban project in West Duluth, 5 miles long, from I-35 to Becks Road. The work includes pavement resurfacing, bridge construction over Kingsbury Creek, and drainage, safety, and sidewalk improvements.

Recent Changes and Updates

This project was let in April 2015 and is currently under construction.

Project History:

In June 2013, Duluth was awarded a Corridor Investment Management Strategy grant in the amount of \$3,035,000. The CIMS elements will be constructed from I-35 to Becks Road. The pavement repairs under this project will be from I-35 to 83rd Avenue West.

The 2012 District 1 Remaining Service Life map shows this section is in poor condition (0-3 years). Pavement, drainage and pedestrian improvements are needed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.4	\$ 10.4
Other Construction Elements:	\$ 0.5	\$ 0.9
Engineering:	\$ 2.4	\$ 2.5
Right of Way:	\$ 0.6	\$ 0.8
Total:	\$ 14.9	\$ 14.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project was let in April of 2015. The current estimate is based on the bid cost. The project includes \$3,035,000 for CIMS work. These dollars were used for construction, purchase of right-of-way and engineering work.

Project Risks:

The project has been let. Risks include potential construction changes.

Schedule:

Environmental Approval Date: 03/10/2015
Municipal Consent Approval Date: 08/27/2014
Geometric Layout Approval Date: 08/29/2014
Construction Limits Established Date: 12/02/2013
Original Letting Date: 02/27/2015
Current Letting Date: 04/24/2015
Construction Season: May 2015 /November 2015
Estimated Substantial Completion: Spring 2016



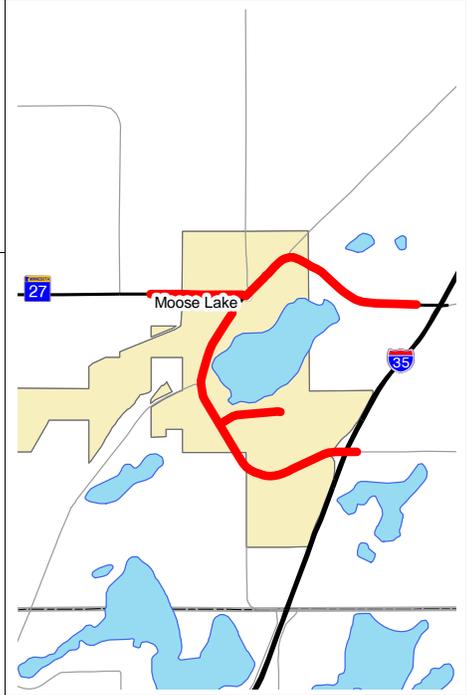
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/15/2015

PROJECT SUMMARY

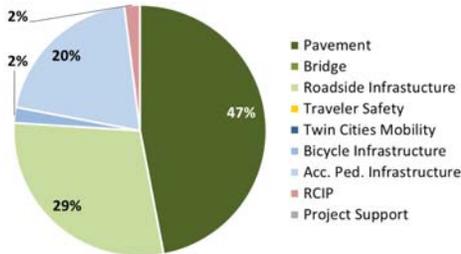
Hwys 27, 73 & 289
Moose Lake Area
State Project No. 8821-200



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project is in the City of Moose Lake on Hwys 27, 73 and 289 between the north and south junctions of I-35 and on Hwy 27/73 to the west limits. Work includes pavement rehabilitation, turn lanes, ADA and drainage improvements. Moose Lake will upgrade utilities under a cooperative agreement.

Recent Changes and Updates

Turn lanes will be constructed on Hwy 73 at sites of new development in the corridor.

Project History:

The pavement is in poor condition on Hwy 27, Hwy 73 and Hwy 289.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.2	\$ 5.4
Other Construction Elements:	\$ 0.2	\$ 0.5
Engineering:	\$ 0.6	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 4.0	\$ 7.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate was prepared in July of 2015. The cost increase is because of the need to replace pavement and curb and gutter through some of the urban sections rather than simply resurfacing. Other added improvements include sidewalk replacement, turn lane construction, signal system revision at Hwy 61 and more extensive storm sewer reconstruction and repair.

Project Risks:

Municipal consent

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Pending Approval
Geometric Layout Approval Date: Pending Approval
Construction Limits Established Date: Pending Approval
Original Letting Date: 04/28/2017
Current Letting Date: 03/24/2017
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

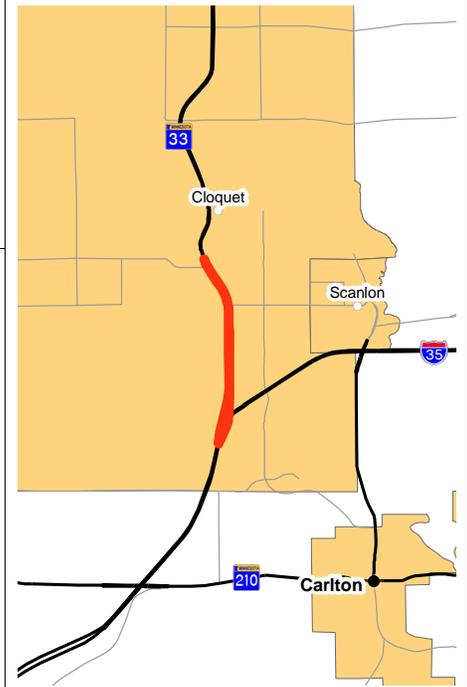
District Engineer: Duane Hill
Project Manager: Roberta Dwyer

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 33
I-35 to 1.4 miles north in Cloquet
State Project No. 0905-53

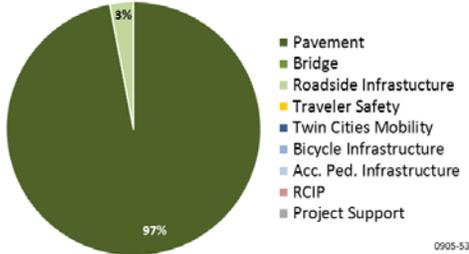
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

This was an urban project in Cloquet from I-35 to just north of Doddridge Avenue. The work includes pavement reconstruction, traffic signal replacements, and safety, sidewalk and drainage improvements.

Recent Changes and Updates

This project was completed in the fall of 2014.

Project History:

This was originally an alternate bid project that included access changes, crossover changes, new pavement structure, new signal systems, and geometric improvements. The 2012 District 1 Remaining Service Life map showed this segment to be in poor condition.

This project was let on April 25, 2014. Partnering with Carlton County and Cloquet, the purpose of this project was to improve the pavement ride quality on Hwy 33; improve the functionality of the Hwy 33/Doddridge Avenue/Big Lake Road intersection; and improve safety at the Armory Road/Holmes Drive.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 6.2
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 1.0	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.2	\$ 7.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

This project was let February 2014. The current estimate was based on the bid cost.

Project Risks:

The project is complete. There are no risks remaining.

Schedule:

Environmental Approval Date: 07/08/2013
Municipal Consent Approval Date: 01/13/2013
Geometric Layout Approval Date: 10/14/2012
Construction Limits Established Date: 08/02/2013
Original Letting Date: 03/27/2015
Current Letting Date: 04/25/2014
Construction Season: 2014
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

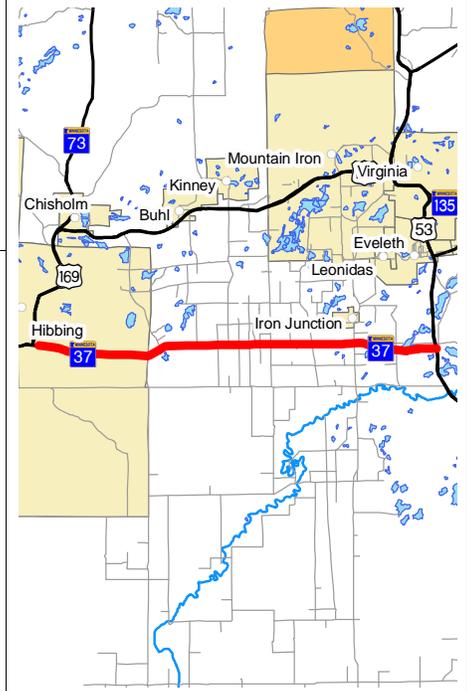
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 37

From Highway 169 in Hibbing to Highway 53

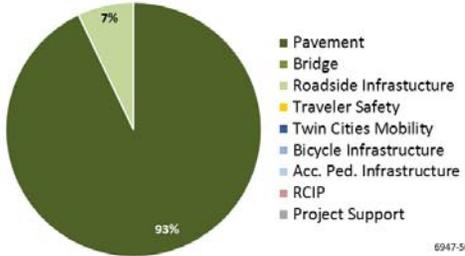
State Project No. 6947-50



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



6947-50

Project Description:

Pavement resurfacing and drainage improvements on Highway 37 from Hibbing to the interchange with Highway 53.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 5.0
Other Construction Elements:	\$ 0.4	\$ 0.5
Engineering:	\$ 0.8	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.4	\$ 6.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Recent Changes and Updates

A project scoping report was completed in January 2015.

Project History:

This segment of roadway was originally graded and paved in 1950. Since then, there were numerous spot improvements performed. Most recently, a resurfacing was performed on the west half in 1995 and the east half was resurfaced in 2001.

Key Cost Estimate Assumptions:

The current estimate was prepared in January of 2015. The estimate includes costs for pavement resurfacing and drainage improvements. The cost change is because 7.7 miles of paving was added but the resurfacing of the shoulders was also eliminated.

Project Risks:

There is the potential for contaminated materials at a former gas station at the intersection of South County Road 25.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 05/19/2017
 Current Letting Date: 03/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



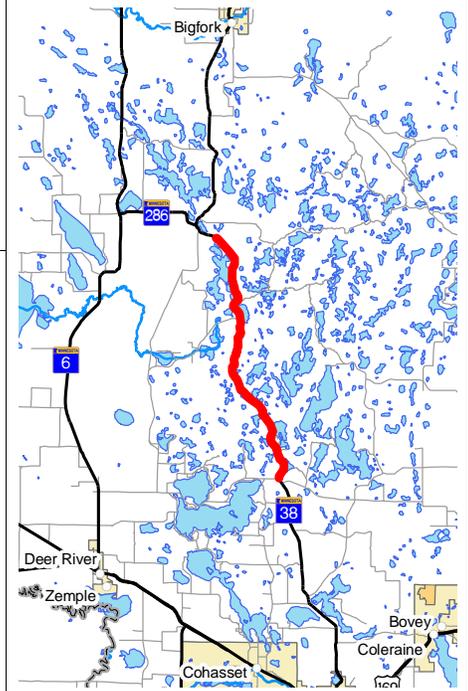
Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/15/2015

PROJECT SUMMARY

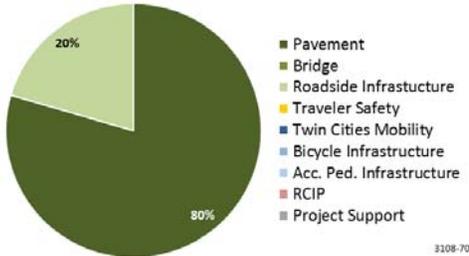
Hwy 38
County Road 19 to the City of Marcell
State Project No. 3108-70



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project is 14 miles long, from County Road 19 to the City of Marcell. The work consists of pavement resurfacing, drainage and other road improvements.

Recent Changes and Updates

The project design is on schedule for delivery in March 2017. The Environmental Assessment required for property acquisition in the Chippewa National Forest is underway.

Project History:

This segment of Hwy 38 was originally graded in the late 1920s and included a gravel surface. In the late 1940s improvements were made including numerous spot overlays, additional gravel and a bituminous surface. Continued construction and maintenance projects occurred over time, with the most recent bituminous overlay completed in 2000.

The purpose of this project is to recondition and resurface the existing highway to improve ride quality, extend the useful life of the highway, and reduce maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.2	\$ 12.4
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 2.3	\$ 2.4
Right of Way:	\$ 0.3	\$ 0.4
Total:	\$ 15.8	\$ 16.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimate was updated in February of 2014 and includes costs for bituminous resurfacing and other road improvements.

Project Risks:

Project risks include subgrade conditions, difficulties in achieving safety improvements, wetland impacts and potential for rock excavation. Additional risks include the need for an environmental assessment by Chippewa National Forest, and a right of way acquisition.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not known
Construction Limits Established Date: Not known
Original Letting Date: 01/02/2009
Current Letting Date: 03/24/2017
Construction Season: 2017
Estimated Substantial Completion: Summer 2018



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

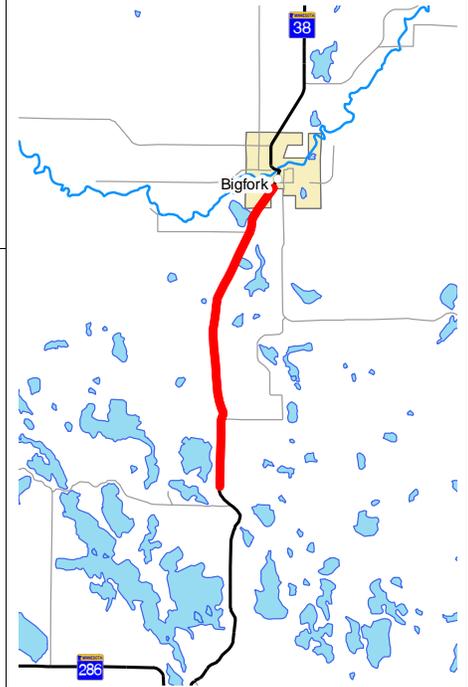
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 38 & Hwy 286

On Hwy 38 from Horseshoe Lake Rd to Bigfork and on Hwy 286 from Hwy 6 to Marcell

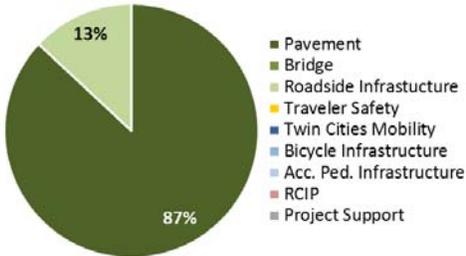
State Project No. 3108-76



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

The project is on Hwy 38 from Horseshoe Lake Rd to Bigfork and on Hwy 286 from Hwy 6 to Marcell. The work includes bituminous resurfacing and drainage improvements.

Recent Changes and Updates

The project originally provided a bituminous mill and overlay on both Hwy 38 and on Hwy 286. The project now provides for a bituminous reclamation on Hwy 286.

Project History:

There are two segments of this project:

1)
Hwy 286 was originally graded in 1941 and initially paved in 1949. Since 1949, there have been two bituminous overlay projects in addition to one bituminous spot overlay project. The two overlays were completed in construction years 1968 and 1998.

2)
Hwy 38 was originally constructed as a gravel road in 1929. The gravel surface was overlaid and additional shoulder width was added in 1973. It was reconstructed in 1997 and bituminous cracks were sealed in 2000.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.9	\$ 5.7
Other Construction Elements:	\$ 0.3	\$ 0.6
Engineering:	\$ 0.7	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.9	\$ 7.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current cost estimate was updated in June of 2014 and includes costs for a bituminous mill and overlay on Hwy 38 and a bituminous reclamation on Hwy 286 as well as drainage improvements.

Project Risks:

The cost of the necessary pavement repair has not been fully determined.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 01/27/2017
 Current Letting Date: 02/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Brian Larson

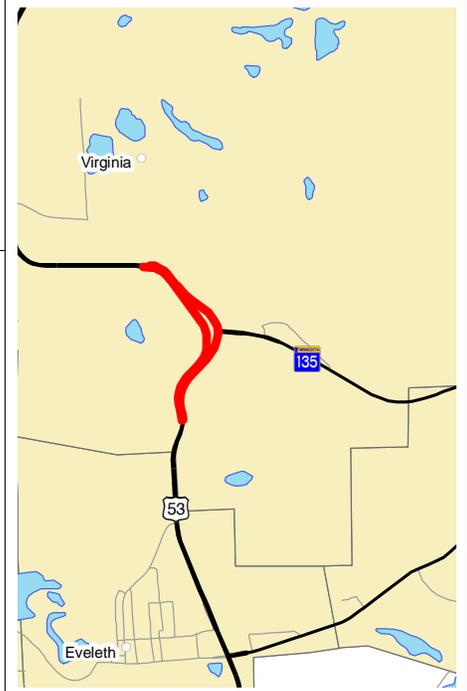
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 53

Between Eveleth and Virginia, relocate Hwy 53 away from United Taconite Operations

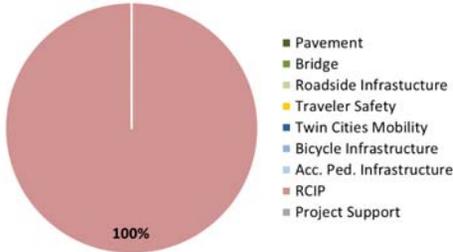
Bridge 69129, &, 69130
State Project No. 6918-86



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

The project is located in St. Louis County, between Eveleth and Virginia. The proposed project is to abandon Hwy 53 in the area of the United Taconite mine expansion and reconstruct it in a new location. State Project 6918-86 (which is also included in the 6918-80 project scope) is all remaining grading on Hwy 53 & Hwy 135, including a bridge on Hwy 135 over Hwy 53.

Recent Changes and Updates

MnDOT has prepared a Final Environmental Impact Statement for the US Highway 53 Virginia to Eveleth project. MnDOT is recommending the E-2 route as the preferred alternative for the Hwy 53 Relocation project. It is the northernmost route with a 1,100-foot bridge across the Rouchleau Pit. EIS published Record of Decision October 5, 2015. Kiewit Infrastructure Company has been named the Construction Manager/General Contractor for the project with Parsons designing the bridge. MnDOT awarded a \$17 million dollar early steel contract. MnDOT expects to award a contract in November 2015 for the bridge and roadway work. MnDOT anticipates that the construction work will be complete in the fall of 2017.

Project History:

In 1960 United States Steel granted MnDOT Hwy easement rights for Hwy 53. In 2010, the successors of US Steel, United Taconite and RGGGS Land and Minerals, in accordance with the easement provisions, gave MnDOT notice that they were terminating easement rights for Hwy 53. The easement expires on May 5, 2017.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 60.0	\$ 166.6
Other Construction Elements:	\$ 13.8	\$ 10.2
Engineering:	\$ 14.4	\$ 31.1
Right of Way:	\$ 0.0	\$ 22.1
Total:	\$ 88.2	\$ 230.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The original project estimate was a high level estimate for the proposed M1 alternative when the project was placed in the STIP. Subsequent engineering on M1 route has identified additional challenges on this route that increase the cost. Current risk based cost estimates for the preferred alternative ranges from \$180 - \$240 million. These estimates are being refined on a continuous basis. MnDOT is currently targeting a total project cost estimate of \$240 million based on what is known today.

Project Risks:

Risks include an aggressive timeline for relocating the highway; securing a permanent highway easement, public utility relocation; geotechnical issues, maintaining water quality for the drinking water supply for the city of Virginia, a challenging construction environment, and managing traffic during the time between when the easement expires and construction is complete.

Schedule:

Environmental Approval Date: Fall 2015
Municipal Consent Approval Date: 04/14/2015
Geometric Layout Approval Date: 04/20/2015
Construction Limits Established Date: Spring 2015
Original Letting Date: 04/24/2015
Current Letting Date: 10/21/2015
Construction Season: 2016/2017
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

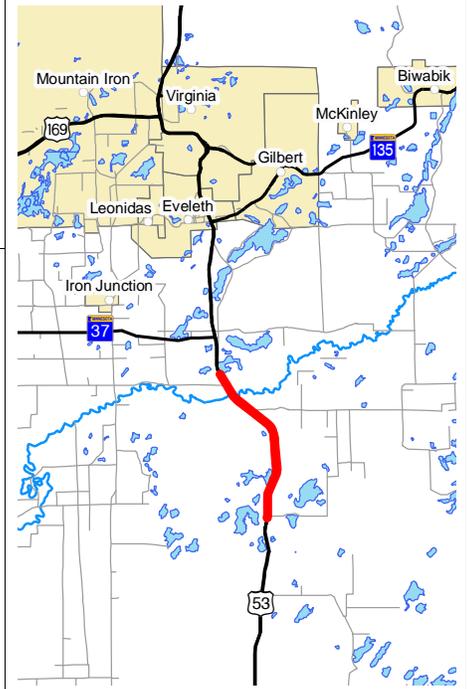
District Engineer: Duane Hill
Project Manager: Patrick Huston

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 53

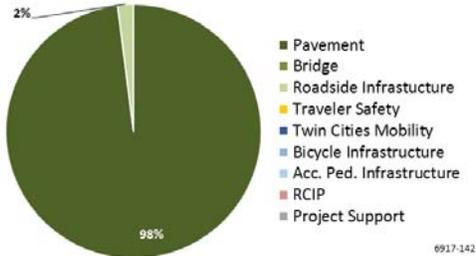
On Hwy 53 south of the Hwy 37/Lion Spring area, from the Peat Plant Road to County Road 690.
State Project No. 6917-142



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

The project includes pavement rehabilitation work on northbound Hwy 53 from the Peat Plant Road to County Road 690 along with repairs to the Anchor Lake rest area parking lot.

Recent Changes and Updates

Due to the poor pavement condition, repairs to the Anchor Lake rest area parking lot were added to this project because the rest area falls within the boundaries of the Hwy 53 work.

Project History:

This segment of roadway was originally graded and paved with concrete in the early 1920s. In the late 1940s it was widened and paved with bituminous. There were also bituminous overlays in the late 1960s and 1970s. The most recent improvements included a mill and overlay in 1996.

This project will recondition and resurface the existing highway to improve the ride and extend the useful life of the highway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 7.0
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.2	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.2	\$ 9.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate was prepared in August 2013 and includes costs for pavement resurfacing. The current estimate was prepared in July of 2015. The cost increase is due to the addition of repair work at the Anchor Lake Rest Area.

Project Risks:

The project length and pavement repair has not been fully determined.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 04/28/2017
Current Letting Date: 04/28/2017
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 1
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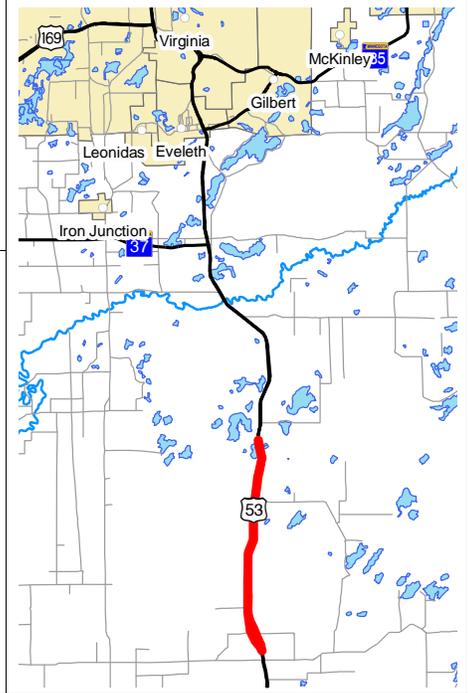
District Engineer: Duane Hill
Project Manager: Brain Larson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 53

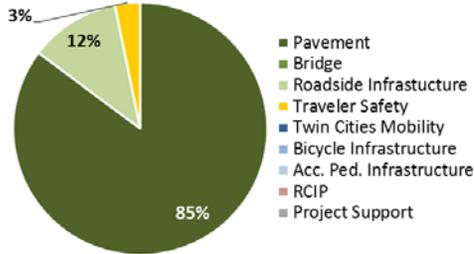
Southbound from the Paleface River to Augusta Lake Rd
 Bridge 69022, and, 69071
 State Project No. 6917-141



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

The project is located on southbound Highway 53 from the Paleface River to Augusta Lake Rd. The work includes 9 miles of pavement resurfacing and drainage improvements.

Recent Changes and Updates

The project design is completed and on schedule for letting in December 2015.

Project History:

This segment of Hwy 53 has been resurfaced numerous times including overlays in 1978, 1987 and 1996. Most recently, in 2000, the bituminous cracks on this segment were sealed.

The project limits have changed to include an additional 3 miles. The recommended pavement thickness has increased from a medium mill and overlay to a thick mill and overlay.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 2.4	\$ 4.1
Other Construction Elements:	\$ 0.2	\$ 0.4
Engineering:	\$ 0.5	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 3.1	\$ 5.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current cost estimate was prepared in July of 2014. The project has been extended an additional 3 miles and the proposed pavement thickness has increased. The estimate includes costs for pavement resurfacing and drainage improvements.

Project Risks:

The project will be let soon. Project risks include potential construction changes.

Schedule:

Environmental Approval Date: 06/01/2015
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 04/25/2014
 Current Letting Date: 12/18/2015
 Construction Season: 2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 1
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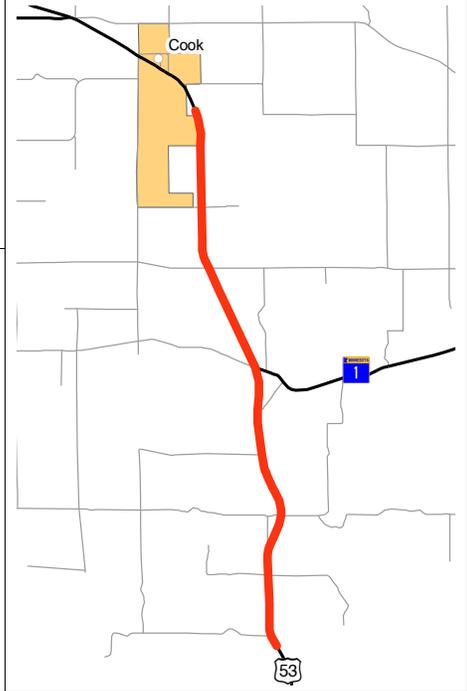
District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 53
CR 652 (Goodell Road) to the southern limits of Cook
Bridge 69044, 69045
State Project No. 6920-48

Substantially Complete



Primary Purpose:

Regional & Community Improvement Priority:
NCIP

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

This project was completed in August 2014.

Project History:

Discussions regarding the four-lane expansion of Hwy 53 to International Falls began before the creation of Voyageurs National Park in the 1980s. The Hwy 53 Long Range Improvement Task Force citizen's coalition formed in 1999 with the stated mission to "ensure a safe and modern four-lane roadway for all users on Hwy 53 between Virginia and International Falls." The project letting was moved from Sept. 23, 2011 to Dec. 16, 2011. It was finally moved to Oct. 26, 2012 to allow additional time for permitting.

Project Description:

The project was located in St. Louis County from CR 652 (Goodell Road) to the southern city limits of Cook and involved expanding 10 miles of the existing two-lane highway to four lanes.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2008

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 34.0	\$ 32.8
Other Construction Elements:	\$ 1.4	\$ 1.1
Engineering:	\$ 7.1	\$ 2.1
Right of Way:	\$ 3.9	\$ 0.5
Total:	\$ 46.4	\$ 36.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project is complete. The current estimate is based on the actual costs.

Project Risks:

The project is complete. There are no remaining risks.

Schedule:

Environmental Approval Date: 06/06/2011
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 9/24/2010
Construction Limits Established Date: 08/16/2010
Original Letting Date: 07/23/2010
Current Letting Date: 10/26/2012
Construction Season: 2013
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
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District Engineer: Duane Hill
Project Manager: Michael Kalnbach

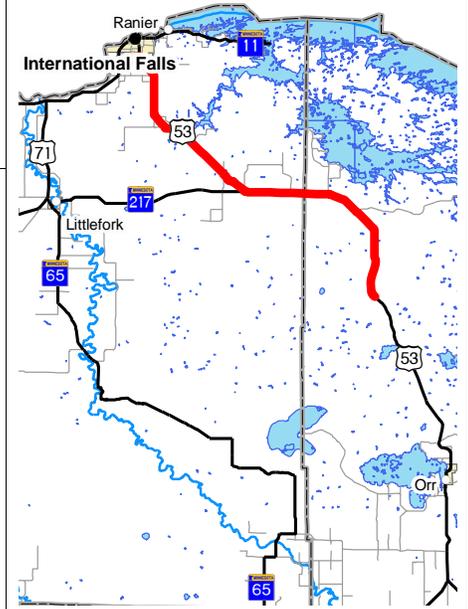
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 53

From Keyes Rd to Crescent Dr in International Falls
 Bridge 36003, and, 69X16
 State Project No. 3608-49

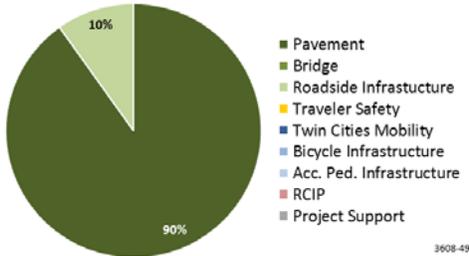
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

The project is 34 miles long, from south of Keyes Rd to Crescent Dr in International Falls. The work includes pavement resurfacing, bridge deck repairs and drainage improvements. In addition, the project includes safety improvements at two intersections.

Recent Changes and Updates

This project is under construction and is on schedule for completion in early fall 2015.

Project History:

The southernmost 18 miles had a bituminous overlay in the mid 1990s and a crack repair project in the late 1990s. The next 12 miles included a bituminous milling and paving project in 2000 and a crack repair project in 2001. The northernmost three miles had numerous bituminous overlays performed over portions of this segment between the 1960s and the 1980s.

The project was added for construction in 2015 as part of MAP-21 program.

The pavement repairs on this project are to include milling with a bituminous overlay. In addition to the pavement repairs, these improvements will be included: the addition of a center left turn lane at two intersections, bridge deck repairs, and a large box culvert will be replaced.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.2	\$ 10.1
Other Construction Elements:	\$ 1.3	\$ 2.2
Engineering:	\$ 2.8	\$ 2.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 18.3	\$ 15.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project was let in January of 2015. The current cost estimate is based on the bid cost. The baseline cost was established with a high contingency prior to scoping. National Corridor Infrastructure Program Funds were used for the turn lane construction.

Project Risks:

The project is complete. There are no remaining risks.

Schedule:

Environmental Approval Date: 11/03/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 8/20/2014
 Original Letting Date: 01/23/2015
 Current Letting Date: 01/30/2015
 Construction Season: 2015
 Estimated Substantial Completion: Summer 2015



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/15/2015

PROJECT SUMMARY

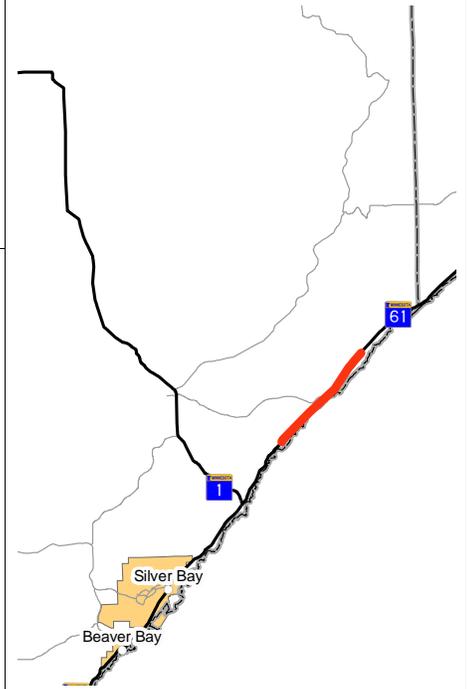
Hwy 61

North of Hwy 1 to south of township road 81 (Little Marais area)

Bridge 38016

State Project No. 3808-35

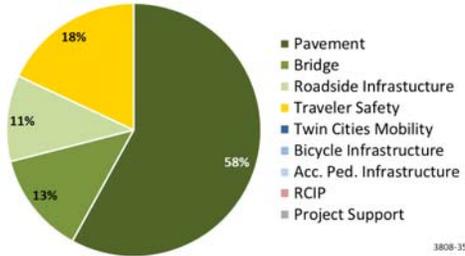
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition & District Safety Plan

Investment Category:



Project Description:

This was a 5 mile rural project in the Little Marais area north of Hwy 1 to just south of the Manitou River. The project includes pavement resurfacing, drainage improvements, and shoulder widening.

Recent Changes and Updates

The construction was completed in the fall of 2014.

Project History:

The new bridge over the Little Marais River was completed in the fall of 2013.

In the fall of 2014, the pavement was reclaimed and overlaid, drainage was improved, the guardrail was replaced/added/improved and shoulders were widened to six feet. The substandard shoulder width and spot locations with poor sight distance were priorities for improvement along the TH 61 corridor.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.7	\$ 9.8
Other Construction Elements:	\$ 0.3	\$ 0.7
Engineering:	\$ 1.6	\$ 1.7
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 10.0	\$ 12.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project is complete. The current estimate is based on the actual costs. The cost of the project was higher than the base cost due to the need to provide a bridge at the Little Marais River and the higher than expected costs for complex staging needed for pipe replacements.

Project Risks:

The project is complete. There are no remaining risks.

Schedule:

Environmental Approval Date: 01/31/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not known
 Original Letting Date: 02/13/2013
 Current Letting Date: 06/07/2013
 Construction Season: 2013/2014
 Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

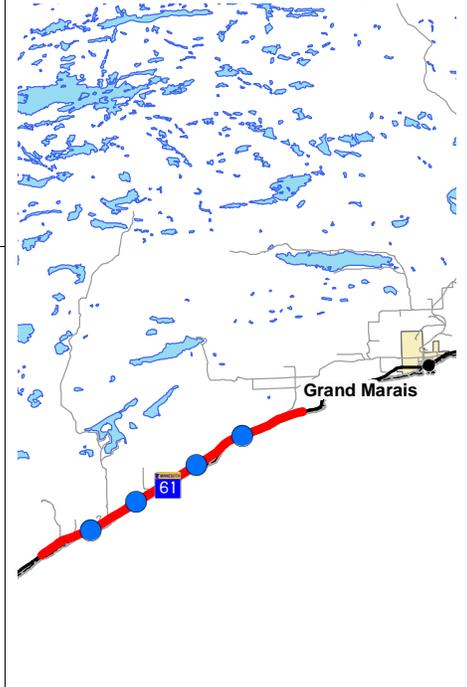
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 61

South of County Road 5 to north of County Road 7
 Bridge 8292, 5132, 16X06, 16X07
 State Project No. 1602-49

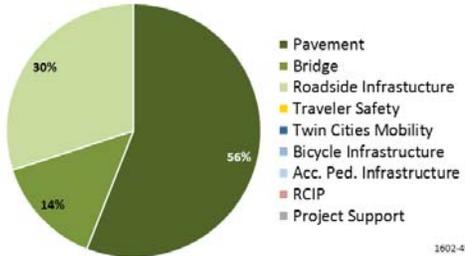
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

This was a 14 mile long rural project from south of CR 5 to north of CR 7. The work included pavement resurfacing, drainage improvements and bridge repair.

Recent Changes and Updates

This project was completed in the fall of 2014.

Project History:

This project was let on March 21, 2014 and is now complete.

The pavement condition in this section of Hwy 61 was in the poor category, based on the 2012 District 1 Remaining Service Life map.

The purpose of the project was to improve ride quality, complete drainage improvements, complete bridge repairs, and extend the useful life of the highway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.6	\$ 8.2
Other Construction Elements:	\$ 0.5	\$ 0.2
Engineering:	\$ 1.4	\$ 1.2
Right of Way:	\$ 0.2	\$ 0.0
Total:	\$ 8.7	\$ 9.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project is complete. The current cost estimate is based on actual costs. The cost increase was due to the need to increase the size of culverts and the difficulty encountered during construction staging.

Project Risks:

The project is complete. There are no remaining risks.

Schedule:

Environmental Approval Date: 1/23/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 1/15/2014
 Original Letting Date: 11/22/2013
 Current Letting Date: 02/28/2014
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2014



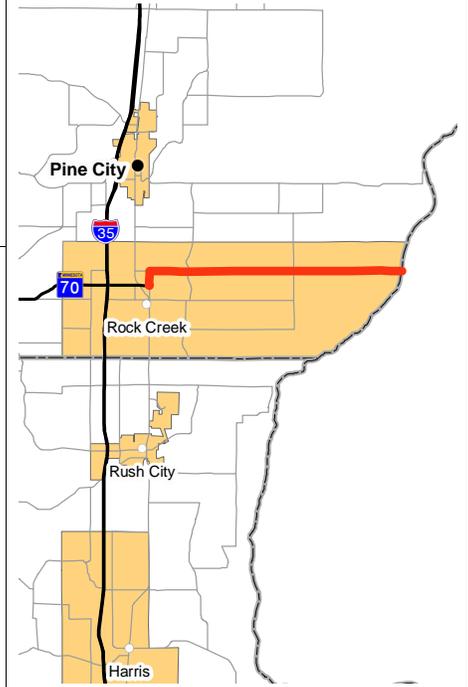
Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/15/2015

PROJECT SUMMARY

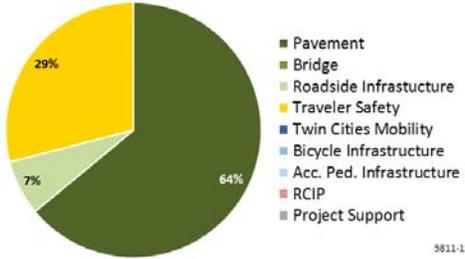
Hwy 70
 East of Hwy 361 to the Minnesota/Wisconsin state line
 Bridge 58X03
 State Project No. 5811-12



Primary Purpose:

Performance-based Need: Pavement Condition and District Safety Pain

Investment Category:



Project Description:

The project is a 9 mile long rural project that includes pavement resurfacing, profile corrections, drainage improvements, and turn lane additions on Hwy 70 from just east of Hwy 361 to the Minnesota/Wisconsin

Recent Changes and Updates

This project was let in January 2015 and is nearly complete.

Project History:

Currently, the pavement condition on this section of Hwy 70 is poor, based on the 2012 District 1 Remaining Service Life map.

The scope of this project will be to establish a long term pavement fix for this section of Hwy 70, improve sight distance and safety at identified spot locations, and improve drainage conditions.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.7	\$ 8.6
Other Construction Elements:	\$ 0.4	\$ 0.6
Engineering:	\$ 1.4	\$ 1.5
Right of Way:	\$ 0.4	\$ 0.4
Total:	\$ 8.9	\$ 11.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project was let in January of 2015. The current estimate is based on the bid cost. The cost increase is due to the need to resurface the roadway using a stabilized bituminous reclamation and to reconstruct additional portions of the roadway.

Project Risks:

The project has been let. Risks include potential construction changes.

Schedule:

Environmental Approval Date: 10/15/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 9/09/2014
 Construction Limits Established Date: 11/20/2013
 Original Letting Date: 01/23/2015
 Current Letting Date: 01/30/2015
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation
 District 1
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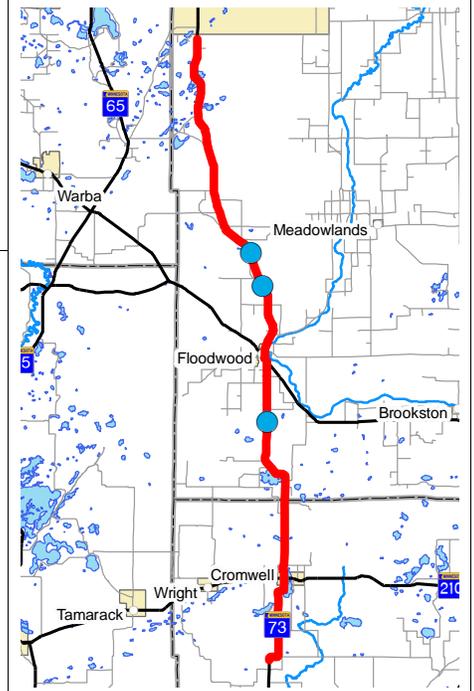
District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 73

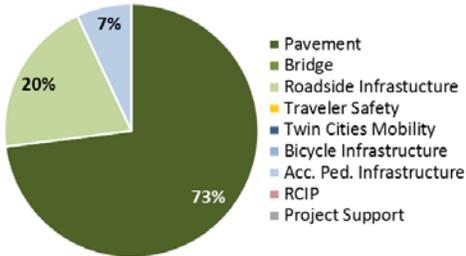
Various locations on Highway 73 and Highway 2 that include the City of Cromwell and the City of Floodwood
State Project No. 6928-28



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is 30 miles long, at several locations along Highway 73 and Highway 2 including the City of Cromwell and the City of Floodwood. Project improvements include: pavement resurfacing, curb ramp construction and sidewalk improvements.

Recent Changes and Updates

The project scoping was completed in August 2015.

Project History:

The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.5	\$ 8.5
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 1.6	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.9	\$ 10.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate was prepared in January of 2014 and includes costs for pavement resurfacing and drainage improvements.

Project Risks:

The final pavement recommendation is not complete. The amount of sidewalk replacement needed in Floodwood is not known.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Known
Original Letting Date: 01/01/2018
Current Letting Date: 2/23/2018
Construction Season: 2018
Estimated Substantial Completion: 11/01/2018



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/15/2015

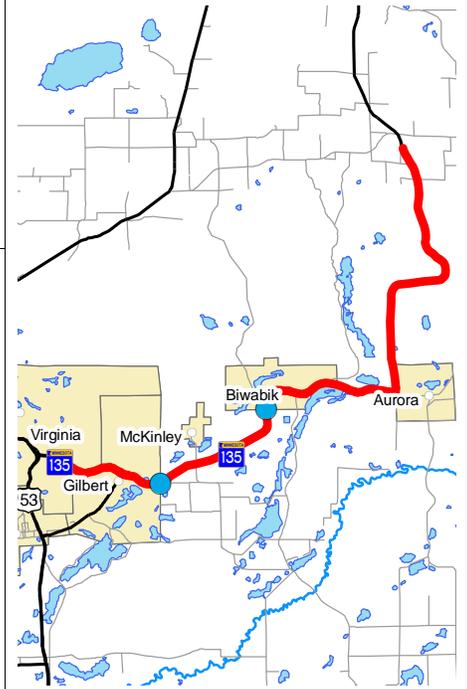
PROJECT SUMMARY

Hwy 135

From Hwy 53 to just south of County Road 558

Bridge 69023, 69025,6942

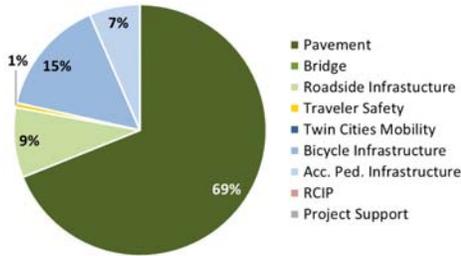
State Project No. 6912-77



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This is a pavement resurfacing project on Hwy 135 from the junction of Hwy 53 to south of CR 558. It includes the cities of Gilbert and Biwabik. The work in Biwabik includes ADA improvements and new curb and gutter. The city of Biwabik plans to replace water and sewer lines under a cooperative agreement. There is minor work on 3 bridges and drainage repair throughout the project. Intersection revisions will be done at the intersection of CR 100.

Recent Changes and Updates

This project is new to the report.

Project History:

Hwy 135 in this area has numerous turn lanes and bypass lanes. The Mesaba Trail parallels and crosses portions of the route.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.9	\$ 10.2
Other Construction Elements:	\$ 0.8	\$ 0.9
Engineering:	\$ 1.7	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 11.4	\$ 13.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current cost estimate was prepared in August of 2015. The project costs include pavement resurfacing and pedestrian infrastructure improvements in Biwabik. The cost increase is due to added bridge repair and intersection reconstruction in both Aurora and Gilbert.

Project Risks:

Municipal consent from Biwabik, and Biwabik's funding. Impact of replacement of city utilities in Biwabik.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Pending Approval
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 01/01/2019
 Current Letting Date: 11/16/2018
 Construction Season: 2019
 Estimated Substantial Completion: Fall 2019



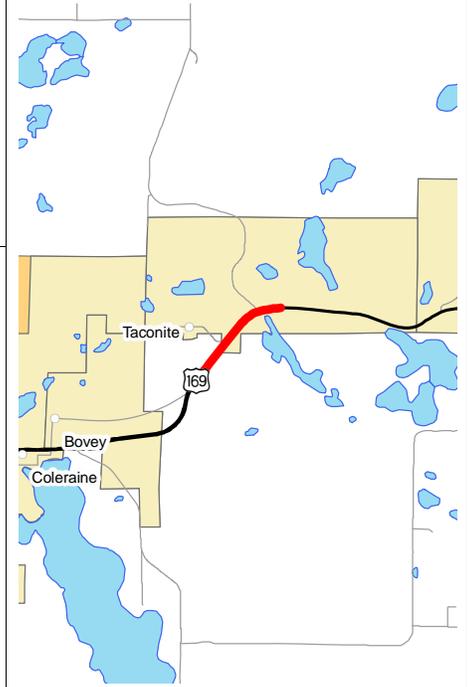
Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Roberta Dwyer

Revised Date: 12/15/2015

PROJECT SUMMARY

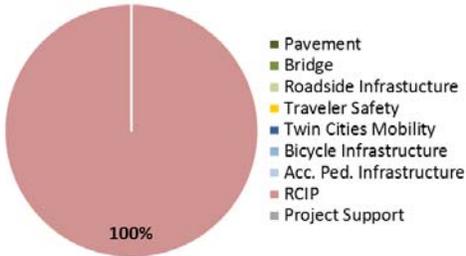
Hwy 169
 County Road 15 to County Road 7
 Bridge 31X09
 State Project No. 3116-142
<http://www.dot.state.mn.us/d1/projects/hwy169-cross-range/>



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

This is a Corridors of Commerce project that is an expansion from two lanes to four lanes of Hwy 169 CR 7.

Recent Changes and Updates

The re-evaluation of the Environmental Assessment was completed in July of 2015. The project is on schedule for delivery with the current roadway design at 60% complete.

Project History:

Phases of this expansion were completed beginning in 1994 and most recently in 2007. Funding for this project was secured in the fall of 2013 as part of the Corridor of Commerce program.

Project design began in late 2013 and is currently at the 60% design phase. The Environmental Document is being drafted.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.3	\$ 8.3
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 2.1	\$ 2.1
Right of Way:	\$ 0.5	\$ 0.5
Total:	\$ 12.3	\$ 12.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The base cost estimate was prepared in February of 2014 and includes costs for constructing a four lane roadway with bituminous pavement and drainage facilities including a bridge/box culvert.

Project Risks:

A Corp of Engineers permit is needed for this project. The letting will not be delayed; however, the habitat impacts to the Northern Long Eared Bat could impact the Corp permit and construction timing.

Schedule:

Environmental Approval Date: 07/16/2015
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 10/23/2015
 Construction Limits Established Date: 03/13/2015
 Original Letting Date: 06/03/2016
 Current Letting Date: 06/03/2016
 Construction Season: 2016/2017
 Estimated Substantial Completion: Summer 2017



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

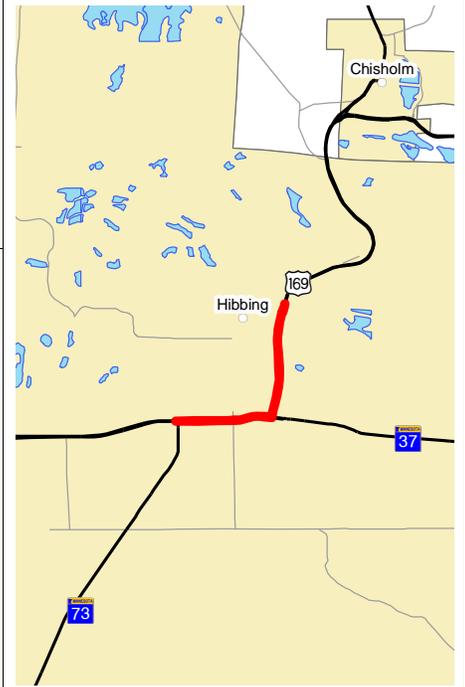
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 169

In Hibbing, from the intersection of Hwy 73 to east of County Road 5.

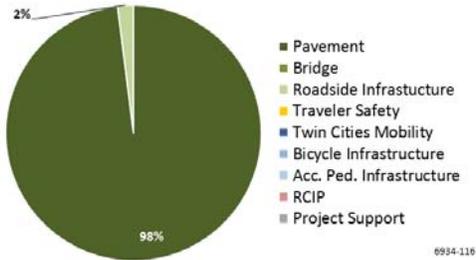
State Project No. 6934-116



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of bituminous resurfacing, drainage and ADA accessibility improvements in Hibbing along 8 miles on Hwy 169 from the south junction of Hwy 73 to CR 5.

Recent Changes and Updates

The project was programmed for construction in 2017 as part of the Statewide Managed Program to improve pavement condition on the National Highway System.

Project History:

The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 5.0
Other Construction Elements:	\$ 0.4	\$ 0.6
Engineering:	\$ 0.8	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 6.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate was prepared in June of 2014 and includes costs for pavement resurfacing and drainage improvements. Work on some additional roadway segments within the project limits were added to the project.

Project Risks:

There is potential for a substantial amount of culvert repair and replacement and the full extent of pavement repair has not yet been determined.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Need Unknown
 Original Letting Date: 05/19/2017
 Current Letting Date: 03/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/15/2015

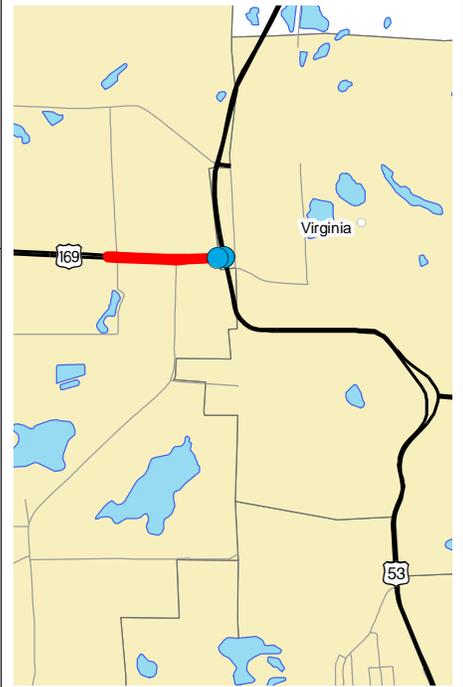
PROJECT SUMMARY

Hwy 169

In Virginia from County Road 109 to Hoover Rd

Bridge 69034, &, 69035

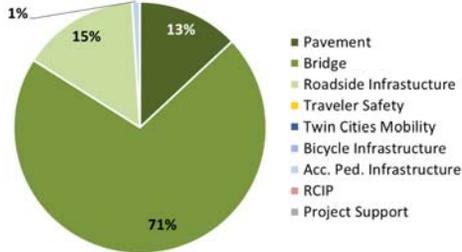
State Project No. 6935-89



Primary Purpose:

Performance-based Need: Pavement Condition and Bridge Condition

Investment Category:



Project Description:

The project is 1 mile long from just west of CR 109 to Hoover Rd in Virginia. The work includes pavement resurfacing, turn lanes, bridge rehabilitation, and traffic signal, drainage, and sidewalk improvements.

Recent Changes and Updates

The project scoping was originally completed in January 2014. The scoping document is currently being amended to include some traffic and safety improvements along the corridor in coordination with the City of Mountain Iron and St. Louis County.

Project History:

The need for this project is deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.6	\$ 5.6
Other Construction Elements:	\$ 0.8	\$ 0.6
Engineering:	\$ 0.8	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.2	\$ 7.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate was prepared in May of 2015. The estimate includes costs for pavement resurfacing, bridge rehabilitation and signal construction. The cost has increased due to the need to achieve bridge clearance over US 53 and an added signal system revision.

Project Risks:

This project requires traffic signal and cooperative construction agreements with St. Louis County and the City of Mountain Iron.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Pending Approval
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 05/19/2017
 Current Letting Date: 05/19/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



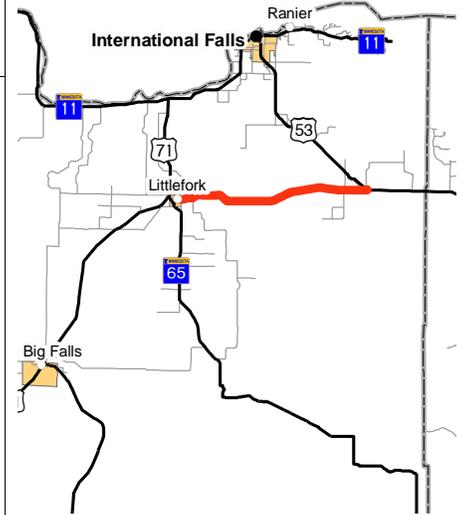
Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/15/2015

PROJECT SUMMARY

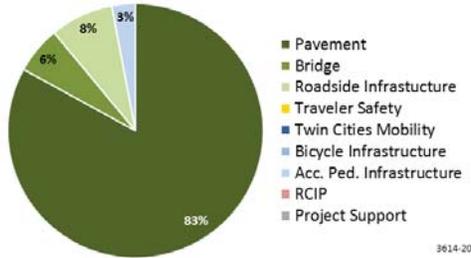
Hwy 217
 Little Fork to Hwy 53
 Bridge 9028A
 State Project No. 3614-20



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

The project is 17 miles long and includes bituminous pavement rehabilitation on Hwy 217 from the east limit of Little Fork to Hwy 53. The city of Little Fork will be replacing its water line along Hwy 217 within the project limits. Work on the bridge consists of repairing the superstructure.

Recent Changes and Updates

The city of Little Fork will be installing a new water line along Hwy 217 as part of the project. A cooperative construction agreement with the city will be needed for the work which is estimated at \$185,500.

Project History:

This is a pavement rehabilitation project slated for the 2016 fiscal year. It has been scoped for development along the eastern edge of Little Fork to the junction of Hwy 53.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.0	\$ 4.8
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 1.9	\$ 1.0
Right of Way:	\$ 0.2	\$ 0.2
Total:	\$ 11.6	\$ 6.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate was prepared in June of 2014. The scope of the pavement repair has changed. Much of the project work will now consist of a thinner pavement surface.

Project Risks:

There is a possible risk if the consultant for the city of Little Fork does not deliver the water main plans in time for letting.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 05/15/2009
 Current Letting Date: 01/29/2016
 Construction Season: 2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

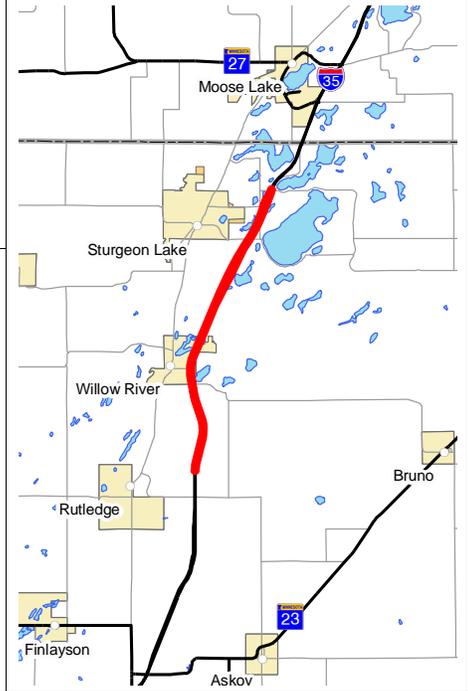
District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/15/2015

PROJECT SUMMARY

I-35

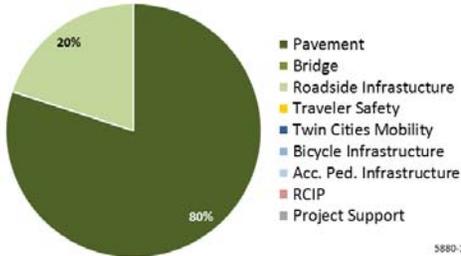
North of Pine County Rd 33 to south of the Carlton County line
State Project No. 5880-180



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



5880-180

Project Description:

The project consists of a bonded concrete overlay for 9 miles of I-35 from just north of Pine CR 33 to south of the Carlton county line in the east Sturgeon Lake/Willow River area.

Recent Changes and Updates

The preliminary design work is underway.

Project History:

This project was initially programmed for bituminous resurfacing on the northbound roadway and changed to a bonded concrete overlay. The southbound section of I-35 is in fair condition, and the northbound section is in poor condition.

The project was programmed for construction in 2017 as part of the statewide managed program to improve pavement condition on the National Highway System.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 13.0
Other Construction Elements:	\$ 0.5	\$ 1.0
Engineering:	\$ 1.0	\$ 2.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.5	\$ 16.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current cost estimate was prepared in January of 2014. The cost increase is due to the change in scope from bituminous resurfacing on the northbound roadway to concrete resurfacing in both directions.

Project Risks:

Possible wetland impacts.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 01/01/2012
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Roberta Dwyer

Revised Date: 12/15/2015

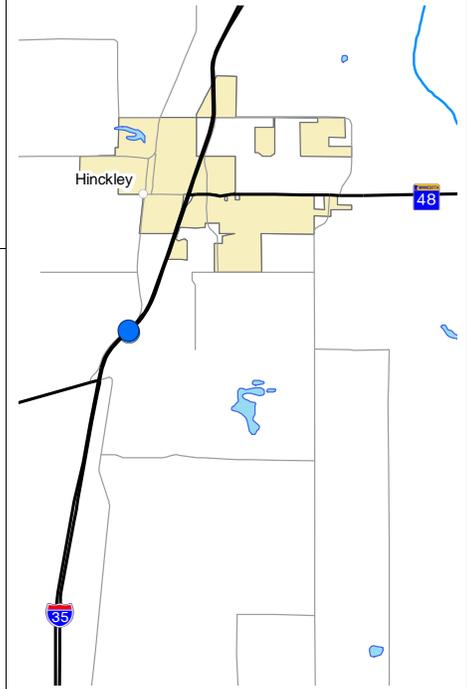
PROJECT SUMMARY

I-35

Replace two bridges on I-35 over the BNSF railroad south of Hwy 48

Bridge 9784, 9783

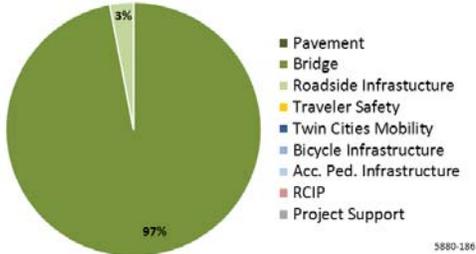
State Project No. 5880-186



Primary Purpose:

Performance-based Need: Bridge condition

Investment Category:



Project Description:

The project is located on I-35, south of Hwy 48 at Hinckley and includes the replacement of Bridges 9783 and 9784 over the Burlington Northern Santa Fe railroad and associated approach work.

Recent Changes and Updates

Detail design is in process. This project will be tied to S.P. 5880-191, a concrete pavement project.

Project History:

These bridges were originally constructed over the BNSF railroad with the I-35 construction in 1959. The bridge decks of both bridges are structurally deficient and in need of replacement. It is questionable whether the rest of the structure for both bridges should be repaired or replaced, or possibly widened to better match the width of the roadways. The project is programmed for construction in 2016.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.8
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.2	\$ 7.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The initial cost estimate was prepared in February of 2014. The estimate includes costs for bridge replacement. The current estimate was prepared in March of 2015.

Project Risks:

Any unforeseen project delays could require some work in 2017.

Schedule:

Environmental Approval Date: 06/18/2015
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: July 29, 2015
 Construction Limits Established Date: July 29, 2015
 Original Letting Date: 01/01/2016
 Current Letting Date: 01/29/2016
 Construction Season: 2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

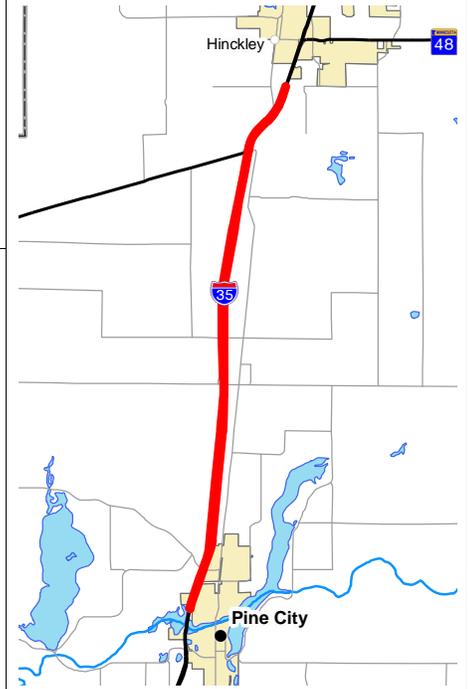
District Engineer: Duane Hill
Project Manager: Roberta Dwyer

Revised Date: 12/15/2015

PROJECT SUMMARY

I-35

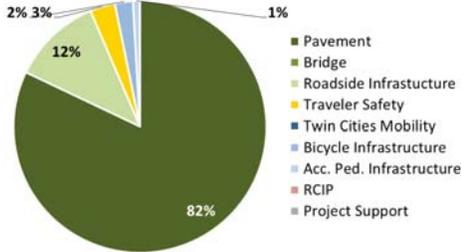
South of County Road 11 to 1 mile south of Hinckley
State Project No. 5880-191



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

This project consists of a concrete overlay on I-35 from the Snake River at Pine City to south of Highway 48 at Hinckley.

Recent Changes and Updates

The plans are 100% complete. The project will be tied to S.P. 5880-186, which replaces two bridges over the BNSF railroad 2 miles south of Hinckley.

Project History:

This segment of I-35 was constructed with concrete in 1961. The concrete underwent major repairs and in 2006, a bituminous overlay was placed over the concrete.

The bituminous overlay is failing at the joints resulting in a rough ride and a safety hazard. Current maintenance costs for patching exceed \$500,000 per year.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 24.6	\$ 24.6
Other Construction Elements:	\$ 2.6	\$ 2.6
Engineering:	\$ 5.3	\$ 5.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 32.5	\$ 32.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The base/current cost estimate was prepared in March of 2015 and includes costs for concrete pavement resurfacing. The cost is expected to change because the project is not fully scoped.

Project Risks:

Wetland permits. Construction continuing into the 2017 season due to delays on the BNSF railroad bridges.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not required
 Geometric Layout Approval Date: Not required
 Construction Limits Established Date: 08/13/2015
 Original Letting Date: 01/29/2016
 Current Letting Date: 01/29/2016
 Construction Season: 2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

District Engineer: Duane Hill
Project Manager: Roberta Dwyer

Revised Date: 12/15/2015

PROJECT SUMMARY

I-535

On the I-535 Blatnik Bridge over the St. Louis River between Duluth, MN and Superior, WI.

Bridge 9030

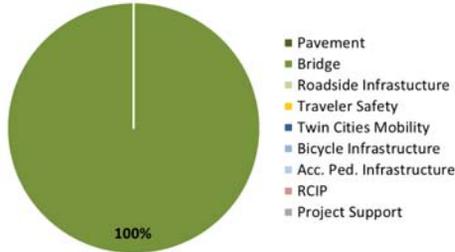
State Project No. 6981-9030L



Primary Purpose:

Performance-based Need: Bridge condition.

Investment Category:



Project Description:

The Blatnik Bridge on I-535 between Duluth, MN and Superior, WI will have some of its steel structural members repainted along with minor concrete repairs to the superstructure.

Recent Changes and Updates

This bridge rehabilitation project is scheduled for construction years 2019 and 2020.

Project History:

The Blatnik Bridge was originally built in 1961, and previous bridge work included: major renovation and remodeling work such as, widening of the main truss in 1993, painting, concrete barrier replacement, joint replacements and lighting in 2012.

The need for the project is driven by a deteriorating paint system, which if left unchecked would expose the steel bridge to accelerated corrosion. The bridge is fracture critical. This project will paint areas that were not painted in the 2012 project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 13.4
Other Construction Elements:	\$ 0.3	\$ 0.9
Engineering:	\$ 1.7	\$ 2.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.6	\$ 17.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The base cost estimate was prepared in April of 2015 prior to scoping. The estimate included costs for bridge painting. The current estimate was prepared in August of 2015 after scoping was complete. 50% of the project cost will be paid for by WisDOT.

Project Risks:

Project will require cost sharing with the state of Wisconsin and their funding may not be available till 2020 or later.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 01/01/2019
 Current Letting Date: 12/21/2018
 Construction Season: 2019 & 2020
 Estimated Substantial Completion: Fall of 2020



Minnesota Department of Transportation
 District 1
 1123 Mesaba Ave
 (218) 725-2700

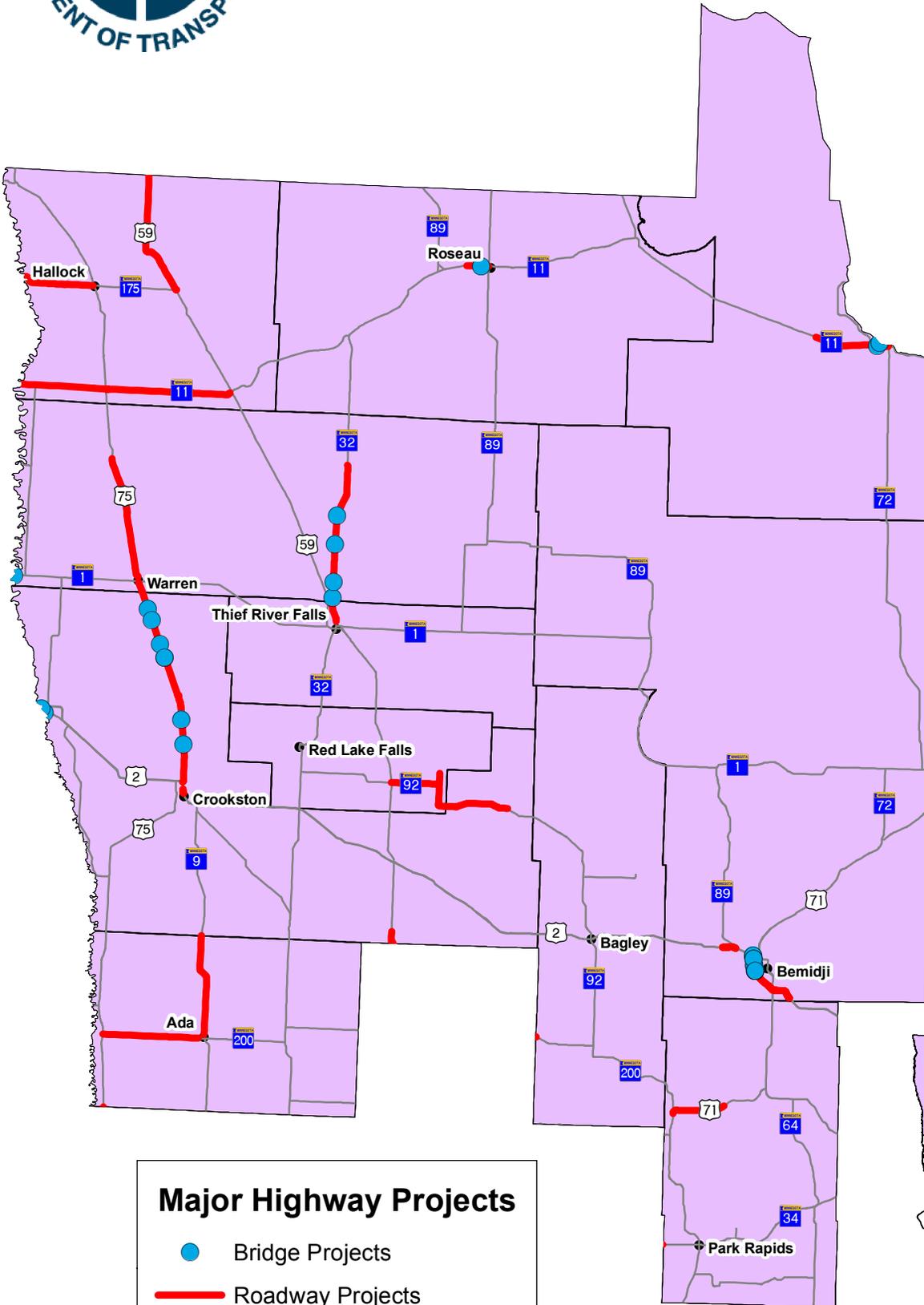
District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/15/2015



Major Highway Projects 2015

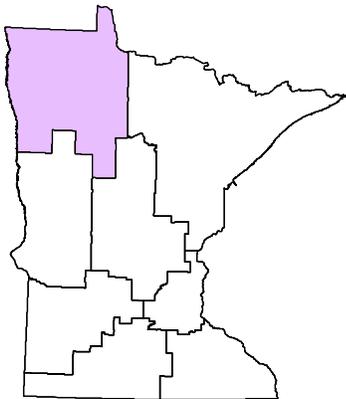
District 2



Bemidji

Major Highway Projects

- Bridge Projects
- Roadway Projects
- Trunk Highway System



District Project Summary
District 2

Route	State Project #	Project Location	Page
Hwy 1	4509-05	Over the Red River in Oslo	B 2
Hwy 1	3602-25	From the east end of Northhome to Effie	B 3
Hwy 2	6018-02	Kennedy Bridge over the Red River in East Grand Forks	B 4
Hwy 2	6002-72	Slope protection in Crookston	B 5
Hwy 2	0406-59	Intersection of Hwy 2 & Hwy 89 west of Bemidji	B 6
Hwy 2	1102-62	From Cass Lake to Ball Club	B 7
Hwy 2	0406-60	Bemidji Bypass	B 8
Hwy 2B	6015-07	Over the Red River in East Grand Forks	B 9
Hwy 9	5408-30	From Ada to the Norman/Polk county line	B 10
Hwy 11	3604-73M	West of Loman to the junction of TH 71 at Pelland	B 11
Hwy 11	3501-14	From the Red River to the west end of Karlstad	B 12
Hwy 11	3604-72M	From 1 mile west of Indus to 1 mile west of Loman	B 13
Hwy 11	6802-27	From CSAH 15 to Roseau	B 14
Hwy 11	3901-41	Over 7 miles west of Baudette on Hwy 11 to Baudette	B 15
Hwy 32	4503-14	North of Thief River Falls to the north of Middle River	B 16
Hwy 46	3109-41M	From Hwy 2 to Itasca Hwy 39	B 17
Hwy 59	3505-19	From Hwy 175 to the Canadian border	B 18
Hwy 71	2906-18	From south of Hwy 200 to southern limits of Lake George	B 19
Hwy 72	3905-09	In Baudette over the Rainy River	B 20
Hwy 75	4507-48	From the north end of Warren to the south end of Stephen	B 21
Hwy 75	6011-24	From north of Hwy 2 to south of Hwy 1 in Warren	B 22
Hwy 75	6011-29	From Hwy 2 to Polk Hwy 19	B 23
Hwy 92 & Hwy 222	6305-18	From Hwy 59 to Trail	B 24
Hwy 175	3515-16	North Dakota Border to Hallock	B 25
Hwy 200	5407-31	From Hwy 75 to the western limits of Ada	B 26
Hwy 371	1120-55	From Walker to Cass Lake	B 27

PROJECT SUMMARY

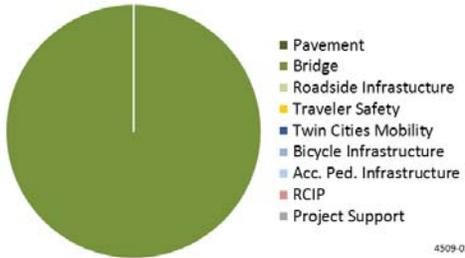
Hwy 1
Over the Red River in Oslo
Bridge 9100
State Project No. 4509-05



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project consists of improving the bridge over the Red River between Minnesota and North Dakota in Oslo.

Recent Changes and Updates

The project is in the preliminary design phase. There is an increase in engineering costs due to the development of a second set of construction plans.

Project History:

The existing fracture critical bridge structure was built in 1959 and has exhausted its useful life. It is functionally obsolete. An engineering study to evaluate rehabilitation options, instead of replacement, was completed in late 2012. The project was let as a bridge rehabilitation on October 24, 2014. Due to the high cost of the bids received for the rehabilitation, all bids were rejected. The project has been delayed until 2018 and other rehabilitation or potential replacement options will be evaluated.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.1	\$ 7.5
Other Construction Elements:	\$ 9.4	\$ 10.0
Engineering:	\$ 1.3	\$ 2.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 18.7	\$ 20.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is an updated estimate for bridge replacement in 2018. The other construction represents North Dakota's cost share for construction and engineering.

Project Risks:

MnDOT and NDDOT share ownership of the bridge and are both involved in decision-making/approval process which could result in unforeseen delays or changes. There may be problems coordinating project scheduling with emergency services and schools. Local agencies are concerned that the bridge hydraulics are affecting flooding in the area.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Pending Approval
Geometric Layout Approval Date: Pending Approval
Construction Limits Established Date: Pending Approval
Original Letting Date: 11/16/2012
Current Letting Date: 11/17/2017
Construction Season: 2018
Estimated Substantial Completion: Nov. 2019



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

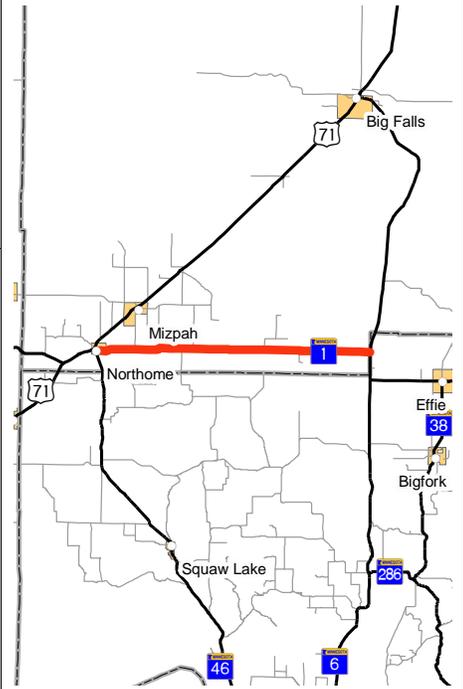
District Engineer: Craig Collison
Project Manager: Jeremy Hadrava

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 1
From the east end of Northome to Effie
State Project No. 3602-25

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Project is substantially complete.

Project History:

This bituminous resurfacing project was let and constructed in 2012.

Project Description:

The project consisted of resurfacing 33 miles of Highway 1 and Highway 6. The reconstruction in Effie included replacing 77 failing culverts.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.0	\$ 8.0
Other Construction Elements:	\$ 0.3	\$ 0.7
Engineering:	\$ 0.8	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.1	\$ 9.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

No project risks remain.

Schedule:

Environmental Approval Date: 02/29/2012
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 05/18/2012
 Current Letting Date: 05/18/2012
 Construction Season: 2012
 Estimated Substantial Completion: Oct. 2012



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Jeremy Hadrava

Revised Date: 12/15/2015

PROJECT SUMMARY

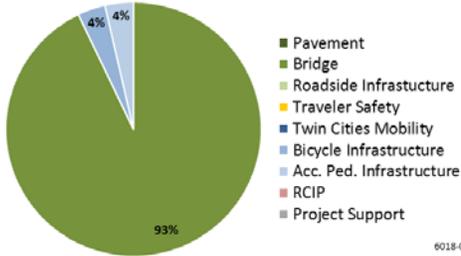
Hwy 2
 Kennedy Bridge over the Red River in East Grand Forks
 Bridge 9090
 State Project No. 6018-02



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project consists of rehabilitating the bridge over the Red River in East Grand Forks. The project includes replacing the bridge deck, repairing the tilted pier and painting.

Recent Changes and Updates

Project is in the preliminary/detail design phase.

Project History:

A planning study was completed in early 2014, and determined that a bridge rehabilitation project is a feasible alternative to reconstruction. The rehabilitation will include replacing a severely tilted bridge pier, installing a new concrete bridge deck, adding new vehicle railings, painting and constructing a pedestrian/bicycle path on the north side of the deck. The project estimate has decreased by \$5.7M.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 25.0	\$ 9.0
Other Construction Elements:	\$ 0.0	\$ 10.9
Engineering:	\$ 2.5	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 27.5	\$ 21.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimate is based on a bridge rehabilitation. Other Construction Elements represents North Dakota's cost share.

Project Risks:

Because several agencies are involved in the decision-making/approval process, there may be significant delays or changes or other construction assumptions. There may be problems coordinating project scheduling with emergency services and schools.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 11/17/2017
 Current Letting Date: 9/23/2016
 Construction Season: 2017
 Estimated Substantial Completion: Nov. 2018



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Joe Mckinnon

Revised Date: 12/15/2015

PROJECT SUMMARY

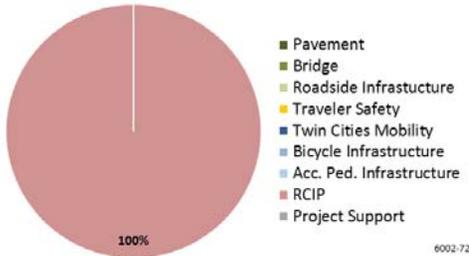
Hwy 2
Slope protection in Crookston
State Project No. 6002-72



Primary Purpose:

Regional & Community Improvement Project

Investment Category:



Project Description:

The project consists of providing slope protection along Hwy 2 adjacent to the Red Lake River in Crookston.

Recent Changes and Updates

Shear walls were installed and the slope was graded. The project is experiencing delays associated with the removal of asbestos containing materials that were unearthed during the project. The significant increase in cost is attributed to the disposal of the asbestos containing material.

Project History:

Project was awarded as a design-build contract to Nicholson Construction Company. The project is currently under construction. The estimated substantial completion date has been modified to reflect the contract documents.

In fall 2012 the inslope adjacent to Hwy 2 in an urban portion of Crookston showed signs of possible slope failure. An alternative to protect the inslope with reinforcement would be installed. Slope monitoring devices have been installed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 6.4
Other Construction Elements:	\$ 0.0	\$ 4.1
Engineering:	\$ 1.4	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.0	\$ 11.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The Current Estimate is the construction letting amount for a design-build.

Project Risks:

Asbestos was discovered during excavation and was disposed of. No remaining risks.

Schedule:

Environmental Approval Date: 10/04/2013
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 10/04/2013
Original Letting Date: 03/26/2014
Current Letting Date: 03/26/2014
Construction Season: 2014
Estimated Substantial Completion: Sept, 2015



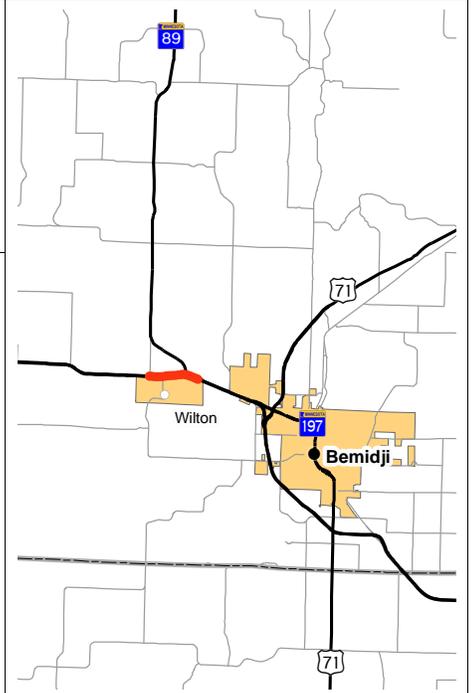
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Paul Konickson

Revised Date: 12/15/2015

PROJECT SUMMARY

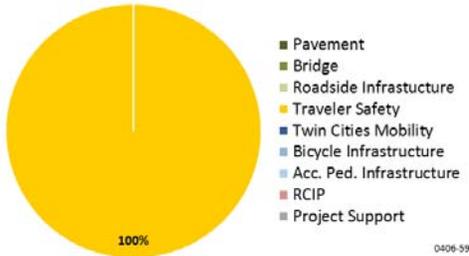
Hwy 2
 Intersection of Hwy 2 & Hwy 89 west of Bemidji
 Bridge 04030
 State Project No. 0406-59



Primary Purpose:

Performance-based Need: District Safety Plan

Investment Category:



Project Description:

The project consists of constructing a partial interchange at the intersection of Hwy 2 and Hwy 89.

Recent Changes and Updates

The project was let and awarded to KGM Contractors Inc. The project is currently under construction and is on schedule. Additional costs include additional business relocation and more complex engineering.

Project History:

Project is in the design stages. The engineering costs were increased to more accurately reflect the complexity of the project. The right of way estimate was increased to reflect the current acquisition needs. This intersection has the third highest injury related crash rate in the state. An engineering study was completed in December 2012 and recommended a partial interchange to eliminate the most recurring intersecting vehicle movements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 4.9
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 0.6	\$ 1.0
Right of Way:	\$ 0.6	\$ 0.8
Total:	\$ 6.1	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

If there's an early winter or the schedule is delayed, the contractor may have to heat and house bridge construction. The heavy use of the intersection may cause construction delays or additional costs.

Schedule:

Environmental Approval Date: 1/27/2015
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 7/16/2014
 Construction Limits Established Date: 07/16/2014
 Original Letting Date: 04/25/2015
 Current Letting Date: 04/24/2015
 Construction Season: 2015
 Estimated Substantial Completion: Nov. 2015



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Brandy Pemberton

Revised Date: 12/15/2015

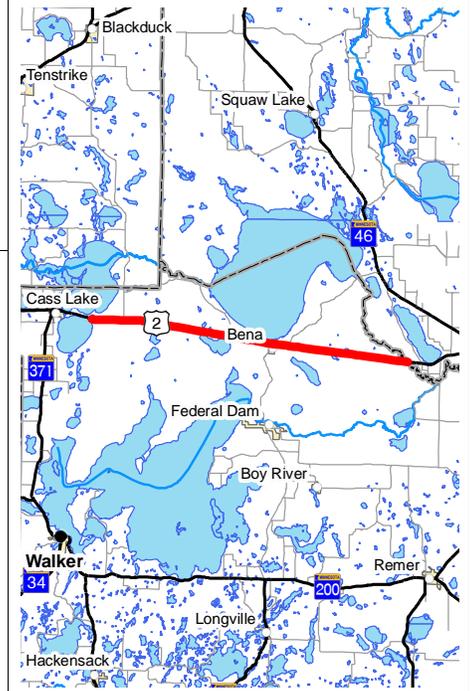
PROJECT SUMMARY

Hwy 2

From Cass Lake to Ball Club

State Project No. 1102-62

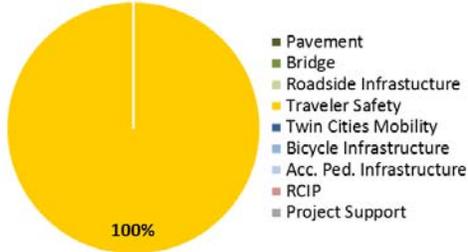
www.dot.state.mn.us/d2/projects/hwy2passinglanes/index.html



Primary Purpose:

Performance-based Need: Interregional Corridor Mobility

Investment Category:



Project Description:

The project consists of constructing three 4-lane passing sections, 3 left turn lanes, 9 right turn lanes and 1 bypass lane.

Recent Changes and Updates

The project was let and awarded to Gladen Construction Inc. The project is currently under construction. Increased cost is due to deep muck excavation, construction staging and additional grading work identified during construction.

Project History:

Hwy 2 from Cass Lake to Deer River is the last remaining segment of Hwy 2 from North Dakota to Wisconsin without passing lanes or a 4-lane cross section. Long traffic queues are common. This results in a lower level of service and encourages aggressive driving habits. The proposed project would improve overall traffic operations by breaking up traffic platoons and would reduce delays caused by inadequate passing opportunities.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.5	\$ 13.3
Other Construction Elements:	\$ 0.4	\$ 1.0
Engineering:	\$ 2.1	\$ 2.1
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 13.1	\$ 16.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

Unidentified environmental issues may delay construction or raise costs. Deep muck may increase project costs. Lack of detour options may inconvenience motorists or require solutions that increase project duration or cost.

Schedule:

Environmental Approval Date: 06/30/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 4/29/2014
 Construction Limits Established Date: 04/29/2014
 Original Letting Date: 07/25/2014
 Current Letting Date: 08/22/2014
 Construction Season: 2014/2015
 Estimated Substantial Completion: Nov. 2015



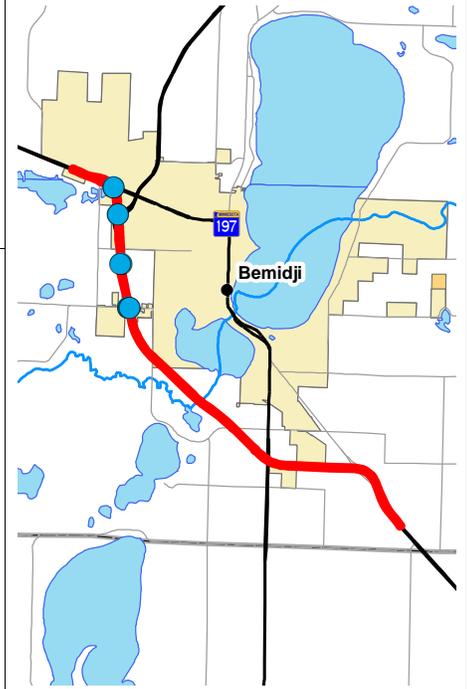
Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Deb Bauer

Revised Date: 12/15/2015

PROJECT SUMMARY

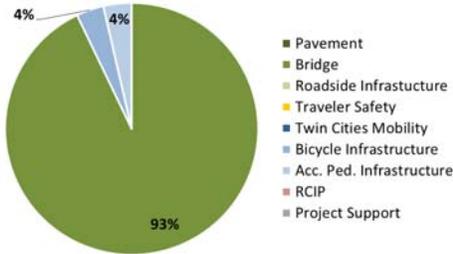
Hwy 2
Bemidji Bypass
Bridge 04005, -, 04010, 04019
State Project No. 0406-60



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 21.5 miles of pavement, rehabilitating 6 bridges and increasing bridge clearance along the corridor.

Recent Changes and Updates

MnDOT expanded the scope of a bridge rehabilitation project along the Bemidji bypass to include resurfacing 21.5 miles of pavement adjacent to the bridges. Combining these improvements provides cost savings through efficiencies and economy of scale along with constraining traffic impacts to one construction season. Accelerating the pavement resurfacing allows for a thinner, less costly resurfacing.

Project History:

Bridges 04005, 04006, 04007, 04008, 04009, 04010 are over 30 years old and require rehabilitation to extend their useful lives. Bridge 04019 does not meet clearance requirements of a super-haul truck corridor. The pavement surface on US 2 is projected to be in poor condition by 2018. This project will extend the useful life of all six bridges, provide additional clearance under Bridge 04019 so it can be designated a super-haul truck corridor, and extend the useful service life of the pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.3	\$ 6.8
Other Construction Elements:	\$ 0.2	\$ 0.3
Engineering:	\$ 0.6	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.1	\$ 8.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2014 historical cost data and uses an inflation factor based on the midpoint of the construction season.

Project Risks:

The project is lengthy and may cause local traffic problems.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 8/26/2016
Current Letting Date: 8/26/2016
Construction Season: 2017
Estimated Substantial Completion: Nov, 2017



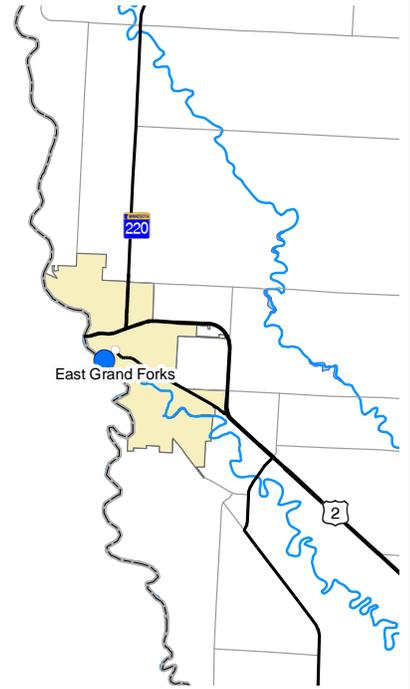
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Deb Bauer

Revised Date: 12/15/2015

PROJECT SUMMARY

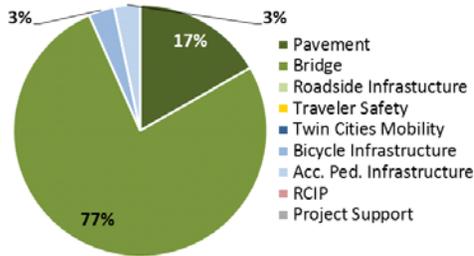
Hwy 2B
Over the Red River in East Grand Forks
Bridge 4700
State Project No. 6015-07



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project consists of rehabilitating the bridge over the Red River on Hwy 2B (Demers Avenue) in East Grand Forks.

Recent Changes and Updates

Bridge rehabilitation was determined to be the appropriate improvement to extend the service life of the bridge. The project was accelerated to 2015 to avoid traffic impacts with the Kennedy Bridge Rehabilitation. The project was let, awarded and is currently under construction. Revising the scope to rehabilitation from reconstruction resulted in a significant reduction in cost.

Project History:

North Dakota DOT is the lead agency for this project. In 2013 and early 2014, the engineering consultant on the project performed structural reviews of the bridge to determine the in-place condition and remaining bridge life. This review indicated a bridge rehabilitation will extend the life of the bridge for a significant time period. This bridge was constructed in 1929 and remodeled in 1986. The structure is historically significant.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.7	\$ 2.1
Other Construction Elements:	\$ 17.8	\$ 2.7
Engineering:	\$ 3.1	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 35.6	\$ 5.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The Current Estimate is the construction letting amount.

Project Risks:

Because several agencies are involved in the decision-making/approval process, there may be delays and increased costs. Emergency services and schools may experience traffic delays due to the project.

Schedule:

Environmental Approval Date: 5/22/2015
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 11/15/2017
Current Letting Date: 5/22/2015
Construction Season: 2015
Estimated Substantial Completion: Nov. 2015



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

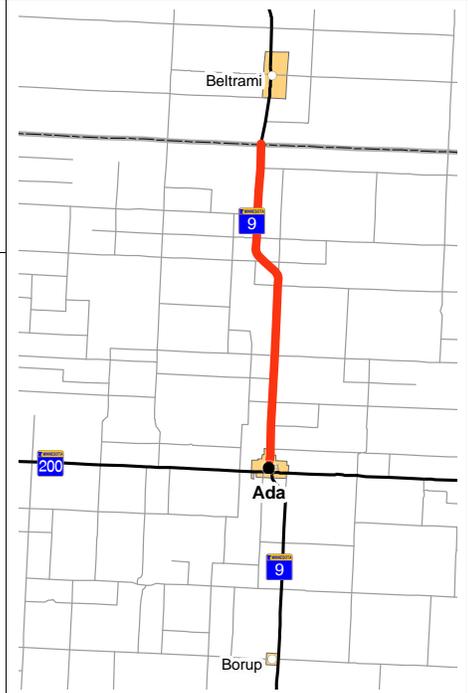
District Engineer: Craig Collison
Project Manager: Joe Mckinnon

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 9
From Ada to the Norman/Polk county line
State Project No. 5408-30

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Project is substantially complete.

Project History:

This project was let and constructed in 2013. Additional paving was completed to protect inslopes from eroding during a flood. The project's purpose was to improve the ride and surface condition, pavement strength and extend pavement life.

Project Description:

The project consisted of rehabilitating 18 miles of highway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 5.0
Other Construction Elements:	\$ 0.3	\$ 0.2
Engineering:	\$ 0.9	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.1	\$ 5.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The Current Estimate is the construction letting amount.

Project Risks:

No project risks remain.

Schedule:

Environmental Approval Date: 07/17/2012
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 01/25/2013
Current Letting Date: 01/25/2013
Construction Season: 2013
Estimated Substantial Completion: 06/01/2014



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Shawn Groven

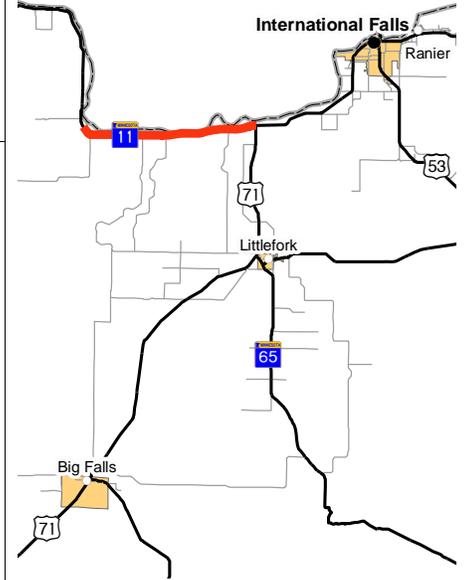
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 11

West of Loman to the junction of TH 71 at Pelland
State Project No. 3604-73M

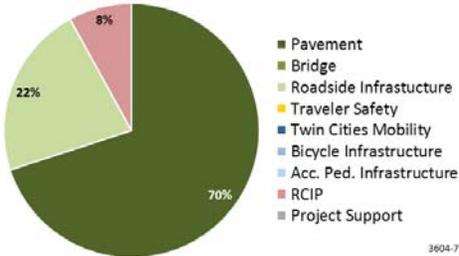
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 11 miles of highway, widening shoulders and replacing failing culverts.

Recent Changes and Updates

Project is substantially complete.

Project History:

The project was completed in November 2014. The increase in construction cost was caused by the isolated location of the project and the strict erosion control standards to protect the Rainy River. The design includes driveway and entrance revisions based on feedback from property owners. The design incorporates several small stormwater ponds for runoff control. This project provides improved surface ride, wider shoulders, 10-ton pavement strength and additional shoulder width.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 7.0
Other Construction Elements:	\$ 0.3	\$ 0.0
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.3	\$ 0.1
Total:	\$ 8.2	\$ 8.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

Unstable slopes along the Rainy River may cause erosion and river pollution. Slope stability is being monitored.

Schedule:

Environmental Approval Date: 07/26/2013
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 06/01/2013
Original Letting Date: 06/06/2014
Current Letting Date: 04/25/2014
Construction Season: 2014
Estimated Substantial Completion: Nov. 2014



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Todd Vonasek

Revised Date: 12/15/2015

PROJECT SUMMARY

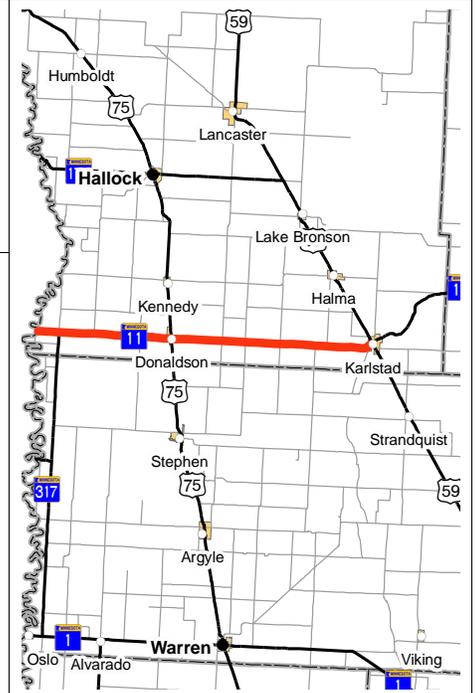
Hwy 11

From the Red River to the west end of Karlstad

Bridge 8513, &, 8514

State Project No. 3501-14

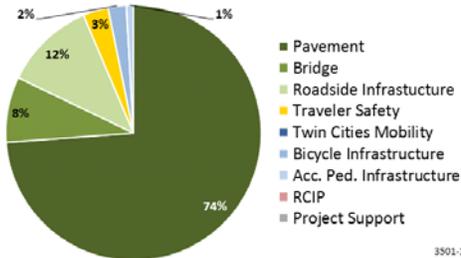
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



3501-14

Project Description:

The project consists of resurfacing 21 miles of highway and replacing 2 box culvert bridges.

Recent Changes and Updates

Project is substantially complete.

Project History:

The project is currently under construction.

This segment is in need of pavement improvement.

Since the initial project scoping, two miles of additional inslope slides occurred. The estimate increased to show the additional inslope repair and associated box culvert work. Additional slides are not anticipated because the deep ditch is only along part of this portion of Hwy 11.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2008

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.8	\$ 5.9
Other Construction Elements:	\$ 0.4	\$ 0.3
Engineering:	\$ 1.2	\$ 0.9
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 7.5	\$ 7.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

Contractor is contesting the earthwork quantities. A post construction survey is being completed to verify grading quantities. Could result in a \$75K-\$100K supplemental agreement.

Schedule:

Environmental Approval Date: 12/09/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 12/09/2013
 Original Letting Date: 04/27/2012
 Current Letting Date: 04/25/2014
 Construction Season: 2014
 Estimated Substantial Completion: Nov. 2014



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Shawn Groven

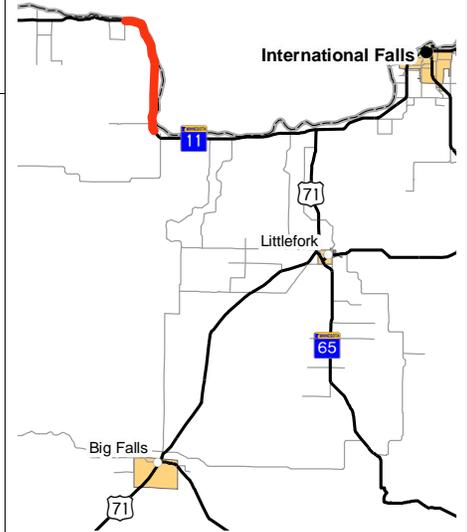
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 11

From 1 mile west of Indus to 1 mile west of Loman
State Project No. 3604-72M

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Project is substantially complete. The project experienced above average bids due to the remote location of the project and the lack of a suitable detour. The lack of a suitable detour resulted in more complex staging operations and the need for temporary bypasses.

Project History:

This project was let and constructed in 2012. This segment was in need of an improved surface ride, wider shoulders and increased pavement strength to a 10-ton pavement.

Project Description:

The project consisted of resurfacing/reconstructing 9 miles of highway, widening shoulders and replacing failing culverts.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.5	\$ 6.5
Other Construction Elements:	\$ 0.2	\$ 0.0
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 5.6	\$ 7.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

No project risks remain.

Schedule:

Environmental Approval Date: 02/13/2012
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 12/18/2011
Original Letting Date: 05/18/2012
Current Letting Date: 05/18/2012
Construction Season: 2012
Estimated Substantial Completion: Nov. 2012



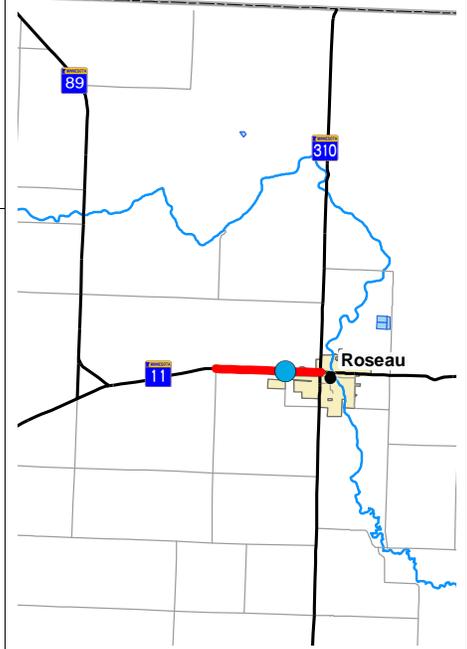
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Todd Vonasek

Revised Date: 12/15/2015

PROJECT SUMMARY

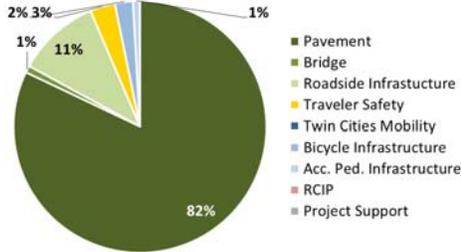
Hwy 11
 From CSAH 15 to Roseau
 Bridge 68X06
 State Project No. 6802-27



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project includes reclaiming 3 miles of highway, extending the center turn lane, widening shoulders, replacing 1 signal, replacing culverts, replacing 4 pedestrian ramps and replacing signage.

Recent Changes and Updates

The project has been let and awarded to Minn-Dak Asphalt Inc. and is currently under construction. Additional costs are due to scope changes to improve accessibility and drainage within the City of Roseau.

Project History:

The pavement conditions on Hwy 11 are projected to be unacceptable by 2017. The corridor lacks adequate shoulders and turning lanes. The traffic signal at TH 310 is not ADA compliant. Centerline culvert crossings are in poor condition. Sidewalks in Roseau do not comply with ADA standards.

The project provides a smooth riding surface, improves traffic mobility and safety, extends the useful life of roadside infrastructure and improves the accessibility of sidewalks.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 2.6	\$ 4.1
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.5	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 3.3	\$ 4.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

Construction staging and detours may cause traffic delays and accessibility issues for local businesses and schools.

Schedule:

Environmental Approval Date: 1/27/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 1/27/2014
 Original Letting Date: 1/30/2015
 Current Letting Date: 1/30/2015
 Construction Season: 2015
 Estimated Substantial Completion: Nov, 2015



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Shawn Groven

Revised Date: 12/15/2015

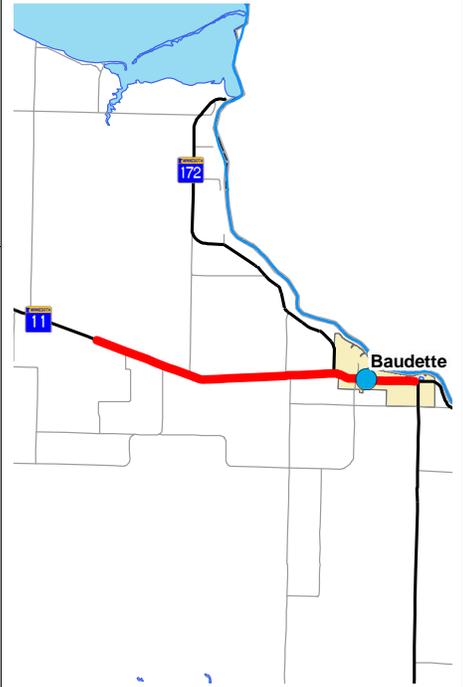
PROJECT SUMMARY

Hwy 11

Over 7 miles west of Baudette on Hwy 11 to Baudette

Bridge 39007

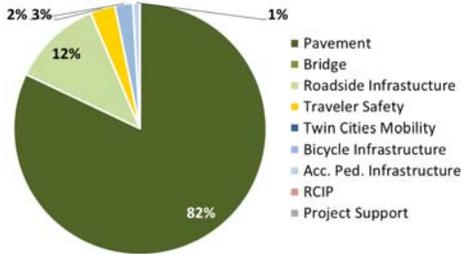
State Project No. 3901-41



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 9.9 miles of pavement, reconstructing 1.3 miles of urban section pavement, rehabilitating 1 urban bridge, replacing 4 culverts, constructing 5 bypass/turn lanes and upgrading 15 blocks of sidewalk.

Recent Changes and Updates

MnDOT expanded the project to include reconstruction of 1.3 miles of urban highway in Baudette to better accommodate ADA improvements and local utility needs. The scope was also expanded to include rehabilitation of Bridge 39007 over the Baudette River. Expanding the scope and partnering with the City of Baudette provides the state and city with cost savings through efficiencies and economies of scale, and constrains traffic impacts to one construction season.

Project History:

Pavement quality is projected to drop below acceptable levels by 2019. The existing sidewalks and pedestrian ramps are not ADA compliant. Bridge 39007 has a deteriorated deck. The storm sewer is undersized and does not adequately drain the City of Baudette. Culverts are in poor condition, and intersections lack turning lanes. The project will extend the service life of highway infrastructure, improve ride conditions, extend the useful life of Bridge 39007, improve drainage, improve safety and bring sidewalk and ramps up to ADA standards.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.2	\$ 5.8
Other Construction Elements:	\$ 0.1	\$ 0.3
Engineering:	\$ 0.5	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 3.8	\$ 7.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2013 historical cost data and uses an inflation factor applied to the midpoint of the construction season.

Project Risks:

If local traffic and business are disrupted by the length, complexity and urban setting of the project, MnDOT may have to modify the project's scope and/or schedule.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 1/13/2015
 Original Letting Date: 3/27/2015
 Current Letting Date: 3/25/2016
 Construction Season: 2016
 Estimated Substantial Completion: Nov, 2016



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

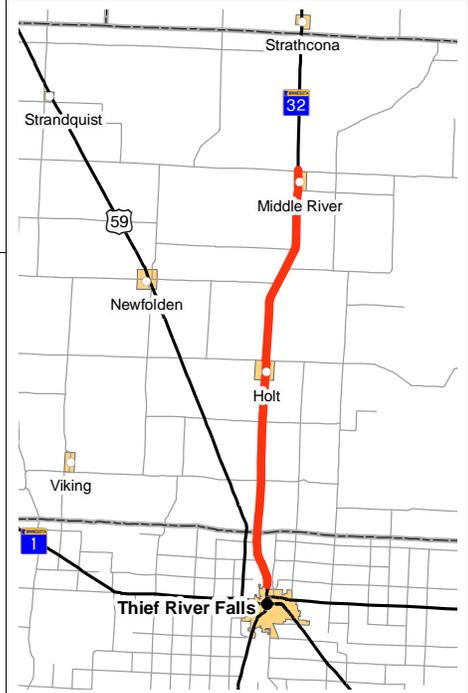
District Engineer: Craig Collison
Project Manager: Joe Mckinnon

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 32

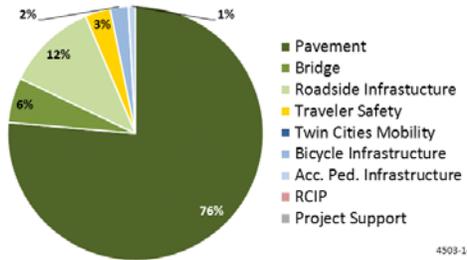
North of Thief River Falls to the north of Middle River
 Bridge 8581, 8582, 8583, &, 6085
 State Project No. 4503-14



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of rehabilitating 22 miles of highway, full width shoulder paving, replacing 4 box culvert bridges and replacing failing culverts. The project also includes reconstructing the urban section of highway in Middle River, replacing the storm sewer system and replacing sidewalks.

Recent Changes and Updates

The project was let and awarded to Northstar Materials Inc. The project is currently under construction and on schedule. Increased costs are due to modifications of the scope to include an urban reconstruct in Middle River, two additional box culvert replacements and paving full width shoulders.

Project History:

The current estimate was updated to reflect a full urban reconstruction in Middle River to replace the failing storm sewer system. The project will be a cooperative project with the City of Middle River.

The current estimate was updated based on bituminous costs, two additional box culverts and centerline and entrance culverts. The project improves ride and surface condition, pavement strength and pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.8	\$ 10.8
Other Construction Elements:	\$ 0.5	\$ 0.3
Engineering:	\$ 1.6	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.9	\$ 12.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

There may be local traffic and business impacts due to the location of the project.

Schedule:

Environmental Approval Date: 06/13/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 07/22/2014
 Original Letting Date: 01/23/2015
 Current Letting Date: 03/27/2015
 Construction Season: 2015
 Estimated Substantial Completion: Nov. 2015



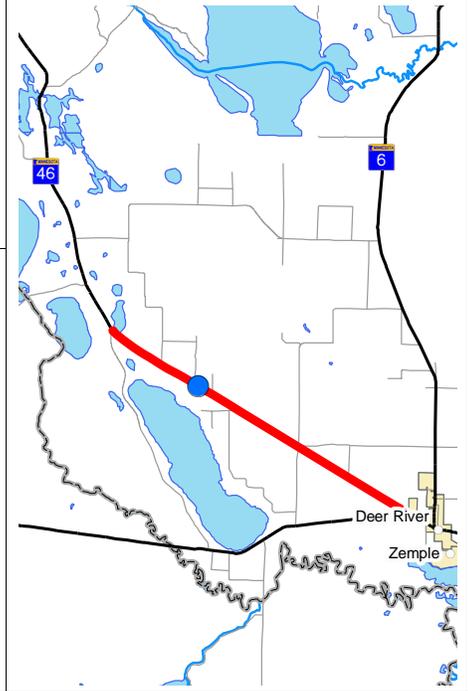
Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Ray Gust

Revised Date: 12/15/2015

PROJECT SUMMARY

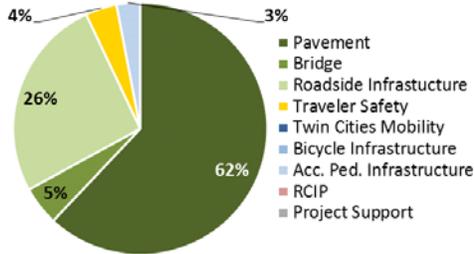
Hwy 46
From Hwy 2 to Itasca Hwy 39
Bridge 5623
State Project No. 3109-41M



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 10 miles of highway, replacing 1 box culvert bridge, replacing 53 failing culverts, constructing 4 turn lanes, constructing a truck pull off area and replacing signs.

Recent Changes and Updates

A new entrance and right turning lane has been constructed on Hwy 46 by the White Oak Casino.

Project History:

New project added to the 2015-2018 STIP.

The pavement surface ride quality has fallen below an acceptable level. Centerline culvert crossings and entrance culverts may fail. Bridge 5623 lacks adequate recovery area for run-off-the-road vehicles. Key intersections lack turning lanes. Narrow shoulders do not have adequate space for trucks to check loads. Signs do not meet reflectivity requirements. The proposed project provides a smooth riding surface, a structurally sound bridge, new culverts and increased safety.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 4.2
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.2	\$ 5.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2013 historical cost data and uses an inflation factor to the midpoint of construction.

Project Risks:

Culverts are in extremely poor condition and may fail prior to construction letting. The project's location within the Chippewa National Forest and the Leech Lake Band of Ojibwe Reservation may lengthen schedule or increase costs. Proposed development at the White Oak Casino may effect shoulder access and project costs.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 3/23/2018
Current Letting Date: 12/15/2017
Construction Season: 2018
Estimated Substantial Completion: Nov. 2018



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Rachel Hoff

Revised Date: 12/15/2015

PROJECT SUMMARY

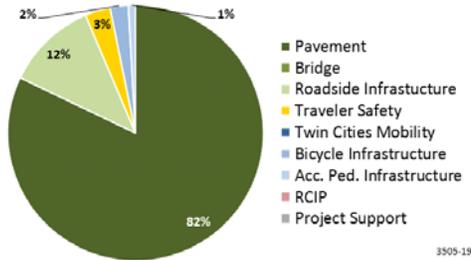
Hwy 59
 From Hwy 175 to the Canadian border
 Bridge 35X10
 State Project No. 3505-19



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project resurfaces 18 miles of highway, replaces failing culverts and a storm sewer in Lancaster.

Recent Changes and Updates

The project is in detail design phase and is on schedule to be constructed in late summer of 2016.

Project History:

The funding for this project was delayed from 2016 to 2017 to free up funding for changes to other projects in the STIP.

This segment is in need of pavement improvement. The project's purpose is to improve the ride and surface condition, pavement strength and extended pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.3	\$ 4.5
Other Construction Elements:	\$ 0.3	\$ 0.2
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.4	\$ 5.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2012 historical cost data and uses standard inflation factors to the midpoint of construction.

Project Risks:

Impacts on local traffic and agricultural traffic may be significant.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 04/22/2016
 Current Letting Date: 02/26/2016
 Construction Season: 2016
 Estimated Substantial Completion: Nov. 2016



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

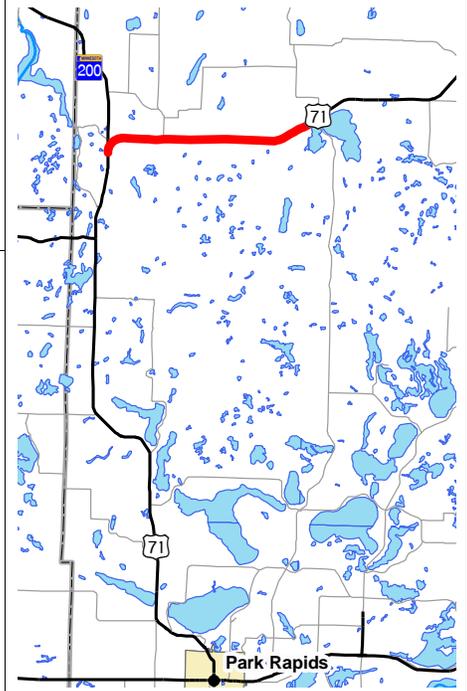
District Engineer: Craig Collison
Project Manager: Ray Gust

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 71

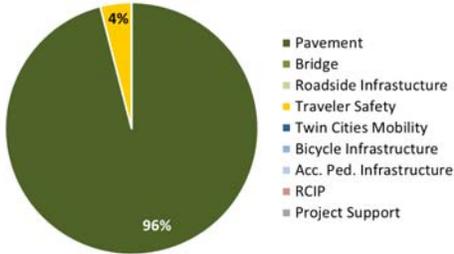
From south of Hwy 200 to southern limits of Lake George
State Project No. 2906-18



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of reclaiming or applying a thin layer of concrete to 7.5 miles of pavement, constructing 4 new right turn lanes, widening 1 bypass lane and lighting at the Hwy 200 intersection.

Recent Changes and Updates

This is a new project added to the 2016-2019 STIP. The project was scoped and a baseline estimate was prepared.

Project History:

The pavement surface on Hwy 71 is predicted to be unacceptable by 2017. Key intersections along the corridor lack turning lanes, the Intersection of Hwy 71 and Hwy 200 lacks lighting and the bypass lane at Hwy 200 is too narrow. The purpose of this project is to extend the useful service life of the pavement, provide a smooth riding surface, improve traveler safety and reduce crashes along the corridor.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 4.2
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.2	\$ 5.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the construction season.

Project Risks:

If the duration of the project causes traffic problems, the pace of the project may have to be changed.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 2/23/2018
Current Letting Date: 2/23/2018
Construction Season: 2018
Estimated Substantial Completion: Nov, 2018



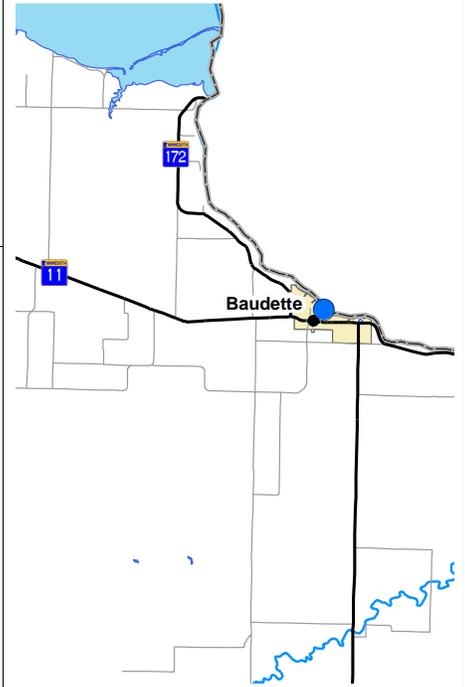
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Joseph McKinnon

Revised Date: 12/15/2015

PROJECT SUMMARY

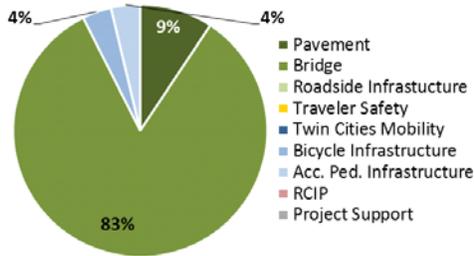
Hwy 72
 In Baudette over the Rainy River
 Bridge 9412
 State Project No. 3905-09



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project replaces a bridge over the Rainy River in Baudette.

Recent Changes and Updates

The project is in the preliminary design phase. The District will be investigating different procurement methods for contracting final design and construction.

Project History:

In early 2014, MnDOT and the Ontario Ministry of Transportation discussed the preliminary design of a bridge replacement. In July of 2014, an engineering consultant was selected to complete the preliminary design. The major tasks include completing the Environmental Assessment, reviewing and recommending bridge alternatives and reviewing and recommending a bridge alignment. The preliminary design will be completed in January 2016.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.5	\$ 15.5
Other Construction Elements:	\$ 20.0	\$ 20.0
Engineering:	\$ 4.5	\$ 4.5
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 40.3	\$ 40.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2012 historical cost data and uses a standardized inflation factor. Other Construction Elements include Canada's cost share.

Project Risks:

Complexities in administering a project with Canada. New alignment alternatives are limited and have potential cultural and/or major utility impacts. Coordination with Customs and Border Protection for alignment alternatives may affect the existing port building and border security during construction.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 11/17/2017
 Current Letting Date: 11/17/2017
 Construction Season: 2018
 Estimated Substantial Completion: Nov. 2019



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Joe Mckinnon

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 75

From the north end of Warren to the south end of Stephen
State Project No. 4507-48

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Project is substantially complete. Additional costs came from expanding the scope to include resurfacing the Warren Airport. All construction costs associated with the Warren Airport were funded through an agreement with the City of Warren.

Project History:

This pavement rehabilitation project was let and completed in 2012.

Project Description:

The project consisted of rehabilitating 18 miles of highway, improving sidewalk accessibility in Argyle, replacing failing lighting units in Warren and resurfacing the Warren Airport.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 6.1
Other Construction Elements:	\$ 0.0	\$ 0.4
Engineering:	\$ 0.4	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.5	\$ 7.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

No project risks remain.

Schedule:

Environmental Approval Date: 11/22/2011
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 04/27/2012
Current Letting Date: 04/27/2012
Construction Season: 2012
Estimated Substantial Completion: Sept. 2012



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

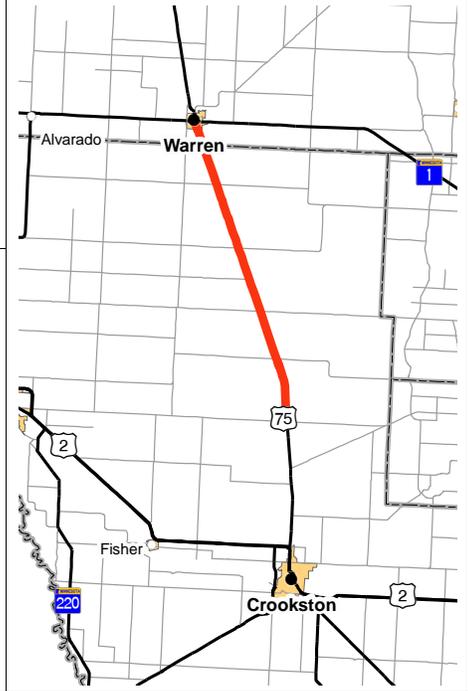
District Engineer: Craig Collison
Project Manager: Shawn Groven

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 75

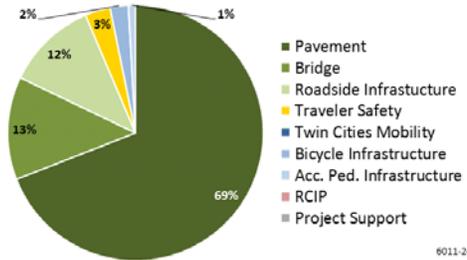
From north of Hwy 2 to south of Hwy 1 in Warren
 Bridge 3958, 8393, 8394, 3959, 4463, &, 6631
 State Project No. 6011-24



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 20 miles of highway, shoulder paving south of Warren, replacing 6 box culvert bridges and replacing 13 failing culverts.

Recent Changes and Updates

The project is in the final design phase. Shoulder paving south of Warren was added to the project to address bicycle needs identified by the community.

Project History:

Replacement of the bridge and four culverts have been removed from the project and added to SP 6011-29. This project was delayed from 2014 to 2016 to free up funding for changes to other projects in the STIP. The delay resulted in a slight cost increase.

This segment is in need of pavement improvement. The project's purpose is to improve the ride and surface condition, pavement strength and extended pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 6.1
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 7.4	\$ 7.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2013 historical cost data and uses a standardized inflation factor.

Project Risks:

The project may cause delays and problems for local and agricultural traffic. Road conditions may have degraded and the project's costs may have to be revised upwards.

Schedule:

Environmental Approval Date: 2/9/2015
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 2/9/2015
 Original Letting Date: 12/20/2013
 Current Letting Date: 12/18/2015
 Construction Season: 2016
 Estimated Substantial Completion: Nov. 2016



Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Rachel Hoff

Revised Date: 12/15/2015

PROJECT SUMMARY

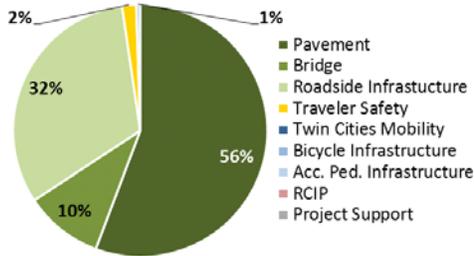
Hwy 75
 From Hwy 2 to Polk Hwy 19
 Bridge 8391, 8392
 State Project No. 6011-29



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 12 miles of highway, replacing 2 box culvert bridges, replacing 29 failing culverts and constructing a new storm sewer system and pedestrian ramps in Euclid

Recent Changes and Updates

Project is in preliminary design phase.

Project History:

Project is scoped and has a baseline estimate. Pavement quality will not be acceptable by 2018. The bridges are over 80 years old and lack an adequate recovery area for run-off-the-road vehicles. Concrete box culvert crossings and entrance culverts may fail. Curb & gutter in Euclid do not drain properly. Sidewalks in Euclid do not meet the ADA standards. This project provides an improved surface and bridge. It reduces the risk of culvert failure and improves the accessibility of Euclid's sidewalks.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.9	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2013 historical cost data and uses an inflation factor to the midpoint of construction.

Project Risks:

The project is lengthy and there may be local traffic and agricultural traffic impacts. Road conditions may degrade and increase project duration or cost.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 02/23/2018
 Current Letting Date: 02/23/2018
 Construction Season: 2018
 Estimated Substantial Completion: Nov. 2018



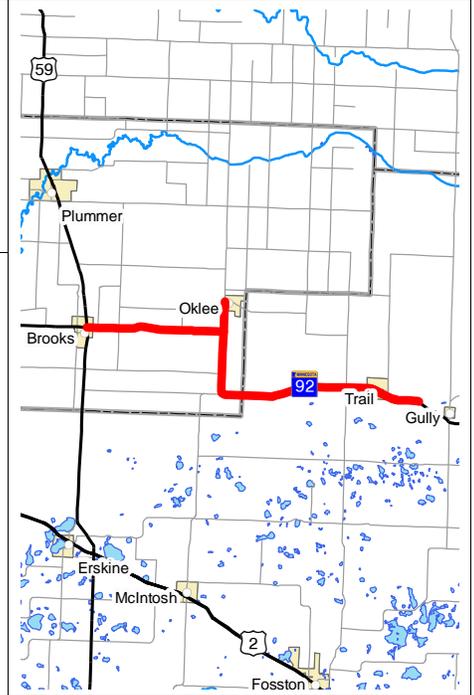
Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Ray Gust

Revised Date: 12/15/2015

PROJECT SUMMARY

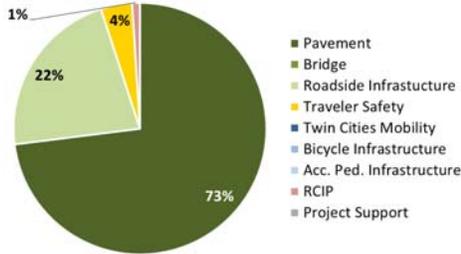
Hwy 92 & Hwy 222
From Hwy 59 to Trail
State Project No. 6305-18



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 21 miles of highway and replacing 3 culvert crossings.

Recent Changes and Updates

This is a new project added to the 2016-2019 STIP. The project was scoped and a baseline estimate was prepared.

Project History:

The pavement ride quality on Hwys 92 and 222 has fallen below an acceptable level. There are centerline culverts and entrance culverts that are in poor condition and may fail. The project extends the useful service life of the pavement, provides a smooth surface and lowers the risk of culvert failures.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 4.4
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.4	\$ 5.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the construction season.

Project Risks:

If the duration of the project causes traffic problems, the pace of the project may have to be changed.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 12/15/2017
Current Letting Date: 12/15/2017
Construction Season: 2018
Estimated Substantial Completion: Nov, 2018



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: Craig Collison
Project Manager: Brandy Pemberton

Revised Date: 12/15/2015

PROJECT SUMMARY

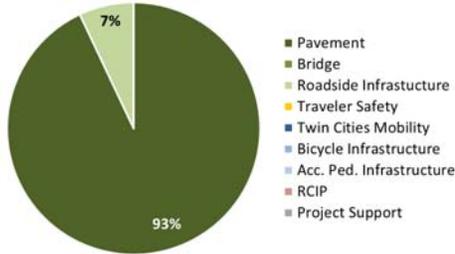
Hwy 175
North Dakota Border to Hallock
State Project No. 3515-16



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of resurfacing 9.7 miles of pavement, reconstructing overflow areas with grade raise restrictions and replacing 7 entrance culverts.

Recent Changes and Updates

This is a new project added to the 2016-2019 STIP. The project was scoped and a baseline estimate was prepared.

Project History:

The pavement of Hwy 175 is predicted to be unacceptable by 2020. Shoulders do not drain properly and are deteriorating rapidly. Existing culverts are in poor condition. The project will extend the useful service life of the pavement, provide a smooth riding surface, improve drainage of the subgrade, strengthen shoulders and upgrade failing roadside infrastructure.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 4.6
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 5.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was developed based on 2014 historical cost data and uses an inflation factor to the midpoint of the year of construction.

Project Risks:

If the district is able to tie the project to a planned resurfacing project on Hwy 75 and Hwy 175 in Hallock, then the work will be more efficient.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 4/27/2018
Current Letting Date: 4/27/2018
Construction Season: 2018
Estimated Substantial Completion: Nov, 2018



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

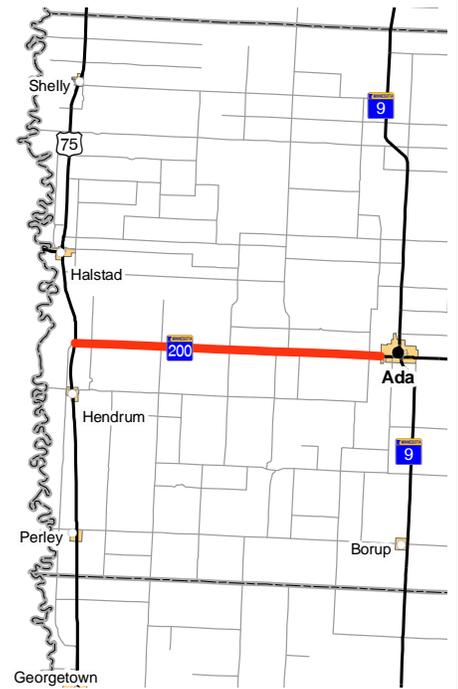
District Engineer: Craig Collison
Project Manager: Deb Bauer

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 200
 From Hwy 75 to the western limits of Ada
 Bridge 2068
 State Project No. 5407-31

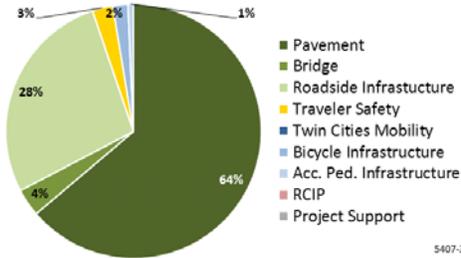
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



5407-31

Project Description:

The project consists of improving 13 miles of concrete road surface with a bituminous overlay.

Recent Changes and Updates

Project is substantially complete.

Project History:

The project is under construction. The estimate increased because a two-mile portion planned to be an overlay changed to a full pavement replacement.

The local watershed would not allow additional fill in flood overtopping areas.

In September 2012 the project was moved from 2013 to 2014 because of the design time needed to resolve hydraulic issues with the local watershed.

The project improves ride and surface condition, pavement strength and extends pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2007

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 7.0
Other Construction Elements:	\$ 0.3	\$ 0.0
Engineering:	\$ 1.0	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.2	\$ 7.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

No project risks remain.

Schedule:

Environmental Approval Date: 05/29/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 03/26/2010
 Current Letting Date: 02/28/2014
 Construction Season: 2014
 Estimated Substantial Completion: Oct. 2014



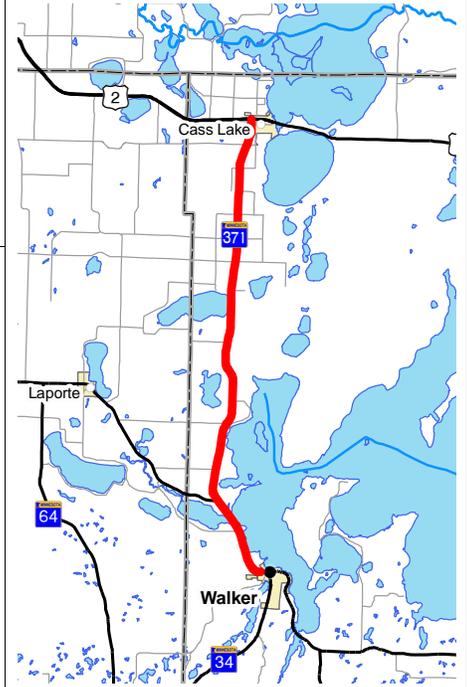
Minnesota Department of Transportation
 District 2
 3920 Highway 2 West
 (218) 755-6500

District Engineer: Craig Collison
Project Manager: Todd Vonasek

Revised Date: 12/15/2015

PROJECT SUMMARY

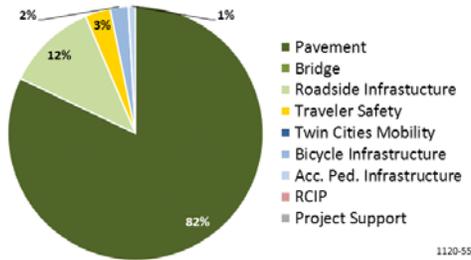
Hwy 371
From Walker to Cass Lake
State Project No. 1120-55



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



1120-55

Project Description:

The project consists of resurfacing 20 miles of highway, replacing 1 culvert, lining 19 culverts and constructing turning and bypass lanes at key intersections.

Recent Changes and Updates

The project was let and awarded to Anderson Brothers Construction. The project is under construction. The increased cost is due to scope enhancements for shoulder paving, culvert lining and turning lanes.

Project History:

The scope was modified to address shoulder paving and turning lane needs. The ADT is high enough to warrant additional right turn, left turn and bypass lanes. Providing protected turning lanes is proven to increase mobility and reduce crashes.

This segment is in need of pavement improvement. The project improves ride and surface condition, pavement strength and extends pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.6	\$ 5.6
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.3	\$ 6.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction letting amount.

Project Risks:

There may be some local traffic problems due to the duration of the project..

Schedule:

Environmental Approval Date: 2/20/2015
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 03/27/2015
Current Letting Date: 4/24/2015
Construction Season: 2015
Estimated Substantial Completion: Nov. 2015



Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

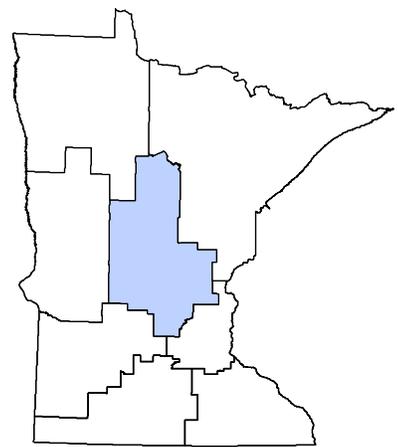
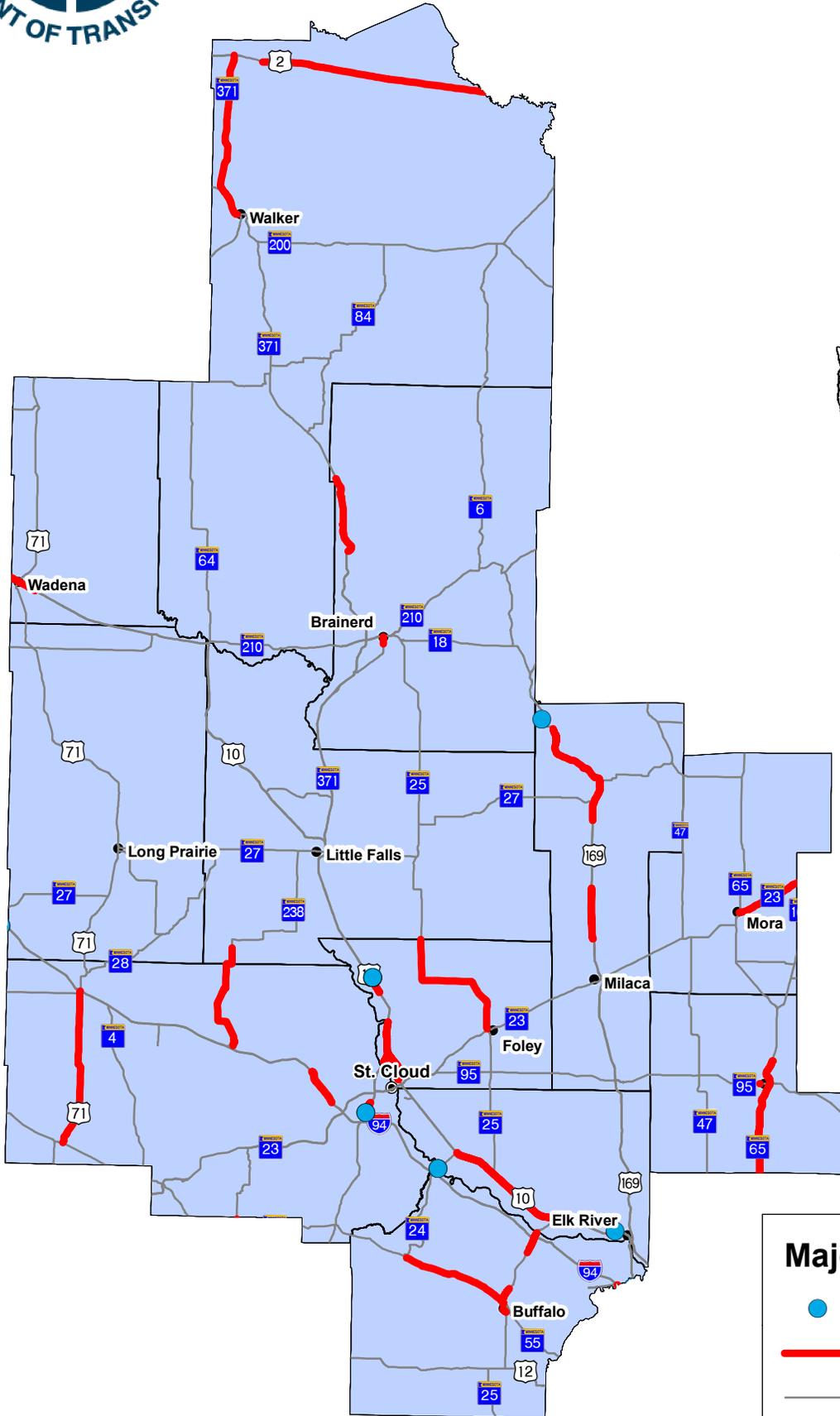
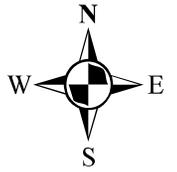
District Engineer: Craig Collison
Project Manager: Deb Bauer

Revised Date: 12/15/2015



Major Highway Projects 2015

District 3



Brainerd

Major Highway Projects

- Bridge Projects
- Roadway Projects
- Trunk Highway System

District Project Summary
District 3

Route	State Project #	Project Location	Page
Hwy 10	7102-127N	Bridge over Lake Orono in Elk River	C 2
Hwy 10	0502-103	From CR 4 to railroad crossing near St. Germain St. in St. Cloud; and, on Hwy 15 from Hwy 10 for one mile south.	C 3
Hwy 10	0502-96	At Benton CR 2 in Rice	C 4
Hwy 10	0502-107	Benton CR 3/Golden Spike Rd interchange in Sauk Rapids	C 5
Hwy 10	8001-40	End of 4-Lane west of Wadena to Oink Joint Rd	C 6
Hwy 10	7102-133	Clear Lake to Big Lake	C 7
Hwy 12	8602-51	Northwest of Delano at the Business Park	C 8
Hwy 15	7303-48	Hwy 15 and 33rd Street in St. Cloud	C 9
Hwy 23	3302-16	From Hwy 65 in Mora east to Hwy 107	C 10
Hwy 24	7108-23	Bridge over Mississippi River in Clearwater	C 11
Hwy 25	0508-13	From Foley to the Benton/Morrison County line	C 12
Hwy 25	8605-49	From 7th St. to Catlin St. in Buffalo	C 13
Hwy 25	8605-50	Monticello	C 14
Hwy 25	8604-37	Buffalo	C 15
Hwy 55	8606-60	Annandale to Buffalo	C 16
Hwy 65	3003-47N/47P	Anoka/Isanti Co line to end of 4-lane in Cambridge	C 17
Hwy 71	7318-39	Belgrade to Sauk Centre	C 18
Hwy 95	3006-36	Rum River Bridge in Cambridge	C 19
Hwy 169	4812-86	Mille Lacs Co. Hwy 11 to Rum River Rest Area	C 20
Hwy 169	4812-84	Mille Lacs Co Hwy 19 south of Onamia to Vineland	C 21
Hwy 169	4814-3355A	Bridge over Whitefish Creek near Wigwam Bay at Lake Mille Lacs	C 22
Hwy 238	7323-11	Albany to Upsala	C 23
Hwy 371	1810-92	Nisswa to Jenkins	C 24
Hwy 371	1810-98	Nisswa	C 25
Hwy 371B	1814-06	Brainerd	C 26
I-94	7380-239	Stearns Hwy 75 to Bridge #73865 over Sauk River	C 27
I-94	2780-66	Rogers to St. Michael	C 28

PROJECT SUMMARY

Hwy 10
 Bridge over Lake Orono in Elk River
 Bridge 5955
 State Project No. 7102-127N



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project cost has been adjusted due to bridge approach work and highway realignment associated with bridge replacement. \$10 million in state bonding is provided to this project. City of Elk River recently awarded funding for bike trail improvements to be coordinated with this project.

Project History:

This bridge is District 3's last structurally deficient bridge. Addressing these deficiencies will require full replacement of the bridge. The project was advanced from FY 2018 to FY 2017 due to the availability of state bond proceeds.

Project Description:

Replace Bridge #5955 over Lake Orono in Elk River, including approach work and realignment of highway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.0	\$ 13.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.0	\$ 2.0
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 12.1	\$ 15.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Current estimate based on actual bid amount.

Project Risks:

If the project disrupts traffic along the travel corridor, the District may have to take steps to improve traffic flow.

Schedule:

Environmental Approval Date: Not Started
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Started
 Construction Limits Established Date: Not started
 Original Letting Date: 02/25/2018
 Current Letting Date: 02/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

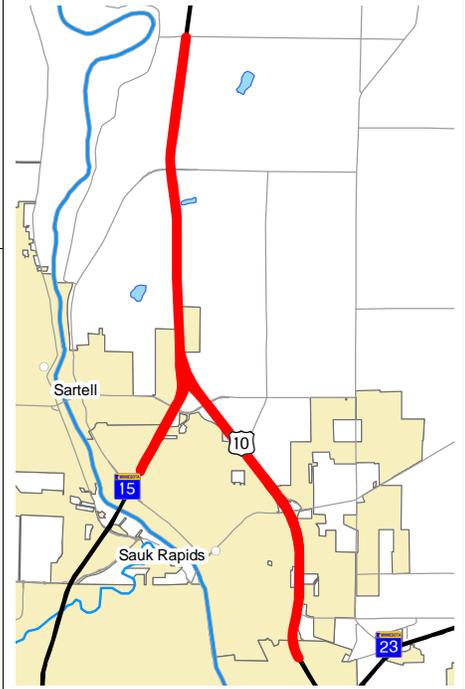
PROJECT SUMMARY

Hwy 10

From CR 4 to railroad crossing near St. Germain St. in St. Cloud; and, on Hwy 15 from Hwy 10 for one mile south.

State Project No. 0502-103

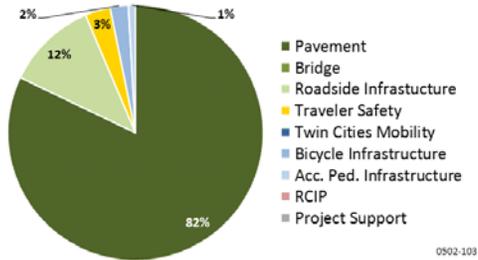
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



0502-103

Project Description:

The project consists of an unbonded concrete overlay on Hwy 10 from Benton CR 4 to just west of the railroad crossing near St. Germain St. in St. Cloud and reconstruction on Hwy 15 from Hwy 10 to 1 mile south.

Recent Changes and Updates

Construction completed in July 2015. The letting date changed due to a delayed Corps of Engineers Permit.

The cost estimate changed due to project complexity, which required more reconstruction, additional signage replacement, erosion control, and had construction staging issues.

Project History:

Several concrete pavement rehabilitation projects have been performed on this roadway. The concrete pavement has reached the end of its useful life and must be overlaid. Extra MAP-21 NHPP funds were used for additional work on the Hwy 15 segment.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.9	\$ 20.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.4	\$ 2.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 14.3	\$ 22.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate is based on estimated quantities and average bid prices. Additional costs in current estimate reflect work added on Highway 15. The Current Estimate reflects the amount encumbered to date.

Project Risks:

No remaining risks.

Schedule:

Environmental Approval Date: 04/07/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Unknown
 Original Letting Date: 01/24/2014
 Current Letting Date: 06/06/2014
 Construction Season: 2014 & 2015
 Estimated Substantial Completion: July 2015



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 10

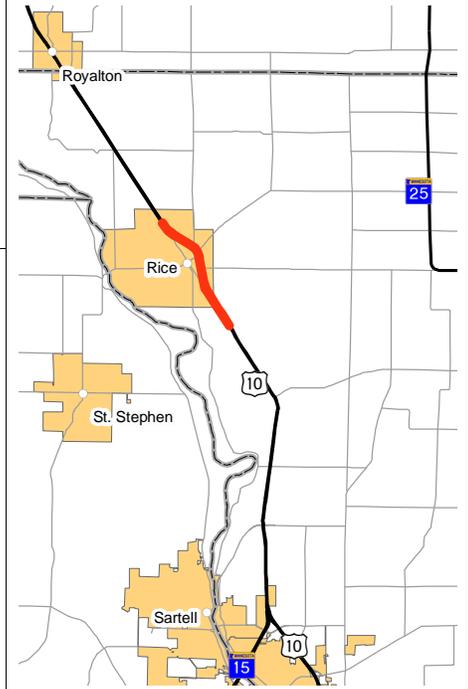
At Benton CR 2 in Rice

Bridge #05009, &, #05012

State Project No. 0502-96

<http://www.dot.state.mn.us/d3/hwy10rice/index.html>

Substantially Complete



Primary Purpose:

Regional & Community Improvement Priority:
(Safety and Mobility Program)

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project completed in fall 2014.

The cost at letting was substantially lower than the baseline estimate because innovative design was used to reconfigure the ramps to and from westbound Hwy 10. The reconfiguration reduced the need to relocate a county road, saving right of way and construction costs.

Project History:

The at-grade intersection has a history of severe and fatal crashes. The design was changed to reduce costs associated with relocating a county state aid highway.

Project Description:

Construct a new interchange (new Bridges #05009 and #05012) at the junction with Benton CR 2 in Rice.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 20.7	\$ 11.9
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 4.1	\$ 2.4
Right of Way:	\$ 7.0	\$ 0.8
Total:	\$ 31.7	\$ 15.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices. The current estimate is based on bids and design changes that reduced costs.

Project Risks:

No remaining risks.

Schedule:

Environmental Approval Date: 07/23/2012
Municipal Consent Approval Date: 09/04/2012
Geometric Layout Approval Date: 4/3/2012
Construction Limits Established Date: Unknown
Original Letting Date: 12/31/2015
Current Letting Date: 05/17/2013
Construction Season: 2013/2014
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
District 3
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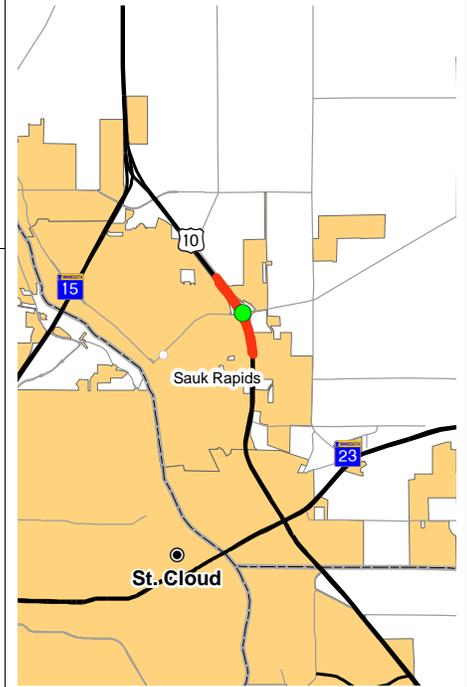
District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 10
 Benton CR 3/Golden Spike Rd interchange in Sauk Rapids
 Bridge 5006
 State Project No. 0502-107
http://www.co.benton.mn.us/Public_Works/golden_spike_project.php

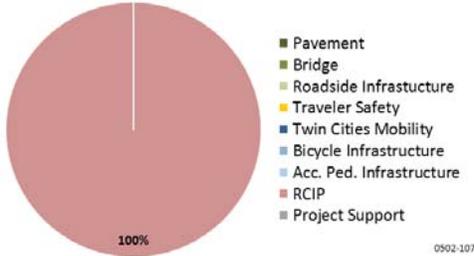
Substantially Complete



Primary Purpose:

Regional & Community Improvement Priority:
 Transportation Economic Development (TED)

Investment Category:



Project Description:

Locally let construction at the Benton CR 3/Golden Spike Rd interchange in Sauk Rapids.

Recent Changes and Updates

This was a locally designed and locally let job utilizing local consultants. MnDOT's contribution originally was capped at \$2.9 million based on early pre-letting bid prices. Construction costs include local water and sewer work. These costs were not fully factored in the early estimates (non state participating).

Project History:

In 2011, the county studied the County Road 3 corridor, which is an important connection to downtown Sauk Rapids, commercial centers and the high school.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 5.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.2	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Bid letting of entire job of \$5.6. MnDOT's contribution is \$2.8. This is a locally designed and let project using TED grant .

Project Risks:

No remaining risks.

Schedule:

Environmental Approval Date: need Unknown
 Municipal Consent Approval Date: 42131
 Geometric Layout Approval Date: 2013
 Construction Limits Established Date: 05/07/2015
 Original Letting Date: 01/10/2014
 Current Letting Date: 01/10/2014
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Kevin Schmidt

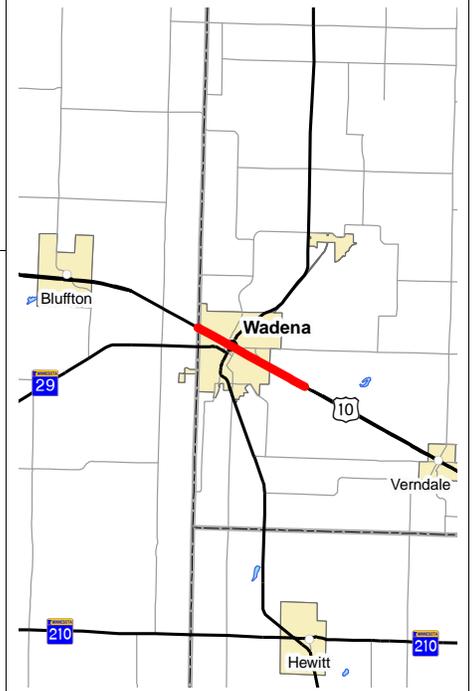
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 10

End of 4-Lane west of Wadena to Oink Joint Rd

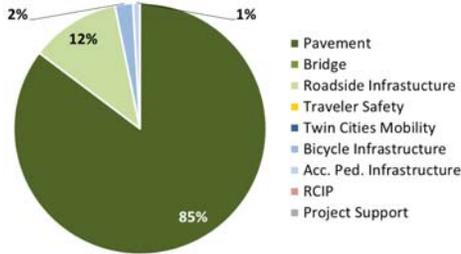
State Project No. 8001-40



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Resurfacing of the rural segments of Hwy 10 east and west of Wadena and reconstruction of the urban section from 3rd St NW to 2nd St NE within the city limits of Wadena. Work includes replacement of curb, gutter, sidewalks and railroad signal upgrades.

Recent Changes and Updates

This is a new project. Funding for this project provided jointly by District 3 and District 4.

Project History:

Several pavement rehabilitation projects have been done on this roadway. The pavement has reached the end of its expected life in the urban area of Wadena and requires full reconstruction. The rural segments require milling and filling.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.6	\$ 9.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 5.0	\$ 5.0
Total:	\$ 16.5	\$ 16.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices. The current estimate is based on bids and design changes that reduced costs. Project includes work in District 4.

Project Risks:

A risk is if the public does not accept the urban pavement replacement along with capacity improvements.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: Pending
 Geometric Layout Approval Date: Pending
 Construction Limits Established Date: Not Started
 Original Letting Date: 12/15/2017
 Current Letting Date: 12/15/2017
 Construction Season: 2018
 Estimated Substantial Completion: Fall 2018



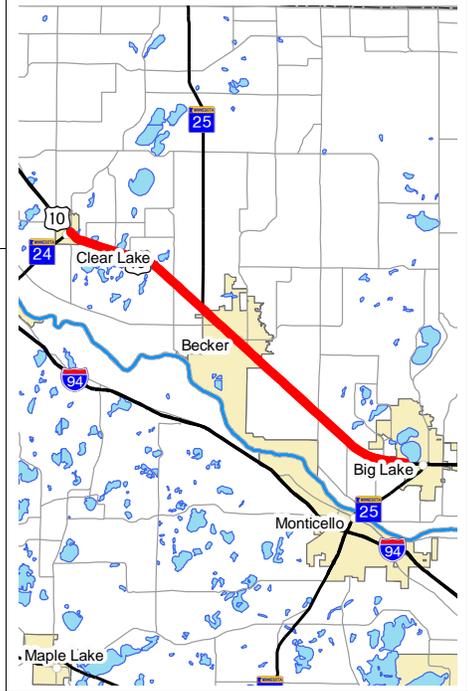
Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

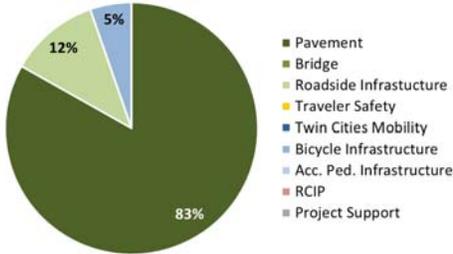
Hwy 10
 Clear Lake to Big Lake
 State Project No. 7102-133



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Resurfacing of eastbound lanes of 4-lane expressway between Clear Lake and Big Lake.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.8	\$ 6.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Recent Changes and Updates

None.

Project History:

The project was programmed to address deteriorating pavement.

Key Cost Estimate Assumptions:

The baseline estimate is based on estimated quantities and average bid prices.

Project Risks:

Need to determine if additional right of way will be needed at Sherburne Co. Hwy 23 and other planned right-turn lane extensions.

Schedule:

Environmental Approval Date: Not Needed
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 11/16/2018
 Current Letting Date: 4/27/2018
 Construction Season: 2018
 Estimated Substantial Completion: 2018



Minnesota Department of Transportation
 District 3
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 (218) 828-5700

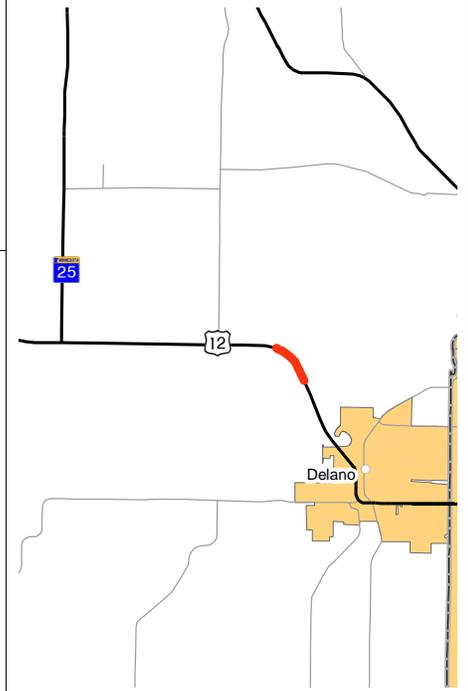
District Engineer: Dan Anderson
Project Manager: Eric Schiller

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 12
Northwest of Delano at the Business Park
State Project No. 8602-51

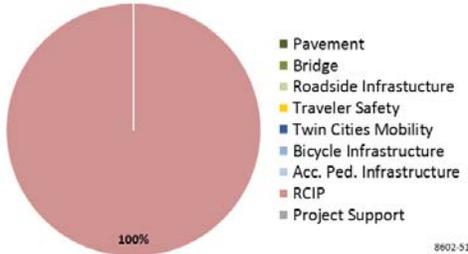
Substantially Complete



Primary Purpose:

Regional & Community Improvement Priority:
Transportation Economic Development (TED)

Investment Category:



Project Description:

Construct business park development and intersection improvements at Hwy 12 to provide safe access into Delano NW Business Park.

Recent Changes and Updates

This project was substantially completed in fall 2014.

Project History:

To expand business locations in Delano, the city identified a potential industrial park area, applied for a Transportation Economic Development (TED) grant, and was awarded funding. This project will improve ingress and egress into the industrial park. The city delayed the letting to 2014. This project has two separate parts: 1) business park development and 2) turn lane construction at the Hwy 12 intersection. Bids were opened for the business park development on 8/27/2013 and for the turn lane project on 8/12/2014. Both projects were constructed and completed in 2014.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 4.3
Other Construction Elements:	\$ 0.0	\$ 1.1
Engineering:	\$ 0.3	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.4	\$ 6.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates for this project. Funding for this project under the TED grant is as follows: Trunk Highway - \$0.6M; DEED - \$1.0M; TED - \$0.8M; Greater Minnesota Business Development Public Infrastructure (BDPI) - \$0.3M; Local - \$4.5M. Trunk Highway funds were used for the Hwy 12 turn lane/intersection improvements. The other TED funding sources (e.g., DEED, TED, BDPI) were used for the business park development in addition to local funding. Other construction elements include contingencies, easements, and wetland purchases not funded with Trunk Highway funding. Current estimate is based on actual bid amounts.

Project Risks:

No remaining risks.

Schedule:

Environmental Approval Date: CATEX
Municipal Consent Approval Date: 6/17/2014
Geometric Layout Approval Date: 1/23/2013
Construction Limits Established Date: 07/15/2014
Original Letting Date: 04/15/2013
Current Letting Date: 08/19/2014
Construction Season: 2014
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

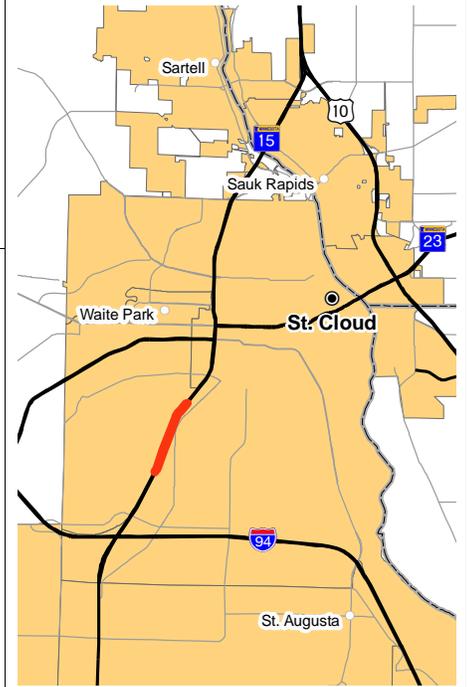
District Engineer: Dan Anderson
Project Manager: Ken Larson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 15
 Hwy 15 and 33rd Street in St. Cloud
 Bridge 73046
 State Project No. 7303-48

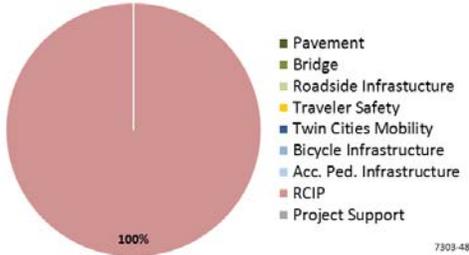
Substantially Complete



Primary Purpose:

Regional & Community Improvement Priority:
 (Transportation Economic Development (TED)
 Program)

Investment Category:



Project Description:

City/county led project to construct a new interchange (Bridge 73046) at Hwy 15 and 33rd St in St. Cloud.

Recent Changes and Updates

The project is substantially completed.

Project History:

St. Cloud, Stearns County and other local governments planned an east-west road along the south side of St. Cloud. Part of the planning included an access to Hwy 15. The city applied for a TED grant and was awarded \$8.4 million.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.6	\$ 10.9
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 3.3	\$ 3.3
Total:	\$ 12.4	\$ 15.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project let in January 2014 for \$10.9 million including local costs. The amount awarded to the project under the TED grant was \$8.4 million. Due to the new bids, MnDOT will actually award \$6.4 million, which can only be used for the construction of the interchange. There will be additional costs for 33rd Street that will be a local responsibility.

Project Risks:

No remaining risks.

Schedule:

Environmental Approval Date: 02/17/2009
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 12/7/2011
 Construction Limits Established Date: Unknown
 Original Letting Date: 09/15/2012
 Current Letting Date: 11/15/2013
 Construction Season: 2014
 Estimated Substantial Completion: 2014



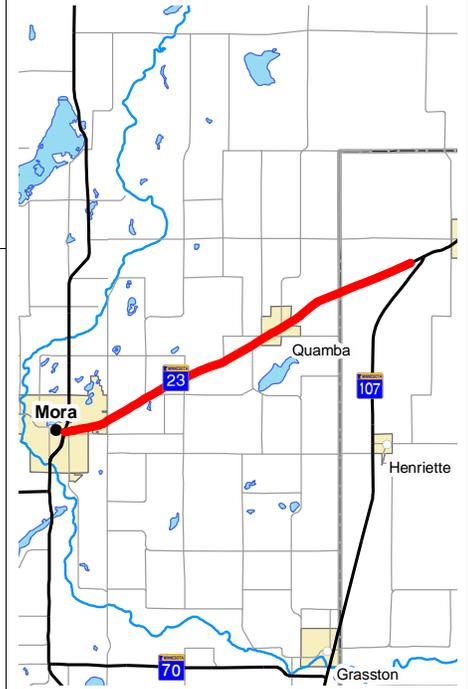
Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Terry Humbert

Revised Date: 12/15/2015

PROJECT SUMMARY

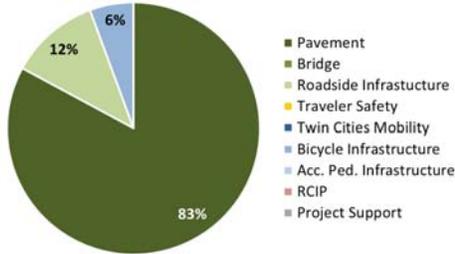
Hwy 23
From Hwy 65 in Mora east to Hwy 107
State Project No. 3302-16



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Resurfacing from the north junction of Hwy 65 in Mora east to Hwy 107.

Recent Changes and Updates

New Project

Project History:

The project was programmed to address deteriorating pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 4.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 5.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate is based on estimated quantities and average bid prices.

Project Risks:

No significant risks are anticipated.

Schedule:

Environmental Approval Date: Not Needed
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 1/25/2019
Current Letting Date: 1/25/2019
Construction Season: 2019
Estimated Substantial Completion: 2019



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Matt Indihar

Revised Date: 12/15/2015

PROJECT SUMMARY

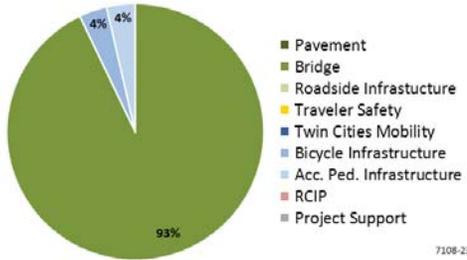
Hwy 24
 Bridge over Mississippi River in Clearwater
 Bridge 6557
 State Project No. 7108-23



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

Replace Bridge 6557 over the Mississippi River at Clearwater. Construct a new Bridge 71004.

Recent Changes and Updates

The decision was made to construct a new bridge parallel to the existing structure to minimize traffic impacts. The project was recently let and the bid amount was considerably lower than the engineer's estimate. The extra funding available due to the lower bid/award was shifted to other areas of the construction program.

Project History:

The bridge deck and girders required replacement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 20.0	\$ 17.4
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 4.4	\$ 3.5
Right of Way:	\$ 5.0	\$ 0.5
Total:	\$ 29.4	\$ 21.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices for similar project. Current estimate based on actual bid amount.

Project Risks:

Maintaining traffic, primarily summer recreation traffic, during construction. Since existing bridge will remain in place during construction of new bridge, the risk is largely mitigated.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: 9/15/14
 Geometric Layout Approval Date: 05/05/2014
 Construction Limits Established Date: 09/15/2014
 Original Letting Date: 05/15/2015
 Current Letting Date: 05/15/2015
 Construction Season: 2015 & 2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

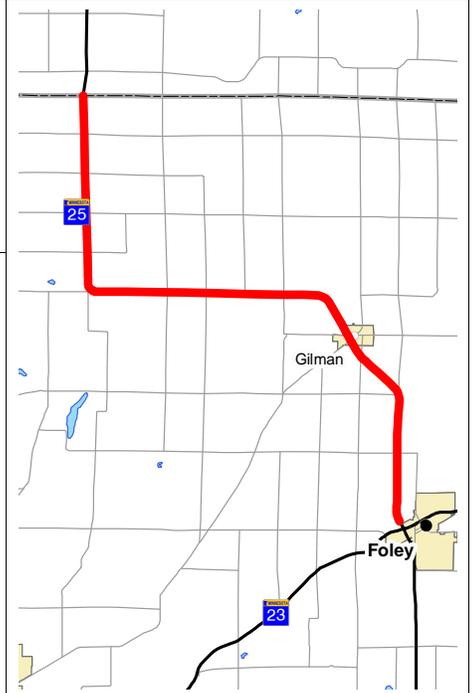
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 25

From Foley to the Benton/Morrison County line

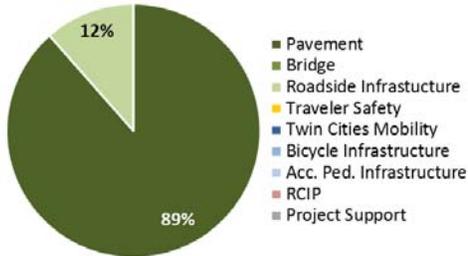
State Project No. 0508-13



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Resurfacing of the road from Foley to the Benton/Morrison County line.

Recent Changes and Updates

None.

Project History:

Deteriorating pavement condition requires resurfacing of this segment.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.6	\$ 6.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.9	\$ 7.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Estimate based on construction cost per mile of similar projects, adjusted for inflation.

Project Risks:

No significant risks are anticipated.

Schedule:

Environmental Approval Date: Not Started
 Municipal Consent Approval Date: Not Required
 Geometric Layout Approval Date: Not Required
 Construction Limits Established Date: Not Needed
 Original Letting Date: 10/27/2017
 Current Letting Date: 6/23/2017
 Construction Season: 2018
 Estimated Substantial Completion: Fall 2017



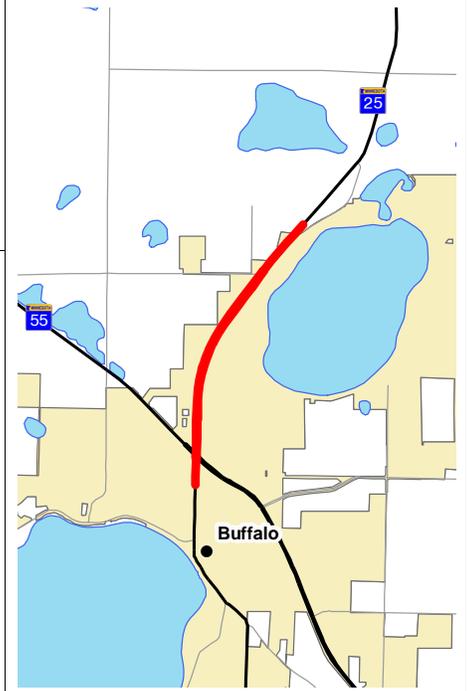
Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

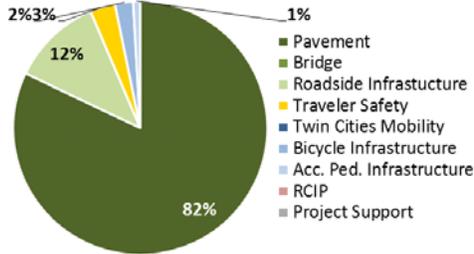
Hwy 25
From 7th St. to Catlin St. in Buffalo
State Project No. 8605-49



Primary Purpose:

Performance-based Need: Pavement Condition and Safety Improvements

Investment Category:



Project Description:

Reconstruction from Hwy 55 to Catlin St. in Buffalo, including traffic signal upgrades, and widening to accommodate four lanes.

Recent Changes and Updates

Local participation for signal upgrades added to the cost. The letting date changed to allow for the completion of the municipal utilities plan. This project was previously adjusted to accommodate local urban reconstruction of Hwy 25 through the downtown area that was funded in part by Corridor Investment Management System program.

Project History:

Funding of project was delayed one fiscal year previously to accommodate changes to the construction program.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.2
Total:	\$ 6.9	\$ 7.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices.

Project Risks:

No significant risks are anticipated.

Schedule:

Environmental Approval Date: Pending
Municipal Consent Approval Date: 4/20/2015
Geometric Layout Approval Date: 8/20/2013
Construction Limits Established Date: 9/8/2014
Original Letting Date: 03/28/2014
Current Letting Date: 1/29/2016
Construction Season: 2016
Estimated Substantial Completion: Fall 2016



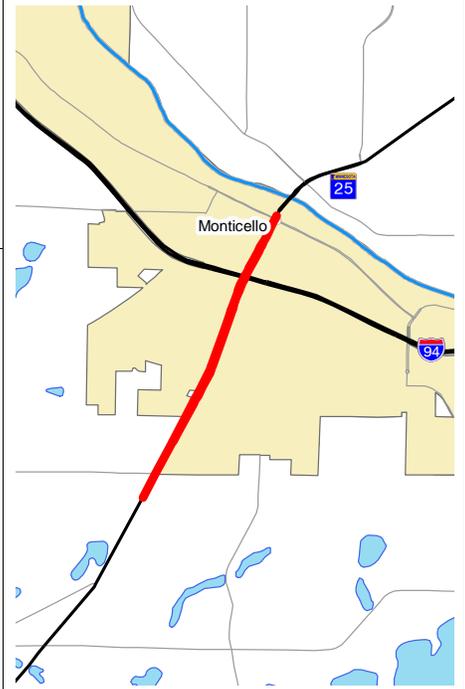
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

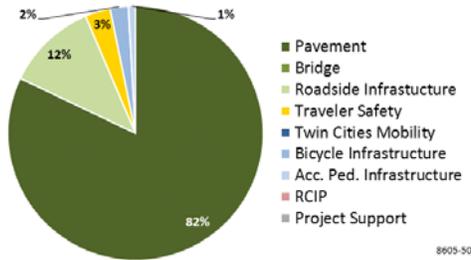
Hwy 25
 Monticello
 State Project No. 8605-50



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project reconstructs 0.5 miles south of Wright CR 106 to south of School Boulevard in Monticello and performs resurfacing to I-94. This includes traffic signal installation at CR 106 and resurfacing from south of School Blvd to the junction of I-94.

Recent Changes and Updates

This project was let and is currently under construction.

Project History:

The project was programmed to address deteriorating pavement and traffic concerns at the intersection of Hwy 25 and Wright CR 106. Funding of the project was delayed one fiscal year to accommodate changes to the construction program. This project received additional MAP-21 NHPP to lengthen project limits to include resurfacing work from School Blvd to I-94, which was not included in original estimate.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 5.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 1.1
Right of Way:	\$ 0.4	\$ 0.4
Total:	\$ 6.4	\$ 7.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Baseline estimate used an estimate of quantities and average bid prices. The current estimate is based on actual bid prices and reflects additional resurfacing from School Blvd to I-94 and local cost participation.

Project Risks:

If traffic flow is disrupted by construction, MnDOT may have to make changes in the project's scope or schedule.

Schedule:

Environmental Approval Date: 10/28/2014
 Municipal Consent Approval Date: 01/28/2013
 Geometric Layout Approval Date: 11/30/2012
 Construction Limits Established Date: Unknown
 Original Letting Date: 03/28/2014
 Current Letting Date: 11/21/2014
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2015



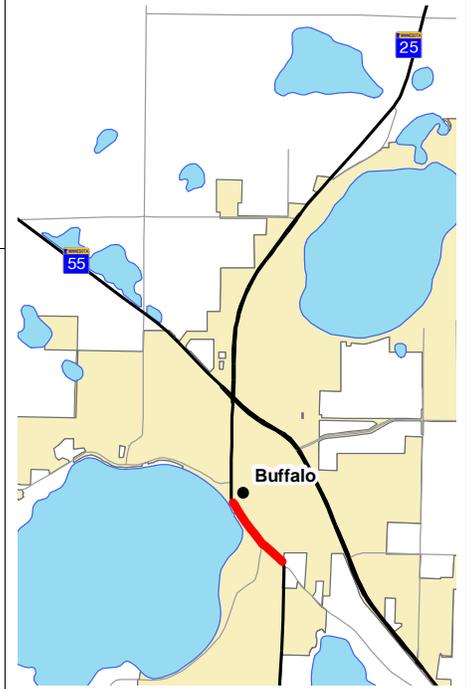
Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

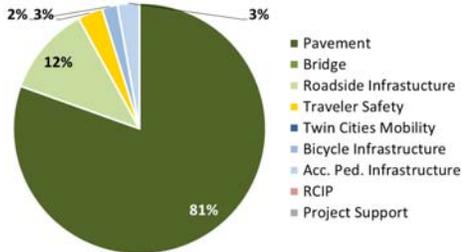
Hwy 25
Buffalo
State Project No. 8604-37



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Reconstruction of the roadway south of 1st St to north of Wright CR 147 in Buffalo, including pedestrian improvements, lighting, and curb and gutter.

Recent Changes and Updates

New Project

Project History:

The project was programmed to address deteriorating pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 5.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.4	\$ 6.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate used estimated quantities and average bid prices.

Project Risks:

The City of Buffalo has plans for replacement of underground utilities which needs to be coordinated with the project development and construction plans. Addressing pedestrian accessibility needs could result in additional right of way needs and impacts to properties.

Schedule:

Environmental Approval Date: Need Unknown
Municipal Consent Approval Date: Need Unknown
Geometric Layout Approval Date: Need Unknown
Construction Limits Established Date: Need Unknown
Original Letting Date: 12/21/2018
Current Letting Date: 12/21/2018
Construction Season: 2019
Estimated Substantial Completion: 2019



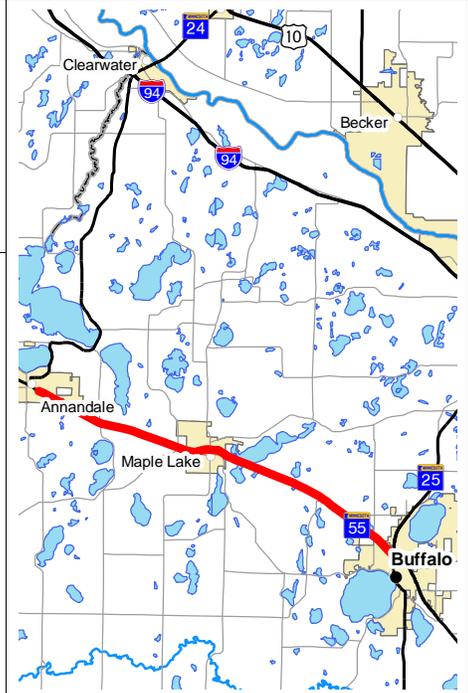
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

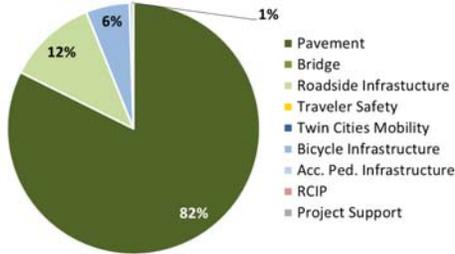
Hwy 55
Annandale to Buffalo
State Project No. 8606-60



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Resurfacing from Poplar Street in Annandale to the Hwy 55 junction in Buffalo, and includes paving the shoulders.

Recent Changes and Updates

New Project

Project History:

The project was programmed to address deteriorating pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.7	\$ 6.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate used estimated quantities and average bid prices.

Project Risks:

This is a routine rural resurfacing project, so no significant risks are anticipated.

Schedule:

Environmental Approval Date: Not Needed
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 10/19/2018
Current Letting Date: 10/19/2018
Construction Season: 2019
Estimated Substantial Completion: 2019



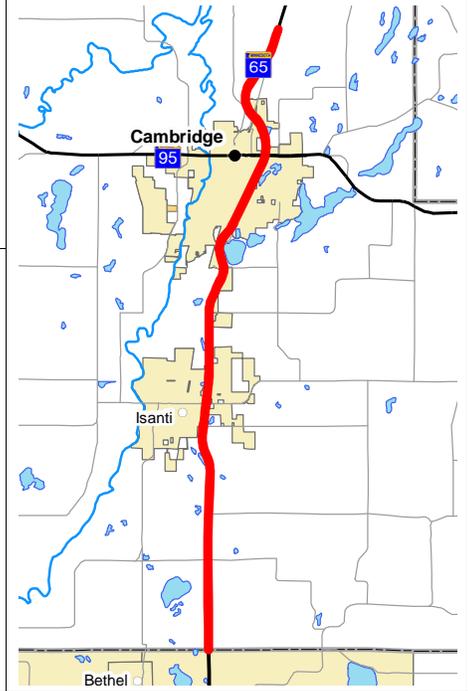
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 65
Anoka/Isanti Co line to end of 4-lane in Cambridge
State Project No. 3003-47N/47P



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

New Project

Project History:

The project was programmed to address deteriorating pavement. The project was selected for the placement of a concrete overlay on top of the bituminous instead of just bituminous to improve the useful life of the pavement.

Project Description:

The project places a concrete overlay on top of bituminous on various segments of the north and southbound lanes from the Anoka/Isanti Co. line to the end of the 4-lane in Cambridge.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.7	\$ 11.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.3	\$ 2.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 14.0	\$ 14.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate used estimated quantities and average bid prices.

Project Risks:

Bid prices for placing a concrete overlay on top of bituminous are difficult to predict and slight variations could result in impacts to the district's construction budget.

Schedule:

Environmental Approval Date: Need Unknown
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 6/29/2018
Current Letting Date: 6/29/2018
Construction Season: 2018
Estimated Substantial Completion: 2018



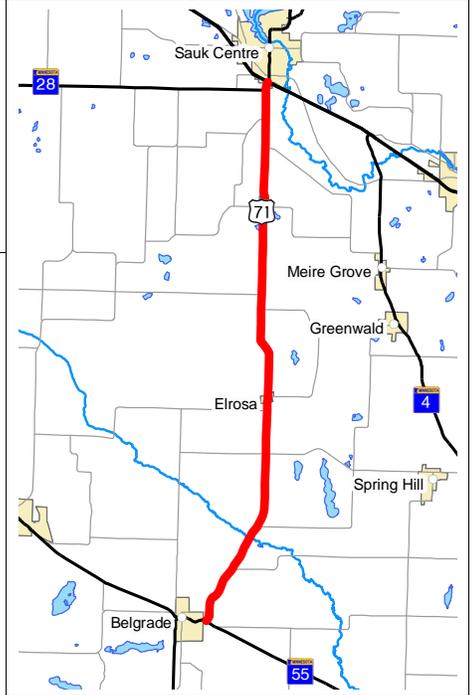
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Eric Schiller

Revised Date: 12/15/2015

PROJECT SUMMARY

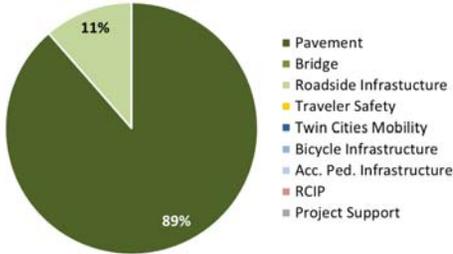
Hwy 71
Belgrade to Sauk Centre
State Project No. 7318-39



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Bituminous resurfacing from east junction at Hwy 55 in Belgrade to I-94 in Sauk Centre.

Recent Changes and Updates

The decision was made to remove the urban segment of this project through the City of Elrosa and to address pedestrian accessibility needs separately without delaying work on the rural segment. The Elrosa segment will retain its original project number (e.g., SP 7318-38) and will be delayed to FY 2017 while the rural segment will now be identified as SP 7318-39.

Project History:

The project was programmed to address deteriorating pavement. The letting date changed to keep a balanced letting schedule. This project was funded with extra National Highway Performance Program funding that was provided to the district for improving pavement conditions on the National Highway System.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.2	\$ 6.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.4	\$ 7.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices.

Project Risks:

If traffic is significantly delayed during construction, then the District may have to modify the project.

Schedule:

Environmental Approval Date: Pending
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending
Original Letting Date: 12/18/2015
Current Letting Date: 03/25/2016
Construction Season: 2016
Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

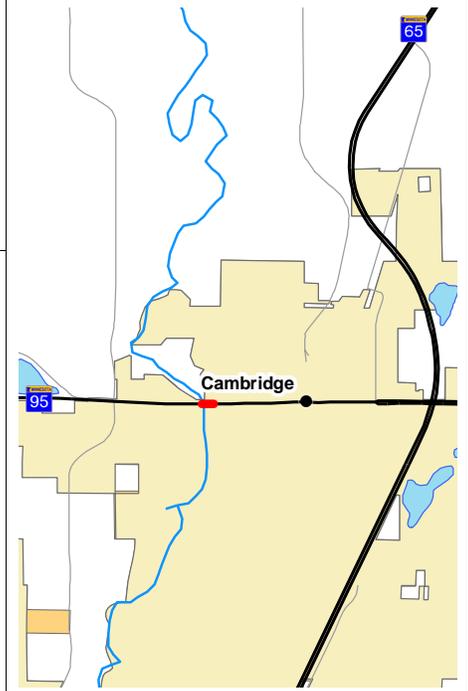
District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 95
Rum River Bridge in Cambridge
Bridge 9173
State Project No. 3006-36

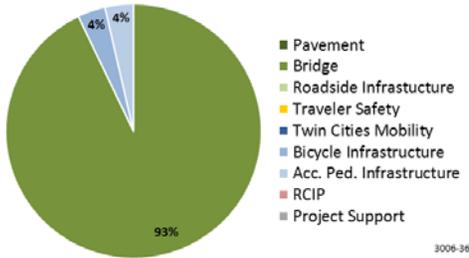
Substantially Complete



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

Replace Bridge 9173 with a new bridge, #30001, over the Rum River a bit west of Cambridge.

Recent Changes and Updates

This project is substantially complete.

Project History:

Bridge 9173 was built in 1963. The bridge has a substandard engineering design and is due for replacement. The bridge design was reviewed to ensure the new structure could be expanded to a four-lane bridge, if needed, in the future.

The letting date changed due to federal project review and development requirements. Construction cost was reduced due to an exceptionally low-bid.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.3	\$ 6.0
Other Construction Elements:	\$ 0.0	\$ 0.1
Engineering:	\$ 1.5	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.8	\$ 7.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Baseline estimate based on actual estimated quantities and average bid prices.
Current estimate based on actual bid.

Project Risks:

None remaining.

Schedule:

Environmental Approval Date: 02/28/2014
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Unknown
Original Letting Date: 02/22/2013
Current Letting Date: 03/28/2014
Construction Season: 2014/2015
Estimated Substantial Completion: Spring 2015



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

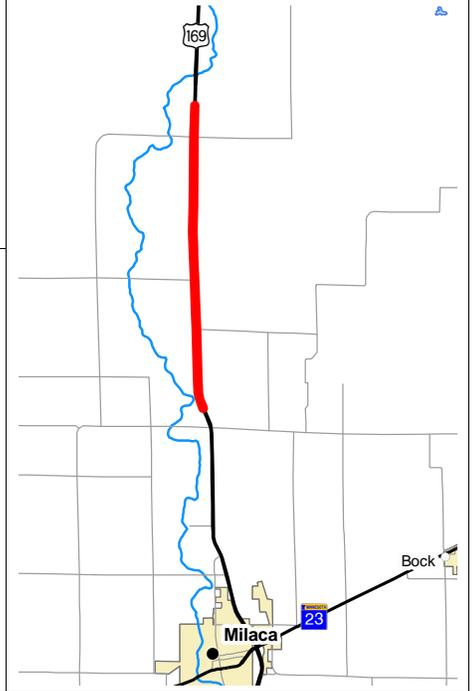
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 169

Mille Lacs Co. Hwy 11 to Rum River Rest Area

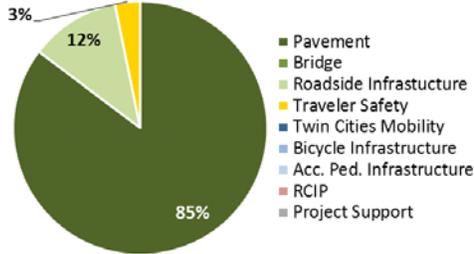
State Project No. 4812-86



Primary Purpose:

Performance-based Need: Pavement Condition & District Safety Plan

Investment Category:



Project Description:

Reconstruct northbound lane, including turn lane extensions, from Mille Lacs Co. Hwy 11/190th St. north of Milaca to Rum River Rest Area.

Recent Changes and Updates

The project was let. The award was higher than the engineer's estimate. Removed federal Highway Safety Improvement Program safety funds for the turn lane extension. Turn lane work will now be funded with National Highway Performance Program funds, which is the same source used for the reconstruction work.

Project History:

The pavement condition along this heavily traveled corridor is deteriorating. Routine resurfacing of this segment is no longer a viable option. A full reconstruction is necessary. The project received \$5 million in extra National Highway Performance Program funding to enable the district to reconstruct this section of roadway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.2	\$ 8.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.4	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.6	\$ 9.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Baseline estimate used estimated quantities and average bid prices. Current estimate based on actual bid.

Project Risks:

No significant risks are anticipated.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: Not Required
 Geometric Layout Approval Date: Pending
 Construction Limits Established Date: 8/11/2014
 Original Letting Date: 03/27/2015
 Current Letting Date: 06/26/2015
 Construction Season: 2015/2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Jim Hallgren

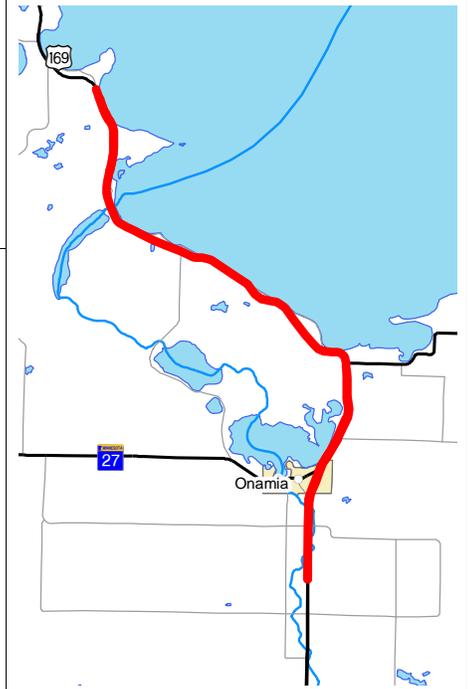
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 169

Mille Lacs Co Hwy 19 south of Onamia to Vineland

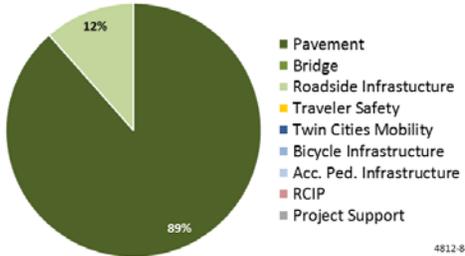
State Project No. 4812-84



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



4812-84

Project Description:

Resurfacing from Mille Lacs Co Hwy 19 to just south of Wagidaaki Rd in Vineland, including turn lane improvements at various intersections and other safety improvements.

Recent Changes and Updates

Minor adjustments were made to the project construction limits to reflect deteriorating pavement conditions.

Project History:

The project was programmed to address deteriorating pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.1	\$ 4.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.9	\$ 4.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate used estimated quantities and average bid prices.

Project Risks:

Coordination of the project with the Mille Lacs Band of Ojibwe is important so that state/tribal relationships are not negatively impacted.

Schedule:

Environmental Approval Date: 2/13/2015
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 2/26/2016
 Current Letting Date: 11/20/2015
 Construction Season: 2016
 Estimated Substantial Completion: 2016



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Jim Hallgren

Revised Date: 12/15/2015

PROJECT SUMMARY

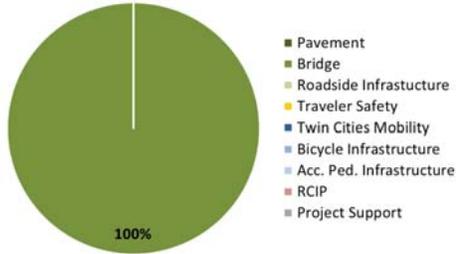
Hwy 169
 Bridge over Whitefish Creek near Wigwam Bay at Lake Mille Lacs
 Bridge 3355
 State Project No. 4814-3355A



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

This project consists of rehabilitating the historic bridge (Bridge #3355) over Whitefish Creek near Wigwam Bay at Lake Mille Lacs.

Recent Changes and Updates

Further study of the bridge condition and the need to preserve and maintain historical qualities of the structure resulted in a higher cost estimate. The increase in project cost required additional funding, which resulted a delay of this project to 2019.

Project History:

The project was programmed to address the deteriorating bridge. The bridge was originally constructed in 1921 and widened in the 1930s by the Civilian Conservation Corps. The bridge is a designated property on the National Register of Historic Places.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 4.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 5.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate used estimated quantities and average bid prices.

Project Risks:

Structural/historical rehabilitation report findings could result in potential archeological issues and mitigation.

Schedule:

Environmental Approval Date: Need Unknown
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 6/5/2015
 Current Letting Date: 9/21/2018
 Construction Season: 2019
 Estimated Substantial Completion: 2019



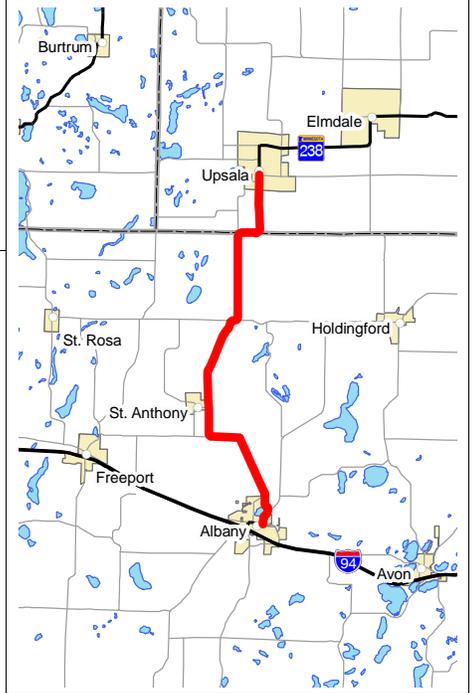
Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

District Engineer: Dan Anderson
Project Manager: Eric Schiller

Revised Date: 12/15/2015

PROJECT SUMMARY

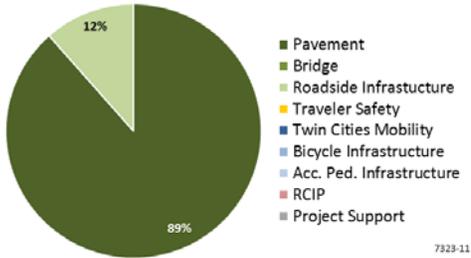
Hwy 238
Albany to Upsala
State Project No. 7323-11



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



7323-11

Project Description:

Pavement reclamation project from Albany to Upsala, including widening and one quarter mile of urban work in Albany.

Recent Changes and Updates

Modified scope and project cost to add shoulder improvements for improved safety. Adjusted cost estimate for right of way costs associated with pedestrian accessibility improvements in Albany.

Project History:

Project programmed to address deteriorated pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.2	\$ 7.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.4	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 8.6	\$ 9.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices. Possibility of new turnlanes.

Project Risks:

If the detour route is seen as too long, then the District may have to change the detour route.

Schedule:

Environmental Approval Date: Unknown
Municipal Consent Approval Date: Need Unknown
Geometric Layout Approval Date: Unknown
Construction Limits Established Date: Unknown
Original Letting Date: 12/16/2016
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



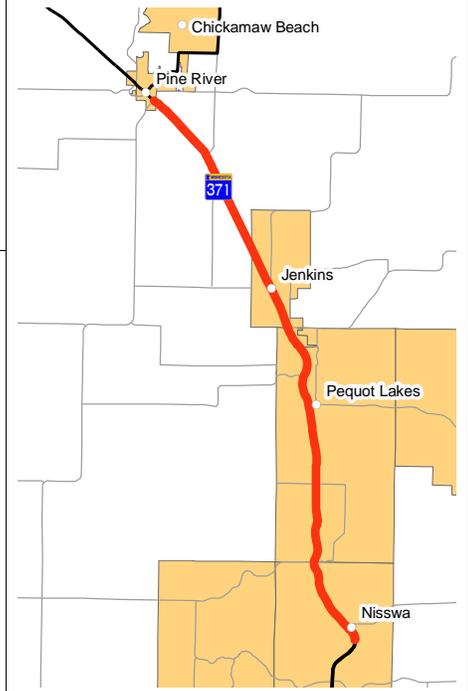
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

PROJECT SUMMARY

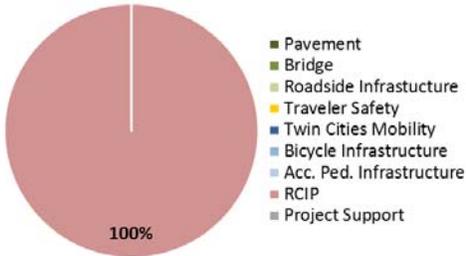
Hwy 371
Nisswa to Jenkins
State Project No. 1810-92



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

Major construction to convert two lane highway to a four-lane expressway from just north of Crow Wing County Hwy 18 in Nisswa to just north of County Highway 16 in Jenkins. Work includes the replacement of Cullen Brook Bridge and construction of a new interchange at Crow Wing Co Hwy 11.

Recent Changes and Updates

The project was recently let with the best value bidder apparently identified. The project was originally funded as a MnDOT Major Regional & Community Improvement Priority (RCIP) commitment. In 2014, the project was advanced to 2016 with funding made possible by cost savings and other efficiencies at MnDOT. The District anticipates construction to begin in 2016 with completion in 2017. The project was identified as a design-build contract.

Municipal Consent was received in Jenkins on 3/9/15. A re-evaluation of the Environmental Document was completed on 6/16/15.

Project History:

Phase 2 of Hwy 371 North Environmental Impact Statement received municipal consent in Pequot Lakes in December 2010. Nisswa provided their municipal consent in February 2011.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 58.0	\$ 49.9
Other Construction Elements:	\$ 0.0	\$ 1.9
Engineering:	\$ 11.6	\$ 0.0
Right of Way:	\$ 7.7	\$ 5.0
Total:	\$ 77.3	\$ 56.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate used estimated quantities and average bid prices. The Current Estimate is based on the actual bid for the design-build contract. The engineering costs were included in the construction letting total.

Project Risks:

The City of Pequot Lakes wastewater spray field mitigation plan could delay construction of this project if not completed before August 1, 2016. Traffic control and managing congestion during construction.

Schedule:

Environmental Approval Date: 10/21/2010
Municipal Consent Approval Date: 02/16/2011
Geometric Layout Approval Date: 10/19/2010
Construction Limits Established Date: 12/15/2014
Original Letting Date: 07/24/2009
Current Letting Date: 10/14/2015.
Construction Season: 2016/2017
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Jim Hallgren

Revised Date: 12/15/2015

PROJECT SUMMARY

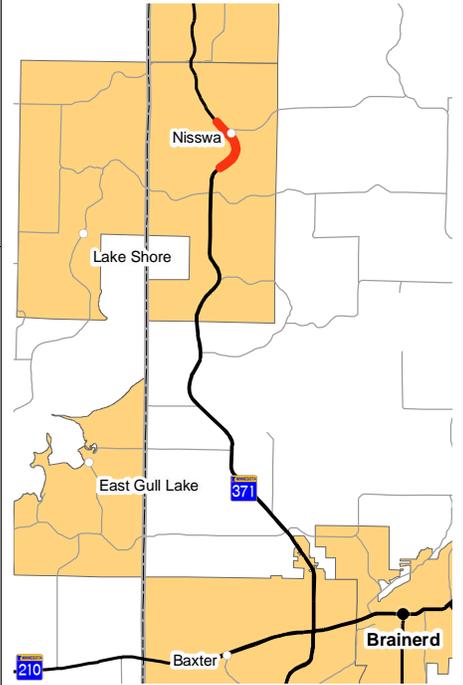
Hwy 371

Nisswa

State Project No. 1810-98

<http://www.dot.state.mn.us/d3/hwy371nisswa/index.html>

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Construction was completed in summer 2014 instead of fall 2013 due to weather and other unforeseen construction delays/setbacks.

Project History:

Phase I of Hwy 371 North Environmental Impact Statement (under SP 1116-22). The project was substantially completed in 2013. Access to a local road was a concern of local government. The current estimate includes work performed by Crow Wing County and Nisswa as required for the realignment of Crow Wing Co Hwy 18. See Key Cost Estimate Assumptions.

Project Description:

Hwy 371 North Stage 1: Reconstruction of four-lane through Nisswa, including construction of bicycle-pedestrian tunnel.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 7.6
Other Construction Elements:	\$ 0.0	\$ 2.7
Engineering:	\$ 1.0	\$ 1.5
Right of Way:	\$ 1.8	\$ 0.9
Total:	\$ 7.8	\$ 10.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is based on the actual bid amount. The baseline estimate used estimated quantities and average bid prices for similar projects for MnDOT's portion of the work only. The current estimate reflects State and local (e.g. Crow Wing County and City of Nisswa) costs associated with the reconstruction of Hwy 371 and the realignment of Crow Wing Co Hwy 18. MnDOT's construction cost is \$4.9 million.

Project Risks:

No risks remaining.

Schedule:

Environmental Approval Date: 10/21/2010
Municipal Consent Approval Date: 02/16/2011
Geometric Layout Approval Date: 10/19/2010
Construction Limits Established Date: 01/01/2011
Original Letting Date: 02/24/2012
Current Letting Date: 06/08/2012
Construction Season: 2012/2013/2014
Estimated Substantial Completion: Summer 2014



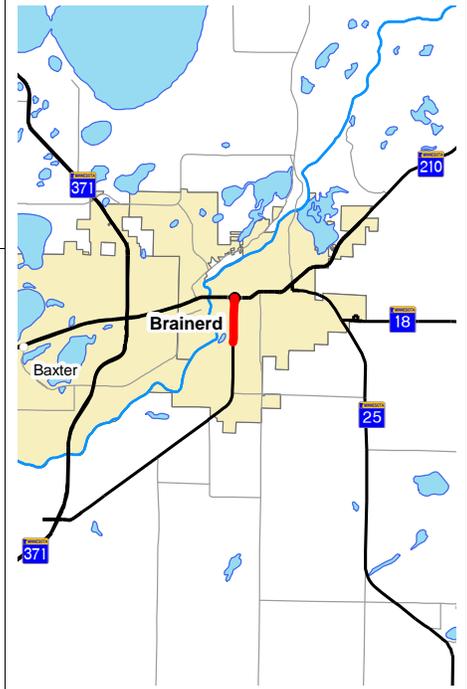
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Jim Hallgren

Revised Date: 12/15/2015

PROJECT SUMMARY

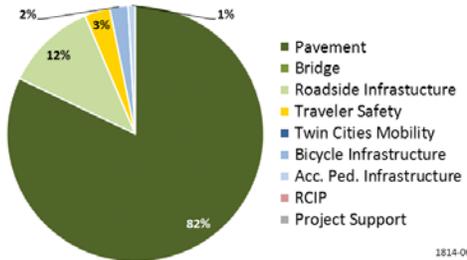
Hwy 371B
 Brainerd
 State Project No. 1814-06



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of the reconstruction, including bicycle and pedestrian accommodations and curb and gutter from Hwy 210 (Washington St.) to Joseph St. in Brainerd. Partnered with the city to extend the trail from Joseph St. to Buffalo Hills Lane.

Recent Changes and Updates

The District is currently developing proposals to address pedestrian concerns and minimize right of way impacts.

Current cost estimate includes cost for right of way.

The City of Brainerd provided the preferred alternative. Geometric Layout submitted for approval.

Project History:

Project programmed to replace deteriorated pavement and city utilities.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.5	\$ 7.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.5
Total:	\$ 9.0	\$ 9.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices for similar project.

Project Risks:

Retired risks associated with accommodating pedestrian accessibility needs under the design alternatives being considered. City wanted to install a signal at Willow St., which could result in a delay of municipal consent for the project.

Schedule:

Environmental Approval Date: Unknown
 Municipal Consent Approval Date: Need Unknown
 Geometric Layout Approval Date: Unknown
 Construction Limits Established Date: Unknown
 Original Letting Date: 02/26/2016
 Current Letting Date: 02/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

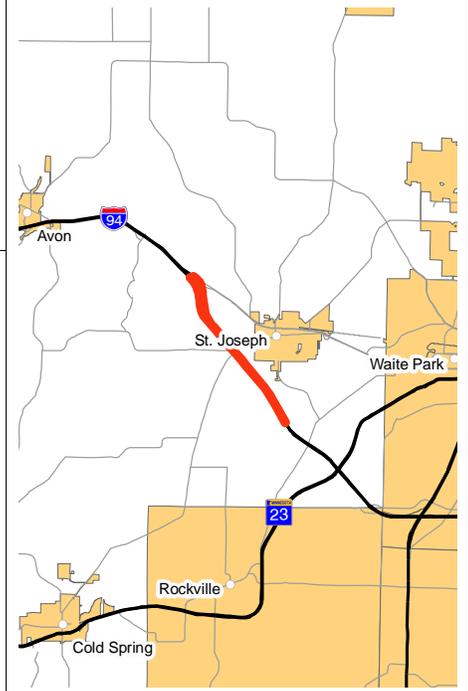
District Engineer: Dan Anderson
Project Manager: Jim Hallgren

Revised Date: 12/15/2015

PROJECT SUMMARY

I-94

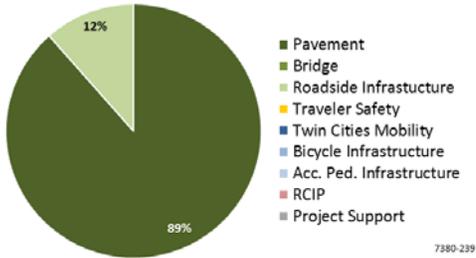
Stearns Hwy 75 to Bridge #73865 over Sauk River
State Project No. 7380-239



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is an unbonded concrete overlay from Stearns Co Hwy 75 west of St. Joseph to the west end of Bridge #73865 and Bridge #73866 over Sauk River. Project also includes the resurfacing from Stearns Co Rd 159 at Collegeville to Stearns Co Hwy 75.

Recent Changes and Updates

This project was expanded to include an adjacent section of I-94, which was programmed for the same year (7380-223). Combining the projects will result in better bid prices, better construction staging and more efficient construction administration.

Project History:

The project was originally programmed as a bituminous overlay to address deteriorating pavement. It received additional funds to construct an unbonded concrete overlay, which is a longer term fix. The project received an additional \$3 million in federal National Highway Performance Program funds to pursue a longer term pavement fix in the unbonded concrete overlay section. This project was combined with SP 7380-223 in 2014.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.0	\$ 15.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.0	\$ 3.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.0	\$ 18.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Based on estimated quantities and average bid prices. The estimate increased to account for the change to an unbonded concrete overlay.

Project Risks:

If the project significantly reduces good traffic flow during construction, MnDOT may have to modify the project's schedule and deal with increased costs.

Schedule:

Environmental Approval Date: Unknown
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: NA
Construction Limits Established Date: NA
Original Letting Date: 02/26/2016
Current Letting Date: 02/26/2016
Construction Season: 2016
Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Eric Schiller

Revised Date: 12/15/2015

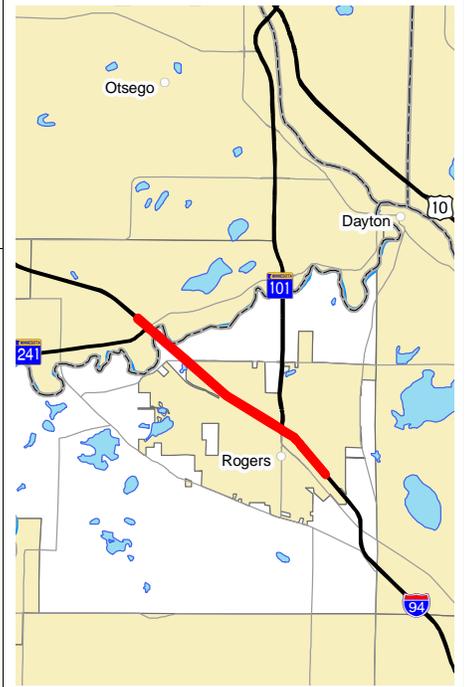
PROJECT SUMMARY

I-94

Rogers to St. Michael

State Project No. 2780-66

<http://www.dot.state.mn.us/d3/i94/index.html>



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project is under construction and will be completed fall 2015. The risk of extensive reconstruction at the Hwy 241 and Hwy 101 interchanges was eliminated, which accounted for lower estimated cost and bid.

Project History:

The project was announced in September 2014 to be funded under the Corridors of Commerce program. The project was amended into the STIP on 5/14/2014. The design-build process was used to expedite construction.

Project Description:

This project constructs an auxiliary lane in the eastbound direction from Hwy 241 in St. Michael to Hwy 101 in Rogers, including an extension of the westbound exit ramp at Hwy 101, widening of bridges over the Crow River, and the construction of a westbound third lane from Hwy 101 to Hwy 241.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 5/14/2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 40.0	\$ 28.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.0	\$ 0.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 40.0	\$ 28.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Since this project followed a design-build process, construction letting total includes construction, design and construction oversight costs. Current estimate based on actual bid amount.

Project Risks:

No significant risks remaining.

Schedule:

Environmental Approval Date: 1/27/2014
 Municipal Consent Approval Date: 4/22/2014
 Geometric Layout Approval Date: 2/14/2014
 Construction Limits Established Date: 2/14/2014
 Original Letting Date: 5/14/2014
 Current Letting Date: 5/14/2014
 Construction Season: 2014/2015
 Estimated Substantial Completion: September 2015



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

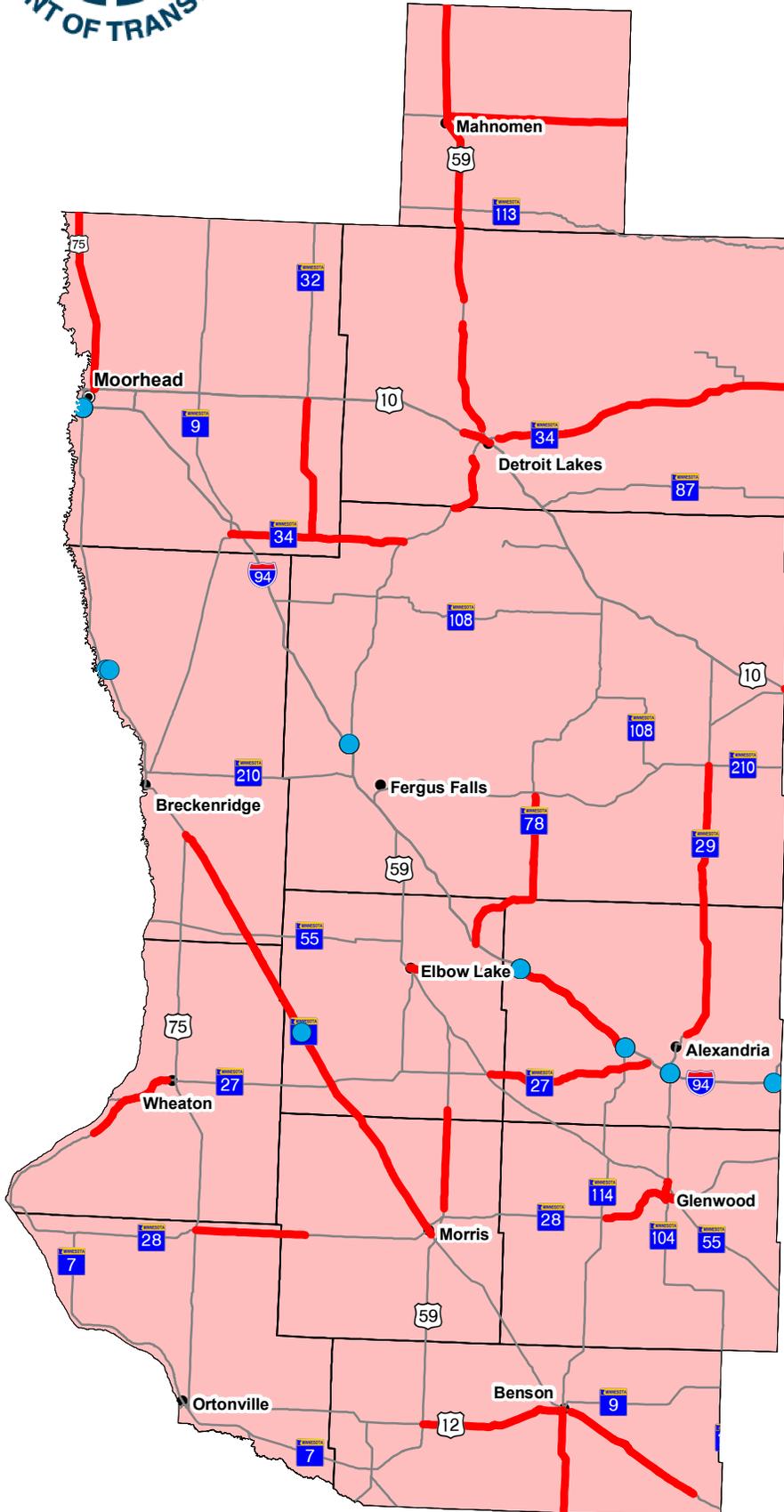
District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/15/2015

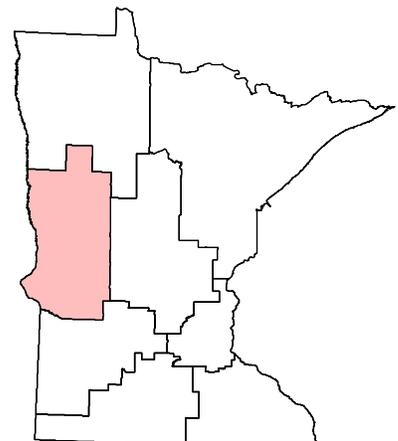


Major Highway Projects 2015

District 4



Detroit Lakes



Major Highway Projects

- Bridge Projects
- Roadway Projects
- Trunk Highway System

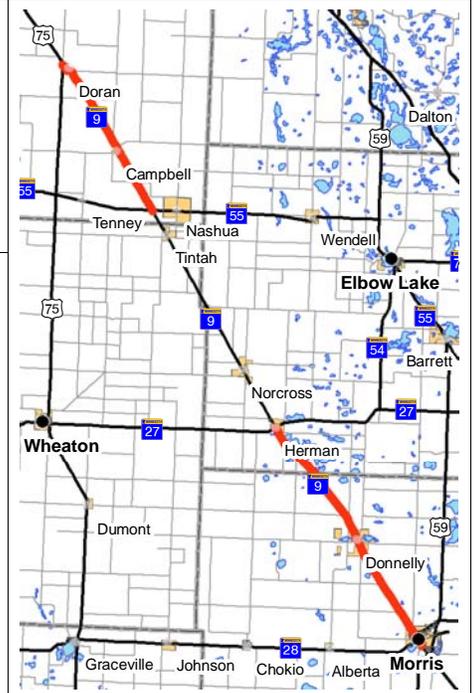
**District Project Summary
District 4**

Route	State Project #	Project Location	Page
Hwy 9	8402-17	Doran to Herman	D 2
Hwy 9	2601-19	Herman to Hwy 55	D 3
Hwy 10	0301-60	Detroit Lakes	D 4
Hwy 12	7604-22	Hwy 59 to City of Benson	D 5
Hwy 12	7605-89	Benson to Kerkhoven	D 6
Hwy 27	2101-21	Hwy 55 east to west of I-94	D 7
Hwy 27	7802-33	On Hwy 27 from CSAH 6 to Hwy 75 and on Hwy 75 from Hwy 27 to the Mustinka River bridge	D 8
Hwy 28	6103-32	Hwy 28, Hwy 29, Hwy 104 - Glenwood	D 9
Hwy 28	0606-11	Hwy 75 to Chokio	D 10
Hwy 28	6103-34	Starbuck to Glenwood	D 11
Hwy 29	2103-35	McKay Avenue in Alexandria to Hwy 210	D 12
Hwy 29	2102-58	50th Avenue in Alexandria to County Road 28	D 13
Hwy 29	7607-29	Hwy 40 to Benson	D 14
Hwy 32	1402-19	Hwy 34 to Hwy 10	D 15
Hwy 34	1404-17	Hwy 9 in Barnesville to Hwy 59 at Dunvilla	D 16
Hwy 34	0303-64	Various Passing Lanes from Detroit Lakes to Akeley	D 17
Hwy 59	0305-31	North of Hwy 34 in Detroit Lakes to south of the Buffalo River	D 18
Hwy 59	7506-17	From the junction of Hwy 28 to the north of the Stevens County line	D 19
Hwy 59	4404-13	South of the Buffalo River Bridge to Winger	D 20
Hwy 59	0304-37	North of CSAH 20 to south of Willow Street	D 21
Hwy 75	8408-44	Near Kent	D 22
Hwy 75	1407-25	Hwy 10 to north Clay County line	D 23
Hwy 78	5619-11	I-94 to Battle Lake	D 24
Hwy 79	2613-18	Elbow Lake to Hwy 94	D 25
Hwy 200	4402-19	Hwy 59 to east Mahnomen County line	D 26
I-94	1406-66	I-94 and Hwy 75 interchange	D 27
I-94	2180-109	At various locations on I-94 from Fergus Falls to Osakis	D 28

PROJECT SUMMARY

Hwy 9
Doran to Herman
State Project No. 8402-17

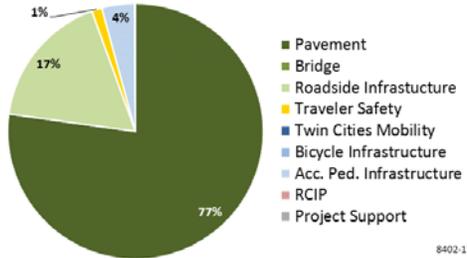
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

Resurface, replace culverts and upgrade guardrail on two segments of Hwy 9, one segment of Hwy 55 and one segment on Hwy 28. Curb ramps in all towns located within these segments will also be brought up to current standards.

The first section on Hwy 9 is 13 miles long, from Doran to Hwy 55. The second section on Hwy 9 is 20 miles long, from Hwy 27 in Herman to Hwy 28 in Morris. The section on Hwy 55 is 5 miles long, from Wendell to Hwy 59. The section on Hwy 28 is 2 miles long from Hwy 9 to 500 feet west of Hwy 59.

Recent Changes and Updates

Construction substantially complete in fall 2015.

Project History:

The existing bituminous pavement is severely cracked, and potholes are developing as the pavement structure continues to deteriorate. Many centerline culverts are in very poor condition and need replacement.

Acquisition of right of way has begun. Surveys are being performed for ADA work and centerline pipe replacements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.3	\$ 13.6
Other Construction Elements:	\$ 1.4	\$ 1.3
Engineering:	\$ 2.1	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 13.8	\$ 16.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

This project was let on 12-19-2014. The cost estimate was updated with a new inflation factor. Additional segments of highway were added to this project, which resulted in 4 miles of increased project length. The baseline estimate did not reflect this additional work.

Project Risks:

This project scope was increased and changed several times.

Schedule:

Environmental Approval Date: 05/10/2013
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 05/30/2014
Original Letting Date: 11/18/2015
Current Letting Date: 12/19/2014
Construction Season: 2015
Estimated Substantial Completion: October/2015



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Bradley Cegla

Revised Date: 12/15/2015

PROJECT SUMMARY

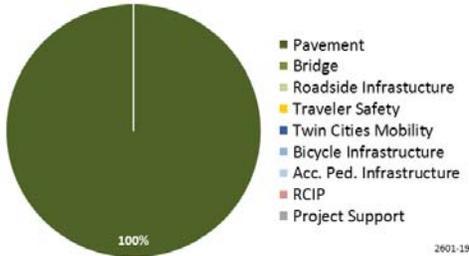
Hwy 9
 Herman to Hwy 55
 Bridge 6686
 State Project No. 2601-19



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

Resurface 18 miles between Herman and the junction of Hwy 55 with three-inch mill and three-inch inlay, updated guardrail and rip rap at bridge locations. Curb ramps in Tintah and Norcross will be brought up to standards. Several poor culverts will be repaired or replaced. Sidewalk replacement in Herman.

Recent Changes and Updates

Plans 60% complete in July 2015. 100% of the plans will be complete in December 2015. Added sidewalk replacement in Herman.

Project History:

Final scoping approval was February 2013. The scoping report is complete. The ADA requirements were reviewed with the ADA section in St. Paul. The pavement was deteriorating rapidly and would drop below the statewide average by 2016 or 2017. There are ADA non-compliant pedestrian ramps and sidewalks. Culverts were in poor condition.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 4.2
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 5.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

ADA work in Tintah, Norcross and Herman will be what is included in the transition plan.

Project Risks:

Rip rap at the Mustinka bridge. Contaminated soils in Herman. This project was selected to be a Flexible Project for 2016. A consultant was selected to do the advanced design so that this project can be ready to let if additional funding is received.

Schedule:

Environmental Approval Date: Not Needed
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 02/26/2016
 Current Letting Date: 01/27/2017
 Construction Season: 2017
 Estimated Substantial Completion: Oct. 2017



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/15/2015

PROJECT SUMMARY

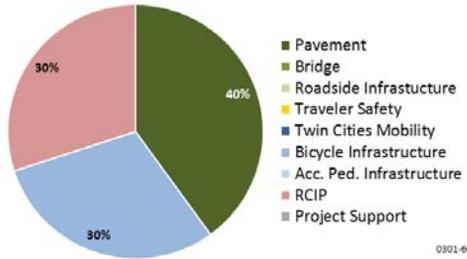
Hwy 10
 Detroit Lakes
 Bridge 3001
 State Project No. 0301-60
<http://www.dot.state.mn.us/d4/projects/dlfrontageroad/>



Primary Purpose:

Regional & Community Improvement Priority
 Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project is located on Hwy 10 from Airport Road to Hwy 59 and on Hwy 59 from Hwy 10 to Holmes Street. A bridge on Hwy 59 will be constructed, as well as a city street running under the bridge. From the city street, a frontage road and trail system will be constructed along both Hwy 59 and Hwy 10. There is pavement rehabilitation for less than two miles between Hwy 59 and Hwy 10, ADA improvements, signals and lighting.

Recent Changes and Updates

Project is under construction with substantial completion in fall 2015. Clean up of swamp area on frontage road will be done in 2016.

Project History:

The recommendations of a transportation planning study completed in June 2011 were incorporated into the Hwy 10 pavement project.

The project will provide safe and controlled access to Hwy 10 with the development of a frontage road system that allows vehicular/ bike/pedestrian travel from downtown Detroit Lakes to facilities west of Hwy 59 without having to travel on Hwy 10.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.0	\$ 14.3
Other Construction Elements:	\$ 0.7	\$ 0.0
Engineering:	\$ 2.8	\$ 1.8
Right of Way:	\$ 0.0	\$ 0.6
Total:	\$ 17.4	\$ 16.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Hwy 10 will be concrete on the existing alignment (airport to Hwy 59), the new frontage road south of Hwy 10 (Wal-Mart Property to DL Auto), and the underpass at Main Morrow with the city project on Thomas Avenue.

Project Risks:

Swamp settlement of newly built sections of frontage road is a risk for this project. Staging could cause traffic back ups during peak hours. Right of way acquisition timelines are tight. Contaminated soil and groundwater.

Schedule:

Environmental Approval Date: 05/21/2013
 Municipal Consent Approval Date: 07/09/2013
 Geometric Layout Approval Date: 05/31/2013
 Construction Limits Established Date: 08/01/2013
 Original Letting Date: 01/23/2015
 Current Letting Date: 02/27/2015
 Construction Season: May 2015 - November 2015
 Estimated Substantial Completion: November/2015



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Tom Lundberg

Revised Date: 12/15/2015

PROJECT SUMMARY

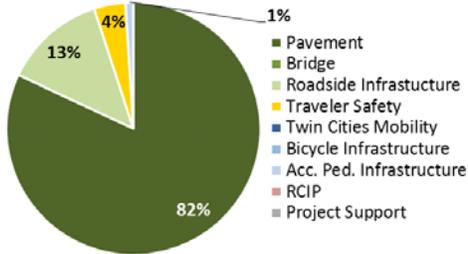
Hwy 12
 Hwy 59 to City of Benson
 State Project No. 7604-22



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

15 mile pavement rehabilitation project from Hwy 59 to the City of Benson. The project also includes shoulder work, side culverts, and snow drift control.

Recent Changes and Updates

This project was moved to an earlier letting date as a result of program balancing.

Project History:

The in place bituminous needs resurfacing, and shoulders need to be graded in a few areas. Seven areas of snow drifting are being evaluated. A combination of ditch grading and snow fence is being proposed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.7
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.5	\$ 7.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Date of estimate was 8-20-2015. 14% inflation rate used.

Project Risks:

Snow drift/snow fencing work and bridge end post design was added to the project. Municipal consent for acquiring property in Danvers city limits for snow fence is required. Other risks include completing railroad crossing agreement, and incorporating erosion prevention measures at bridges. Contingency was included in the estimate for these risks.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Pending Approval
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 02/23/2018
 Current Letting Date: 03/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: October/2017



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

PROJECT SUMMARY

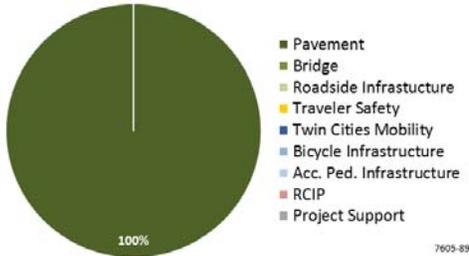
Hwy 12
 Benson to Kerkhoven
 State Project No. 7605-89



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

Mill and overlay from County Road 25 east of Benson to Kerkhoven. Sidewalk and pedestrian ramp replacement in DeGraff, Murdock and Kerkhoven.

Recent Changes and Updates

ADA needs identified and are included in design. Failing culverts, non-compliant sidewalks and pedestrian ramps in DeGraff, Murdock and Kerkhoven are identified.

Project History:

Final scoping approval in February 2013. Scoping report complete.
 Scheduled field walk to evaluate ADA needs.

Resurface Hwy 12 from Benson to Kerkhoven to restore ride quality.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.4	\$ 5.3
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.9	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Average bid prices were used. Estimate was done in 2015 using 9% inflation rate.

Project Risks:

Subgrade issue, which may include poor soils under the pavement, and a low area in Murdock.
 ADA in DeGraff, Murdock & Kerkhoven considerations.

Schedule:

Environmental Approval Date: Not needed
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 01/26/2018
 Current Letting Date: 04/22/2016
 Construction Season: 2016
 Estimated Substantial Completion: 10/01/2016



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 27

Hwy 55 east to west of I-94

State Project No. 2101-21

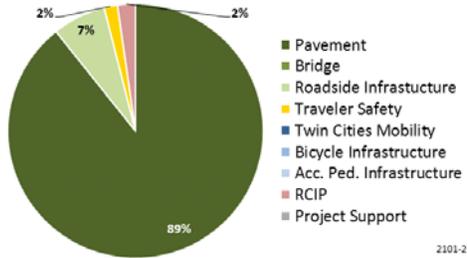
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



2101-21

Project Description:

Mill and cold in-place recycle with a bituminous overlay for 17.7 miles between I-94 and Hwy 55. Culverts will be replaced and a by-pass lane at County Road 15 will be constructed to improve safety.

Recent Changes and Updates

Construction was substantially complete in 2014.

Project History:

The existing bituminous pavement is severely cracked and potholes are developing as the pavement structure continues to deteriorate. Many of the centerline culverts are in very poor condition and need replacement. Preliminary design has begun. Right of way acquisition is ongoing. The materials design recommendations letter and plan design were completed this year.

The letting is in October 2013. This project is no longer an alternative bid project.

Construction was completed summer of 2014. Trouble with roadway section by Lake Oscar from moisture in the subgrade. The less expensive fix was selected.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.7	\$ 6.4
Other Construction Elements:	\$ 0.9	\$ 0.0
Engineering:	\$ 1.9	\$ 0.8
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 11.6	\$ 7.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project let and awarded. The cost of this project decreased due to lower milling and bituminous unit costs in the low bid.

Project Risks:

High water table condition for culvert replacements. Access management throughout construction.

Schedule:

Environmental Approval Date: 05/30/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 12/01/2012
 Original Letting Date: 04/17/2014
 Current Letting Date: 10/25/2013
 Construction Season: 2014
 Estimated Substantial Completion: July, 2014



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

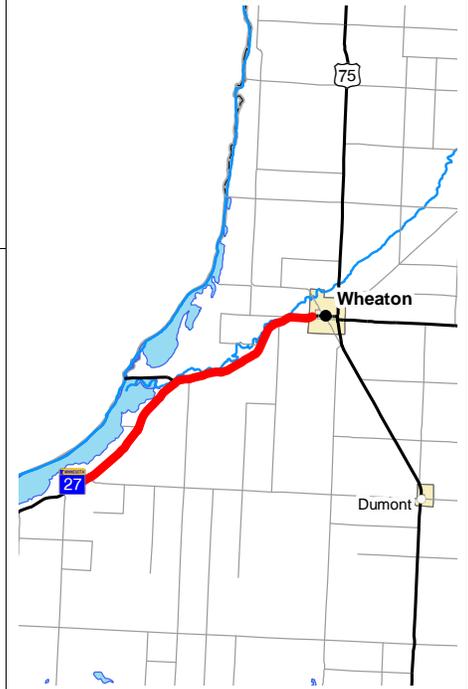
District Engineer: Jody Martinson
Project Manager: Bradley Cegla

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 27

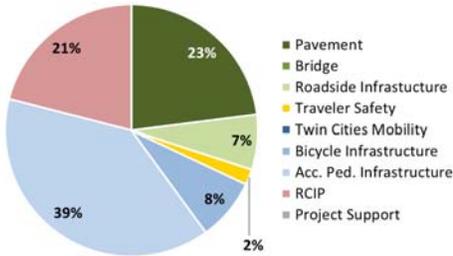
On Hwy 27 from CSAH 6 to Hwy 75 and on Hwy 75 from Hwy 27 to the Mustinka River bridge
State Project No. 7802-33



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

Pavement will be rehabilitated for 12 miles on Hwy 27 and Hwy 75 from CSAH 6 to the Mustinka River bridge. ADA work will be done in Wheaton.

Recent Changes and Updates

In place bituminous needs resurfacing on Hwy 27 and Hwy 75. Accessibility work will be done in Wheaton.

Project History:

This project includes ADA work, pedestrian ramps and sidewalks in Wheaton. Bituminous milling and overlay will be done on the pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 4.4
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 5.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Estimate was done in 2015 using a 19% inflation rate for 2019.

Project Risks:

Right of way for ADA work, railroad agreement, design consultant costs. Contingency for culvert work included in the estimate.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 01-25-2019
Current Letting Date: 01/25/2019
Construction Season: 2019
Estimated Substantial Completion: October/2019



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

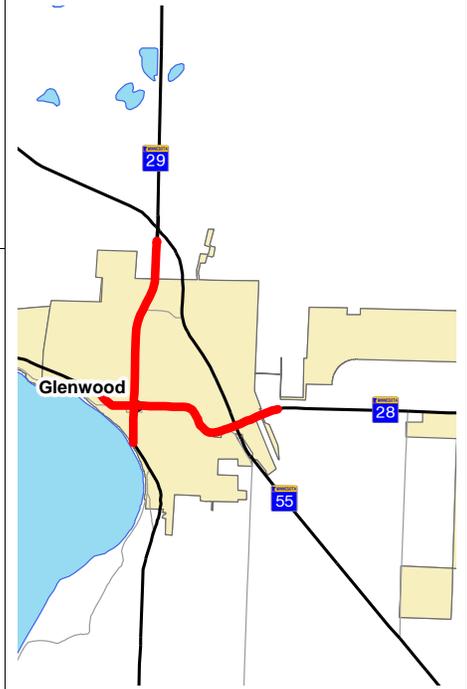
PROJECT SUMMARY

Hwy 28

Hwy 28, Hwy 29, Hwy 104 - Glenwood

State Project No. 6103-32

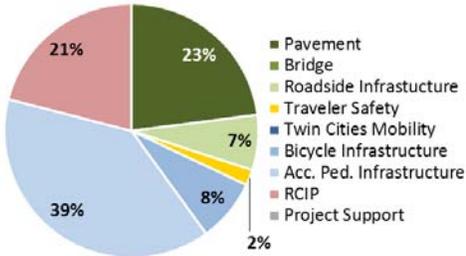
<http://www.dot.state.mn.us/D4/projects/Glenwood>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

4 miles of bituminous rehabilitation on Hwy 28, Hwy 29 & Hwy 104 in the City of Glenwood. The project also includes: ADA pedestrian ramps, sidewalk, signal system, 5 blocks of Complete Streets improvements and a realignment to address a flooding issue on Hwy 28 near the fairgrounds.

Recent Changes and Updates

Complete Streets portion of the project was approved, which includes improvements and facilities for bicycles and pedestrians. Hydraulic flooding issue mitigation design was approved. Predesign contract is complete. Final design contract is initiated. A project that was awarded Transportation Alternatives Program funding will be constructed in conjunction with this project.

Project History:

This project includes ADA, Complete Streets, bituminous overlay, and hydraulic flooding issues that need to be resolved.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.3	\$ 8.7
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 1.4	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.2	\$ 11.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Estimate dated 8-20-15. Used 14% inflation for 2018. \$1M City of Glenwood Complete Streets participation. \$100,000 City of Glenwood participation for grade raise for flooding issues. Estimate increased due to the addition of grade raise costs, increased traffic control cost, addition of ADA and sidewalks outside of Complete Streets and increased mobilization cost.

Project Risks:

Consultants will be used for predesign and final design. Predesign contract for Complete Streets could exceed scope. Hydraulic/flooding area could result in Hwy 28 realignment. City participation costs, ADA, sidewalk, access control.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Pending Approval
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 02/16/2018
 Current Letting Date: 10/27/2017
 Construction Season: 2018
 Estimated Substantial Completion: October/2018



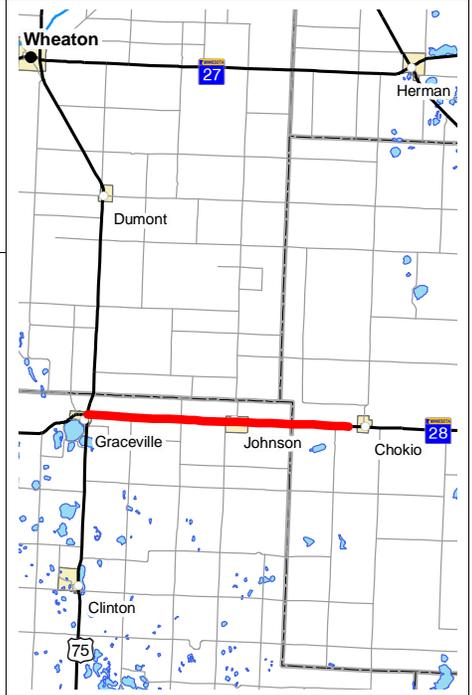
Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

PROJECT SUMMARY

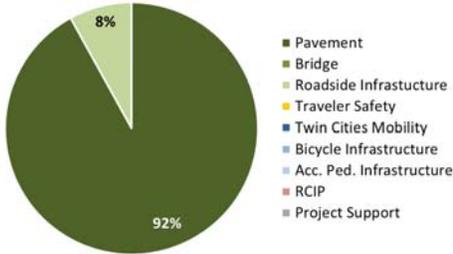
Hwy 28
Hwy 75 to Chokio
State Project No. 0606-11



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

Milling, paving and hydraulic improvements of 12 miles from Hwy 75 in Graceville to Chokio.

Recent Changes and Updates

In place bituminous needs resurfacing.

Project History:

This project includes bituminous resurfacing.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.5	\$ 3.5
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.7	\$ 4.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Cost estimate was done in 2015 using a 19% inflation rate.

Project Risks:

Early let late award allows advanced design time and early completion. Box culverts may need to be lengthened and there has been 4" of standing water at one location on Hwy 28. These risks are accounted for in the contingencies in the estimate.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 03-22-2018
Current Letting Date: 03/23/2018
Construction Season: 2018
Estimated Substantial Completion: October/2018



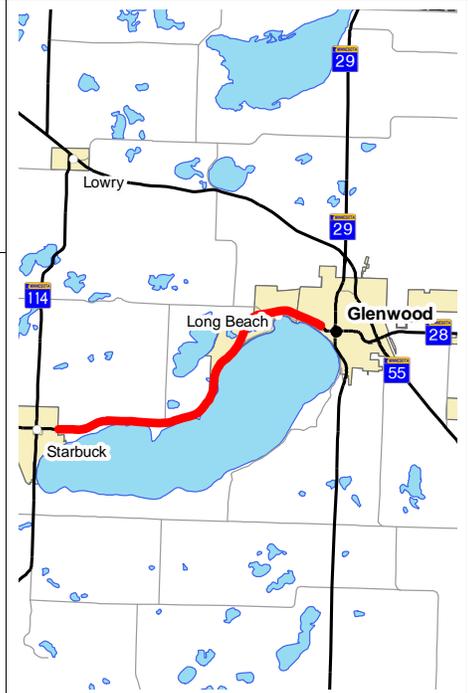
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 28
Starbuck to Glenwood
State Project No. 6103-34



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

In place bituminous needs resurfacing, hydraulics issues need fixing and shoulders need widening. Possible center left turn lane additions may be added.

Project History:

This project includes bituminous milling, roadway reclamation, bituminous surfacing, shoulder widening and center left turn lane construction.

Project Description:

The project consists of 8 miles of bituminous milling, reclamation, and surfacing. Project also includes hydraulic work and shoulder widening on Hwy 28.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 6.8
Other Construction Elements:	\$ 1.4	\$ 1.4
Engineering:	\$ 1.4	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.6	\$ 9.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Cost estimate was done in 2015 using a 19% inflation rate for 2019.

Project Risks:

Environmental approval, right of way acquisition, possible consultant for final design, and detour agreement. Hydraulic risks are accounted for in the cost estimate.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Pending Approval
Construction Limits Established Date: Pending Approval
Original Letting Date: 2020
Current Letting Date: 02-22-2019
Construction Season: 2019
Estimated Substantial Completion: October/2019



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

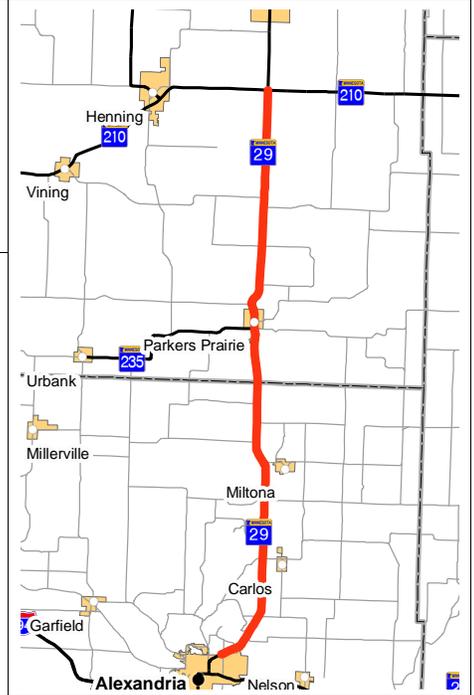
District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 29
 McKay Avenue in Alexandria to Hwy 210
 State Project No. 2103-35

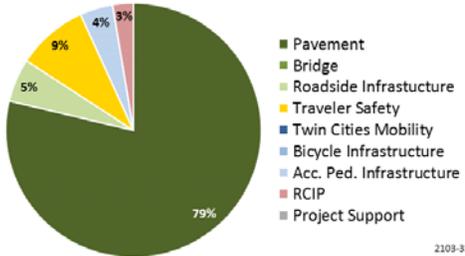
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of a 30-mile bituminous resurfacing. Culverts in poor condition will be replaced. Numerous by-pass, center left and right turn lanes will be added to address mobility and safety concerns. Lighting at the intersection with County Road 5 will be added. Rumble strips will be provided in shoulder and grooved in wet reflective paint on fog line to improve safety.

Recent Changes and Updates

Substantially completed in July 2014.

Project History:

Maintenance has been patching by wedge paving to fill both longitudinal and transverse cracks. There also have been overlays placed over entire width to prevent pop-outs of in place roadway. Scoping was completed in spring 2010. Parkers Prairie provided a recommendation for storm sewer replacement. Hydraulic recommendation recently completed.

The project is currently in the design phase. The Parkers Prairie portion was submitted for a CIMS grant and was unsuccessful. This portion was removed from the current project to work with the city's timelines and acquire right of way. Paving and ADA upgrades will be completed as a future cooperative project between the city, county and state.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.4	\$ 8.9
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.8	\$ 1.9
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 12.2	\$ 11.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project was constructed in 2014.

Project Risks:

Condition of pavement at time of construction. Complete Streets costs.

Schedule:

Environmental Approval Date: 08/23/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 2/1/2013
 Construction Limits Established Date: 02/01/2013
 Original Letting Date: 04/25/2014
 Current Letting Date: 02/28/2014
 Construction Season: Summer 2014
 Estimated Substantial Completion: 07/01/2014



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Seth Yliniemi

Revised Date: 12/15/2015

PROJECT SUMMARY

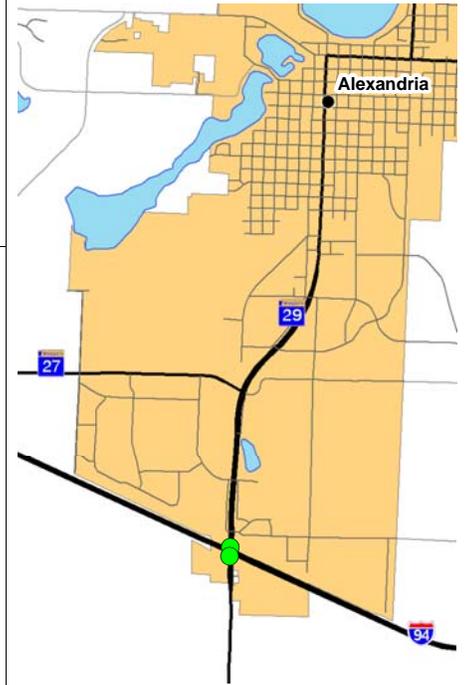
Hwy 29

50th Avenue in Alexandria to County Road 28

Bridge 21813, 21814

State Project No. 2102-58

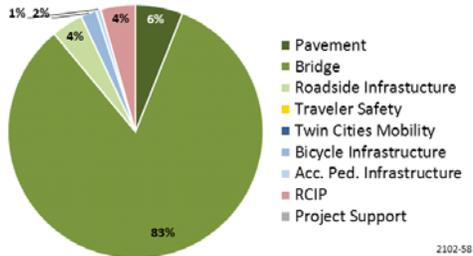
<http://www.dot.state.mn.us/d4/projects/alexi94hwy29/index.html>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



2102-58

Project Description:

The project will replace Bridges 21813 and 21814, which are part of the interchange in Alexandria for 2 miles on Hwy 29 over I-94. The project will replace the interchange and construct a four-lane expansion of Hwy 29 from 500 feet north of 50th Ave. to 0.4 miles south of County Road 28. This project is being done in collaboration with the city and county. A roundabout will be constructed on the south end of the project to improve safety.

Recent Changes and Updates

Construction started July 2015 and will finish fall 2016.

Project History:

The bridges were built in 1965 and are considered Structurally Deficient. The width and railings on the bridges are substandard. A value engineering study is complete. Bridges 21813 and 21814 are part of Chapter 152.

This project will help economic development, mobility and safety. Geometric layout was complete and signed. The right of way acquisition has begun. Design plans are 50 percent complete. Traffic and noise studies are complete. Website is live. Public meeting in October 2012.

90% of the project plans were completed in August 2014. Increased cost for consultant design and required right of way resulted in an increase in the cost estimate.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 16.2	\$ 14.9
Other Construction Elements:	\$ 1.1	\$ 1.2
Engineering:	\$ 3.0	\$ 3.3
Right of Way:	\$ 0.1	\$ 2.0
Total:	\$ 20.5	\$ 21.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Job has been let and awarded and is being constructed. The current estimate reflects low bid amount for the project. Two-span steel girder structure with tall abutments. Bituminous typical section assumed. Right of way process will be tight.

Project Risks:

Utility impacts currently being resolved with Magellan Gas Company dealing with major distribution line. Access changes not accepted by property owners. 50th Ave staging requires additional public involvement and acceptance. FHWA reviews may require additional documentation. Geotechnical issues such as high groundwater could affect construction.

Schedule:

Environmental Approval Date: Not needed
 Municipal Consent Approval Date: 05/28/2013
 Geometric Layout Approval Date: 9/6/2013
 Construction Limits Established Date: 09/06/2013
 Original Letting Date: 01/22/2016
 Current Letting Date: 02/27/2015
 Construction Season: 2015/2016
 Estimated Substantial Completion: Sept. 2016



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

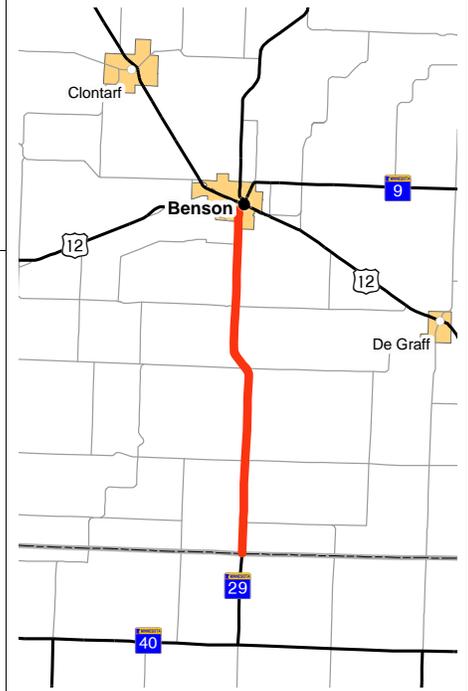
District Engineer: Jody Martinson
Project Manager: Bradley Cegla

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 29
 Hwy 40 to Benson
 Bridge 6550, 6551, and, 6552
 State Project No. 7607-29

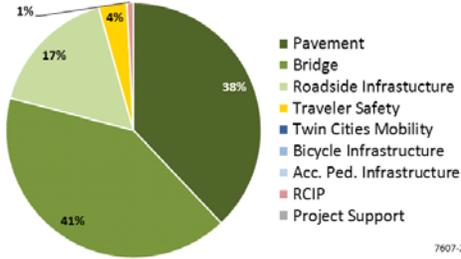
Substantially Complete



Primary Purpose:

Performance-based Need: Bridge & Pavement Condition

Investment Category:



Project Description:

Bituminous resurfacing for 14 miles from Benson to Hwy 40. Bridges 6550, 6551 & 6552 will be replaced and grading will be done to tie into the bridges. Culverts that are in poor condition will be replaced.

Recent Changes and Updates

Project is substantially complete as of fall 2014.

Project History:

Because bridge widening is needed to bring the bridges up to current standards, replacement is the only feasible option. Pavement deterioration rates exceeded historic declines. Bridge Replacement 6552 is part of Chapter 152. A consultant was hired and is starting to work on the design plans. Bridges 6550 and 6551 were evaluated and replaced with box culverts. Bridge 6552 will be replaced with a bridge.

The winter was extremely hard on the pavement condition. The letting was moved up to address this issue.

Project is currently under construction. The bid price for the culverts and bridge were less than expected resulting in cost savings.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.3	\$ 6.6
Other Construction Elements:	\$ 0.9	\$ 0.8
Engineering:	\$ 1.5	\$ 1.4
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 9.8	\$ 8.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project has been awarded. Current estimate reflects low bid amount for the project.

Project Risks:

The timeline is compressed - it may not be possible to complete bridge design and right of way work in time for the early letting. There is the possibility of separating the project into a pavement project one year and bridge project the following year, which would raise the cost.

Schedule:

Environmental Approval Date: 03/13/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 10/18/2013
 Original Letting Date: 03/24/2006
 Current Letting Date: 05/16/2014
 Construction Season: 2014
 Estimated Substantial Completion: November/ 2014



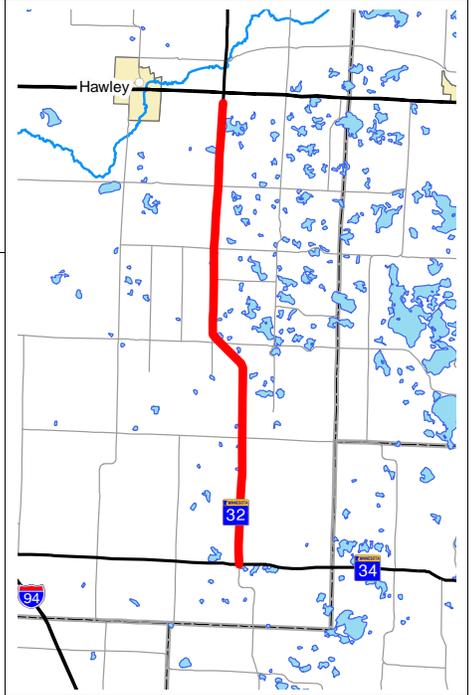
Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Dan Kuhn/Bradley Cegla

Revised Date: 12/15/2015

PROJECT SUMMARY

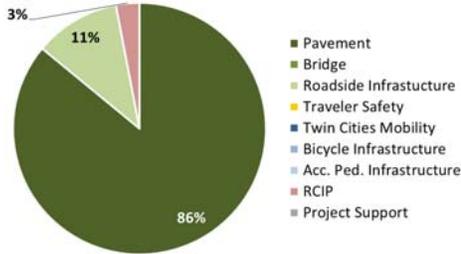
Hwy 32
Hwy 34 to Hwy 10
State Project No. 1402-19



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

16 mile project from the junction of Hwy 34 to the junction of Hwy 10. Pavement will be rehabilitated, center line culverts and entrance pipes will be replaced or lined.

Recent Changes and Updates

Project is being designed, limits established, and the right of way acquisition process is beginning.

Project History:

Pavement needs resurfacing and various center line pipes need to be replaced or lined.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.5	\$ 4.1
Other Construction Elements:	\$ 0.6	\$ 0.5
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.0	\$ 5.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project is in early design stage. Cost estimate was updated in 2015 using a 9% inflation rate. A 19% inflation rate was used for the baseline estimate. The risks below are included in the estimate.

Project Risks:

Potential pedestrian box culvert addition near Rollag, which is currently not funded. There are pipes that need to be inspected, an access road in Rollag might be added to the project and a pipe near the church in Rollag might be buried.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 03-24-2017
Current Letting Date: 03/24/2017
Construction Season: 2017
Estimated Substantial Completion: October/2017



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 34

Hwy 9 in Barnesville to Hwy 59 at Dunvilla

State Project No. 1404-17

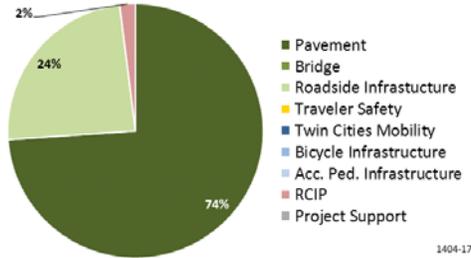
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



1404-17

Project Description:

19 mile long pavement rehabilitation project from Hwy 9 in Barnesville to Hwy 59 at Dunvilla. The effort also includes shoulder work, installing rumble strips, and culvert replacement.

Recent Changes and Updates

Project is substantially complete.

Project History:

This project was initiated due to the intense annual maintenance required to repair cracks, rutting and other deficiencies. It also appears that gravel truck traffic increased from Hwy 32 west, resulting in more rapid deterioration of the roadway. The project was scoped in May 2011. The project scope was expanded to include from I-94 to Hwy 9.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.1	\$ 6.6
Other Construction Elements:	\$ 0.8	\$ 0.7
Engineering:	\$ 1.7	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.6	\$ 8.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate was adjusted to 2015 year of construction using an inflation rate of 1.05. Assumes project will be a bituminous resurfacing project. Current cost estimate reflects low bid amount for the project.

Project Risks:

Project risks include subgrade corrections for poor soils beneath the pavement that cause frost heaves and pavement problems at culvert locations.

Schedule:

Environmental Approval Date: 01/31/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 06/07/2015
 Original Letting Date: 05/20/2011
 Current Letting Date: 02/27/2015
 Construction Season: 2015
 Estimated Substantial Completion: August/2015



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Tom Lundberg

Revised Date: 12/15/2015

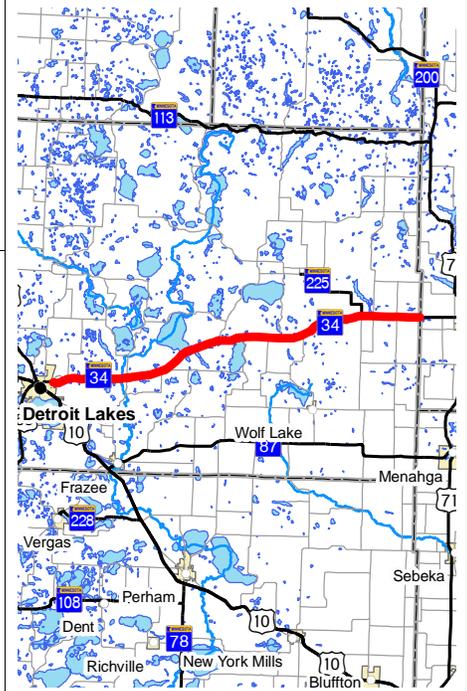
PROJECT SUMMARY

Hwy 34

Various Passing Lanes from Detroit Lakes to Akeley

State Project No. 0303-64

www.dot.state.mn/d4/projects/hwy34



Primary Purpose:

Performance-based Need: Interregional Corridor Mobility

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Work on passing lanes - to be finished fall 2015.

Project History:

This project is part of the Corridors or Commerce Program and was fast tracked starting November 2013 with design and now completing passing lanes in fall 2015.

Project Description:

The project includes spot improvements, passing lane improvements, and intersection improvements on Hwy 34 from Detroit Lakes to Akeley.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 7.9
Other Construction Elements:	\$ 0.6	\$ 0.0
Engineering:	\$ 1.5	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.9	\$ 8.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project let and awarded.

Project Risks:

Short turn around for design and letting. Permits acquired in time due to compressed time schedule. Hydraulics, poor soils beneath the pavement and possible existing contamination of soil on the project.

Schedule:

Environmental Approval Date: 03/10/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Dec 2013
 Construction Limits Established Date: 12/01/2013
 Original Letting Date: 06/06/2014
 Current Letting Date: 06/27/2014
 Construction Season: 2014/2015
 Estimated Substantial Completion: October/2015



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Tom Lundberg

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 59

North of Hwy 34 in Detroit Lakes to south of the Buffalo River

State Project No. 0305-31

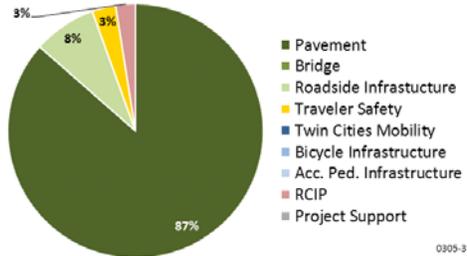
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

14 miles of mill and bituminous overlay from Detroit Lakes to north of Callaway. Culverts in poor condition will be replaced. The ride will be improved along with improved drainage along the corridor. The project will also address safety by adding centerline rumbles. Accessibility ramps in Callaway will be brought up to current standards.

Recent Changes and Updates

Project is substantially complete.

Project History:

Existing pavement conditions were below standard and substantial maintenance work was required for pavement patching. Scoping was completed in spring 2010. The scope was amended to decrease the pavement fix and to include paving and ADA work in Callaway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.1	\$ 4.8
Other Construction Elements:	\$ 0.7	\$ 0.0
Engineering:	\$ 1.6	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.4	\$ 5.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project is substantially complete. Project was previously let and awarded. This project was originally scoped as a 4" overlay but was changed to a 3" mill and overlay, which resulted in a cost decrease.

Project Risks:

Condition of pavement at time of construction.

Schedule:

Environmental Approval Date: 08/07/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 10/01/2012
 Original Letting Date: 03/23/2014
 Current Letting Date: 11/22/2013
 Construction Season: Summer 2014
 Estimated Substantial Completion: Sept. 2014



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

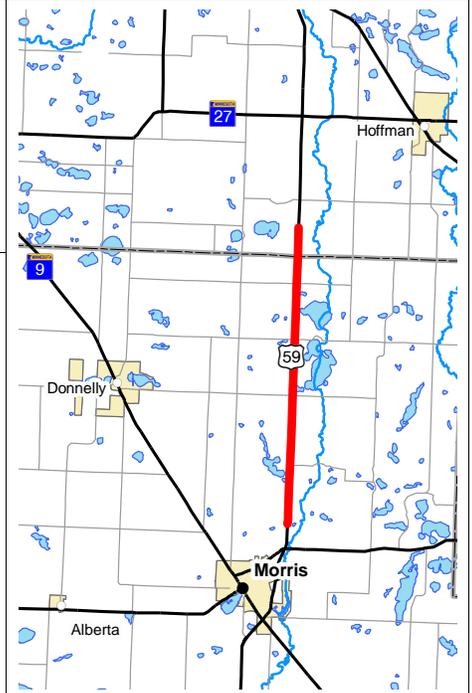
District Engineer: Jody Martinson
Project Manager: Seth Yliniemi

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 59

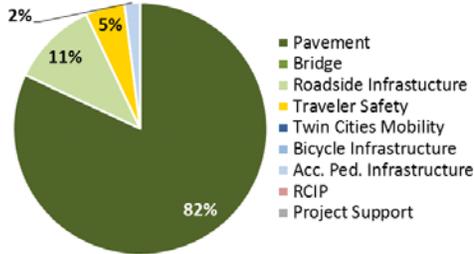
From the junction of Hwy 28 to the north of the Stevens County line
State Project No. 7506-17



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of a concrete overlay from the junction of Hwy 28 to north of the Stevens County line and at the intersection of Hwy 59/28.

Recent Changes and Updates

Project designs are almost done. Testing found contaminated material at the Hwy 28/59 intersection.

Project History:

This project was programmed to correct joints in the pavement that were deteriorating faster than anticipated and will support the implementation of a thin concrete overlay as an innovative type of fix. The letting was advanced from 2018 to 2016.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.3	\$ 3.9
Other Construction Elements:	\$ 0.6	\$ 0.5
Engineering:	\$ 1.2	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.1	\$ 5.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Date of estimate 5-26-15. 4% inflation used. The project was moved from 2018 to 2016, which results in a lower estimate because of less inflation. Previous inflation rate used was 18%.

Project Risks:

The concrete overlays are a new process and problems may be encountered during construction. Contamination exists at the TH 28/59 intersection. Hydraulics issues may occur. These risks are included in the cost estimate contingencies.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 04/30/2015
Construction Limits Established Date: 04/30/2015
Original Letting Date: 03/23/2018
Current Letting Date: 01/18/2015
Construction Season: 2016
Estimated Substantial Completion: 10/01/2016



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

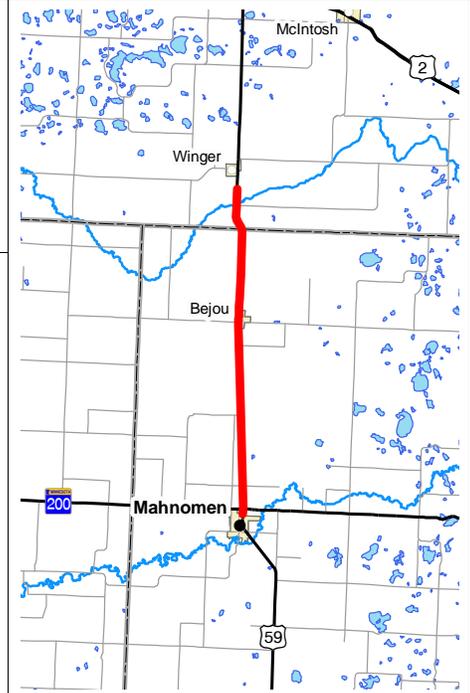
District Engineer: Jody Martinson
Project Manager: Brad Cegla

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 59

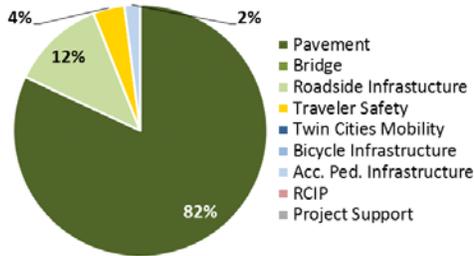
South of the Buffalo River Bridge to Winger
State Project No. 4404-13, 0305-34, &, 6008-15



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

36 mile project from south of the Buffalo River bridge to Winger. Pavement will be rehabilitated, centerline culverts will be replaced and centerline and edgeline rumble stripes will be installed. ADA work in Ogema will be done. One mile of continuous center left turn lane will be constructed in Mahanomen.

Recent Changes and Updates

Two projects, SP 0305-34 and SP 4404-13, on Hwy 59 were combined into one project for construction in 2017. This project extends into District 2 under SP 6008-15. Design is 30% complete. One mile of continuous left turn lane was added in Mahanomen.

Project History:

In place pavement needs resurfacing, and hydraulic pipes need to be replaced. Frost heaves and rip rap at various areas to be corrected. District 2 coordination. Hwy 200 turn lanes to be constructed under SP 0305-34.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 12.9
Other Construction Elements:	\$ 0.5	\$ 1.2
Engineering:	\$ 1.0	\$ 2.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.2	\$ 16.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate increased dramatically because two projects, SP 0305-34 and SP 4404-13, on Hwy 59 were combined into one project for construction in 2017. Estimate dated 7-14-15. 9% inflation rate. Tribal Employment Rights Ordinance is included in estimate.

Project Risks:

District 2 coordination. Frost heave fixes could exceed scope. Possible sidewalk replacement in Ogema. The project is assumed to be a 1.5-inch mill and 3-inch overlay. The increase in elevation of the roadway requires a watershed permit for the project. The watershed permit is pending approval in 2015.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 02/16/2018
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: 10/01/2018October/201



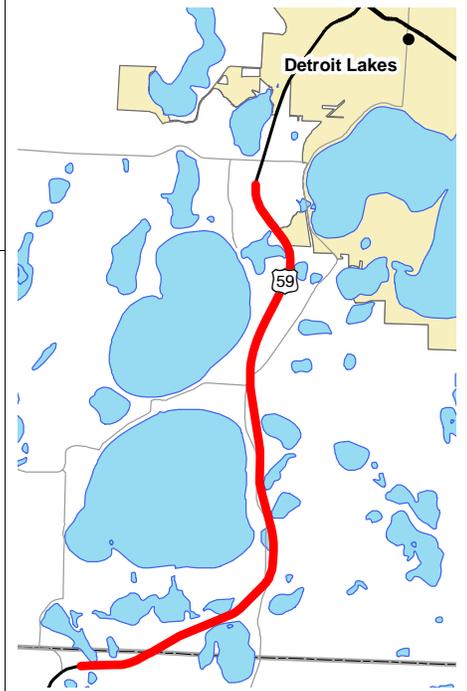
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Shiloh Wahl

Revised Date: 12/15/2015

PROJECT SUMMARY

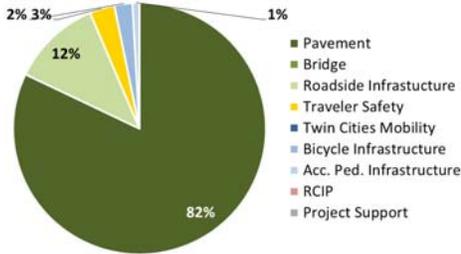
Hwy 59
 North of CSAH 20 to south of Willow Street
 State Project No. 0304-37



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

Resurfacing and safety improvement project from CSAH 20 in Otter Tail County to Willow Street in Detroit Lakes. Left turn lanes will be added at CSAH 17 in Becker County.

Recent Changes and Updates

Working on geometric layout and other pre-design activities. Letting date revised from 2020 to 2018 construction.

Project History:

Project needed as a result of low ride quality and above average crash history. Additional resources are required by Maintenance for patching and crack filling if project is not completed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.7	\$ 3.7
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.7	\$ 4.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Estimate was done in 2015 using a 14% inflation rate.

Project Risks:

Project risks include additional aggregate shouldering, ADA update at CR 6, ADA at Sauer Lake Rest Area, upgrades to the pedestrian push button on the signal system at CR 6 and additional hydraulics issues. These risks were accounted for as contingencies in the estimate.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 09-21-2018
 Current Letting Date: 12-15-2017
 Construction Season: May 2018 to October 2018
 Estimated Substantial Completion: October/2018



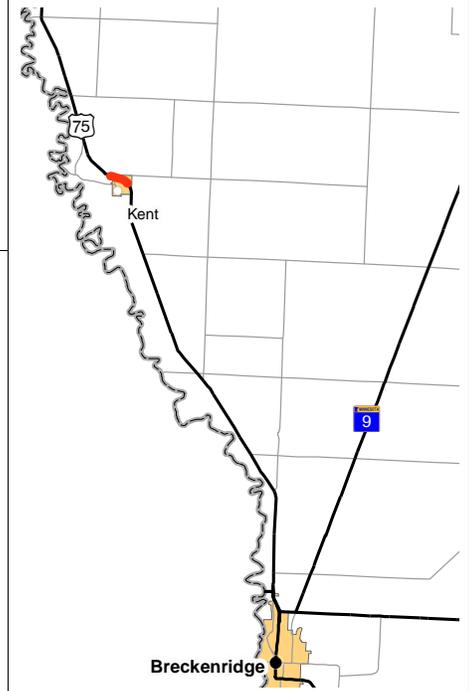
Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/15/2015

PROJECT SUMMARY

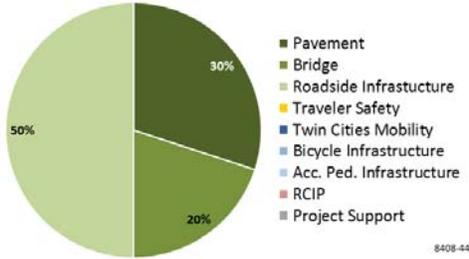
Hwy 75
Near Kent
Bridge 5185, &, 5186
State Project No. 8408-44
<http://www.dot.state.mn.us/D4/Projects/Hwy75kent/>



Primary Purpose:

Performance-based Need: Bridge & Roadside Infrastructure Condition

Investment Category:



Project Description:

Hwy 75 will be realigned away from the flood plain. A new bridge over Whiskey Creek will be constructed. Additionally, a new bridge over BNSF railroad will be constructed. MnDOT has excess right of way that will be released.

Recent Changes and Updates

Project is designed, let and currently being constructed.

Project History:

Bridge 5186 is in poor condition and needs to be replaced. Annual flooding due to spring melt and large rain events caused Hwy 75 to be detoured. This project will address the safety and mobility issues that are caused due to flooding.

Letting moved up from 2016 to 2015. The current estimate has increased due to longer bridge lengths for both bridges as well as turnback costs for a portion of the existing Hwy 75.

Environmental issues are being addressed, including ponding, which resulted in increased costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.6	\$ 9.7
Other Construction Elements:	\$ 0.6	\$ 0.7
Engineering:	\$ 1.5	\$ 1.8
Right of Way:	\$ 0.7	\$ 0.6
Total:	\$ 10.4	\$ 12.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project is let and being constructed. Construction completion on time and within budget.

Project Risks:

If there is 2016 Spring flooding, project completion could be delayed.

Schedule:

Environmental Approval Date: 11/05/2014
Municipal Consent Approval Date: 06/09/2013
Geometric Layout Approval Date: 4/24/2013
Construction Limits Established Date: 04/14/2013
Original Letting Date: 03/28/2000
Current Letting Date: 02/27/2015
Construction Season: 2015/2016
Estimated Substantial Completion: Oct. 2016



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 75
Hwy 10 to north Clay County line
State Project No. 1407-25

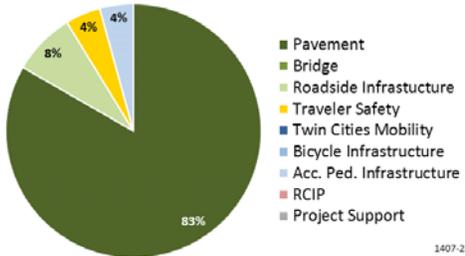
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement condition

Investment Category:



Project Description:

This project consists of pavement resurfacing, culvert replacement and turn lane construction for 19 miles from Hwy 10 in Moorhead to the Clay/Norman County line.

Recent Changes and Updates

Project is substantially complete.

Project History:

In place pavement needs resurfacing and was moved forward due to rapid decline of pavement conditions. Hydraulic/drainage concerns need to be addressed. Project is designed, let and currently being constructed. 4 miles were added to the south limits of the original project, which resulted in additional cost.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	\$ 7.1
Other Construction Elements:	\$ 0.7	\$ 0.0
Engineering:	\$ 1.2	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.1	\$ 8.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project is substantially complete.

Project Risks:

Risks retired.

Schedule:

Environmental Approval Date: 02/24/2014
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 3/21/2013
Construction Limits Established Date: 03/21/2013
Original Letting Date: 02/19/2016
Current Letting Date: 04/25/2014
Construction Season: 2014
Estimated Substantial Completion: August 2014



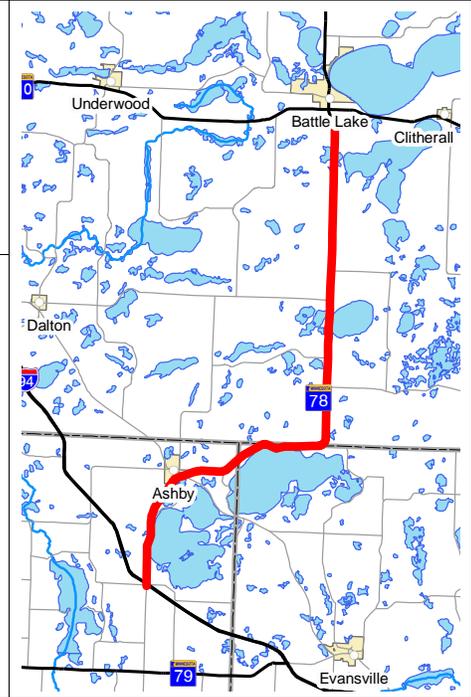
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/15/2015

PROJECT SUMMARY

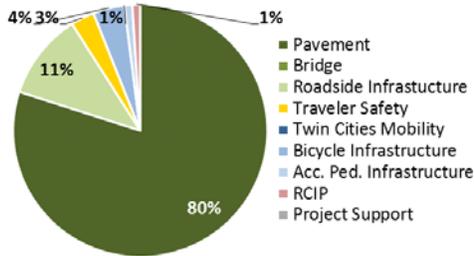
Hwy 78
I-94 to Battle Lake
State Project No. 5619-11



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Mill and overlay project on Hwy 78 from I-94 to Battle Lake.

Recent Changes and Updates

Coordinating with Battle Lake and Ashby on a possible trail between the two communities.

Project History:

This project was designed to correct deteriorating road surface.
Scoping document approved February 2014.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.4	\$ 7.5
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.4	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.7	\$ 9.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Estimate dated 2-4-15. 14% inflation rate used.

Project Risks:

Final hydraulic recommendation not done yet. Potential turnback of frontage road could add cost. No survey data yet.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending Approval
Original Letting Date: 11/01/2017
Current Letting Date: 11/01/2017
Construction Season: 2018
Estimated Substantial Completion: October/2018



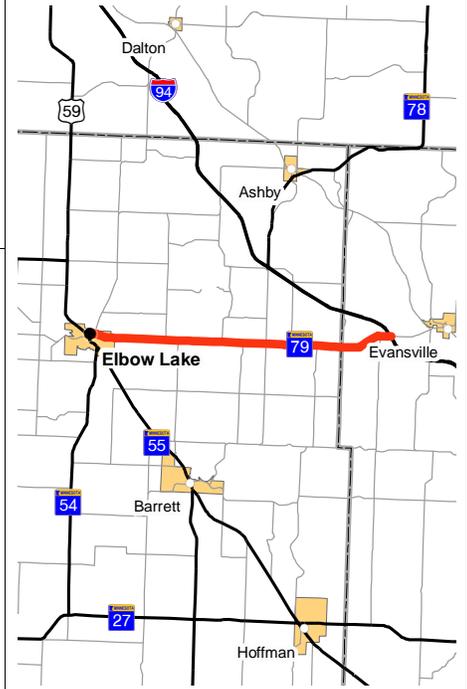
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Tom Lundberg

Revised Date: 12/15/2015

PROJECT SUMMARY

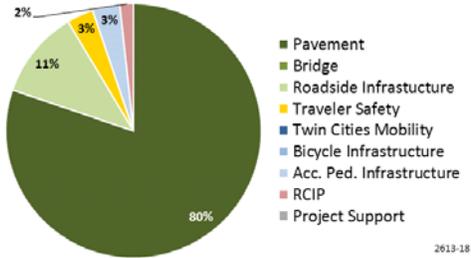
Hwy 79
 Elbow Lake to Hwy 94
 Bridge 21801, &, 21802
 State Project No. 2613-18



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Resurfacing project for 12 miles from Hwy 59 in Elbow Lake to I-94. The project also includes ADA work, replacing culverts, updating guardrail, and installing rumble strips.

Recent Changes and Updates

Paving was added on TH 55 in the City of Elbow Lake and later removed along with the work on Hwy 59 and a portion of TH 79 due to the extent of the accessibility work needed in Elbow Lake. All three highways within Elbow Lake will be done as a separate project currently scheduled for 2019. Any city lighting would be included in the 2019 project. A right turn lane to a new hospital was added to the project.

Project History:

The western limit was extended to include a section of Hwy 59 to the west city limits. ADA work will be included in the project. The project was scoped. Met with the City of Elbow Lake; street lighting may be added to the project scope.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.5	\$ 3.5
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.9	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.9	\$ 4.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project costs were updated to current inflation rates. Contingency includes a 60 percent chance of doing snow sloping, 80 percent chance of erosion corrections, 80 percent chance of frost heave corrections and no chance that the city will request additional work. Estimate reduction reflects the removal of the Elbow Lake portion of the project.

Project Risks:

The county could include a bike trail, which would add environmental impacts and possibly effect the timing. The city could request additional work. They have plugged a centerline pipe and are planning to address their utilities to handle the hydraulics prior to MnDOT's project. Snow sloping may be required after surveys are complete, hydraulic and materials recommendations are not completed. There are frost heave areas that are being drilled for consideration and erosion issues that will be considered.

Schedule:

Environmental Approval Date: 12-03-2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 07/29/2015
 Original Letting Date: 03/28/2016
 Current Letting Date: 11/20/2015
 Construction Season: 2016
 Estimated Substantial Completion: Oct. 2016



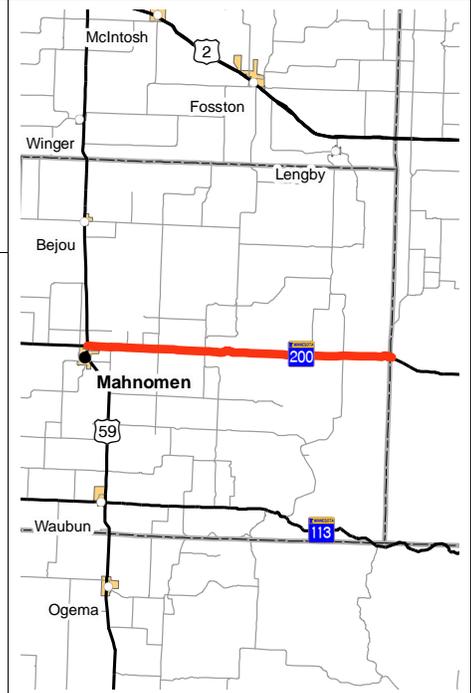
Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Lori Vanderhider

Revised Date: 12/15/2015

PROJECT SUMMARY

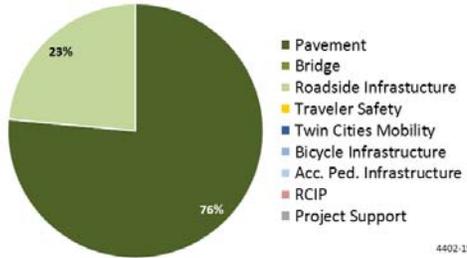
Hwy 200
Hwy 59 to east Mahnomen County line
State Project No. 4402-19



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

20 mile project from Hwy 59 in Mahnomen to the Mahnomen/Clearwater County line. Pavement will be rehabbed, centerline culverts will be replaced, flood-prone areas regraded, guardrail replaced and edge rumbles replaced.

Recent Changes and Updates

Drainage areas west of Hwy 59 require ditch cleaning and pipe work. District 2 is doing the design and will do the contract administration for this project.

Project History:

In place pavement needs resurfacing. Segment has overland flooding due to spring melt and heavy rains. A raised grade to mitigate flooding was added, which resulted in increased project costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.2	\$ 7.4
Other Construction Elements:	\$ 0.4	\$ 0.8
Engineering:	\$ 1.2	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.8	\$ 9.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Cost estimate was updated in 2015 using 4% inflation rate. The grade raise limits will determine whether right of way will need to be acquired.

Project Risks:

Flood areas. Regrade too expensive to fix through this area, but have not received watershed permit, which may require a higher dollar fix. Tribal approval process will be needed for some entrance pipe work.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 06/08/2014
Original Letting Date: 03/25/2016
Current Letting Date: 12/18/2015
Construction Season: 2016
Estimated Substantial Completion: Oct. 2016



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

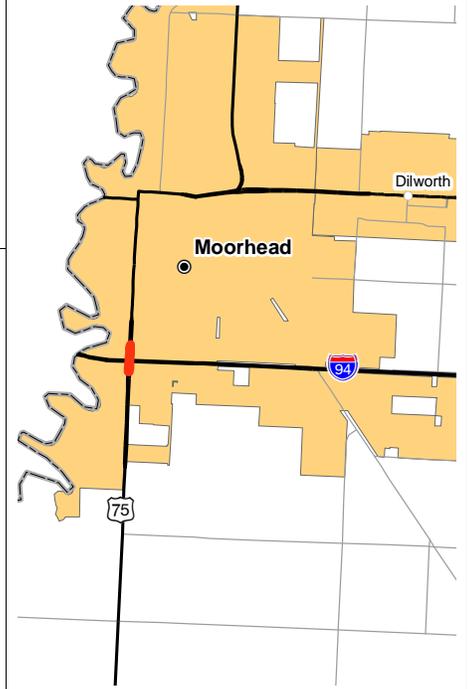
Revised Date: 12/15/2015

PROJECT SUMMARY

I-94

I-94 and Hwy 75 interchange
 Bridge 14813, 14814, 14X11, 14X12
 State Project No. 1406-66

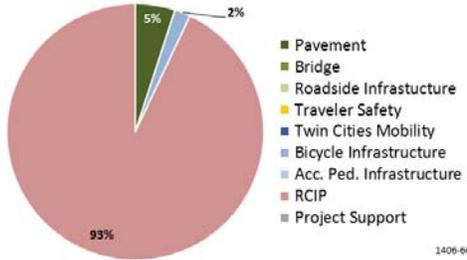
<http://www.dot.state.mn.us/d4/projects/moorhead/>



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

Reconstruct the Hwy 75 interchange over I-94 in Moorhead. Both eastbound and westbound auxiliary lanes on I-94 will be extended to 20th Street. Bike and pedestrian traffic will be addressed with the bridge construction. ADA and guardrail will meet standards. Signals will be installed and hydraulic issues addressed.

Recent Changes and Updates

Final Design was complete in July 2015 and is now pending Federal Approval for letting. The southerly project limits were shortened from 40th Ave to 35th Ave, which eliminated the new signal at 37th Ave. That section is now programmed under SP 1406-74 with a letting in 2017. Cooperative Agreement is pending with the City of Moorhead for signals, lighting and multiuse trail. Utility Agreements are pending due to relocations within Interstate Right of Way.

Project History:

Letting moved to September 2015.

Municipal consent is now needed due to signal replacements at 37th, 30th and 24th Ave. The newly designed Interchange is a lower cost than the one originally planned. This project is the preferred alternative of the Hwy 75 Corridor Transportation Study completed in 2008.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.0	\$ 10.1
Other Construction Elements:	\$ 1.2	\$ 2.2
Engineering:	\$ 3.0	\$ 2.5
Right of Way:	\$ 0.2	\$ 0.1
Total:	\$ 19.4	\$ 14.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Estimate was done in 2015 using 2016 estimated unit costs. Utility agreement totaling \$1M were added as well as a Municipal Agreement for \$260,000 with the City of Moorhead. Final cost estimate is pending. Anticipated to be lower than current estimate.

Project Risks:

Constructing under traffic may increase costs. Staging was developed to expedite construction.

Schedule:

Environmental Approval Date: 08-03-2015
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 10-23-2015
 Construction Limits Established Date: 10-23-2015
 Original Letting Date: 06-24-2016
 Current Letting Date: 09-25-2015
 Construction Season: May - Oct 2016
 Estimated Substantial Completion: Oct. 2016



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

District Engineer: Jody Martinson
Project Manager: Seth Yliniemi

Revised Date: 12/15/2015

PROJECT SUMMARY

I-94

At various locations on I-94 from Fergus Falls to Osakis
 Bridge 21801, 21802, 21803, 21804, 9691, 9692, 21821
 State Project No. 2180-109



Primary Purpose:

Performance-based Need: Pavement and Bridge Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The bridge decks and concrete paving projects were originally to be completed in 6 separate contracts over multiple years. Ultimately, combining all bridge deck replacements and the new concrete pavement into one project to be completed in 2 construction seasons will minimize the impacts to the traveling public.

Project History:

Combining these six projects into one will minimize the impact to the traveling public to 2 construction seasons.

Project Description:

Replace the bridge decks on bridges over I-94 at County Road 88 near Fergus Falls (SP 5680-138), Highway 79 near Evansville, and Highway 114 near Alexandria (SP 2180-105) and replace the bridge deck on Highway 27 over Interstate 94 near Osakis (SP 2180-108). Provide new concrete pavement surface in east bound and west bound directions from Highway 114 to 79 (SP 2180-109 & SP 2180-110).

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 11-01-2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.0	\$ 42.0
Other Construction Elements:	\$ 2.5	\$ 2.5
Engineering:	\$ 3.8	\$ 3.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 48.3	\$ 48.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project is not fully defined. We are still gathering information on the culverts, drainage concerns, and guardrail concerns. We are also considering adjusting the pavement thickness and allowing flexibility on the start date for the contractor to help minimize the costs for the project.

Project Risks:

We have not yet secured all the funding necessary for the entire project. We anticipate that we will secure the funding in the next 6 months.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 03-16-2016
 Current Letting Date: 03-16-2016
 Construction Season: May 2016 - November 2017
 Estimated Substantial Completion: Fall/2017



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600

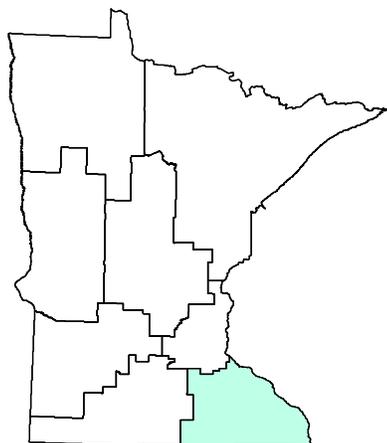
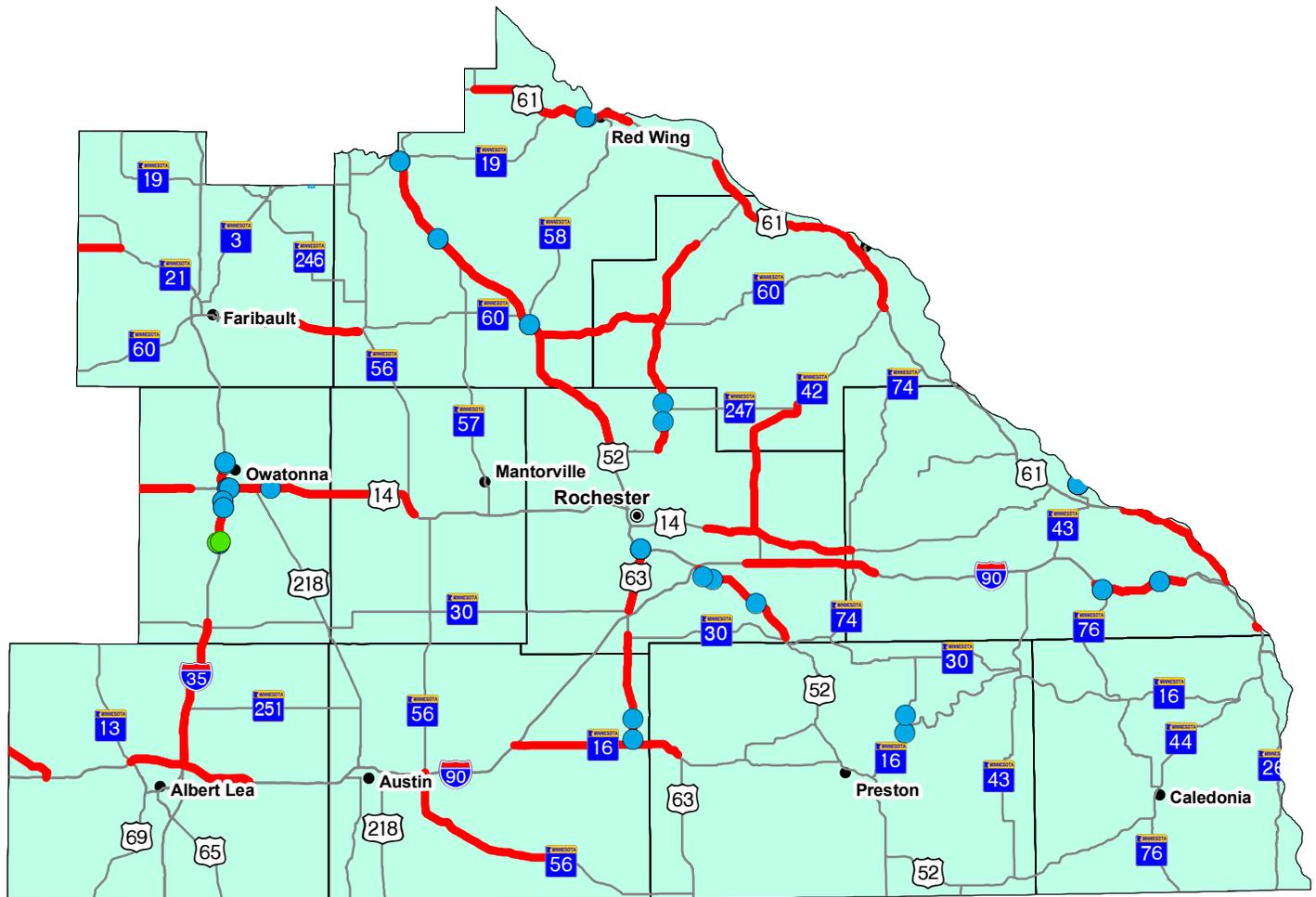
District Engineer: Jody Martinson
Project Manager: Chris Roy

Revised Date: 12/15/2015



Major Highway Projects 2015

District 6



Rochester

Major Highway Projects

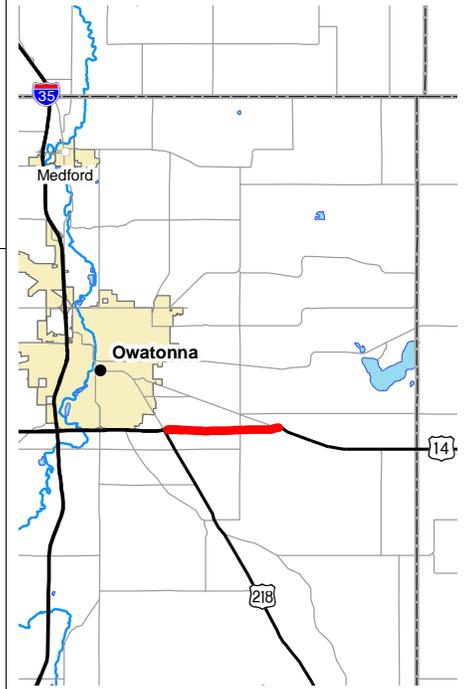
- Bridge Projects
- Roadway Projects
- Trunk Highway System

District Project Summary
District 6

Route	State Project #	Project Location	Page
Hwy 14	7402-30	Hwy 14 from Hwy 218 to CR 180 in Steele County	E 2
Hwy 14	2001-36	Hwy 14 from I-35 to Dodge Center	E 3
Hwy 14	5503-45	Chester to St Charles	E 4
Hwy 16	5003-17	Hwy 16 from I-90 to Tracy Road Spring Valley	E 5
Hwy 42	5506-22	Hwy 14 to north of Hwy 247	E 6
Hwy 43	8503-46	Winona Bridge over Mississippi River	E 7
Hwy 52	2506-72	Hwy 1 to south of Hwy 9 in Goodhue County	E 8
Hwy 52	2506-52	Cannon Falls interchange	E 9
Hwy 52	5507-64	Hwy 52 from Fillmore Hwy 5 to I-90	E 10
Hwy 52	2506-77	Hwy 52 from Hwy 7 to 2 miles south of Hwy 19	E 11
Hwy 52	2506-79	Hwy 52 bridges over Little Cannon River	E 12
Hwy 52	5507-63	Hwy 52 over Hwy 63	E 13
Hwy 52	2506-75	Rochester to Cannon Falls	E 14
Hwy 56	5005-62	Hwy 56 from Maple St. in Taopi to Hwy 46 Mower County	E 15
Hwy 58	2510-50	Hwy 58 Bridge over Hwy 52 in Zumbrota	E 16
Hwy 60	7902-25	Hwy 60 from Hwy 52 to Hwy 63	E 17
Hwy 60	6607-49	Faribault to Kenyon	E 18
Hwy 61	2514-120	Ready Mix entrance in Red Wing to Hwy 19	E 19
Hwy 61	2514-119	Hwy 19 to Hwy 316	E 20
Hwy 61	2514-122	Hwy 61 from Potter St. to Old West Main Street	E 21
Hwy 61	2514-121	Hwy 61 in Red Wing	E 22
Hwy 61	7906-96	Hwy 42 to just north of Lake City limits	E 23
Hwy 61	8504-79	I-90 to Hwy 15 in Homer	E 24
Hwy 63	5006-19	Hwy 16 to south end of Root River Bridge (Stewartville)	E 25
Hwy 63	5509-79	Hwy 30 to 28th Street SE in Rochester	E 26
Hwy 63	7908-35	Hwy 63 from Hwy 14 to Hwy 78	E 27
Hwy 63	2515-21	Hwy 63 bridge over the Mississippi river and Hwy 61	E 28
Hwy 63	5509-80	County Road 16 interchange	E 29
Hwy 250	2319-16	Bridges on Hwy 250 in Lanesboro	E 30
I-35	2480-104	Freeborn/Steele	E 31
I-35	7480-113	5 miles south of Owatonna to Faribault	E 32
I-35	7480-124	Staight River Rest Stop I-35	E 33
I-35	7480-126	6 bridges on I-35 and 4 bridges on Hwy 14	E 34
I-90	8580-163	West of Hwy 76 to west of County Road 12	E 35
I-90	8580-165	Winona	E 36
I-90	5580-90	East of County Road 19 to East of Hwy 74	E 37
I-90	2482-74	I-90 WB Lanes from Hwy13 to Hwy 46 (Petran)	E 38
I-90	8580-149	Mississippi River Bridges - Dresbach	E 39

PROJECT SUMMARY

Hwy 14
Hwy 14 from Hwy 218 to CR 180 in Steele County
Bridge 74X02
State Project No. 7402-30



Primary Purpose:

Regional & Community Improvement Priority:
Corridors of Commerce funding

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project was recently let and provides current cost estimates. Cost estimate reflects not constructing a reduced conflict intersection and leaving CSAH 43 as an at-grade-intersection.

Project History:

Construction includes expanding Hwy 14 from a 2-lane to a 4-lane concrete roadway. Hwy 14 westbound was constructed during 2014 and Hwy 14 eastbound will be reconstructed during 2015. Another construction item includes the construction of a box culvert.

Project Description:

This project expands Hwy 14 from 2 lanes to 4 lanes from Hwy 218 to CR 180. The roadway project also includes grading, concrete and bituminous paving, lighting, and bridge No. 74X02.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.5	\$ 12.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.1	\$ 2.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 18.6	\$ 14.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Current estimated cost reflects letting bid amount.

Project Risks:

There are currently no outstanding risks on this project.

Schedule:

Environmental Approval Date: 11/30/2010
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 10/03/2013
Construction Limits Established Date: 09/27/2013
Original Letting Date: 04/25/2014
Current Letting Date: 04/25/2014
Construction Season: 2014 & 15
Estimated Substantial Completion: 11/2015



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Heather Lukes

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 14
 Hwy 14 from I-35 to Dodge Center
 State Project No. 2001-36



Primary Purpose:

Performance-based Need: Pavement & District Safety Plan

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

This project will preserve existing roadway structure, extend pavement life, and improve ride quality.

Project History:

The Ride Quality Index (RQI) for this segment of Hwy 14 and the Remaining Service Life (RSL) indicate the need for improvement in the short-term.

Project Description:

This project includes bituminous resurfacing, drainage improvements and traffic safety improvements over 16 miles from I-35 to Dodge Center.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.9	\$ 5.9
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.3	\$ 7.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates for this project. Right of way is not required. It is assumed that traffic will be maintained during construction, so no crossover or detour costs were included.

Project Risks:

No detour agreements are anticipated for this project; however, recommended drainage improvements may lead to the need for a detour.

Schedule:

Environmental Approval Date: Unknown
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Unknown
 Construction Limits Established Date: Unknown
 Original Letting Date: 11/21/2014
 Current Letting Date: 01/23/2015
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2015



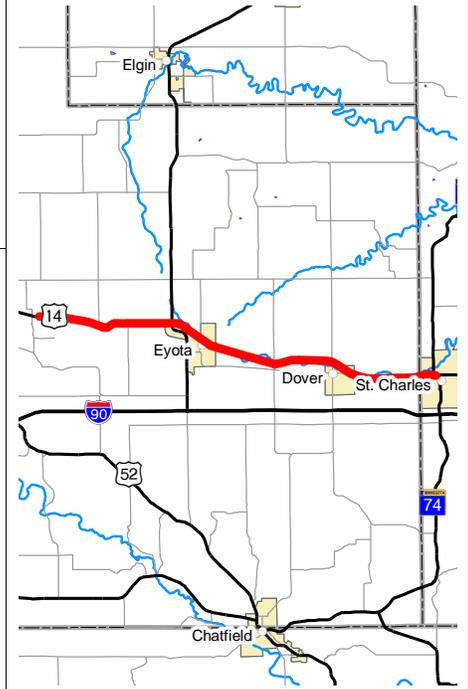
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Mike Kempinger

Revised Date: 12/15/2015

PROJECT SUMMARY

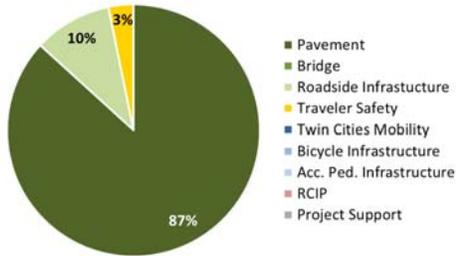
Hwy 14
Chester to St Charles
State Project No. 5503-45



Primary Purpose:

Performance Based Need: pavement condition

Investment Category:



Project Description:

This project on Hwy 14 is a grading and mill and overlay from east of Hwy 19 to the west junction of Hwy 74.

Recent Changes and Updates

Schedule information has been updated.

Project History:

This segment of Hwy 14 is a two-lane rural highway. The pavement is starting to show signs of deterioration, which is expected to accelerate in the upcoming years. The project is needed to extend pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.5	\$ 6.5
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.9	\$ 7.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimates are from the project scoping report of 4/18/14.

Project Risks:

Competitive bid may be higher or lower than expected

Schedule:

Environmental Approval Date: 04/29/2015
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: NA
Construction Limits Established Date: NA
Original Letting Date: 11/17/2017
Current Letting Date: 12/18/2015
Construction Season: 2016
Estimated Substantial Completion: 12/2016



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamnick
Project Manager: Heather Lukes

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 16

Hwy 16 from I-90 to Tracy Road Spring Valley

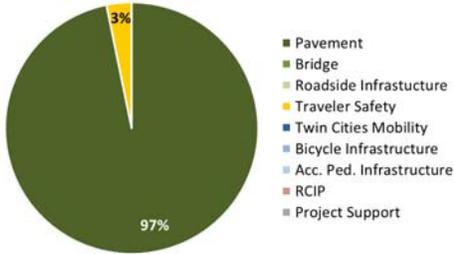
State Project No. 5003-17



Primary Purpose:

Performance Based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay from I-90 to Spring Valley, which is about 16 miles.

Recent Changes and Updates

Project scoping report, 7/16/15. No other recent changes.

Project History:

This segment of Hwy 16 is a mostly rural 2-lane roadway. The pavement is beginning to deteriorate, which is expected to accelerate over the upcoming years. The project is needed to extend service life and improve ride quality. It includes safety and other improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.0	\$ 7.0
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.5	\$ 8.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimates are from the project scoping report of 7/16/15.

Project Risks:

Competitive bids may be higher or lower than expected

Schedule:

Environmental Approval Date: TBD
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: TBD
 Construction Limits Established Date: TBD
 Original Letting Date: 01/25/2019
 Current Letting Date: 01/25/2019
 Construction Season: 2019
 Estimated Substantial Completion: 11/2019



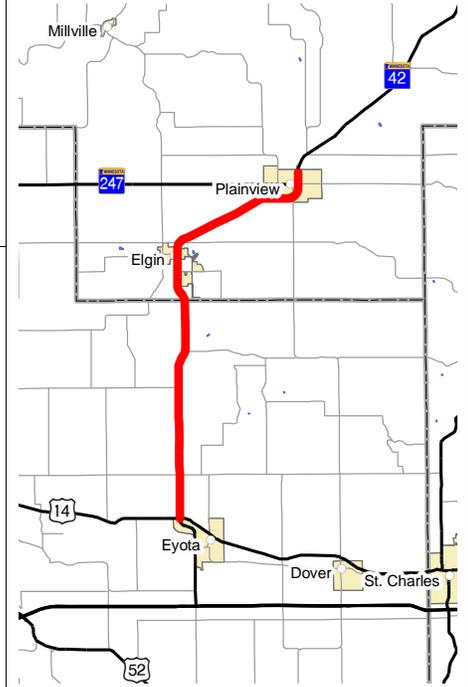
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamnick
Project Manager: David Tsang

Revised Date: 12/15/2015

PROJECT SUMMARY

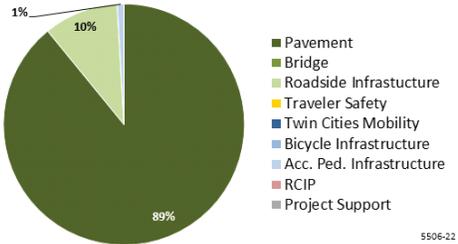
Hwy 42
 Hwy 14 to north of Hwy 247
 State Project No. 5506-22



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a bituminous resurfacing of 15 miles from Hwy 14 to Hwy 247 from outside Eyota, through Elgin and Plainview.

Recent Changes and Updates

The project was scoped and provides the current cost estimate. The letting date changed to reflect the optimized letting schedule.

Project History:

The purpose of the project is to preserve the existing roadway structure, improve pavement life and improve ride quality.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.8	\$ 5.3
Other Construction Elements:	\$ 0.0	\$ 0.3
Engineering:	\$ 1.2	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.0	\$ 6.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20 percent of the construction budget was estimated for engineering. Standard practices were used to develop the cost estimate.

Project Risks:

The scoping report was completed on 10/15/13. The competitive bid may be higher or lower than expected. Soil conditions are unknown.

Schedule:

Environmental Approval Date: TBD
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 11/18/2016
 Current Letting Date: 04/24/2015
 Construction Season: 2015
 Estimated Substantial Completion: 11/2015



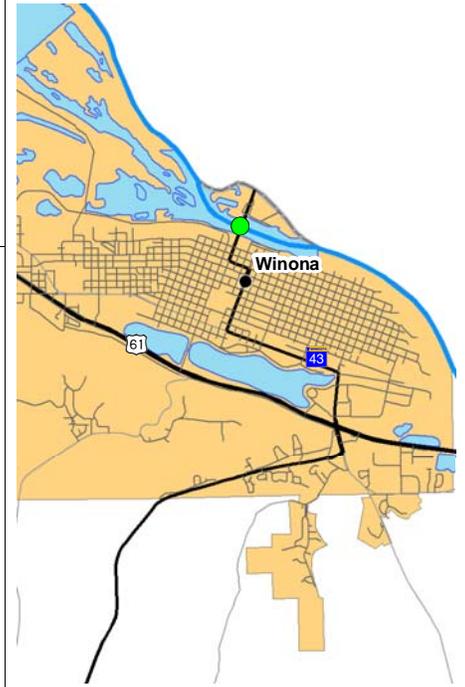
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Kyle Lake

Revised Date: 12/15/2015

PROJECT SUMMARY

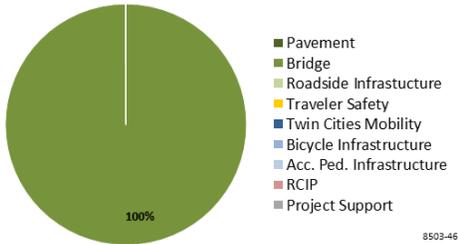
Hwy 43
 Winona Bridge over Mississippi River
 Bridge 5900
 State Project No. 8503-46
<http://www.dot.state.mn.us/d6/projects/winobridge/>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

Construct a new bridge and rehabilitate the existing bridge, along with associated roadway work.

Recent Changes and Updates

MnDOT recommended a two-lane bridge for this river crossing. A new bridge will be constructed to carry Hwy 43 traffic and then the existing bridge will be rehabilitated/reconstructed.

The current estimate matches the baseline estimate very closely. The initial estimate was considerably higher as there were higher contingencies built into the preliminary cost estimate. Since moving forward using the Construction Manager / General Contractor (CMGC) approach, the risks and contingencies are more fully understood.

Project History:

The Winona Bridge was built in 1941, and recent inspections indicate the need for rehabilitation/replacement. Bridge inspections revealed corrosion issues. The existing bridge was closed to all traffic for one week in 2008 for emergency repairs. It is also considered eligible for the National Register of Historic Places. Because of this, MnDOT recommended rehabilitation of the existing bridge, along with building a new bridge parallel to the old bridge.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 140.0	\$ 141.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 25.2	\$ 27.0
Right of Way:	\$ 16.2	\$ 14.0
Total:	\$ 181.4	\$ 182.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The environmental impacts with bridge and roadway approach work will not be significant. Contamination issues will not be cost prohibitive. The project has a maximum price cap of \$142 million from Chapter 152 funding for engineering and construction with an additional \$20 million for right of way acquisition. Recent cost projections indicate the need for about \$25M in additional project funding in order to complete the project because the original project scope was for a new four-lane bridge, yet now there is a new bridge and a rehab; the old bridge has deteriorated more than expected recently; and, the current design will provide a structural design that meets current traffic requirements with no load postings.

Project Risks:

The close proximity of this bridge to the downtown business district of Winona presents unique challenges. The current bridge is eligible for placement on the NRHP. Numerous environmental permits are required. This project is the first CMGC project for the department.

Schedule:

Environmental Approval Date: January 2014
 Municipal Consent Approval Date: 08/19/2013
 Geometric Layout Approval Date: 07/01/2013
 Construction Limits Established Date: Unknown
 Original Letting Date: 01/24/2014
 Current Letting Date: 07/01/2014
 Construction Season: 2014 to 2019
 Estimated Substantial Completion: 12/01/2016



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

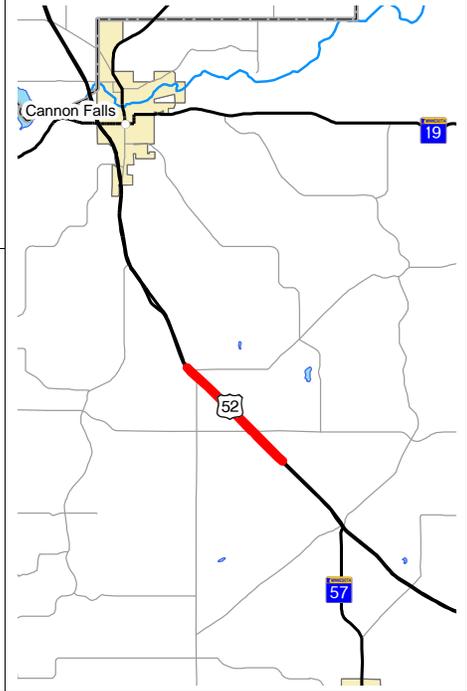
District Engineer: Jeff Vlamincik
Project Manager: Terry Ward

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 52
 Hwy 1 to south of Hwy 9 in Goodhue County
 Bridge 25030
 State Project No. 2506-72

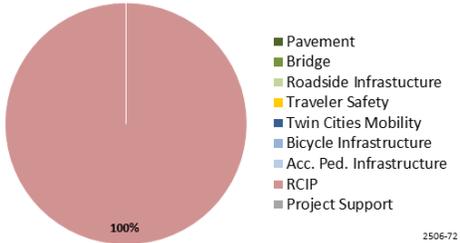
Substantially Complete



Primary Purpose:

Performance-based Need: District Safety Plan
 Regional & Community Improvement Priority

Investment Category:



Project Description:

This is for the design and construction of an interchange at the intersection of Hwy 52 and Hwy 9. The project also includes safety improvements, such as turn lane extensions and center median removals. The project generally consists of grading, surfacing, bridge work, drainage, stormwater management, lighting and signing. The project is primarily located in Goodhue County (Leon Township) between Zumbrota and Cannon Falls.

Recent Changes and Updates

The project was let as a low-bid design-build construction letting in December 2013. The RFP was released in September 2013.

Project History:

This intersection is one of the most dangerous rural intersections in the state. This intersection had 88 crashes recorded from 2000 - 2012. Eleven of the crashes involved a serious injury or a fatality. The area has been identified in previous corridor studies for location of an interchange for many reasons, including safety and mobility of both trunk highway and county road traffic.

MnDOT and Goodhue County received funding to construct an interchange and complete other corridor safety improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 6.1
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 1.0	\$ 1.0
Total:	\$ 8.9	\$ 8.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20 percent engineering of total design-bid-build cost (including ROW) was used to get total cost.

Project Risks:

There are currently no outstanding risks on this project. ROW offers were made in October 2013, allowing for construction to proceed in May 2014.

Schedule:

Environmental Approval Date: 07/01/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 8/7/2013
 Construction Limits Established Date: 08/07/2013
 Original Letting Date: Unknown
 Current Letting Date: 12/18/2013
 Construction Season: 2014
 Estimated Substantial Completion: 11/01/2014



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

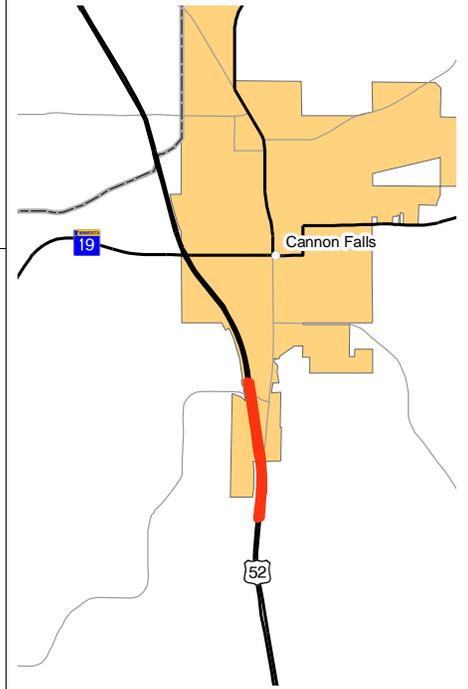
District Engineer: Jeffrey Vlamincik
Project Manager: Heather Lukes

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 52
Cannon Falls interchange
State Project No. 2506-52

Substantially Complete



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project was awarded funding through the Safety and Mobility Program (SaM) in January 2011. This funding, along with funding from MnDOT District 6, Goodhue County and Cannon Falls has accelerated the project schedule. Final design of Phase 1 began in June 2011.

Project History:

This intersection is located within the Hwy 52 segment, which connects the Twin Cities Metro area and Rochester. Original estimates due to uncertainty of extent of the project.

Project Description:

This constructs a diamond interchange and a second overpass to replace the two signalized intersections on Hwy 52 in Cannon Falls. The project will also construct a frontage/backage road system to maintain access to existing streets and businesses. Goodhue CR 24 will be re-routed from its current location at the northern most signalized intersection to the new interchange.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 38.1	\$ 14.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.7	\$ 3.7
Right of Way:	\$ 10.2	\$ 5.0
Total:	\$ 52.0	\$ 23.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate is the construction bid amount.

Project Risks:

Traffic accommodation during construction, right of way acquisition, and funding.

Schedule:

Environmental Approval Date: 12/02/2009
Municipal Consent Approval Date: 07/19/2011
Geometric Layout Approval Date: Unknown
Construction Limits Established Date: Unknown
Original Letting Date: 07/06/2015
Current Letting Date: 02/22/2013
Construction Season: 2013/2014
Estimated Substantial Completion: 11/2014



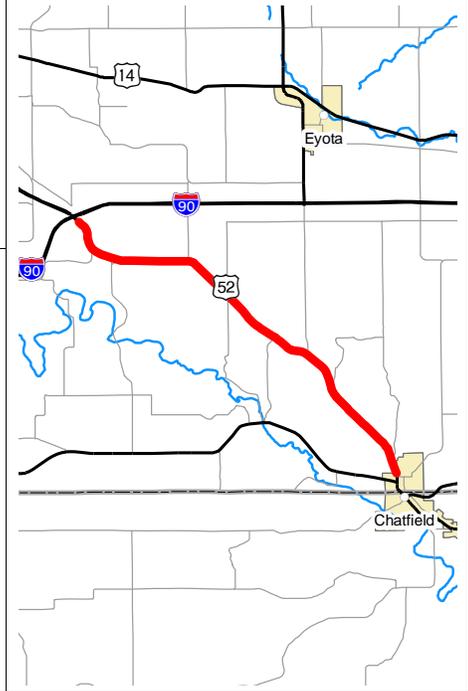
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Jeff Bunch

Revised Date: 12/15/2015

PROJECT SUMMARY

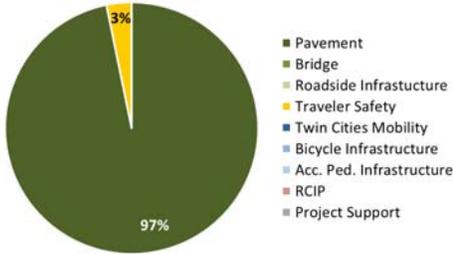
Hwy 52
Hwy 52 from Fillmore Hwy 5 to I-90
Bridge 6124, 8182, and, 8183
State Project No. 5507-64



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This is a bituminous mill and overlay with ADA improvements, and the replacement of bridges 6124, 8182, and 8183 on Hwy 52 from Chatfield to I-90.

Recent Changes and Updates

The project changed from a regrade to a mill and overlay based on district priorities and funding issues. This mill and overlay project is tied to a bridge replacement project, SP 5507-65. This project is also associated with SP 2311-31.

Project History:

The purpose of this project is to preserve the existing roadway structure, extend pavement life, and improve ride quality.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 8.4
Other Construction Elements:	\$ 0.0	\$ 1.4
Engineering:	\$ 1.0	\$ 1.2
Right of Way:	\$ 0.0	\$ 1.6
Total:	\$ 5.8	\$ 12.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20% engineering estimate used to arrive at total cost estimate. Estimates will be updated when bids are let.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: Not Needed
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 06/07/2015
Original Letting Date: Unknown
Current Letting Date: 10/19/2018
Construction Season: 2019
Estimated Substantial Completion: 11/2019



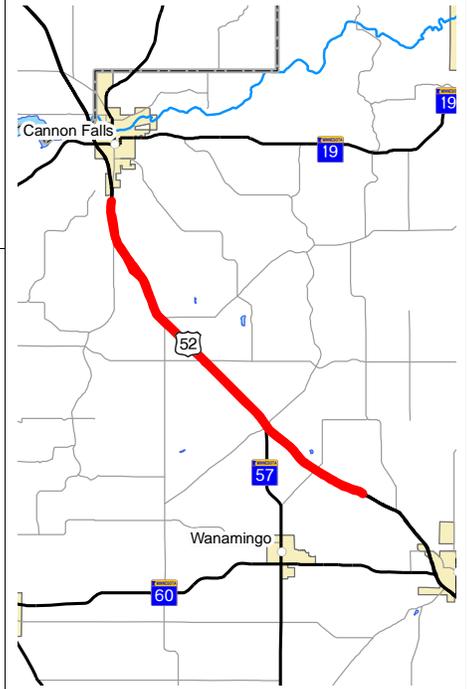
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Heather Lukes

Revised Date: 12/15/2015

PROJECT SUMMARY

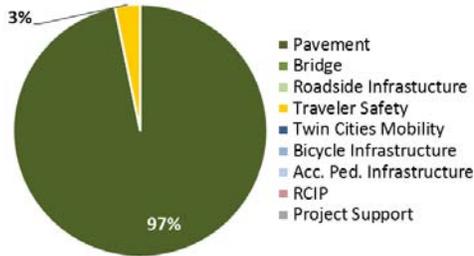
Hwy 52
 Hwy 52 from Hwy 7 to 2 miles south of Hwy 19
 State Project No. 2506-77



Primary Purpose:

Performance Based: Pavement Condition

Investment Category:



Project Description:

This is a bituminous overlay project in Goodhue county on the southbound lanes of Hwy 52.

Recent Changes and Updates

Project just entered STIP in 2014, so no updates or changes at this time.

Project History:

The purpose of this project is to preserve existing roadway structure, extend pavement life, and improve ride quality. This is a high priority interregional corridor on the National Highway System.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.7
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.9	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Cost estimates are based on the most recent District 6 work plan.

Project Risks:

Competitive bids may be higher or lower than expected.

Schedule:

Environmental Approval Date: TBD
 Municipal Consent Approval Date: TBD
 Geometric Layout Approval Date: TBD
 Construction Limits Established Date: TBD
 Original Letting Date: 10/27/2017
 Current Letting Date: 10/27/2017
 Construction Season: 2018
 Estimated Substantial Completion: 11/2018



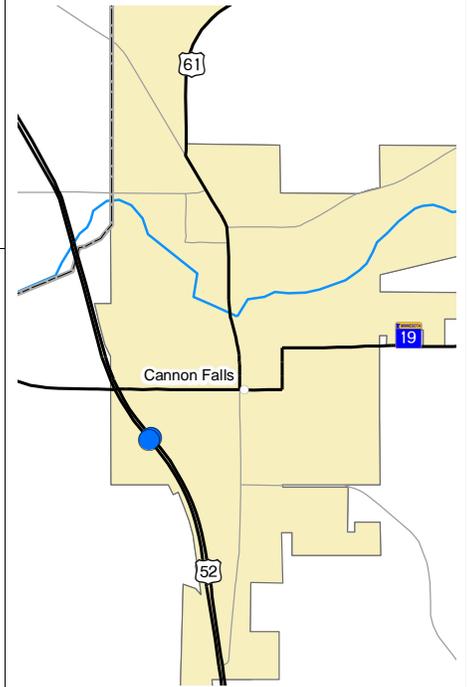
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: David Tsang

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 52
Hwy 52 bridges over Little Cannon River
Bridge 9485, &, 9486
State Project No. 2506-79



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project replaces two bridges, 9485 & 9486, over the Little Cannon River on Hwy 52.

Recent Changes and Updates

This project just entered the STIP in 2014. An environmental document is needed, but is not completed yet.

Project History:

The bridge abutments have cracking, substandard bridge railings, and the overall deterioration is increasing.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	\$ 4.9
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.4	\$ 6.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

No right of way cost.

Project Risks:

Competitive bids may be higher or lower than expected.

Schedule:

Environmental Approval Date: Need Unknown
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: pending
Construction Limits Established Date: pending
Original Letting Date: 02/01/2018
Current Letting Date: 2/24/2017
Construction Season: 2017
Estimated Substantial Completion: November 2017



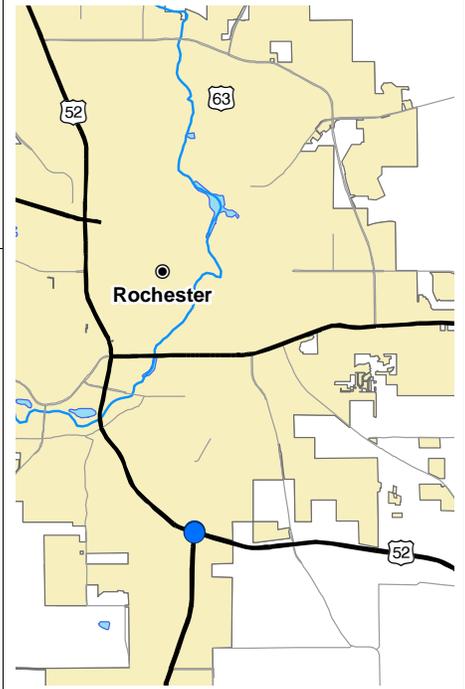
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Kjersti Anderson

Revised Date: 12/15/2015

PROJECT SUMMARY

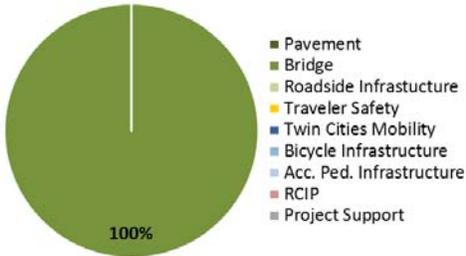
Hwy 52
Hwy 52 over Hwy 63
Bridge 55009, &, 55010
State Project No. 5507-63



Primary Purpose:

Performance-based Need: Bridge

Investment Category:



Project Description:

This project is for the replacement of two bridge decks on Hwy 52 over Hwy 63 in Rochester. The deck surface conditions on these Hwy 52 bridges have deteriorated. Deck replacement is the objective of the project. The northbound Hwy 52 lane extension will be included along with bridge beam painting as a preservation measure.

Recent Changes and Updates

The project is scoped. The bridge project will be bid and built in 2016. The two bridge decks on this project are deteriorating and are in need of replacement.

Project History:

This project will improve the conditions of Hwy 52 bridges, a principal arterial route on the National Highway System.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 3.9
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.9	\$ 4.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Bridge redecking costs are estimated at \$90/S.F.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: Not Needed
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 10/15/2013
Original Letting Date: 01/27/2017
Current Letting Date: 01/29/2016
Construction Season: 2016
Estimated Substantial Completion: 11/2017



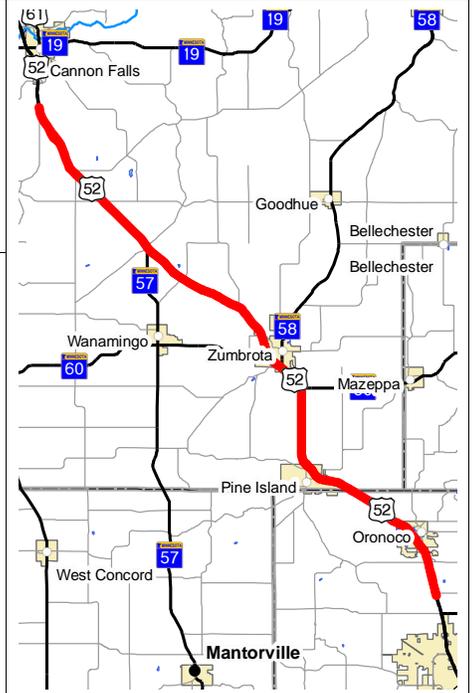
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Richard Augustin

Revised Date: 12/15/2015

PROJECT SUMMARY

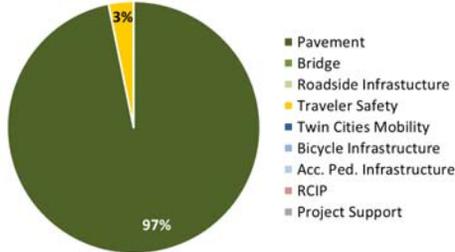
Hwy 52
 Rochester to Cannon Falls
 State Project No. 2506-75



Primary Purpose:

Performance Based Need: Pavement Condition

Investment Category:



Project Description:

This project is an overlay for the northbound lanes on Hwy 52 from Rochester to Cannon Falls. The project covers about 27 miles. It also includes hydraulic improvements and turn lane extensions.

Recent Changes and Updates

Cost Estimates from Scoping Document 10/15/13.

Project History:

In 2008, the Ride Quality Index (RQI) was 3.2 and has decreased since that time. This segment of Hwy 52 is still in fair condition; however, it is starting to show signs of deterioration, which is expected to accelerate in the upcoming years. The project is needed to extend pavement life. This mill and overlay will include traffic safety and other improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.4	\$ 10.4
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.4	\$ 1.4
Right of Way:	\$ --	\$ 0.0
Total:	\$ 12.4	\$ 12.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimates are from the project scoping report of 10/15/13.

Project Risks:

Competitive bid may be higher or lower than expected

Schedule:

Environmental Approval Date: TBD
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: TBD
 Original Letting Date: 10/28/2016
 Current Letting Date: 10/28/2016
 Construction Season: 2017
 Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

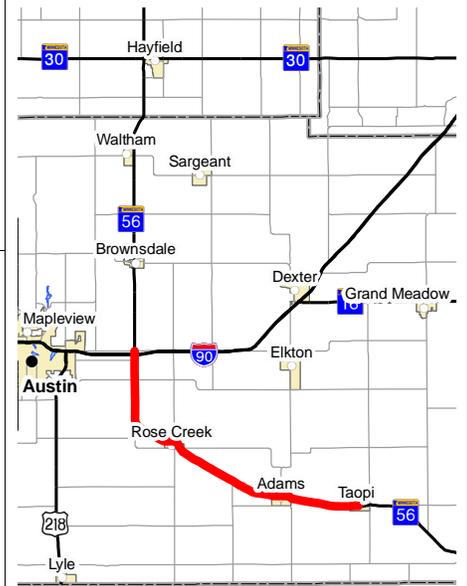
District Engineer: Jeff Vlamnick
Project Manager: Heather Lukes

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 56

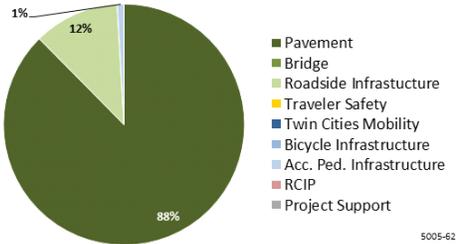
Hwy 56 from Maple St. in Taopi to Hwy 46 Mower County
State Project No. 5005-62



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This is a bituminous mill and overlay project on Hwy 56 in Taopi to Hwy 46.

Recent Changes and Updates

Project prioritization factors delayed this project for several years. This project was originally proposed to be let in 2013.

Project History:

The purpose of this project is to preserve existing roadway structure, extend pavement life, and improve ride quality.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 6.2
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.0	\$ 7.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20 percent engineering cost estimated. Standard practices were used to develop cost estimate.

Project Risks:

Competitive bid may be higher or lower than expected. Soil conditions are unknown. Contaminated soil assessment currently being conducted in the city of Adams

Schedule:

Environmental Approval Date: Not Needed
Municipal Consent Approval Date: Unknown
Geometric Layout Approval Date: Unknown
Construction Limits Established Date: 05/07/2015
Original Letting Date: 01/25/2013
Current Letting Date: 01/27/2017
Construction Season: 2017
Estimated Substantial Completion: 11/2017



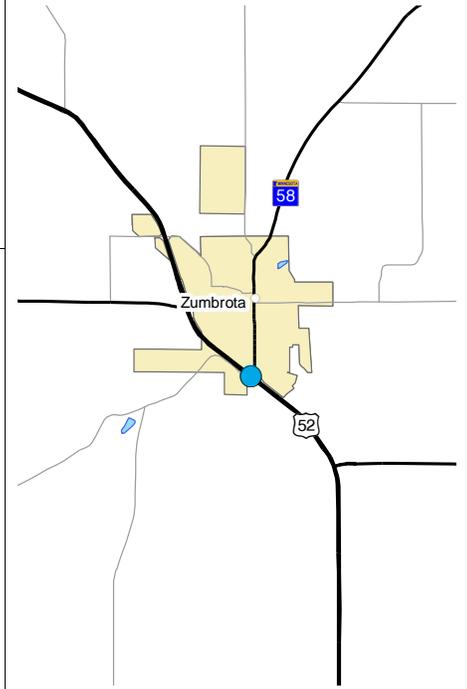
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeffrey L Vlamincik
Project Manager: David Tsang

Revised Date: 12/15/2015

PROJECT SUMMARY

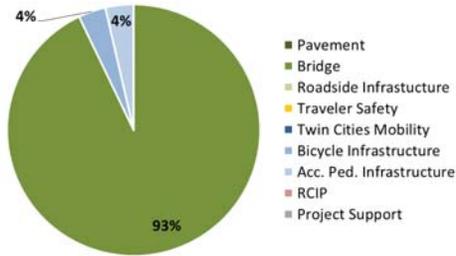
Hwy 58
Hwy 58 Bridge over Hwy 52 in Zumbrota
Bridge 9661
State Project No. 2510-50
<http://www.dot.state.mn.us/d6/projects/hwy58-bridge/index.html>



Primary Purpose:

Performance Based Need: Bridge Condition

Investment Category:



Project Description:

This project will replace the Hwy 58 bridge, #9661, over Hwy 52 in Zumbrota and several approaches.

Recent Changes and Updates

Funds added to project are reflected in the current STIP.

Project History:

The bridge #9661, a pre-stressed beam span bridge, was constructed in 1960 and is in need of replacement. The bridge has substandard railings and sight distance is limited at the interchange ramp intersections. Replacement is recommended. The project calls for replacement due to the bridges' condition and safety issues. The project would also reconstruct the approaches north and south of the bridge.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 6.5
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.9	\$ 7.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Funds added into the new STIP from District and other sources.

Project Risks:

Competitive bids may be higher or lower than expected.

Schedule:

Environmental Approval Date: pending
Municipal Consent Approval Date: need unknown
Geometric Layout Approval Date: pending
Construction Limits Established Date: pending
Original Letting Date: 01/27/2017
Current Letting Date: 01/27/2017
Construction Season: 2017
Estimated Substantial Completion: 2018



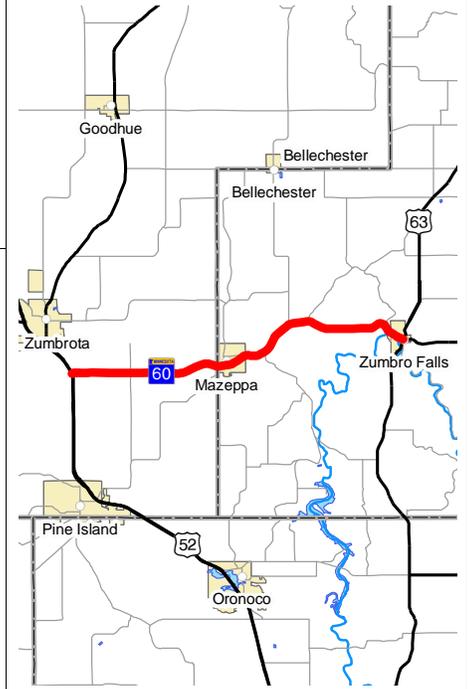
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Jai Kalsy

Revised Date: 12/15/2015

PROJECT SUMMARY

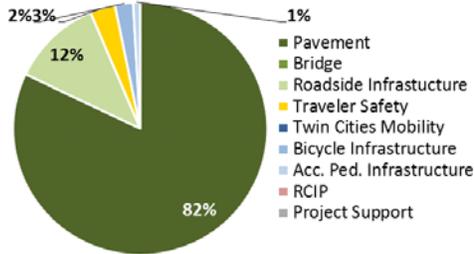
Hwy 60
 Hwy 60 from Hwy 52 to Hwy 63
 State Project No. 7902-25



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of a bituminous mill and overlay, hydraulic improvements, and ADA improvements.

Recent Changes and Updates

No recent significant changes.

Project History:

This project will preserve existing roadway structure, extend pavement life, and improve ride quality. ADA facilities will be brought into compliance.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	\$ 6.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.2	\$ 7.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20% engineering was used to arrive at total cost estimate.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: Not Needed
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 06/07/2015
 Original Letting Date: 11/17/2017
 Current Letting Date: 11/17/2017
 Construction Season: 2018
 Estimated Substantial Completion: 11/2018



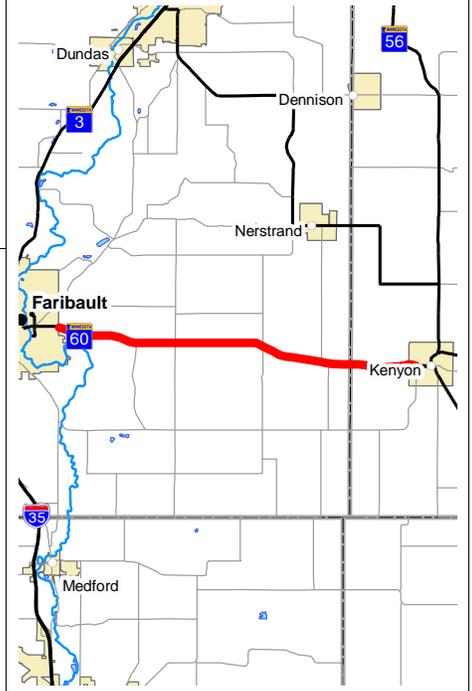
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Heather Lukes

Revised Date: 12/15/2015

PROJECT SUMMARY

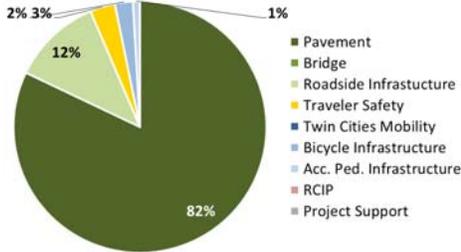
Hwy 60
Faribault to Kenyon
State Project No. 6607-49



Primary Purpose:

Performance Based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay of about 13 miles from the east end of the Straight River Bridge in Faribault to Huseth Ave in Kenyon.

Recent Changes and Updates

Project Scoping Report 7/16/15. No other recent changes.

Project History:

Hwy 60 is a 2-lane minor arterial roadway. Pavement on this segment is deteriorating, which is expected to accelerate in the upcoming years. In 2013, the pavement was determined to be in poor condition. This project is needed to extend service life. This project will improve ride quality, service life and will include safety and other improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.9	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimates are from the project scoping report of 7/16/15.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: TBD
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: TBD
Construction Limits Established Date: TBD
Original Letting Date: 12/21/2018
Current Letting Date: 12/21/2018
Construction Season: 2019
Estimated Substantial Completion: Nov 2019



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamnick
Project Manager: David Tsang

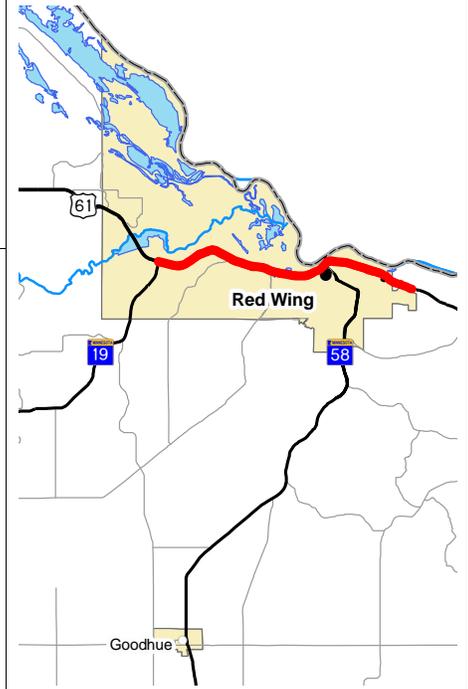
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 61

Ready Mix entrance in Red Wing to Hwy 19

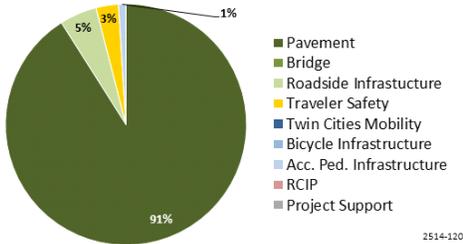
State Project No. 2514-120



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project on Hwy 61 from the Ready Mix entrance in Red Wing to Hwy 19 is a bituminous mill and overlay in the rural sections and a mill and fill on the urban sections. The project will also include drainage and traffic safety improvements. Several mediums will be closed and an acceleration lane will be constructed on the north end of the project.

Recent Changes and Updates

No changes.

Project History:

The last bituminous overlay was placed in 1996 and followed up in 1998 with crack repair. As of 2011, the Ride Quality Index (RQI) was rated as fair, but has continued to deteriorate. The project was proposed in 2012.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.5	\$ 4.5
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.7	\$ 5.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

No right of way will be required. No environmental mitigation will be needed.

Project Risks:

If right of way is needed the project schedule and cost would be affected.

Schedule:

Environmental Approval Date: 06/07/2015
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 2014
 Construction Limits Established Date: 06/07/2015
 Original Letting Date: 12/19/2014
 Current Letting Date: 12/19/2014
 Construction Season: 2015
 Estimated Substantial Completion: 11/2015



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

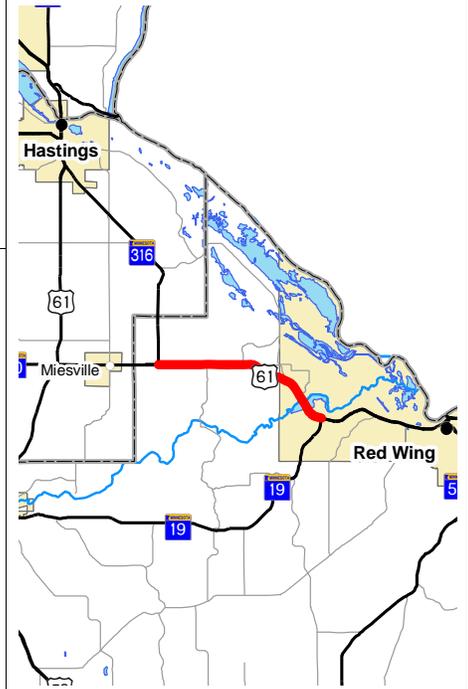
District Engineer: Jeff Vlamincik
Project Manager: Chad Hanson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 61
Hwy 19 to Hwy 316
State Project No. 2514-119

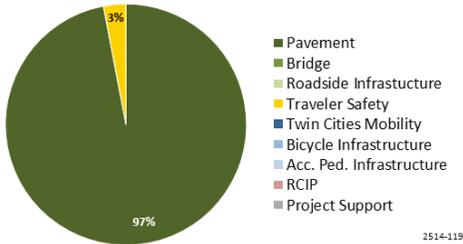
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project resurfaces 8.5 miles of both the northbound and the southbound lanes on Hwy 61 from Hwy 19 to Hwy 316. The project will also include traffic safety improvements.

Recent Changes and Updates

This project includes traffic safety improvements, such as a northbound right turn lane at CR 18, and northbound and southbound left turn lanes at Hwy 19. The traffic safety improvements are funded by FHWA Highway Safety Improvement Program funds. Costs exceeded estimates.

Project History:

The four-lane section from Hwy 19 to CR 18 was graded in 1994. The remaining northbound four-lane section from CR 18 to Hwy 316 was graded in 1996 and the southbound was graded in 1997. This section of Hwy 61 is in fair condition, but with significant cracking. As of 2011, the northbound and southbound Ride Quality Index (RQI) was rated as fair and has seen increasing deterioration since then.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.4	\$ 4.8
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 6.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

No right of way was required. No environmental mitigation was needed.

Project Risks:

no project risks remain

Schedule:

Environmental Approval Date: Unknown
Municipal Consent Approval Date: Need Unknown
Geometric Layout Approval Date: Unknown
Construction Limits Established Date: Unknown
Original Letting Date: 11/22/2013
Current Letting Date: 12/20/2013
Construction Season: 2014
Estimated Substantial Completion: 11/2014



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Jacob Gasper

Revised Date: 12/15/2015

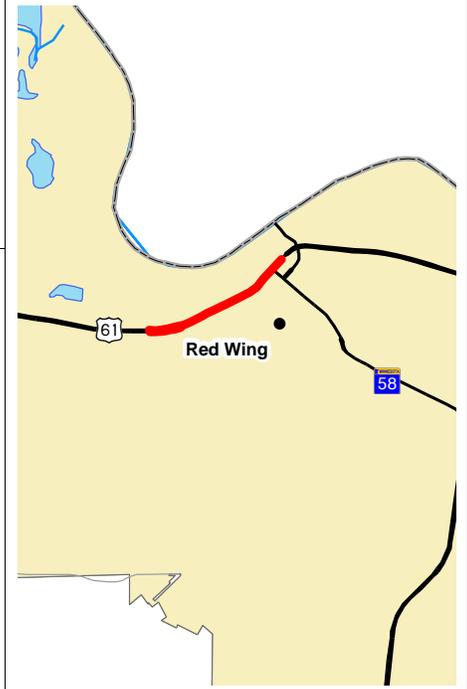
PROJECT SUMMARY

Hwy 61

Hwy 61 from Potter St. to Old West Main Street

State Project No. 2514-122

www.red-wing.org/th61home.html



Primary Purpose:

Performance-based Need: Pavement & District Safety Plan

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project is in the final design phase. Project staging and traffic control are critical to this project and this is being looked at very closely. A High intensity Activated cross Walk, or HAWK, pedestrian signal will be installed approximately in the middle of the corridor.

Project History:

This project started as a pedestrian safety project. The city of Red Wing applied for Municipal Agreements Program funding through District 6 and received funding to convert this to a mill and overlay along with enhanced pedestrian improvements. In 2013, the city applied for Corridor Investment Management Strategy (CIMS) funding and was selected to turn this project into a complete reconstruction.

Project Description:

This project is a reconstruction of Hwy 61 in Red Wing from Potter Street to Old West Main Street. This will include the replacement of city utilities, signal replacement at Old West Main Street, and pedestrian and accessibility improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 9.5
Other Construction Elements:	\$ 0.3	\$ 0.4
Engineering:	\$ 1.4	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.5	\$ 11.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Several funding sources will be used to fund the project, including Corridor Investment Management Strategies (CIMS), Municipal Agreement Program, ADA improvements program, and funding from the City of Red Wing. It is assumed that there will be no right-of-way costs involved with the project.

Project Risks:

It has not been determined whether or not this will be a one or two-year construction project. If the project is planned for a single year there is a risk that it may not get done in one construction season. Costs have risen for Red Wing's portion of the funding, which puts certain portions of the project at risk as to whether those portions will be included in the project.

Schedule:

Environmental Approval Date: N/A
 Municipal Consent Approval Date: 06/07/2015
 Geometric Layout Approval Date: 2014
 Construction Limits Established Date: 06/07/2015
 Original Letting Date: 2/1/2014
 Current Letting Date: 2/15/2015
 Construction Season: 2015/2016
 Estimated Substantial Completion: 11/2016



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Chad Hanson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 61
Hwy 61 in Red Wing
Bridge 6483, &, 6482
State Project No. 2514-121



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

This project replaces bridge #6483 over the abandoned C&NW Railroad on Hwy 61 and plugs bridge #6482 in Red Wing.

Recent Changes and Updates

The District 6 work plan indicates that the current construction estimate is 7.5M, .8M less than the baseline estimate. The project was scoped and moved to FY 2025, (per 2016-2025 HIP dated 8/10/15).

Project History:

The project calls for the replacement of bridge #6483 because of its age and condition, along with reconstruction of the approaches to the bridge. It also plugs bridge #6482 in Red Wing.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.3	\$ 7.5
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.7	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.4	\$ 9.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

No right of way costs will be required.

Project Risks:

Competitive bids may be higher or lower than expected.

Schedule:

Environmental Approval Date: Not Needed
Municipal Consent Approval Date: pending
Geometric Layout Approval Date: pending
Construction Limits Established Date: 10/11/2013
Original Letting Date: 01/27/2017
Current Letting Date: 01/27/2017
Construction Season: 2017
Estimated Substantial Completion: Pending



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Kjersti Anderson

Revised Date: 12/15/2015

PROJECT SUMMARY

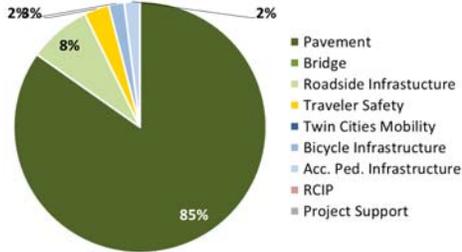
Hwy 61
Hwy 42 to just north of Lake City limits
State Project No. 7906-96



Primary Purpose:

Performance Based Need: Pavement Condition

Investment Category:



Project Description:

This is a mill and overlay of northbound and southbound lanes of Hwy 61 from Hwy 42 to the north of Lake City.

Recent Changes and Updates

Project Scoping Report 3/3/15. No other recent changes.

Project History:

For this section of roadway, the Ride Quality Index (RQI) ranges from 3.4 to 2.8. This project is needed to improve pavement and shoulder ride quality and extend pavement life. The project will include rehabilitation and replacement of deficient storm sewers and culverts. The project will also include low cost safety improvements, reconstruction of curb ramps, sidewalks and crosswalks, and median improvements along the north segment of Lake City.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.5	\$ 13.3
Other Construction Elements:	\$ 1.5	\$ 1.0
Engineering:	\$ 1.2	\$ 2.4
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 14.2	\$ 16.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimates are from the project charter report of 6/25/14. The current cost estimate is from the final project scoping report dated 3/3/15.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: Need Unknown
Municipal Consent Approval Date: Need Unknown
Geometric Layout Approval Date: Need Unknown
Construction Limits Established Date: Need Unknown
Original Letting Date: 10/19/2018
Current Letting Date: 10/19/2018
Construction Season: 2019
Estimated Substantial Completion: November 2019



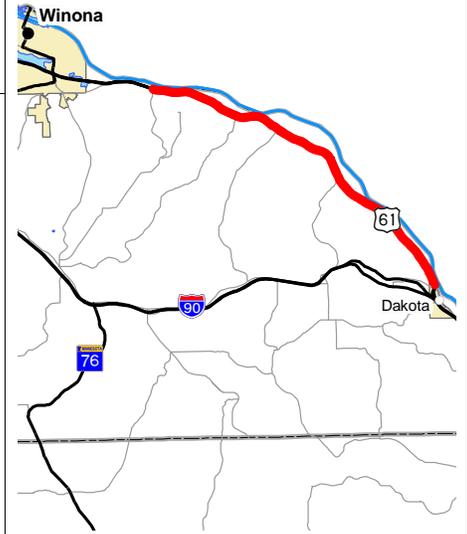
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamnick
Project Manager: Kjersti Anderson

Revised Date: 12/15/2015

PROJECT SUMMARY

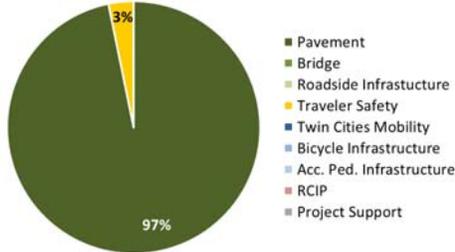
Hwy 61
I-90 to Hwy 15 in Homer
State Project No. 8504-79



Primary Purpose:

Performance Based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay on the northbound and southbound lanes of about 13 miles of Hwy 61 from north of I-90 to Hwy 15 in Homer.

Recent Changes and Updates

No recent estimate. The scoping report indicates the baseline and current estimate.

Project History:

This segment of Hwy 61 is a four lane divided highway, mostly rural with some small urban segments. The pavement is starting to show signs of deterioration, which is expected to accelerate in the upcoming years. The project is needed to address the deterioration and to extend service life. The project will also include safety and other improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.4	\$ 12.4
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 1.6	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 15.0	\$ 15.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimates are from the project cost estimates in the scoping document dated 4/27/15.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: NA
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: NA
Construction Limits Established Date: NA
Original Letting Date: 12/21/2018
Current Letting Date: 12/21/2018
Construction Season: 2019
Estimated Substantial Completion: 2019



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

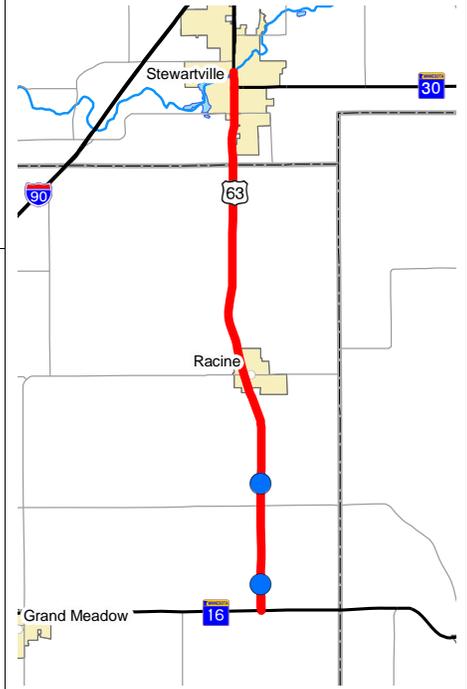
District Engineer: Jeff Vlamnick
Project Manager: Chad Hanson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 63
 Hwy 16 to south end of Root River Bridge (Stewartville)
 Bridge 50001, &, 50002
 State Project No. 5006-19

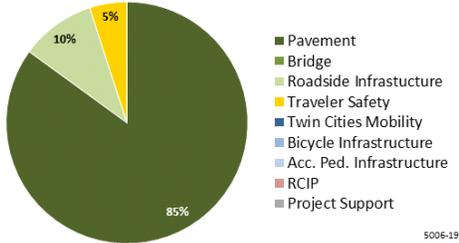
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement, Bridge & District Safety Plan

Investment Category:



Project Description:

This project consists of a mill and overlay for 10 miles on Hwy 63 from Hwy 16 to Stewartville. Additionally, the project includes bridge rehabilitations at Deer Creek and Bear Creek, culvert replacements, a pedestrian ramp reconstruction in Stewartville, and safety improvements in Racine.

Recent Changes and Updates

This project was merged with two other projects: a safety improvement project and a bridge rehabilitation project within the same corridor. The current estimate reflects the bid amount. Design risks were removed from 'Risks' as project construction is complete.

Project History:

The urban section in Stewartville was regraded in 1993 and then overlaid in 2006. The current pavement condition for this segment indicates a need for improvement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 5.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.9	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 6.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate reflects the bid amount.

Project Risks:

There are currently no outstanding risks on this project.

Schedule:

Environmental Approval Date: 10/10/2013
 Municipal Consent Approval Date: N/A
 Geometric Layout Approval Date: 9/27/2014
 Construction Limits Established Date: 07/01/2014
 Original Letting Date: 01/24/2014
 Current Letting Date: 01/24/2014
 Construction Season: 2014
 Estimated Substantial Completion: 08/01/2014



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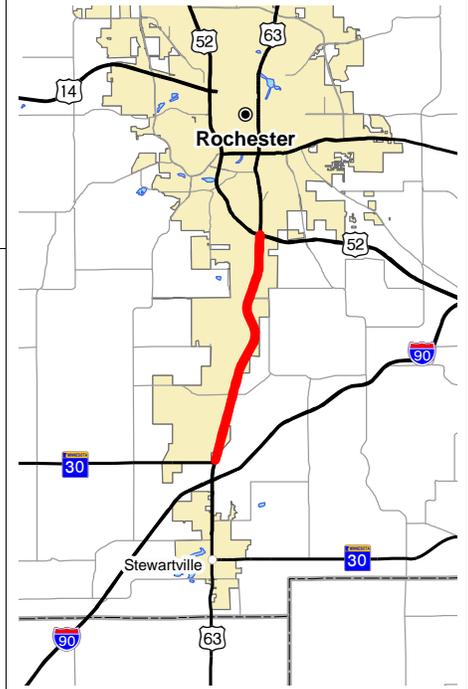
District Engineer: Jeffrey Vlaminc
Project Manager: Kjersti Anderson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 63
 Hwy 30 to 28th Street SE in Rochester
 State Project No. 5509-79

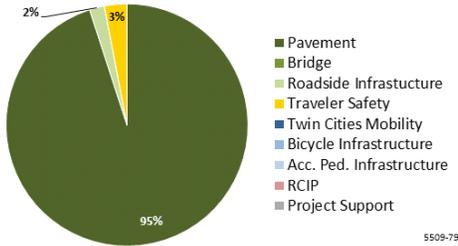
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a bituminous resurfacing of 6 miles on Hwy 63 near Rochester.

Recent Changes and Updates

The current cost estimate is the bid amount. The letting date changed to reflect the optimized letting schedule.

Project History:

This project is needed to address pavement deterioration and extend pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 4.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.7	\$ 5.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate reflects the bid amount, which came in lower than the baseline estimate.

Project Risks:

No risks remain.

Schedule:

Environmental Approval Date: 07/25/2014
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 12/19/2014
 Current Letting Date: 11/21/2014
 Construction Season: 2015
 Estimated Substantial Completion: 7/2015



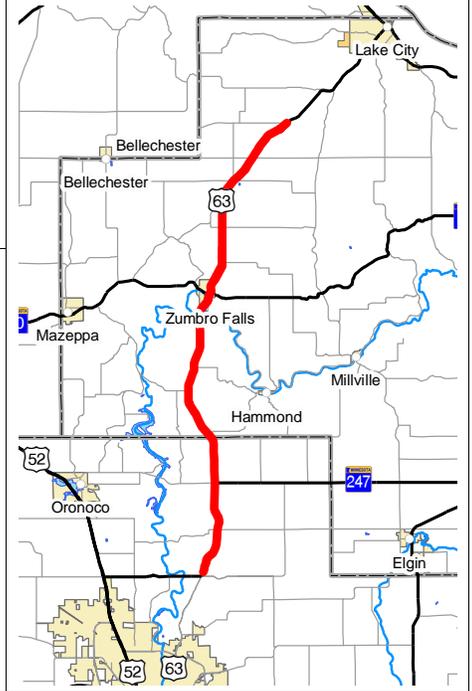
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Kjersti Anderson

Revised Date: 12/15/2015

PROJECT SUMMARY

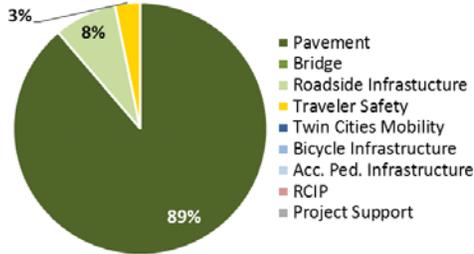
Hwy 63
Hwy 63 from Hwy 14 to Hwy 78
Bridge 8831, &, 8313
State Project No. 7908-35



Primary Purpose:

Performance-based: Pavement Condition

Investment Category:



Project Description:

This project is a bituminous mill and overlay on Hwy 63 through Zumbro Falls from Hwy 14 to Hwy 78. The project includes replacing bridges #8831 and #8313.

Recent Changes and Updates

The project was scoped and entered the STIP. An environmental document is needed but has not yet been completed or turned in for approval.

Project History:

This section of Hwy 63 is a two lane rural highway. The ride quality index is low and starting to show signs of deterioration, which will be addressed to extend pavement life.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 10.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.3	\$ 12.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates.

Project Risks:

Competitive bids may be higher or lower than expected.

Schedule:

Environmental Approval Date: Need Unknown
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: not needed
Construction Limits Established Date: need unknown
Original Letting Date: 01/01/2018
Current Letting Date: 01/25/2018
Construction Season: 2018
Estimated Substantial Completion: 11/01/2018



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Kjersti Anderson

Revised Date: 12/15/2015

PROJECT SUMMARY

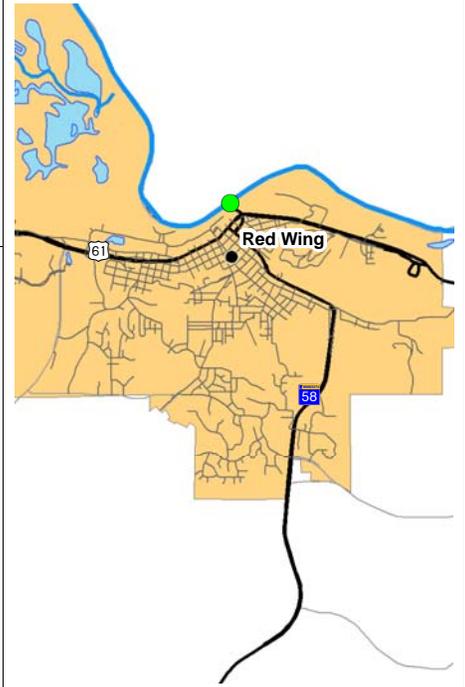
Hwy 63

Hwy 63 bridge over the Mississippi river and Hwy 61

Bridge 9040, &, 9103

State Project No. 2515-21

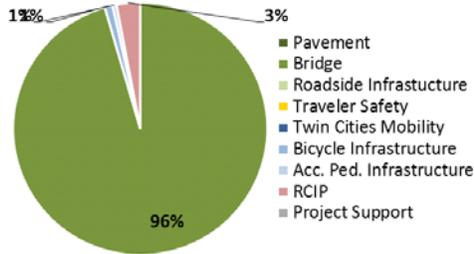
www.dot.state.mn.us/d6/projects/redwing-bridge



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The recommended alternative for this project is to replace both the Hwy 63 bridge over the Mississippi River and replace the Hwy 63 bridge over the Hwy 61 bridge in Red Wing. The recommended approach roadway alternative in Red Wing is the buttonhook design that will create a new signalized intersection with Hwy 61 and Hwy 63. A jughandle design will be constructed on the Wisconsin approach.

Recent Changes and Updates

A steel box girder structure over the Mississippi river was selected as the recommended bridge type. A buttonhook approach, along with replacement of the bridge over Hwy 61, has been selected as the recommended Minnesota roadway alternative. The Visual Quality process is underway to determine the visual aspects of the bridges and the project as a whole. Construction phasing will use performance-based design and only construct a two-lane structure to meet the immediate needs for capacity while preserving the right of way for a future four-lane when it is warranted rather than with this project.

Project History:

This river bridge is fracture critical and was put on the Chapter 152 Bridge list in 2008. The bridge over Hwy 61 is on the National Register. The original primary needs were to provide structurally sound crossings of the Mississippi River and Hwy 61; however, after significant traffic analysis, it was determined that traffic mobility in downtown Red Wing should also be a primary need.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 80.0	\$ 55.0
Other Construction Elements:	\$ 8.0	\$ 5.0
Engineering:	\$ 10.0	\$ 8.0
Right of Way:	\$ 2.0	\$ 2.0
Total:	\$ 100.0	\$ 70.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost includes the Minnesota portion only. It is assumed that the steel box girder bridge will be constructed across the Mississippi River. It is also assumed that staging issues will not significantly increase costs.

MnDOT originally evaluated constructing a four lane structure to provide adequate capacity for long-term traffic growth. However, it was decided to use performance-based construction and to construct two lanes initially to provide adequate capacity for the 20 year forecast. Then MnDOT will preserve the existing right-of-way so that when traffic volumes warrant it the project will be set up to construct two additional lanes at that time. The cost savings to the project was estimated to be over \$25 million.

Project Risks:

There is contamination on the Minnesota approach that will be impacted by construction. These properties will need to be acquired. There are poor soils on the Wisconsin approach that could increase costs. There are limited areas for staging of the project.

Schedule:

Environmental Approval Date: 42192
 Municipal Consent Approval Date: 07/07/2015
 Geometric Layout Approval Date: 2015
 Construction Limits Established Date: 07/07/2015
 Original Letting Date: 11/01/2017
 Current Letting Date: 2/24/2017
 Construction Season: 2017-2020
 Estimated Substantial Completion: 11/2020



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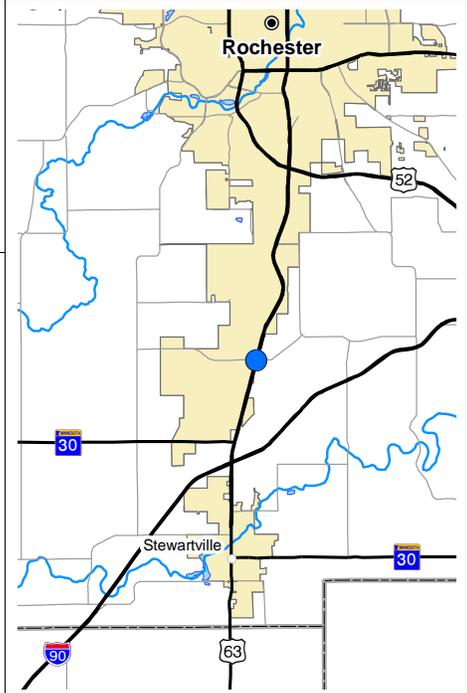
District Engineer: Jeff Vlamincik
Project Manager: Chad Hanson

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 63
 County Road 16 interchange
 Bridge 55040
 State Project No. 5509-80

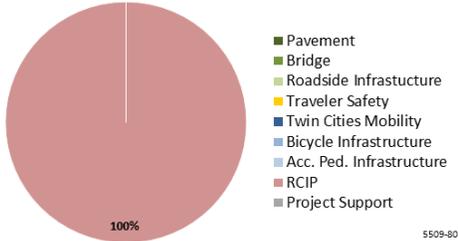
<http://www.co.olmsted.mn.us/planning/trnsprtng/plng/2015airportinterchange/Pa>



Primary Purpose:

Performance-based Need: District Safety Plan, TED Project

Investment Category:



Project Description:

This project will reconstruct the interchange of Hwy 16 and Hwy 63 in Olmsted county to address existing functional deficiencies. This design includes addressing inadequate sight distance, a narrow bridge deck, lack of turn lanes at ramp junctions, limited accommodation for non-motorized travel and poor access management within the interchange area.

The bridge reconstruction will also incorporate space for pedestrians and bicyclists to enhance safety on Hwy 16.

Recent Changes and Updates

The project was let on 6/2/15.
 Olmsted County is lead agency.

Project History:

The purpose of the project is to address existing functional deficiencies including: inadequate sight distance, a narrow bridge deck, lack of turn lanes at ramp junctions, limited accommodation for non-motorized travel and poor access management within the interchange area. Olmsted County was awarded a TED grant in July 2013 for \$2.224 million. Olmsted County will be the lead on this project, with oversight provided by MnDOT District 6 design staff. Project will be locally let.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.9	\$ 7.0
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 2.2	\$ 2.2
Right of Way:	\$ 0.4	\$ 0.4
Total:	\$ 11.6	\$ 9.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current estimate reflects the let amount.

Project Risks:

No further project risks are anticipated at this time

Schedule:

Environmental Approval Date: 09/09/2013
 Municipal Consent Approval Date: 1/5/15
 Geometric Layout Approval Date: 10/07/2014
 Construction Limits Established Date: 03/11/2014
 Original Letting Date: 02/16/2015
 Current Letting Date: 5/15/2015
 Construction Season: 2015/2016
 Estimated Substantial Completion: 11/2016



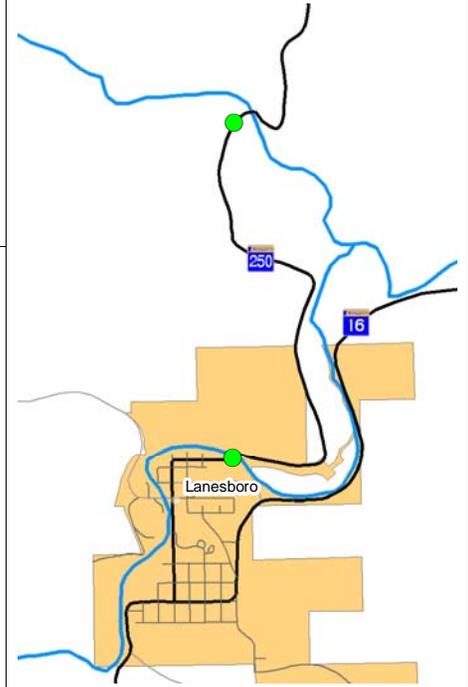
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Jai Kalsy

Revised Date: 12/15/2015

PROJECT SUMMARY

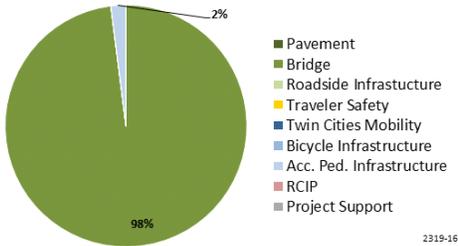
Hwy 250
 Bridges on Hwy 250 in Lanesboro
 Bridge 6975, 6977
 State Project No. 2319-16
mndot.gov/d6/projects/hwy250-bridge/



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project replaces bridges over the north and south branches of the Root River in and to the north of Lanesboro.

Recent Changes and Updates

The current estimate is based on updated information in the District 6 work plan (10 year HIP). Letting date changed based upon the optimized letting schedule.

Project History:

Bridge #6975 was built in 1931 and bridge #6977 was built in 1924. Both structures are classified as functionally obsolete.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.0	\$ 5.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.7	\$ 1.1
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 11.0	\$ 7.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The environmental impacts of roadway approach work will not be significant. Traffic will be detoured during construction for bridge #6975.

Project Risks:

The roadway approach work could lead to significant environmental issues. Right of way acquisition is on schedule.

Schedule:

Environmental Approval Date: pending
 Municipal Consent Approval Date: 8/3/15
 Geometric Layout Approval Date: 05/14/2015
 Construction Limits Established Date: 05/14/2015
 Original Letting Date: 01/22/2016
 Current Letting Date: 02/26/2016
 Construction Season: 2016
 Estimated Substantial Completion: 11/2016



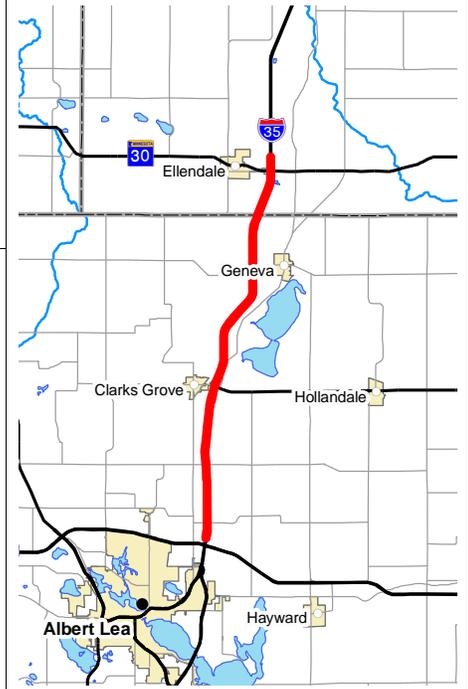
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Kjersti Anderson

Revised Date: 12/15/2015

PROJECT SUMMARY

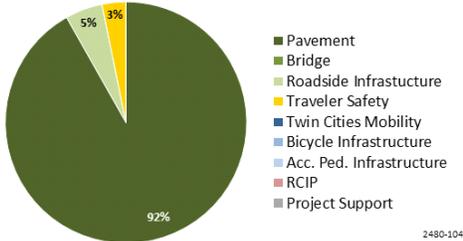
I-35
Freeborn/Steele
State Project No. 2480-104



Primary Purpose:

Performance-based Need: Pavement & Roadside Infrastructure Condition

Investment Category:



Project Description:

This project will add a new layer of concrete roadway and replace drainage structures and guard rail for 14 miles along I-35 from Hwy 23 to Hwy 30.

Recent Changes and Updates

No recent changes noted.

Project History:

The purpose of the project is to replace the existing bituminous on the concrete roadway structure, extend pavement life and improve ride quality.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 17.7	\$ 17.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.5	\$ 3.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 21.2	\$ 21.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates. These estimates were taken from the most recent District 6 work plan.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: 07/31/2014
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: NA
Construction Limits Established Date: 05/01/2014
Original Letting Date: 11/20/2015
Current Letting Date: 09/26/2014
Construction Season: 2015
Estimated Substantial Completion: 11/2015



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

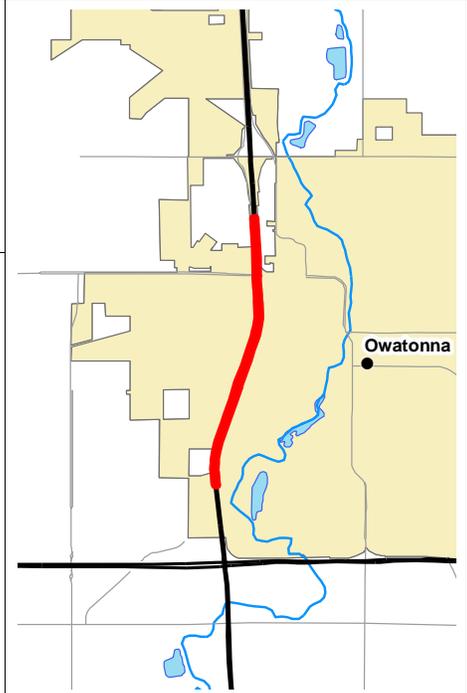
District Engineer: Jeffrey Vlamincik
Project Manager: David Tsang

Revised Date: 12/15/2015

PROJECT SUMMARY

I-35

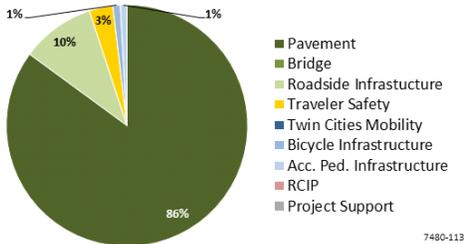
5 miles south of Owatonna to Faribault
 Bridge 74815, 74816, 74817, &, 74818
 State Project No. 7480-113



Primary Purpose:

Performance-based Need: Pavement & Bridge Condition

Investment Category:



Project Description:

This project will replace four bridges over I-35 in Owatonna. It will also reconstruct the pavement on northbound and southbound I-35 and construct an auxiliary lane on northbound and southbound I-35 from Bridge Street to old Hwy 14 west.

Recent Changes and Updates

The current estimate is based on a new project scope. The paving portion of the original project on I-35 from Owatonna to Faribault has been removed and is a separate project now.

Project History:

Each of the four bridges over I-35 in Owatonna are approximately 45 years old, functionally obsolete and have various structural deficiencies. Two of the four bridges also span the Canadian Pacific Railroad. Traffic safety issues exist on I-35 for traffic entering from Hwy 14 west and to Bridge Street due to existing geometrics. Letting date pushed back to accommodate revisions necessary for best results and other priorities in the transportation system.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 34.1	\$ 24.1
Other Construction Elements:	\$ 0.0	\$ 1.0
Engineering:	\$ 6.8	\$ 4.8
Right of Way:	\$ 0.5	\$ 0.5
Total:	\$ 41.4	\$ 30.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The remainder of the project will be completed under traffic. Traffic will be one lane in each direction (head-to-head) in Owatonna.

Project Risks:

Railroad agreement with CPRR will be required for bridge replacement.

Schedule:

Environmental Approval Date: 12/26/2013
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 8/7/2013
 Construction Limits Established Date: 08/02/2013
 Original Letting Date: 01/23/2009
 Current Letting Date: 02/28/2014
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeffrey Vlamincik
Project Manager: David Tsang

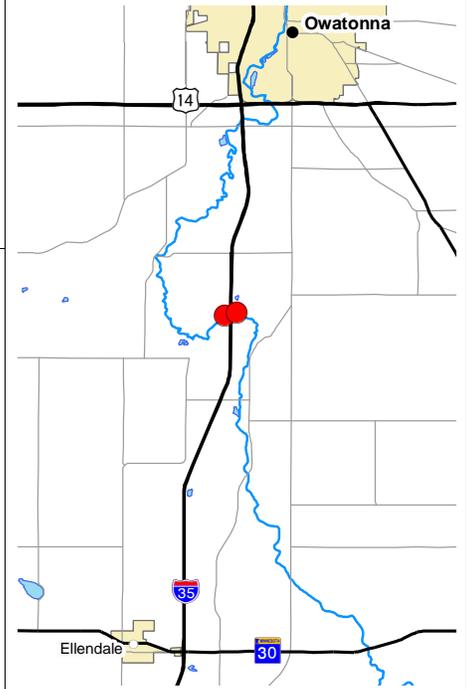
Revised Date: 12/15/2015

PROJECT SUMMARY

I-35

Straight River Rest Stop I-35

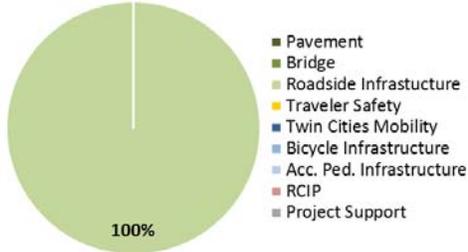
State Project No. 7480-124



Primary Purpose:

Performance-based Need: Roadside Infrastructure Condition

Investment Category:



Project Description:

This project is for the replacement of the I-35 Straight River Rest Area.

Recent Changes and Updates

The scoping document has been completed.

Project History:

The Straight River Rest Area located on northbound I-35 is currently rated as the poorest rest area in District 6. The truck parking was designed using outdated semi-truck turning radius standards and is now considered inadequate. The building is deteriorating and the facility does not meet current ADA requirements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 4.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.6	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.4	\$ 5.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20% engineering used in current estimate.

Project Risks:

Competitive bid may be higher or lower than expected.

Schedule:

Environmental Approval Date: unknown
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: Unknown
 Construction Limits Established Date: NA
 Original Letting Date: 02/26/2016
 Current Letting Date: 02/26/2016
 Construction Season: 2016
 Estimated Substantial Completion: 10/2016



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Kyle Lake

Revised Date: 12/15/2015

PROJECT SUMMARY

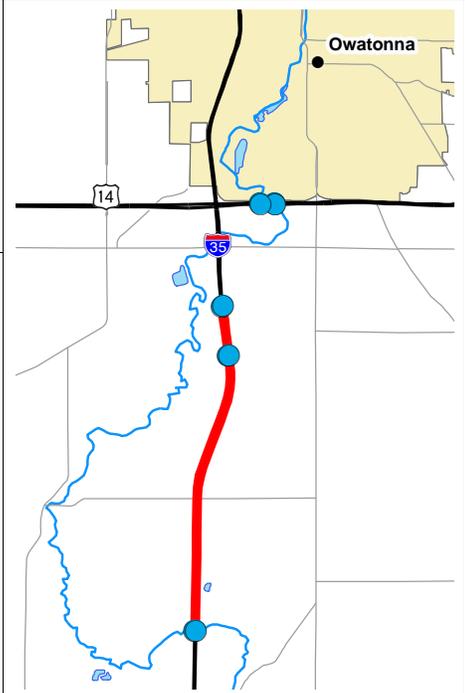
I-35

6 bridges on I-35 and 4 bridges on Hwy 14

Bridge 74807,74808,74823,74824,74804,74803,74001,74002,74003,74004

State Project No. 7480-126

<http://www.dot.state.mn.us/designbuild/steele-county-bridges/index.html>



Primary Purpose:

Performance Based Need: Bridge Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The construction funding for this project was recently cut from \$25M to \$16M. Using Design-Build, each contractor will be asked to build as many bridges as they can for \$16M. If additional funding becomes available, ID/IQ will be used for the remaining bridges.

Project History:

This project was recently added to the program in July, 2015. This project is being funded with additional state appropriation money. The project was initially funded at \$25M to reconstruct all 10 bridges. Current funding is \$16M.

Project Description:

This project will be a design-build for replacment of 6 Bridges on I-35 between Owatonna and Hope. The project also includes replacement of 4 bridges on Hwy 14 near Owatonna between I-35 and CR 45. This project will be a design-build for the replacement of up to 10 bridges (6 bridges on I-35 between Owatonna and Hope, 4 bridges on TH 14 between Owatonna and CR 45). The number of bridges built will be based on funding availability.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.3	\$ 27.3
Other Construction Elements:	\$ 1.9	\$ 1.9
Engineering:	\$ 4.3	\$ 4.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 33.5	\$ 33.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The numbers above assume steel bridges on I-35 and TH 14 over the Union Pacific Railroad. The cost of these bridges may decrease if we can reduce the portal opening and optimize the design. The assumptions also include reconstructing TH 14 between the UP RR and Straight River and approximately 250' of approach work at all of the other bridges.

Project Risks:

- Med Risk - Delay in obtaining UP RR agreement could delay project.
- Low Risk - Potential compensable utility relocations within the railroad right of way.
- Low Risk – DNR is unable to complete the mussel survey this fall, delaying the project.

Schedule:

Environmental Approval Date: 8/ 2010 EIS
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 12/2015
 Construction Limits Established Date: 10/2015
 Original Letting Date: 04/08/2016
 Current Letting Date: 4/8/2016
 Construction Season: 2016/2017/2018
 Estimated Substantial Completion: 10/2018



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
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District Engineer: Jeff Vlamincik
Project Manager: Jay Heiptas

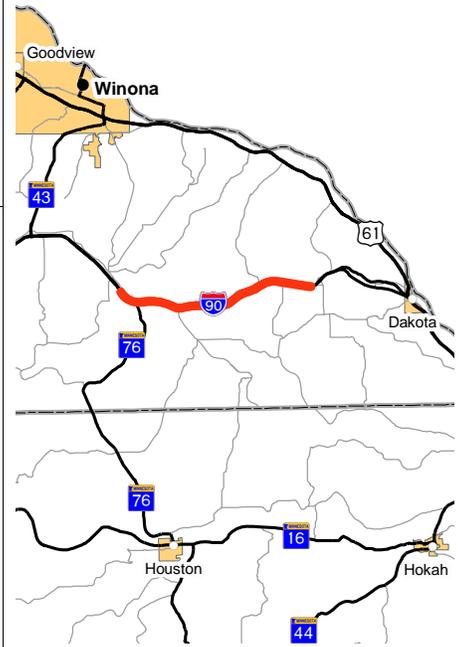
Revised Date: 12/15/2015

PROJECT SUMMARY

I-90

West of Hwy 76 to west of County Road 12
State Project No. 8580-163

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement & District Safety Plan

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

This project will preserve existing roadway structure, extend pavement life, and improve ride quality.

Project Description:

This project is a mill and overlay of 8 miles of I-90 from Hwy 76 to Hwy 12. The weigh station ramps will also be overlaid and drainage and safety improvements will be made.

Project History:

This section of I-90 was originally graded in 1971 and last overlaid in 1997 and 1998. In 2009 the pavement was rated in good condition with a Ride Quality Index (RQI) from 2.8 to 3.6. Project tied with SP 8502-33 (TH 43).

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 5.3
Other Construction Elements:	\$ 0.4	\$ 0.0
Engineering:	\$ 0.6	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.3	\$ 5.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

It was assumed there will be no right of way costs, a 1.5-inch mill and 3-inch overlay and that traffic will be maintained during construction. No crossovers or detour costs were included.

Project Risks:

Coordination will be needed to address maintenance of traffic issues at the Hwy 76 interchange. The project plans do not include replacing the approach panels, which will only be replaced on the bridges; however, the approach panels could be added at a later time.

Schedule:

Environmental Approval Date: Not Needed
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Unknown
Construction Limits Established Date: Unknown
Original Letting Date: 01/24/2014
Current Letting Date: 6/7/2013
Construction Season: 2015
Estimated Substantial Completion: 11/2015



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Richard Augustin

Revised Date: 12/15/2015

PROJECT SUMMARY

I-90
 Winona
 Bridge 85830, 85844
 State Project No. 8580-165

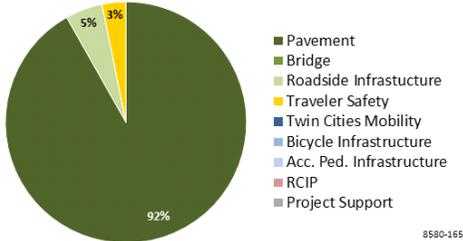
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement & Roadside Infrastructure Condition

Investment Category:



Project Description:

This project will resurface the eastbound lanes of Hwy 90 with a concrete unbonded overlay. The ramps will be re-graded and several existing culverts will be replaced or repaired as a part of the project. Repairs will also include fixing separating pipes and aprons.

Recent Changes and Updates

The project changed from a bituminous mill and overlay to a concrete unbonded overlay.

Project History:

I-90 eastbound is in poor condition and needs repair. The purpose of the project is to improve ride quality and reduce maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.4	\$ 8.4
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.1	\$ 10.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20 percent of the construction budget was estimated for engineering. Standard practices were used to develop cost estimates.

Project Risks:

Competitive bid may be higher or lower than expected. Ramps may be overlaid or regraded.

Schedule:

Environmental Approval Date: 9/27/2013
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: 08/15/2013
 Original Letting Date: 11/22/2013
 Current Letting Date: 11/22/2013
 Construction Season: 2014
 Estimated Substantial Completion: 2015



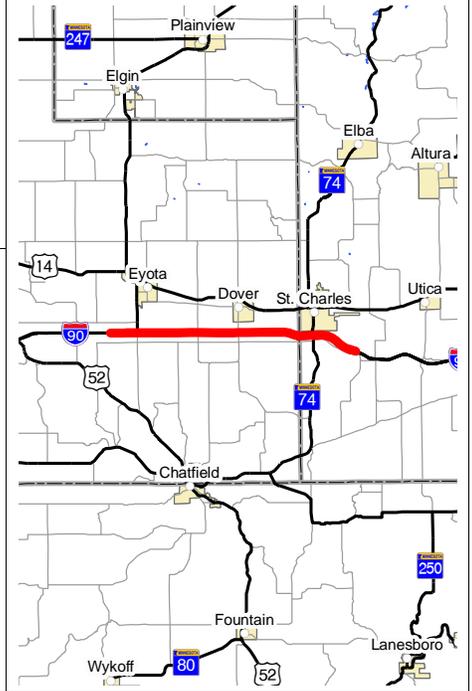
Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeffrey L. Vlamincik
Project Manager: David Tsang

Revised Date: 12/15/2015

PROJECT SUMMARY

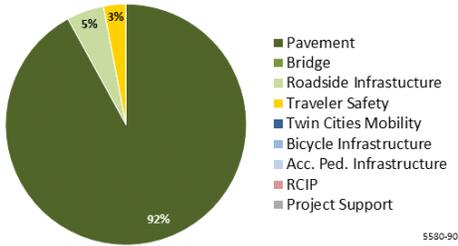
I-90
 East of County Road 19 to East of Hwy 74
 Bridge 85817
 State Project No. 5580-90



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project will resurface 12 miles of the westbound lanes on I-90 from 2 miles east of Hwy 19 to 2 miles east of Hwy 74. The resurfacing will consist of an unbonded concrete overlay. The project also includes culvert repairs and improvements.

Recent Changes and Updates

No recent changes noted.

Project History:

This section of the westbound lanes of I-90 was built in 1971 and overlayed in 1998. This highway segment is starting to deteriorate. The purpose of the project is to improve ride quality and reduce maintenance costs.

Bridge rehabilitation on bridge #85817 was added to the project. The bridge rehabilitation includes new bridge railings, end posts, and resurfacing.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.5	\$ 15.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.7	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 16.2	\$ 17.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The engineering estimate and higher anticipated concrete costs increased the current estimate. The Current Estimate includes bridge rehabilitation.

Project Risks:

No project risks remain.

Schedule:

Environmental Approval Date: Unknown
 Municipal Consent Approval Date: Need Unknown
 Geometric Layout Approval Date: Unknown
 Construction Limits Established Date: Unknown
 Original Letting Date: 12/19/2014
 Current Letting Date: 11/21/2014
 Construction Season: 2015
 Estimated Substantial Completion: 11/2015



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Jacob Gasper

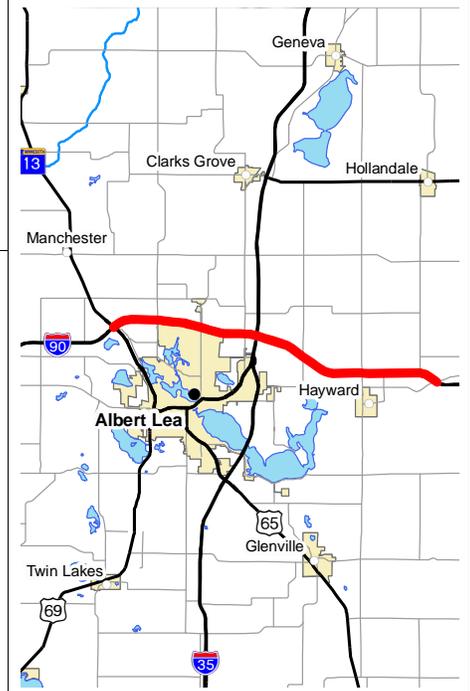
Revised Date: 12/15/2015

PROJECT SUMMARY

I-90

I-90 WB Lanes from Hwy13 to Hwy 46 (Petran)

State Project No. 2482-74



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

Project Description:

This project will resurface 12 miles of the westbound lanes on I-90 from Hwy 13 to CR 46. The resurfacing will consist of a medium bituminous overlay. The project also includes guardrail replacements, culvert repairs and improvements.

Recent Changes and Updates

This project was delayed and moved from a 2018 project to a 2019 project. This project includes patching of the existing bituminous, which will take place prior to the overlay.

Project History:

This segment of I-90 is a 4-lane divided, rural highway. The pavement is starting to show signs of deterioration. This project will improve ride quality and reduce maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 4.9
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.9	\$ 5.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

20% engineering cost was used to arrive at total current estimate.

Project Risks:

Competitive bids may be higher or lower than expected. Final pavement recommendations will be made during the project development process.

Schedule:

Environmental Approval Date: Not Needed
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Unknown
 Construction Limits Established Date: 05/12/2014
 Original Letting Date: 11/17/2017
 Current Letting Date: 11/16/2018
 Construction Season: 2019
 Estimated Substantial Completion: 11/2019



Minnesota Department of Transportation
 District 6
 2900 48th Street NW
 (507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Jake Gasper

Revised Date: 12/15/2015

PROJECT SUMMARY

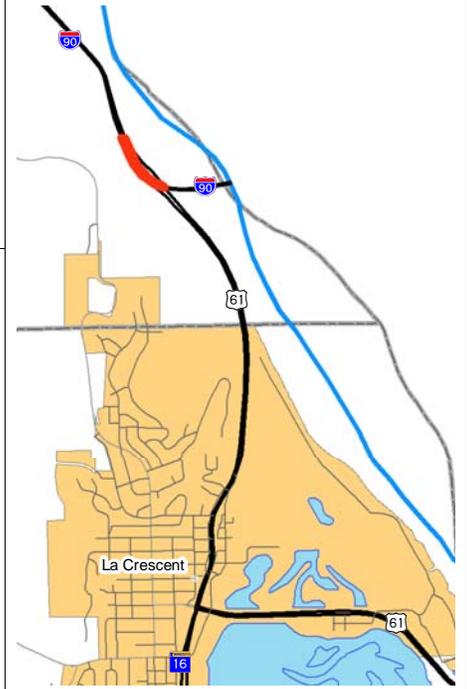
I-90

Mississippi River Bridges - Dresbach

Bridge 85801, &, 85802

State Project No. 8580-149

<http://www.dot.state.mn.us/dresbachbridge/index.html>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:

Project Description:

This project will construct a new I-90 river bridge, which will include a reconstructed interchange that improves traffic safety, capacity and access on and between Hwy 61 and Hwy 14, as well as I-90. The project includes grading, concrete surfacing and bridge replacement. New and enhanced bicycle and pedestrian facilities will be provided along Hwy 61 and provisions for future bike/ped facilities are incorporated into the plans. Additionally, Wisconsin is funding a portion of the bridge replacement, including 100 percent of the Wisconsin approach costs.

Recent Changes and Updates

The initial estimate was considerably higher because there were higher cost contingencies built into the preliminary level cost estimate. There were four major companies bidding on this project, so the bids were very competitive. There was extensive industry outreach in advance of the project to facilitate the contracting industry input and feedback and the project was let at an optimal time of year. The project included a unique performance based construction staging and maintenance of traffic provisions to bring contractor innovation. Since the project has moved forward, there is a much better view of the risks and contingencies. The current estimate reflects the letting bid amount.

Project History:

The primary purpose of the project is to provide a new bridge on I-90 for an important regional river crossing, and to provide a reconstructed interchange that improves traffic safety, capacity and access on and between Hwy 61/Hwy 14 and I-90. The project will address identified bridge structural deficiencies, roadway operational problems, capacity needs, traffic safety concerns

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2009

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 265.5	\$ 187.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 28.1	\$ 24.8
Right of Way:	\$ 0.0	\$ 0.5
Total:	\$ 293.6	\$ 212.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Environmental impacts with the bridge and the roadway approach work are not significant. The US Fish and Wildlife Services agrees to the right of way swap.

Project Risks:

The close proximity of this bridge to Hwy 61, the railroad tracks and the Minnesota rest area make roadway and bridge geometry challenging. Numerous environmental permits will be required.

Schedule:

Environmental Approval Date: unknown
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 12/7/2011
Construction Limits Established Date: 06/14/2011
Original Letting Date: 01/24/2012
Current Letting Date: 10/19/2012
Construction Season: 2013/2016
Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Jeff Vlamincik
Project Manager: Mark Anderson

Revised Date: 12/15/2015

**District Project Summary
District 7**

Route	State Project #	Project Location	Page
Hwy 4	8302-38	South of 10th Ave to 11th Ave in St. James	F 2
Hwy 4	4601-32	From Iowa to the west junction of CSAH 26	F 3
Hwy 13	8101-57	Waseca to Hwy 30 in New Richland	F 4
Hwy 14	0804-81	Jct of Hwy 15 over river and railroad	F 5
Hwy 14	0803-38	Hwy 5 in Springfield to east of CSAH 27	F 6
Hwy 14	5203-104	From west of Nicollet to North Mankato	F 7
Old Hwy 14	8103-113	From County Road 60 to Owatonna city limits	F 8
Old Hwy 14	8103-114	From west to east Janesville city limits	F 9
Old Hwy 14	8103-115	From west to east Waseca city limits	F 10
Hwy 14	0804-113	East limits of Sleepy Eye to west limits of New Ulm	F 11
Hwy 15	8304-113	Hwy 15 and Hwy 60	F 12
Hwy 15	0805-113	From Township Road 46 to 7th Street North in New Ulm	F 13
Hwy 15	4603-45	Johnson Street to Goeman Road in Fairmont	F 14
Hwy 15	4604-32	I-90 to Hwy 54 in Truman & Watonwan/Brown county line to Hwy 24	F 15
Hwy 19	4004-112	Over the Union Pacific railroad, east of Sibley/LeSueur county line	F 16
Hwy 22	0704-88	Mankato, from Hwy 83 to County Road 36	F 17
Hwy 22	0704-100	Hwy 30 to Hwy 15	F 18
Hwy 30	8105-21	From Hwy 83 to New Richland	F 19
Hwy 60	1703-69	Windom to west of Mountain Lake	F 20
Hwy 60	5305-51	Bigelow to Worthington	F 21
Hwy 60	1703-70	Mountain Lake to Butterfield	F 22
Hwy 60	8308-44	Butterfield to St. James	F 23
Hwy 60	8309-52	Between St. James and Hwy 4 to Hwy 14	F 24
Hwy 62	1704-27	Hwy 59 to west limits of Windom	F 25
Hwy 71	3205-29	From Springfield Parkway to Industrial Boulevard	F 26
Hwy 91	5308-29	From the southern Adrian city limits to the Nobles/Murray County Line	F 27
Hwy 99	4008-25	Over the Minnesota River in St Peter	F 28
Hwy 99	4008-28/4010-1	From Minnesota River Bridge to Hwy 38 in Le Center/from Hwy 13 to Hwy 21	F 29
Hwy 109	2212-28	Winnebago to Wells	F 30
Hwy 109	2206-13	Hwy 22 in Wells to I-90 in Alden	F 31
Hwy 169	5209-74	From Hwy 22 in St Peter to Hwy 93 at Le Sueur	F 32
Hwy 169	5209-66	St. Peter to Le Sueur, south of the Minnesota River Bridge	F 33
Hwy 169	2207-32	Blue Earth from the south limits at 14th Street to County Road 6	F 34
Hwy 169	5211-59	Hwy 14 in Mankato to St. Peter	F 35
Hwy 169	5211-61	Hwy 14 in Mankato to St. Peter	F 36
Hwy 22, Hwy 5, Hwy 19	7207-20	Gaylord	F 37
I-90	3280-126	Eastbound from Hwy 86 to Hwy 4 & westbound from Hwy 5 to Hwy 4	F 38
I-90	4680-126	From Sherburn to Fairmont westbound	F 39
I-90	5380-133	Westbound from Rushmore to Worthington & eastbound from Worthington to Hwy 264	F 40
I-90	6780-105	From the South Dakota border to 2.9 mi East of Hwy 23	F 41

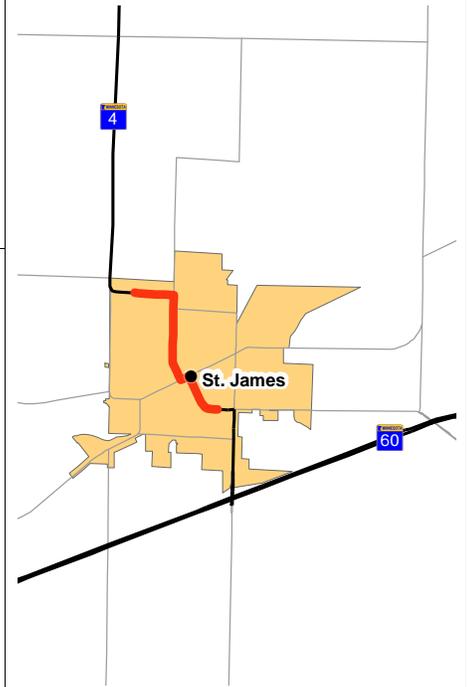
PROJECT SUMMARY

Hwy 4

South of 10th Ave to 11th Ave in St. James

State Project No. 8302-38

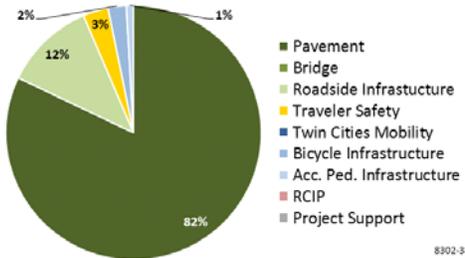
<http://www.dot.state.mn.us/d7/projects/hwy4stjames/>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This is a roadway reconstruction project for 1.6 miles in St James from south of 10th Ave S. to 11th Ave N.

The sidewalk will be replaced and constructed to meet ADA standards. In addition, the storm sewer, sanitary sewer and water main will be replaced.

Mini-roundabouts will be built to replace the existing signals in town to optimize the flow of traffic.

Recent Changes and Updates

The city approved the geometric layout. A consultant was procured for doing the final design work. The letting date changed to align with a scheduled letting date after the project was programmed.

Project History:

The project was scoped. The city requested concrete surfacing. The project is less than 2 miles in length, so it will not be an alternate bid. Some temporary easements will be needed in the process of making the sidewalks ADA compliant. In addition, some right of way will need to be acquired for the intersection modifications and will be determined through the layout process. Traffic will be detoured.

There was a data entry error in the 2013 report for the costs. These were updated to reflect the correct estimates. Existing 1951 concrete throughout the corridor is in very poor condition with a Ride Quality Index (RQI) of 0.3, which is well below the poor threshold. Multiple city utility breaks occur each winter due to poor utilities below the roadway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 10.8
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.2	\$ 0.2
Total:	\$ 6.9	\$ 12.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Construction Cost: MnDOT's share -\$5.3 million, local share - \$5.5 million. Cost estimate based on concrete pavement. Estimated in 2012 dollars inflated to 2016 dollars.

Project Risks:

Local funding of needs on the project.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: 12/02/2014
 Geometric Layout Approval Date: 04/10/2015
 Construction Limits Established Date: Summer 2015
 Original Letting Date: 06/30/2016
 Current Letting Date: 02/26/2016
 Construction Season: 2016-2017
 Estimated Substantial Completion: Dec. 2017



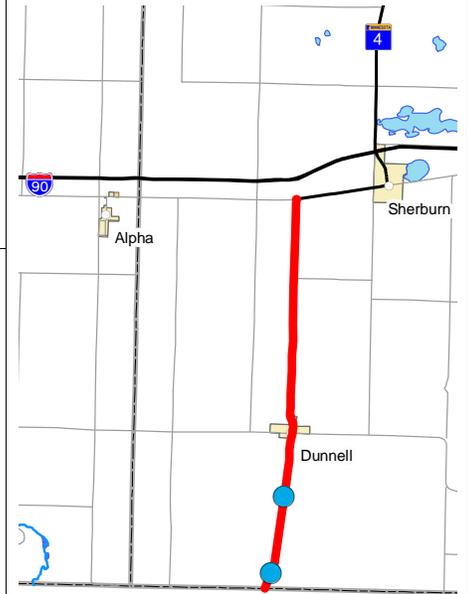
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/15/2015

PROJECT SUMMARY

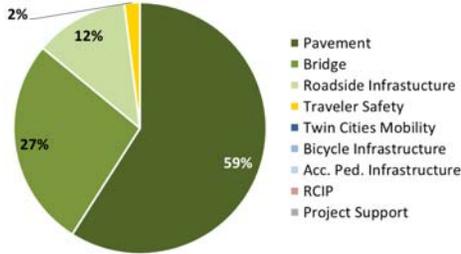
Hwy 4
From Iowa to the west junction of CSAH 26
Bridge 3572, &, 3878
State Project No. 4601-32



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project consists of a mill and bituminous overlay for the rural section of Hwy 4 from the Iowa border to Hwy 26, located southwest of Sherburn. The project will also replace two bridges, #3572 and #3878, with new box culverts.

Recent Changes and Updates

This project was scoped in 2015 and moved up to fiscal year 2018.

Project History:

This project will resurface the pavement to achieve a smooth riding surface and improve the ride quality index (RQI). The project also includes replacing two w-style bridges, #3572 and #3878, with new box culverts.

In 2013, the pavement was near the end of its service life and the ride quality was poor. Both bridges need replacement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 6.1
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.7	\$ 7.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

It is assumed the project is a bituminous mill and overlay. The current estimate is in 2014 dollars inflated to 2018.

Project Risks:

The life cycle cost analysis may show an alternate fix has the lowest life cycle cost. If a more substantial fix is required that requires raising the road grade or includes subgrade corrections, the costs may increase significantly.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Pending Approval
Construction Limits Established Date: Pending Approval
Original Letting Date: 01/26/2018
Current Letting Date: 01/26/2018
Construction Season: 2018
Estimated Substantial Completion: Summer 2019



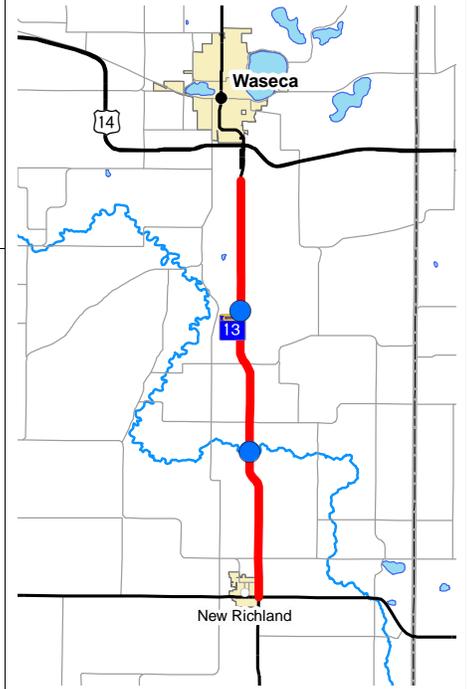
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matt Coudron

Revised Date: 12/15/2015

PROJECT SUMMARY

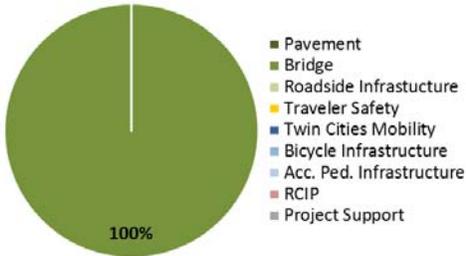
Hwy 13
Waseca to Hwy 30 in New Richland
Bridge 81001, &, 81002
State Project No. 8101-57



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay of about 11 miles on Hwy 13 from south of Waseca to Hwy 30 in New Richland. The project also includes bridge rehabilitation work on bridges #81001 and #81002 and some ADA updates to the county trail on the east side of New Richland.

Recent Changes and Updates

There will be additional culverts that will be replaced or lined during the bridge rehabilitations. The detour route will follow MnDOT trunk highways.

Project History:

This project is a combined pavement preservation project and a bridge rehabilitation project into one. The project is a mill and overlay and bridge rehabilitation, which will also address some ADA concerns on the county trail on the east side of New Richland. This was identified as a district early letting candidate project pending approval from MnDOT's Central Office. The idea of entering into a limited use permit with Waseca County is being contemplated.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 6.0
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 1.0	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.3	\$ 7.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimate is from 2013, which was modified in 2014 with the 2017 inflation factor. Because the outstanding scope questions have been resolved and there is an updated estimate and inflation factor, the current estimate has gone up.

Project Risks:

The project risks include: ADA compliance on trail in New Richland, the limited use permit with the county, and the lighting agreements and/or permits.

Schedule:

Environmental Approval Date: pending
Municipal Consent Approval Date: pending
Geometric Layout Approval Date: pending
Construction Limits Established Date: pending
Original Letting Date: 12/16/2016
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: 07/09/2017



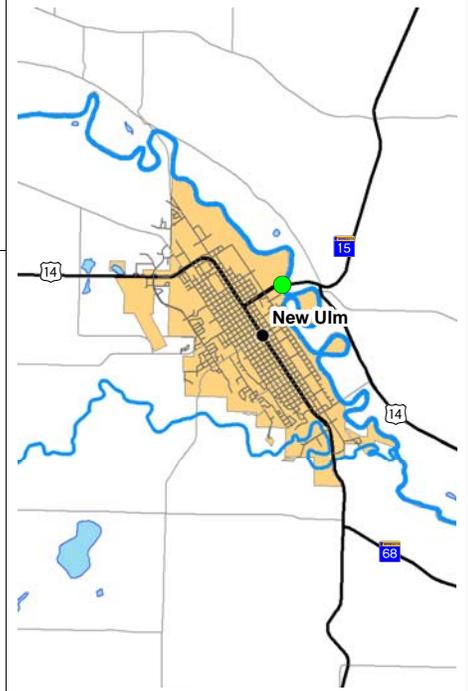
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/15/2015

PROJECT SUMMARY

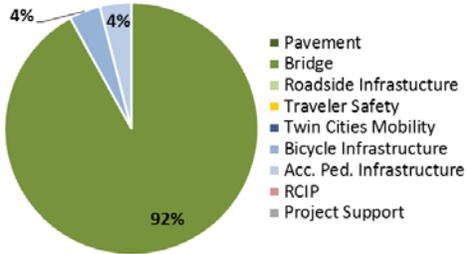
Hwy 14
 Jct of Hwy 15 over river and railroad
 Bridge 9200, &, 9294
 State Project No. 0804-81



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

This project will be constructing two-lane bridges over the Minnesota River (#9200) and Front St. (#9294), reconstructing the in-town section of Hwy 14 from Front St. to the signal at Broadway St., and constructing an interchange at the junction at Hwy 14/Hwy 15/CR 21 east of New Ulm.

Recent Changes and Updates

A special task force commissioned by the Commissioner of Transportation was brought together to review priorities in the corridor and to discuss how best to apply current funding. The task force issued a recommendation for the inclusion of the Hwy 14/Hwy 15 interchange in the project, while revising the scope of the existing bridges to be 2-lane bridge structures. MnDOT reviewed the recommendation and concurred with the revised scope of work.

Project History:

Bridge #9200 is functionally obsolete and will be structurally deficient by the time it is replaced, and bridge #9294 is already structurally deficient.

This project was scoped, but the area is being reviewed for other improvements that could be made while the bridges are out. Most notably, the review includes the following: the rural intersection of Hwy 14 and Hwy 15, the existing pavement between the two bridges, and the Hwy 14/Hwy 15 intersection.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.7	\$ 42.7
Other Construction Elements:	\$ 7.0	\$ 7.0
Engineering:	\$ 7.0	\$ 7.0
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 56.8	\$ 56.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimate is based on 2012 dollars inflated to 2018 dollars. The estimate assumes the complete replacement of both bridges.

Project Risks:

A moderate amount of poor soils is included in the base estimate, but poor soils in the bridge fill areas could increase project costs substantially.
 A multi-year detour will be required for this work to be completed.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Need Unknown
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 05/01/2017
 Current Letting Date: 05/01/2017
 Construction Season: 2017/2018
 Estimated Substantial Completion: November 2018



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 14
 Hwy 5 in Springfield to east of CSAH 27
 State Project No. 0803-38



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The scope of the project was amended to include turn lanes and additional ADA work in the city of Sleepy Eye. This work will require some additional right of way acquisition. The bridge work was done under another project, so the bridge work for #08002 and #08004 were dropped from this project.

Project History:

Originally, this project was the combination of two project scopes into one, SP 0804-114 and SP 0803-38. The project was a pavement and bridge rehabilitation project, which included ADA improvements; however, the bridge work for Bridges #08002 and #08004 under SP 0804-114 was removed.

Project Description:

This project is a mill and overlay and a concrete grind and overlay on about 14 miles of Hwy 14 from Hwy 5 in Springfield to east of CSAH 27. The project also includes ADA improvements in Sleepy Eye and the addition of turn lanes.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 10.3
Other Construction Elements:	\$ 0.4	\$ 0.8
Engineering:	\$ 1.5	\$ 1.8
Right of Way:	\$ 0.0	\$ 0.4
Total:	\$ 9.0	\$ 13.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate is from 2012, and was modified in 2014 with 2018 inflation factor used for mid-point construction year of 2018. Costs have increased due the additional length at the east end of the project.

Project Risks:

The project risks include the following: additional city utility work within the city limits of Sleepy Eye; additional ADA compliant work, which may include sidewalks; signal removal; left turn lanes, additional right of way purchase of several parcels within Sleepy Eye's city limits and other traffic calming initiatives.

Schedule:

Environmental Approval Date: pending
 Municipal Consent Approval Date: pending
 Geometric Layout Approval Date: pending
 Construction Limits Established Date: pending
 Original Letting Date: 01/26/2018
 Current Letting Date: 01/26/2018
 Construction Season: 2018
 Estimated Substantial Completion: 07/10/2015



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/15/2015

PROJECT SUMMARY

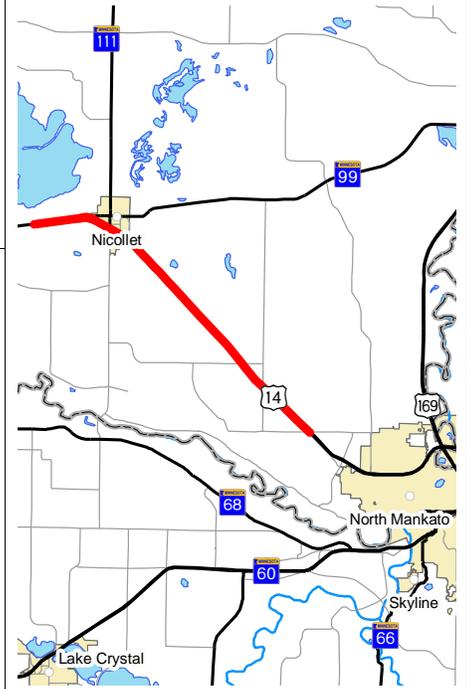
Hwy 14

From west of Nicollet to North Mankato

Bridge 52005

State Project No. 5203-104

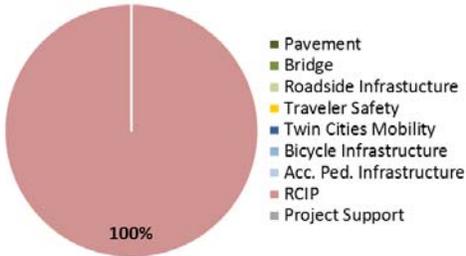
<http://www.dot.state.mn.us/d7/projects/14newulmtonmankato/>



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

This project expands Hwy 14 from a 2-lane to a 4-lane expressway to improve safety, capacity, and enhance the corridor's interregional trade function.

This project goes from west of Nicollet to North Mankato for a distance of over 9 miles. Hwy 14 will bypass Nicollet. The project includes the construction of a tight diamond interchange with roundabout ramp terminals at Hwy 14 and Hwy 111.

Recent Changes and Updates

This project was let in May. The current estimate is the actual let amount.

Project History:

The project was in the final design stage. The public hearing for Municipal Consent from the city of Nicollet was on August 11, 2014. The project cost was updated to reflect a more detailed cost estimate, and many risks have been retired. There was also substantially less poor soils than originally anticipated. The project was scoped after its inclusion in the Corridors of Commerce program in November 2013. Coordination with the community of Nicollet occurred in determining the intersection solution at the new Hwy 14 and Hwy 111.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 38.3	\$ 31.7
Other Construction Elements:	\$ 2.3	\$ 2.0
Engineering:	\$ 7.5	\$ 5.0
Right of Way:	\$ 3.4	\$ 5.0
Total:	\$ 51.5	\$ 43.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project was let in May and so costs were updated to reflect known costs.

Project Risks:

The project risks include the following: turnbacks to local jurisdictions of existing Hwy 14 and existing Hwy 99; areas with poor soils - muck sites; agricultural tile connections - potential for additional private agricultural tile impacts.

Schedule:

Environmental Approval Date: 09/01/2012
 Municipal Consent Approval Date: 08/18/2014
 Geometric Layout Approval Date: 05/19/2014
 Construction Limits Established Date: 01/15/2014
 Original Letting Date: 05/15/2015
 Current Letting Date: 05/22/2015
 Construction Season: July 2015/November 2016
 Estimated Substantial Completion: 11/01/2016



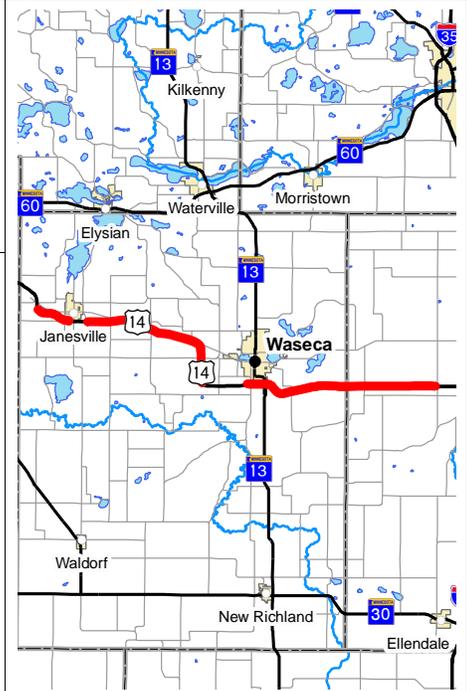
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/15/2015

PROJECT SUMMARY

Old Hwy 14
From County Road 60 to Owatonna city limits
State Project No. 8103-113



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

This project is under construction and about 75% complete.

Project History:

The Legislature recently passed the law allowing for the construction of this project according to the Settlement Agreement. The turnback of Old Hwy 14 in Waseca and Steele counties was contested. A Settlement Agreement was created to define what was to be constructed.

Project Description:

This project is a Design-Build project on the rural portions of Old Hwy 14 between CR 60 and the Owatonna city limits. The job consists of a concrete overlay and drainage improvements. Exceptions to this project include the cities of Janesville and Waseca.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 8.6	\$ 8.6
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.9	\$ 10.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimates for the turnback were performed early in the process. Only a certain amount of money was made available for the entire program on Old Hwy 14, so there is a need to make sure there is enough money for the projects that will come in subsequent years.

Project Risks:

The Settlement Agreement was very prescriptive in some areas and vague in others.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 12/03/2014
Current Letting Date: 12/03/2014
Construction Season: May 2015 / Nov 2015
Estimated Substantial Completion: 11/01/2015



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matt Rottermond

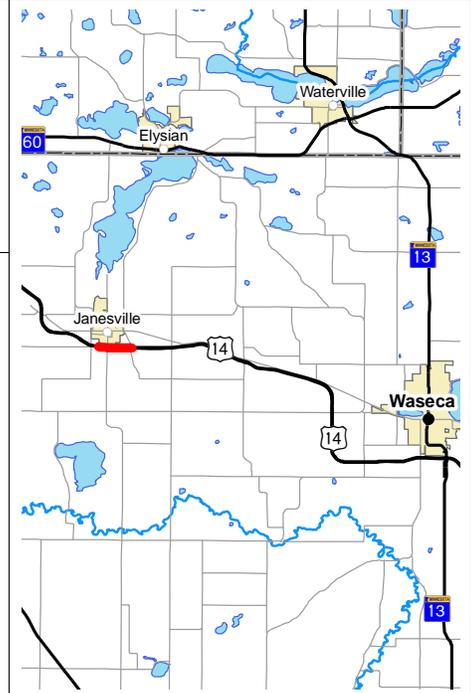
Revised Date: 12/15/2015

PROJECT SUMMARY

Old Hwy 14

From west to east Janesville city limits

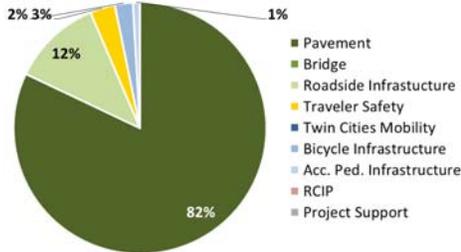
State Project No. 8103-114



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project consists of the reconstruction of Old Hwy 14 through Janesville. The city will be replacing the utilities in conjunction with this project. A new concrete surface will be provided with curb and gutter.

Recent Changes and Updates

This project is currently being designed. Construction was planned for 2015; however, the city of Janesville is leading the project development and decided to move construction to 2016. The letting date was moved to January 2016 and the cost estimate was updated to account for an additional year of inflation.

Project History:

The Legislature recently passed the law allowing for the construction of this project according to the Settlement Agreement. The turnback of Old Hwy 14 in Waseca and Steele counties was contested. A Settlement Agreement was created to define what was to be constructed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 5.8
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 7.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimates for the turnback were performed early in the process. Only a certain amount of money was made available for the entire program on Old Hwy 14, so, there is a need to make sure there is enough money for the projects that will come in subsequent years.

Project Risks:

The Settlement Agreement was very prescriptive in some areas and vague in others.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 04/15/2015
 Current Letting Date: 1/15/2016
 Construction Season: May 2015 / Nov 2015
 Estimated Substantial Completion: 11/01/2016



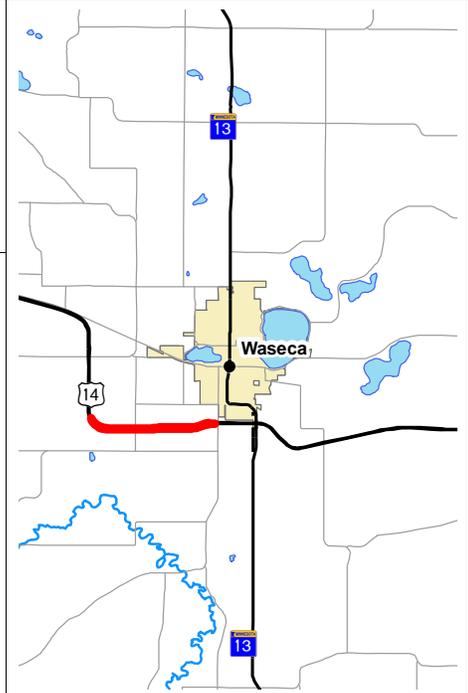
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Matt Rottermond

Revised Date: 12/15/2015

PROJECT SUMMARY

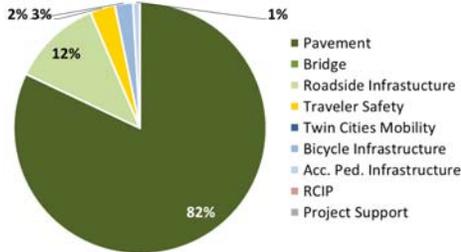
Old Hwy 14
From west to east Waseca city limits
State Project No. 8103-115



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project consists of the reconstruction of Old Hwy 14 through Waseca. The city will replace the utilities in conjunction with this project. A new concrete surface will be provided with the curb and gutter.

Recent Changes and Updates

The project is being designed at this time. The original baseline was incorrectly entered and has been corrected.

Project History:

The Legislature recently passed the law allowing for the construction of this project according to the Settlement Agreement. The turnback of Old Hwy 14 in Waseca and Steele counties was contested. A Settlement Agreement was created to define what was to be constructed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 17.8	\$ 17.8
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 2.7	\$ 2.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 21.5	\$ 21.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimates for the turnback were performed early in the process. Only a certain amount of money was made available for the entire program on Old Hwy 14, so there is a need to make sure there is enough money for the projects that will come in subsequent years.

Project Risks:

The Settlement Agreement was very prescriptive in some areas and vague in others.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 04/15/2016
Current Letting Date: 03/15/2016
Construction Season: May 2016 / Nov 2017
Estimated Substantial Completion: 11/01/2017



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

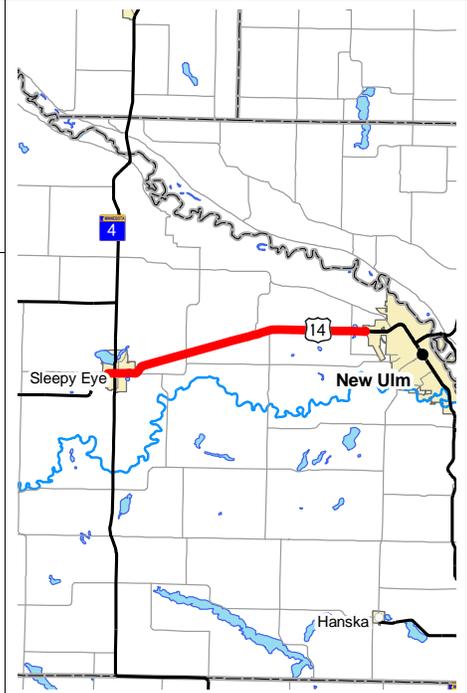
District Engineer: Greg Ous
Project Manager: Matt Rottermond

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 14

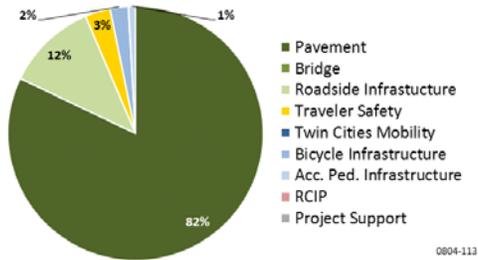
East limits of Sleepy Eye to west limits of New Ulm
State Project No. 0804-113



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



0804-113

Project Description:

This project is a mill and overlay on almost 10 miles of Hwy 14 from the east of Hwy 27 in Sleepy Eye to the west side of New Ulm.

Recent Changes and Updates

The scope was amended to shorten the length of the project, which reduced the current cost estimate as well.

The letting date changed due to district balanced lettings.

Project History:

The project was scoped and a detour should not be necessary.
The purpose of this project is to provide a smooth ride by resurfacing the roadway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.3	\$ 3.5
Other Construction Elements:	\$ 0.4	\$ 0.6
Engineering:	\$ 0.8	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.5	\$ 4.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate is based on bituminous pavement. The estimates decreased slightly due to the project limits decreasing. Some contingency included was based on additional pipe replacements and detour needs. This was estimated in 2012 dollars, then inflated to 2017 dollars. Project costs will increase if a concrete overlay is chosen over using bituminous.

Project Risks:

There may be a need to replace a few culverts within the project limits and additional hydraulics work. There is a possibility that the project may be changed to a concrete overlay rather than bituminous.

Schedule:

Environmental Approval Date: Need Unknown
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 11/18/2016
Current Letting Date: 02/24/2017
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

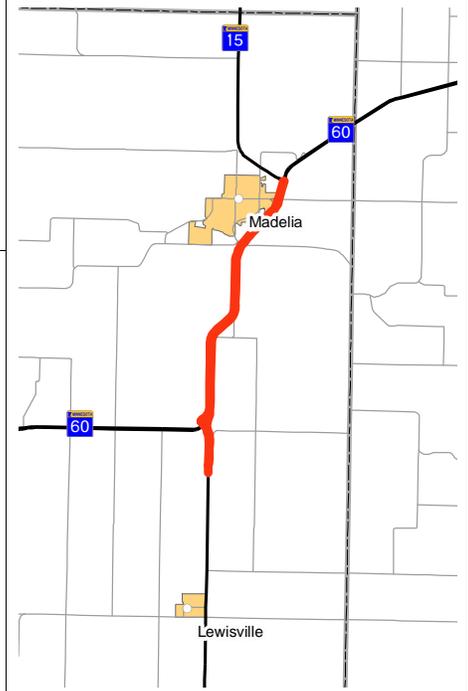
District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 15
Hwy 15 and Hwy 60
State Project No. 8304-113

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project is complete.

Project History:

The project scoping was completed in 2012. Lighting was added to this project late in the project development process. The final cost for the project was approximately \$300,000 over the contract amount as let due primarily to shouldering and bituminous overruns. This segment had rough pavement due to concrete faulting and damaged panels. The pavement preservation project was funded through the Better Roads program.

Project Description:

This project is a bituminous overlay which runs for about 10 miles along Hwy 14 from the east side of Sleepy Eye to the west side of New Ulm.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.5	\$ 6.1
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 1.1	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.1	\$ 6.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Base estimate is in 2011 dollars and then inflated to 2013 dollars. Current estimate is the awarded bid taken from the abstract. Lighting was added to this project late in the development process. Pavement faulting and damage was more extensive by the time the project was let.

Project Risks:

No project risks remain.

Schedule:

Environmental Approval Date: 02/28/2012
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 04/27/2012
Current Letting Date: 04/27/2012
Construction Season: 2012
Estimated Substantial Completion: 07/04/2015



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

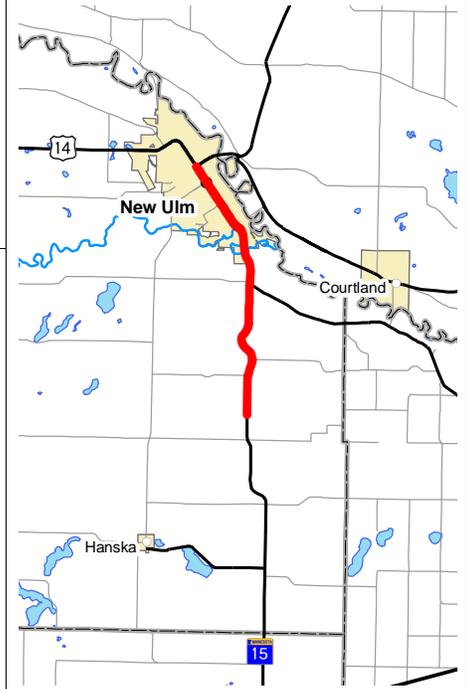
District Engineer: Greg Ous
Project Manager: Bob Williams

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 15

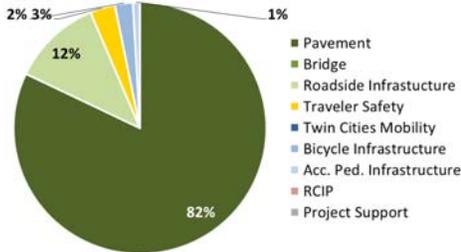
From Township Road 46 to 7th Street North in New Ulm
 Bridge 08010, &, 08011
 State Project No. 0805-113



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay of 8.5 miles of Hwy 15 from the south side of Searles to the junction of Hwy 14 and Hwy 15 in New Ulm. This project also improves sidewalks and curb ramps in New Ulm to bring them up to ADA standards.

Recent Changes and Updates

The project scope was modified to bring the sidewalk up to current ADA standards in addition to the pedestrian ramps. The letting was changed to align with a scheduled letting date after the project was programmed.

Project History:

The project was scoped and a minimal amount of risks were identified. The purpose of this project is to provide a smooth riding surface and reconstruct the failing sidewalk and pedestrian ramps in New Ulm to meet ADA guidelines.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.2	\$ 7.5
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.3	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.1	\$ 9.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate is based on bituminous pavement, ADA work and bridge repairs. It includes a contingency based on additional ADA work, possible turn lane extensions and detour staging due to pipe work. This is estimated in 2012 dollars then inflated to 2017 dollars.

Project Risks:

Minimal detours will be needed for both the culvert replacements in the rural section of the project and the spot pavement replacements in the urban area. Easements will be needed in some areas where there is sidewalk replacement in New Ulm.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending
 Original Letting Date: 01/01/2017
 Current Letting Date: 02/24/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



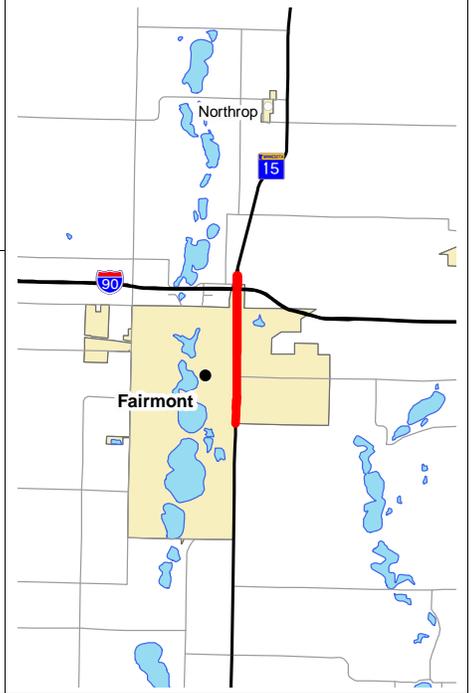
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/15/2015

PROJECT SUMMARY

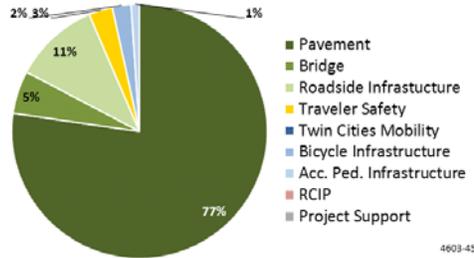
Hwy 15
Johnson Street to Goeman Road in Fairmont
State Project No. 4603-45



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This section of Hwy 15 includes the urban section of roadway from the south end of the project at Johnson Street to the north end at Goemann Road. The roadway work will consist of milling and a bituminous overlay. Updates to signals and pedestrian ramps to meet ADA requirements will also be completed.

Recent Changes and Updates

There is project coordination with the city of Fairmont to review sidewalks and review intersection control. The preliminary design work and final design began in 2015.

Project History:

The project scope was done for this project. Additional scoping yet to be completed includes the city's utilities needs and the life cycle cost analysis.

The Bridge 46002 rehabilitation over Center Creek was re-evaluated and this work is no longer planned as part of this project.

The project will resurface the pavement to preserve and extend the life of the existing pavement structure and achieve a smooth riding surface. The project will also reconstruct pedestrian ramps to meet ADA guidelines and update signals with flashing yellow arrows.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.1	\$ 6.1
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 7.9	\$ 7.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

It is assumed the project will include a mill and overlay, and that the project will not require a detour and can be done under traffic and no detour will be required. The current estimate is in 2013 dollars inflated to 2017 dollars.

Project Risks:

The life-cycle cost analysis (LCCA) may show an alternate fix has the lowest life cycle cost. This would warrant a change in the proposed fix or an exception.

If the City of Fairmont determines significant utility work is required, a detour and additional pavement removal and replacement may be needed. The extent of sidewalk repair and/or replacement is unknown.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Need Unknown
Geometric Layout Approval Date: Pending Approval
Construction Limits Established Date: Pending Approval
Original Letting Date: 01/01/2017
Current Letting Date: 01/27/2017
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Glen Coudron

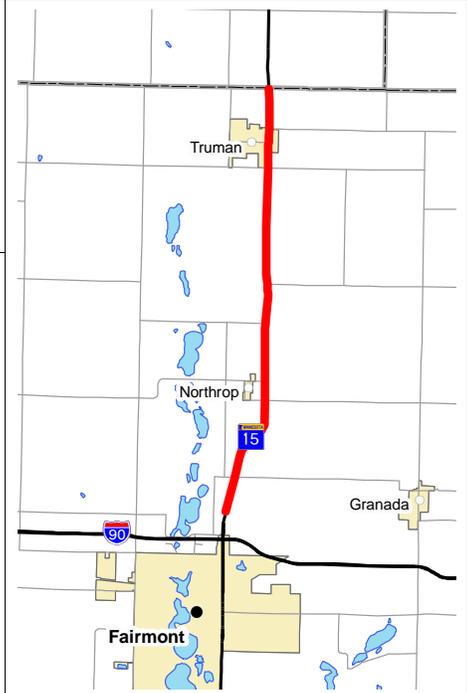
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 15

I-90 to Hwy 54 in Truman & Watonwan/Brown county line to Hwy 24
State Project No. 4604-32, &, 0805-112

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The project is now substantially complete.

Project History:

Another project, SP 0805-112, was tied to this project.

This project is under construction and will be substantially complete soon.

The road surface is rough and deteriorating. This project will resurface the pavement to achieve a smooth riding surface.

Project Description:

This project is a bituminous overlay for about 11 miles from I-90 to Hwy 54 in Truman. It also includes ADA improvements in Truman. The project overlays 7 miles from Watonwan/Brown county line to a bit south of Hwy 24.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.1	\$ 5.1
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.3	\$ 6.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate was based on mill and bituminous overlay costs with ADA work. The current estimated construction cost is the awarded bid taken from the abstract.

Project Risks:

Edge drains need to be inspected and evaluated to determine if they need work.

Schedule:

Environmental Approval Date: 12/16/2013
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 08/08/2013
Original Letting Date: 03/28/2014
Current Letting Date: 03/28/2014
Construction Season: 2014
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Kent Purrier

Revised Date: 12/15/2015

PROJECT SUMMARY

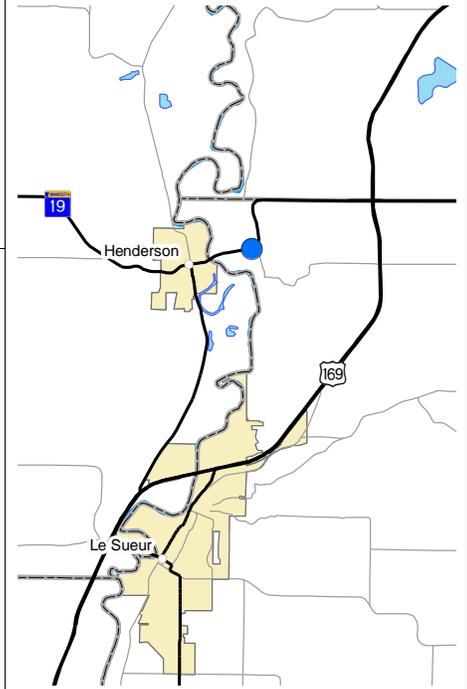
Hwy 19

Over the Union Pacific railroad, east of Sibley/LeSueur county line

Bridge 5369

State Project No. 4004-112

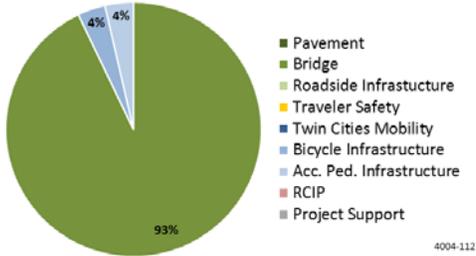
<http://www.dot.state.mn.us/d7/projects/hwy19henderson/index.html>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

This project will replace Bridge #5369 over the Union Pacific Railroad. The project includes the associated grading and paving on the ends of the bridge to match the in-place profile.

Recent Changes and Updates

In early 2014, a switch was made to the project to use a reinforced-soil slope (RSS) embankment. The RSS embankment allows steeper slopes, which in turn has a smaller construction footprint. This change eliminated permanent wetland, floodplain and wildlife refuge impacts on the project and reduced construction costs by \$1.7M.

Project History:

The existing bridge is failing. The sight distance is poor at the county road intersection. The project will replace the bridge with a structure that minimizes maintenance and provides improved sight distance for the local road connection.

Railroad requirements necessitate a longer and taller bridge than the current one. Constructing the larger embankments required for this bridge led to significant geotechnical issues as well as wetland, floodplain and wildlife refuge impacts; therefore, RSS was selected for the embankments. The construction cost estimate was inflated by \$6M to reflect this in 2013.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.0	\$ 5.7
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 0.6	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 4.2	\$ 7.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Baseline (2012) - Assumed matching existing bridge dimensions, \$3M construction cost.
 2013 - Increased construction cost to \$6M to account for risk of having to build a longer/taller bridge. Updated bridge costs not yet available.
 2014 - Decision was made to use RSS embankment, cost reduced by \$1.7M, \$4.3 M construction cost. Updated bridge costs not yet available.
 2015- Updated costs provided based on a longer/taller bridge. Bridge costs increased by \$1M. Roadway costs inflated to reflect complexities for working along an active railroad line. Current construction cost \$5.7M.

Project Risks:

Railroad coordination may pose a schedule risk, both in design and construction.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 07/08/2014
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 02/28/2014
 Current Letting Date: 02/26/2016
 Construction Season: 2016
 Estimated Substantial Completion: Nov. 2016



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

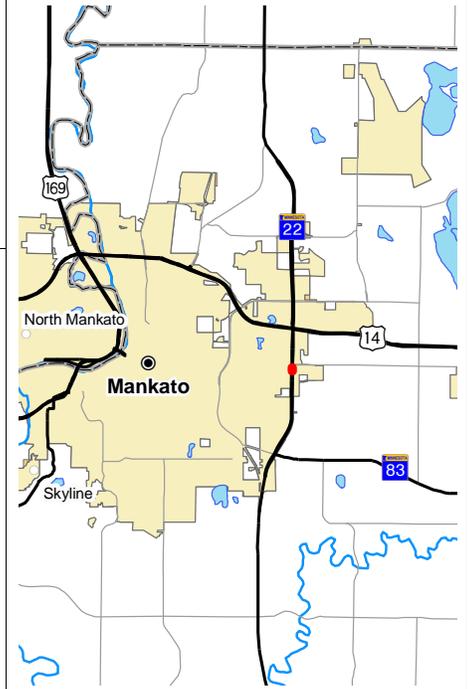
District Engineer: Greg Ous
Project Manager: Chris Bower

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 22
 Mankato, from Hwy 83 to County Road 36
 State Project No. 0704-88

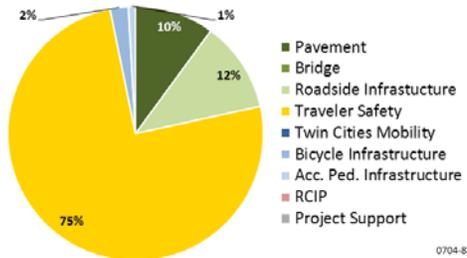
Substantially Complete



Primary Purpose:

Performance-based Need: District Safety Plan

Investment Category:



Project Description:

The project consists of constructing roundabouts on Hwy 22 at the intersections of Madison Avenue and Adams Street, rehabilitating concrete pavement, and installing flashing yellow arrows at intersecting side roads.

Recent Changes and Updates

Project construction is substantially complete.

Project History:

MnDOT partnered with the city and county to optimize construction staging, and to minimize the duration of impacts to businesses with an accelerated construction schedule. The project limits were extended to address traffic signal modifications at the surrounding intersections. Constructing the roundabouts will improve safety and reduce signal delay. The signalized intersections of Hwy 22 with Madison Avenue and Adams Street had the highest crash rating in District 7, so this project will greatly enhance safety.

An extensive educational campaign was implemented to educate drivers on navigating multilane roundabouts. Construction began in May 2014 and the roadway was open to traffic at the end of August 2014.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.6	\$ 7.2
Other Construction Elements:	\$ 0.4	\$ 1.0
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.3	\$ 9.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project's construction was accelerated with the completion in one construction season. The letting cost includes the city and county share of \$2.6 million for cost sharing on Madison Avenue and Adams Street. The construction letting was based on the low bid received.

Project Risks:

There could be additional construction costs associated with an accelerated construction schedule and with the extent of construction staging and traffic control. The project bid included a contract time component with an incentive/disincentive if the construction is completed early.

Schedule:

Environmental Approval Date: 11/15/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 6/10/2013
 Construction Limits Established Date: 06/10/2013
 Original Letting Date: 01/25/2014
 Current Letting Date: 02/28/2014
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2014



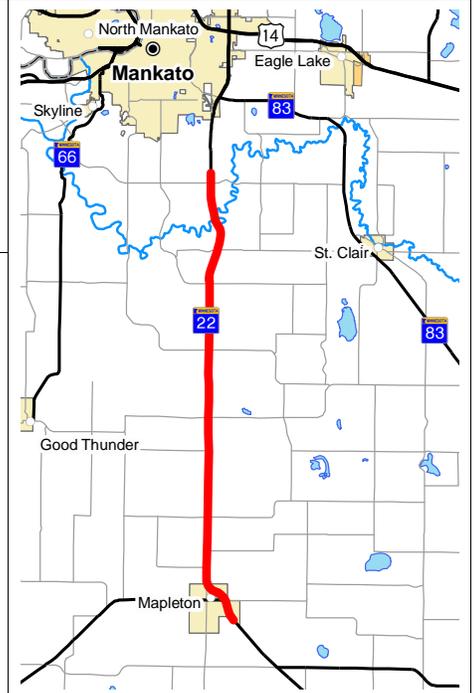
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/15/2015

PROJECT SUMMARY

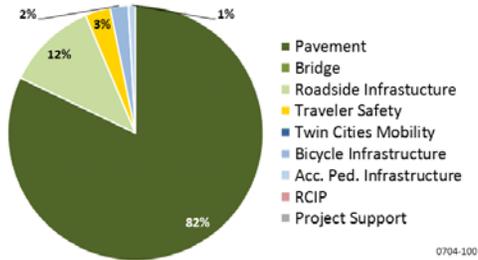
Hwy 22
 Hwy 30 to Hwy 15
 Bridge 5959
 State Project No. 0704-100
<http://www.dot.state.mn.us/d7/projects/hwy22mapleton/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project consists of reconstructing 10.5 miles of pavement from Mapleton near CR 7 to Hwy 15, including the replacement of bridge #5959 over the Big Cobb River. In addition, turn lanes are being proposed at several county roadways.

Recent Changes and Updates

The condition of the pavement was investigated in 2014 and found to be too deteriorated, and therefore unsuited for an unbonded overlay. The project scope was amended to include pavement reconstruction. Project limits were adjusted and the north limit was scaled back to the intersection of Hwy 15. The section of Hwy 22, from Hwy 15 to Hwy 90, which includes bridge #6497 over the Le Sueur River, will not be included under this project. The letting date was changed to accommodate the bridge offices work load issues.

Project History:

The bridge #5959 over the Big Cobb River is scheduled to be replaced. Due to the significant costs, the project may have to be staged over multiple years due to budget and program limitations. Once the existing soil and pavement investigation is complete, the project limits will be finalized.

Hwy 22 from Mapleton Hwy 90 is a minor arterial. The existing pavement is continuing to deteriorate and the ride quality is very poor, especially during the spring and winter seasons due to the frost heaving at the pavement joints.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 25.9	\$ 23.3
Other Construction Elements:	\$ 2.9	\$ 2.9
Engineering:	\$ 4.6	\$ 4.6
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 33.5	\$ 30.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The estimate is based on reconstructing the pavement with a similar pavement width and surfacing as the current roadway. This is estimated in 2011 dollars inflated to 2017 dollars. Project costs were adjusted to include bridge costs. The current estimate decreased because there is not enough funding to complete the project as originally scoped. The scope and project limits were adjusted to keep it under the budget shown in the current estimate.

Project Risks:

The project may require to be staged over multiple years. There may be additional costs for edge drain repair/replacement if needed. The investigation of chronic frost heaving at the joints determined that much of the pavement will need to be reconstructed. Reconstruction may require an alternate bid.

Schedule:

Environmental Approval Date: Need Unknown
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: need Unknown
 Construction Limits Established Date: Need Unknown
 Original Letting Date: 01/01/2017
 Current Letting Date: 01/27/2017
 Construction Season: 2017 / 2018
 Estimated Substantial Completion: Fall 2018



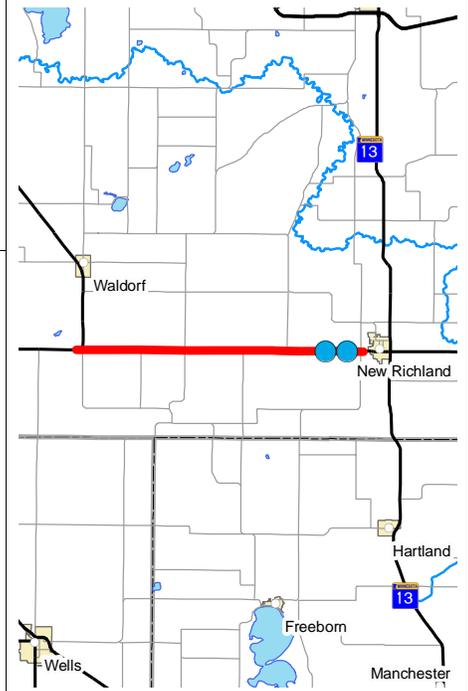
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Peter Harff

Revised Date: 12/15/2015

PROJECT SUMMARY

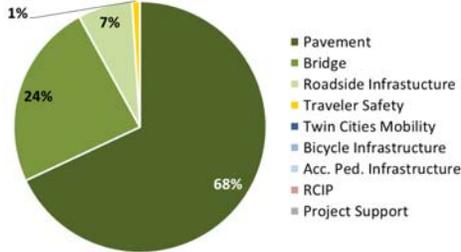
Hwy 30
 From Hwy 83 to New Richland
 Bridge 6789, &, 8131
 State Project No. 8105-21



Primary Purpose:

Performance-based Need: Pavement Condition and Bridge Condition

Investment Category:



Project Description:

This project is a rural preservation project consisting of a mill and overlay of about 10 miles of Hwy 30. In addition, bridges #6789 and #8131 will be replaced.

Recent Changes and Updates

The bridges #6789 and #8131 will be replaced and extended with right of way acquisition.

Project History:

Bridge #6789 is scour critical and bridge #8131 is old. Both bridges are in need of replacement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 5.7
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.1	\$ 7.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost was determined assuming a medium bituminous mill and overlay, two bridge replacements, right of way acquisition and culvert linings.

Project Risks:

The risks are the possibility of additional bridge rehabs, lengthening of culverts, right of way acquisition, scope or grade changes and possible detour needed.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 10/26/2018
 Current Letting Date: 10/26/2018
 Construction Season: 2018
 Estimated Substantial Completion: 2018



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/15/2015

PROJECT SUMMARY

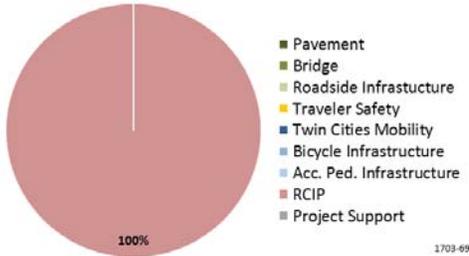
Hwy 60
 Windom to west of Mountain Lake
 Bridge 8260
 State Project No. 1703-69



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

This project completes Hwy 60 as a four-lane divided roadway between the eastern edge of Windom and the west end of the existing four-lane section of Mountain Lake. This includes construction through Bingham Lake.

Recent Changes and Updates

The project received municipal consent on the layout from the city of Bingham Lake. The consultant that will do the final design was procured. The letting was moved to an earlier date to support MnDOT's optimized letting goals. The cost estimate was lowered because contingencies for poor soils and retaining walls were reduced.

Project History:

The Final Scoping Report was completed in 2013. The development of the formal geometric layout is underway. The work proposed under this project was originally addressed in an Environmental Impact Statement approved in 1983. Initial phases of the work identified in the 1983 EIS were completed. A supplemental final EIS was completed in 2012.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.1	\$ 25.3
Other Construction Elements:	\$ 3.0	\$ 2.3
Engineering:	\$ 4.9	\$ 4.6
Right of Way:	\$ 1.5	\$ 2.1
Total:	\$ 36.5	\$ 34.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop the cost estimates for this project. The estimate is based on bituminous pavement and retaining wall system at Warren Pond. It includes a contingency based on using a concrete pavement option.

Project Risks:

The investigations on soils and foundations were not been completed. Embankment designs at Clear Lake and Warren Pond may have considerable costs and may need to be approved by the regulatory agencies.

Schedule:

Environmental Approval Date: 11/23/2012
 Municipal Consent Approval Date: 05/04/2015
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: 04/22/2015
 Original Letting Date: 02/24/2017
 Current Letting Date: 12/16/2016
 Construction Season: 2017 / 2018
 Estimated Substantial Completion: Fall 2018



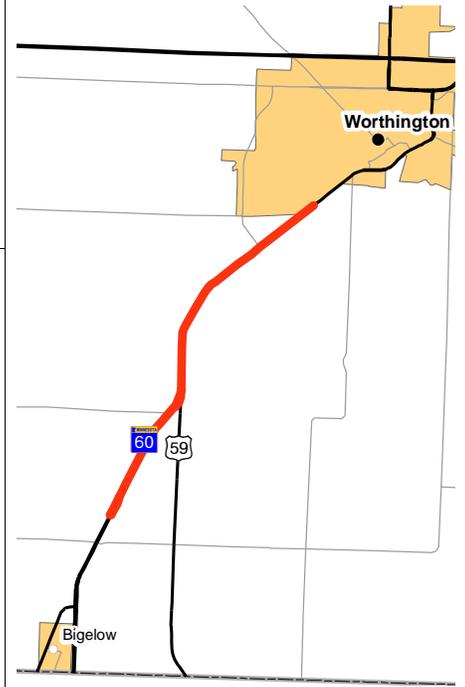
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Peter Harff

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 60
Bigelow to Worthington
Bridge 53008
State Project No. 5305-51, 5305-56, 5305-58, 5305-59
<http://www.dot.state.mn.us/d7/projects/hwy60/index.html>



Substantially Complete

Primary Purpose:

Regional & Community Improvement Priority

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The last roadway project was substantially complete in the fall of 2013, and the landscaping project was substantially complete in the fall of 2014. The actual costs were lower than the baseline estimate because many risks were successfully managed to reduce costs.

Project History:

The existing road was constructed in the 1930s, and the corridor was identified for four-lane expansion in the 1960s. Initial baseline estimates did not include full scoping, soil investigations were not complete, and the alignment had not been set in the Worthington area. MnDOT constrained the construction limits, spent less than anticipated on right of way, and reduced other costs as the project was developed and contingencies were retired. In addition, using alternate bid pavement and breaking the corridor into smaller, low-risk, projects allowed better bids in a very competitive market. The EIS was approved on 3/23/2005 and re-evaluated on 3/31/2010.

Project Description:

This project constructs a 4-lane expressway along the existing alignment from Hwy 4 in Nobles County to I-90. The project also reduces access locations, removes skew at intersections, replaces bridge #53008 over the Union Pacific Railroad and urban section area landscaping.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2009

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 59.1	\$ 45.3
Other Construction Elements:	\$ 17.5	\$ 7.4
Engineering:	\$ 19.3	\$ 6.9
Right of Way:	\$ 22.7	\$ 13.1
Total:	\$ 118.6	\$ 84.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate costs are adjusted to midpoint of construction year assuming 5 percent annual inflation.

Project Risks:

Project risks were addressed.

Schedule:

Environmental Approval Date: 3/31/2010
Municipal Consent Approval Date: 08/17/2009
Geometric Layout Approval Date: 2/5/2009
Construction Limits Established Date: 02/28/2009
Original Letting Date: 03/01/2010
Current Letting Date: 07/09/2010
Construction Season: 2010 / 2013
Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Rolin Sinn

Revised Date: 12/15/2015

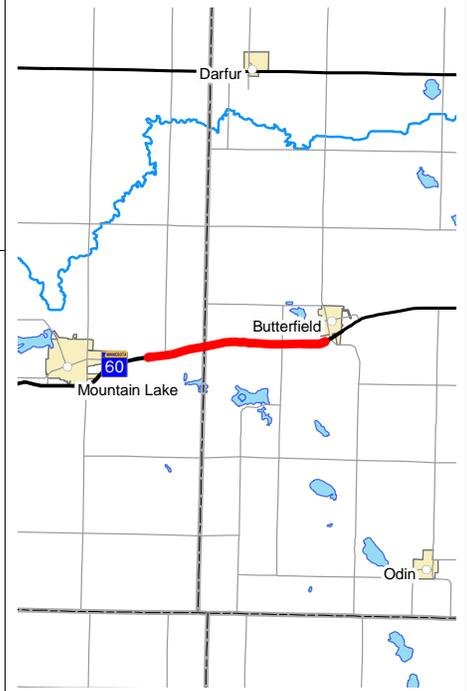
PROJECT SUMMARY

Hwy 60

Mountain Lake to Butterfield

State Project No. 1703-70

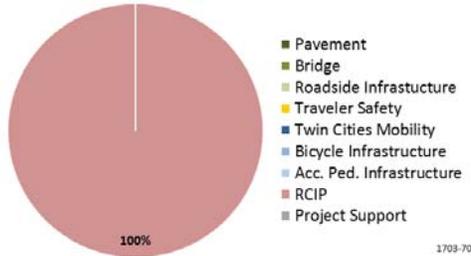
<http://www.dot.state.mn.us/d7/projects/hwy60stjames/index.html>



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

This 4.5 mile project constructs a four-lane expressway along the existing alignment from Mountain Lake to Butterfield by constructing two additional lanes, reducing access locations and reconstructing existing shoulders.

Recent Changes and Updates

The project construction is substantially complete by late fall 2015. The project design was completed in 2014 and the project was bid in the fall of 2014.

Project History:

Right of way acquired the necessary property. The existing roadway, which served as the westbound lanes, required some concrete pavement rehabilitation and joint repair. This repair was done while the roadway was detoured for the construction of the new eastbound lanes. The work proposed under this project was originally addressed in an environmental impact statement approved in 1983. The initial phases of the work identified in the 1983 EIS are completed. A supplemental, final EIS is complete.

As part of balancing project lettings, this project was let earlier than originally anticipated.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.8	\$ 11.2
Other Construction Elements:	\$ 2.1	\$ 2.1
Engineering:	\$ 2.8	\$ 2.8
Right of Way:	\$ 0.6	\$ 0.6
Total:	\$ 19.3	\$ 16.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop the cost estimates for this project. The estimate is based on a bituminous pavement option. The estimate is in 2012 dollars inflated to 2015 dollars. The current letting estimate is based on the low bid received for bituminous pavement.

Project Risks:

Soil testing was completed. Substantial muck excavation may be encountered that would require correction and may elevate project costs. The project is being bid with different alternates for bituminous and concrete pavement surfacing.

Schedule:

Environmental Approval Date: 2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 8/14/2012
 Construction Limits Established Date: 03/15/2013
 Original Letting Date: 12/19/2014
 Current Letting Date: 11/21/2014
 Construction Season: 2015
 Estimated Substantial Completion: Late fall 2015



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
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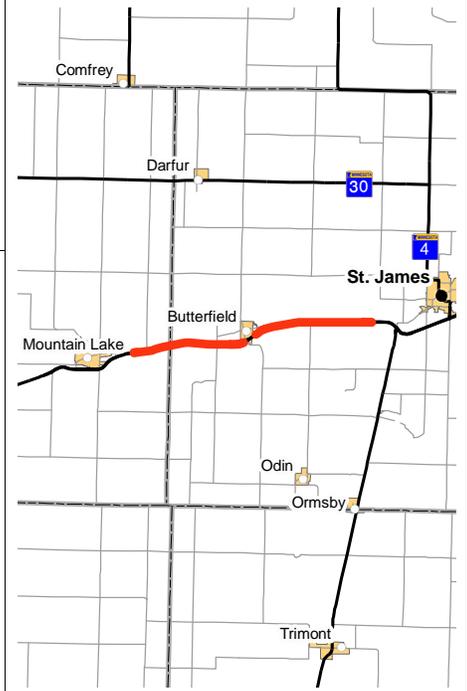
District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 60
 Butterfield to St. James
 Bridge 83040, 83037, &, 93716
 State Project No. 8308-44

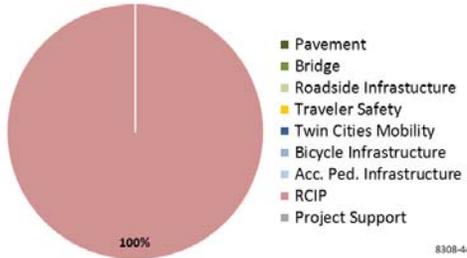
Substantially Complete



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

This project completes Hwy 60 as a four-lane divided roadway between Butterfield and the existing four-lane section end near St. James, which is about 5.9 miles.

Recent Changes and Updates

The project was let for 2013-2014 construction and is now substantially complete.

Project History:

The project was let for 2013-2014 construction. Grading operations are substantially complete. Bridge #83040 is also nearing completion. The project letting costs were lower than the baseline estimate because contingency items were not retired until near plans-completion date (e.g. deciding not to include wick drains in the embankment). Also, good bid prices were obtained at the time of letting.

The work proposed under this project was originally addressed in an environmental impact statement approved in 1983. The initial phases of the work identified in the 1983 EIS were completed. A supplemental final EIS was completed in 2013.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2009

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 20.1	\$ 14.2
Other Construction Elements:	\$ 3.0	\$ 2.9
Engineering:	\$ 4.0	\$ 3.8
Right of Way:	\$ 1.5	\$ 1.4
Total:	\$ 28.6	\$ 22.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop the Baseline Estimate for this project. The Current Estimate is based on the actual construction letting costs combined with the original estimated cost for the other three categories.

Project Risks:

There are no remaining risks since project construction is now substantially complete.

Schedule:

Environmental Approval Date: 07/26/2012
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 01/12/2010
 Construction Limits Established Date: 09/02/2011
 Original Letting Date: 05/17/2013
 Current Letting Date: 05/17/2013
 Construction Season: 2013 to 2014
 Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Steve Bowers

Revised Date: 12/15/2015

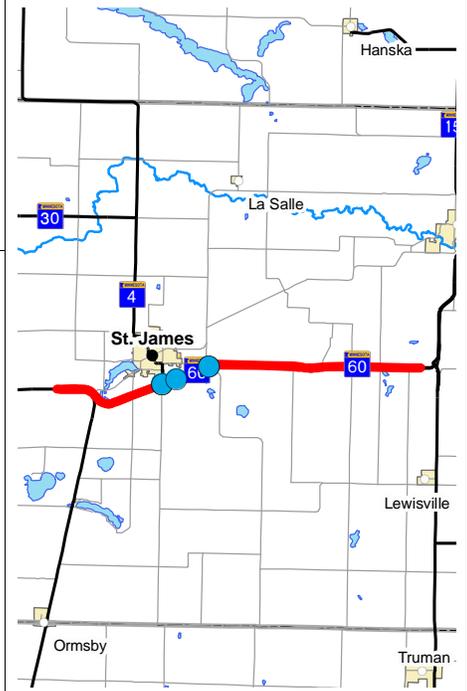
PROJECT SUMMARY

Hwy 60

Between St. James and Hwy 4 to Hwy 14

Bridge 83026, 91543, 83027

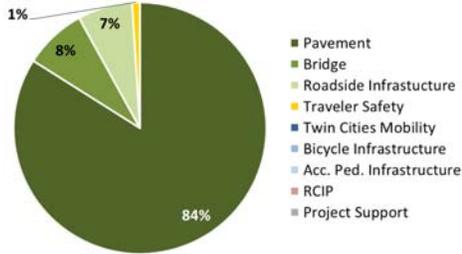
State Project No. 8309-52



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project will preserve about 13 miles of both the eastbound and westbound lanes of Hwy 60 from St. James and Hwy 4 to Hwy 14. The project includes the following: repairs to the existing concrete pavement, a bituminous mill and overlay for the existing bituminous areas, preservation work on the interchange at St. James, deck repairs and a mill and overlay to bridge #83026, repairs and updates to bridge #91543 and a deck milling and patchwork for bridge #83027.

Recent Changes and Updates

The scope of the project includes preservation work on the interchange ramps and bridge rehabilitation work in St. James.

Project History:

The purpose and need of the project is to resurface the pavement to provide an improved ride quality index (RQI) rating, a smooth riding surface, and to preserve pavement life because the pavement is in poor condition and will be at the end of its service life by 2019.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.4	\$ 13.9
Other Construction Elements:	\$ 1.2	\$ 1.2
Engineering:	\$ 2.4	\$ 2.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 16.0	\$ 17.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The cost estimate was created using an itemized cost for each section of repair with average bid prices for projects in the area. The estimate was inflated to a construction year of 2019. Project construction cost is \$1.5M higher than current STIP amount due to the inclusion of interchange ramp and bridge rehabilitation work in St. James.

Project Risks:

There is a potential for Alkali-Silica Reactivity (ASR) in the existing concrete, which leads to abnormal expansion and cracking of the pavement. This could cause the project to be a bad candidate for pavement preservation work and would then need to be 'rescoped' for a different solution.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 10/26/2018
 Current Letting Date: 10/26/2018
 Construction Season: 2019
 Estimated Substantial Completion: November 2019



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 62
 Hwy 59 to west limits of Windom
 Bridge 17X02, &, 17X03
 State Project No. 1704-27

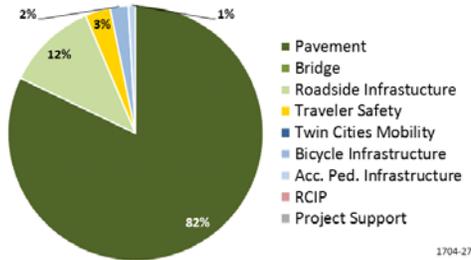
Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project resurfaced the pavement with a bituminous overlay and paved two feet of the shoulders, for approximately 23 miles of Hwy 62 from Hwy 59 in Fulda to the western limits of Windom. Several culverts were also repaired.

Recent Changes and Updates

The project is now substantially complete.

Project History:

The cost change was due to the year of construction change and associated inflation factors. The Current Estimate is based on the actual letting costs. The project is currently under construction and will be substantially complete in the fall of 2014.

This is a pavement preservation project that was moved from FY 2015 to FY 2014 and funded with Better Roads.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.1	\$ 10.3
Other Construction Elements:	\$ 1.6	\$ 1.7
Engineering:	\$ 2.8	\$ 2.9
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 18.6	\$ 15.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The original project was an alternate bid. The estimate was based on bituminous pavement with a contingency for concrete pavement. The project was let and constructed. The current estimate is based on the actual letting cost.

Project Risks:

Any previous project risks were eliminated.

Schedule:

Environmental Approval Date: 01/17/2014
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: 05/30/2012
 Original Letting Date: 03/22/2013
 Current Letting Date: 03/28/2014
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
 District 7
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 (507) 304-6100

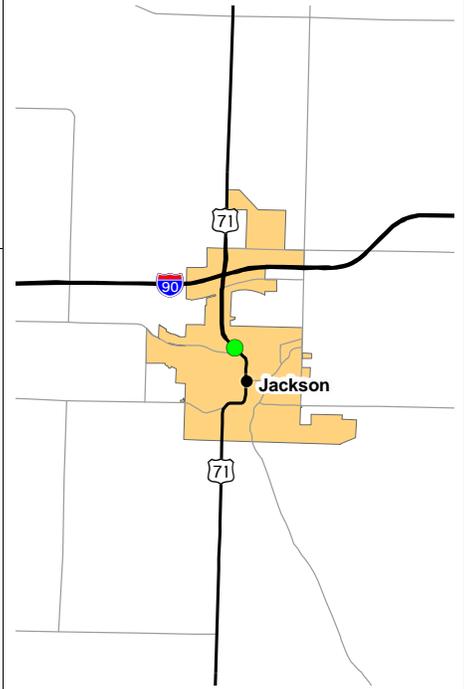
District Engineer: Greg Ous
Project Manager: Kent Purrier

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 71

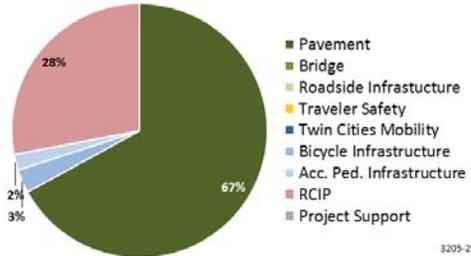
From Springfield Parkway to Industrial Boulevard
 Bridge 6741, old, 32011, new
 State Project No. 3205-29
<http://www.dot.state.mn.us/roadwork/future>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

This project will replace a bridge over the Des Moines River in Jackson. It will also resurface the roadway on a hill with modified lane configuration, and add a trail with a pedestrian crossing indicator.

Recent Changes and Updates

After updating the 2004 layout that narrowed the width of the bridge, the planning cost estimate decreased, and a new baseline cost estimate was established. Some safety improvements that will be included are turn lanes, truck lanes, etc., and are in partnership with the city and county.

Project History:

The project replaces an aging bridge. Plans were substantially complete in 2004, but the project was delayed due to reprioritizing needs vs. funding.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 7.1	\$ 7.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate is based on bituminous pavement. The current estimate is in 2011 dollars inflated to 2015 dollars.

Project Risks:

The project is adjacent to a delisted Superfund site and an environmental assessment is needed.

Schedule:

Environmental Approval Date: 02/2015
 Municipal Consent Approval Date: Not Required
 Geometric Layout Approval Date: 05/2014
 Construction Limits Established Date: 03/01/2013
 Original Letting Date: 11/15/2004
 Current Letting Date: 05/15/2015
 Construction Season: 2015-2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Chris Bower

Revised Date: 12/15/2015

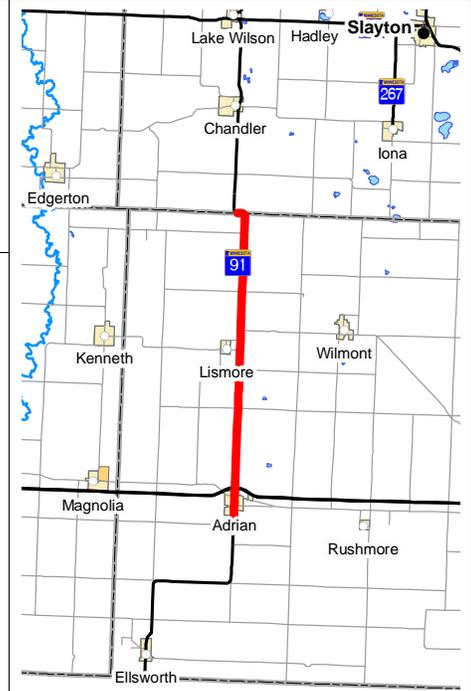
PROJECT SUMMARY

Hwy 91

From the southern Adrian city limits to the Nobles/Murray County Line

Bridge 1503, &, 8793

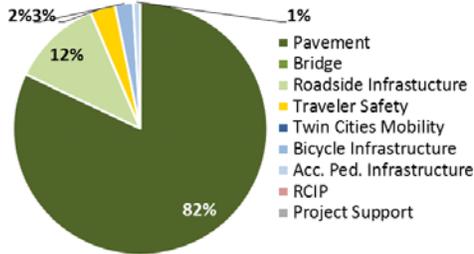
State Project No. 5308-29



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a bituminous mill and overlay of Hwy 91 in and north of Adrian. This is a concrete pavement rehabilitation in downtown Adrian.

Recent Changes and Updates

The project was moved to FY 2019 to free up funding for other projects in FY 18. The replacement of bridges #1503 and #8793 were added to the scope. The scope was also revised to include sidewalks that are not ADA compliant. The cost estimate changed to account for an additional year of inflation, added bridges and additional ADA work.

Project History:

The Scoping Report was completed. The project was identified for inclusion in the 2018 program and scoped.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.9	\$ 7.5
Other Construction Elements:	\$ 4.7	\$ 0.2
Engineering:	\$ 1.3	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 8.7	\$ 9.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline assumes a medium mill and overlay, extensive ADA work, and the replacement of two box culverts. There is no work at other box culverts.

Project Risks:

This project is a candidate for changing to a concrete overlay. There are possible poor soils which could be encountered at the culvert replacement locations. There is the potential for adding additional work during the ADA fixes.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 12/15/2017
 Current Letting Date: 11/16/2018
 Construction Season: 2019
 Estimated Substantial Completion: Fall 2019



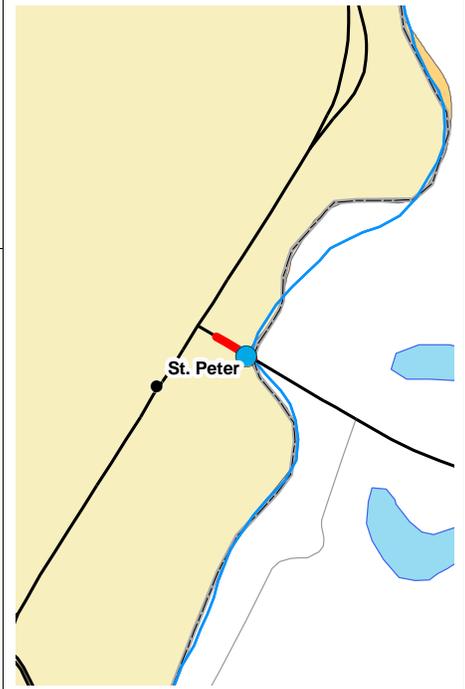
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Peter Harff

Revised Date: 12/15/2015

PROJECT SUMMARY

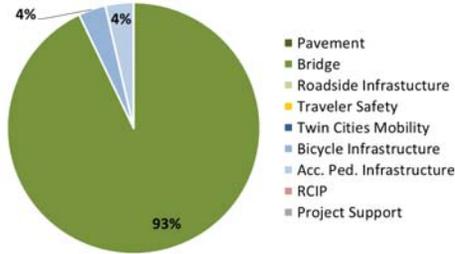
Hwy 99
Over the Minnesota River in St Peter
Bridge 4930
State Project No. 4008-25



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

The project will rehabilitate bridge #4930 on Hwy 99 over the Minnesota River in St. Peter. The rehabilitation includes the following items: strengthening the truss floorbeams, adding a new concrete deck and sidewalk, rehabilitating the abutment and pier, completely repainting the bridge, and adding new lighting.

Hwy 99 will be detoured to Hwy 22 and CR 21 for the duration of the project.

Recent Changes and Updates

No substantial changes occurred in the last year. This project was let in 2014 but the low bidder was deemed non-responsible with regards to DBE goals. The project will be re-let to not conflict with other Saint Peter area work.

Project History:

The existing bridge was built in 1931 and has a National Bridge Inventory (NBI) structure evaluation rated at 5.

The purpose and need for the project is to rehabilitate the in-place bridge while preserving its historical integrity and providing a safe crossing of the Minnesota River.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.9	\$ 4.9
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.5	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.7	\$ 5.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The project was previously bid and rejected. The low bid from that letting is used as the base cost estimate and inflated to 2017 dollars, which is when this will be constructed.

Project Risks:

Major risks include substantial changes in the water elevation of the Minnesota River during construction, which will affect the staging and overall construction duration. Due to the nature of the work (rehabing an older steel bridge) extra care will need to be given to the parts of the bridge that are kept intact and remaining as part of the bridge after construction.

Schedule:

Environmental Approval Date: 11/25/2013
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 01/01/2014
Current Letting Date: 08/26/2016
Construction Season: 2017
Estimated Substantial Completion: October 2017



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

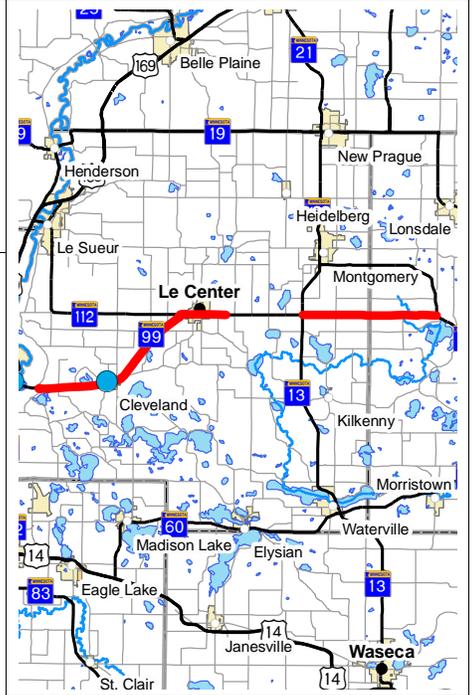
Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 99

From Minnesota River Bridge to Hwy 38 in Le Center/from Hwy 13 to Hwy 21
Bridge 8893

State Project No. 4008-28/4010-10



Primary Purpose:

Performance Based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

New FY 2019 Project.

Project History:

The project SP 4010-10 was moved from FY 2018 to FY 2019 so that it could be combined with this project to achieve delivery cost savings.

Project Description:

The project consists of a mill and bituminous overlay for the mostly rural sections of Hwy 99 with urban sections in Le Center and Cleveland. The project also adds some rural right turn lanes at county roads and a center left turn lane in Cleveland. Bridge #8893, which is a box culvert in Cleveland, will be replaced.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP:

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 12.0	\$ 12.0
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 2.2	\$ 2.2
Right of Way:	\$ 0.2	\$ 0.2
Total:	\$ 15.4	\$ 15.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Average bid prices were used from projects in this area and inflated to the midpoint of construction for the estimates.

Project Risks:

Extending the box culvert to eliminate the need for a guardrail is a challenge due to the fact that the adjacent property is a city park. It is possible that the right of way for the extension may not be available to acquire because of the city park and so guardrail would be used.

Schedule:

Environmental Approval Date: Need Unknown
 Municipal Consent Approval Date: Early 2017
 Geometric Layout Approval Date: Fall 2016
 Construction Limits Established Date: Fall 2016
 Original Letting Date: 12/14/2018
 Current Letting Date: 12/14/2018
 Construction Season: 2019
 Estimated Substantial Completion: End of 2019



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Matt Rottermond

Revised Date: 12/15/2015

PROJECT SUMMARY

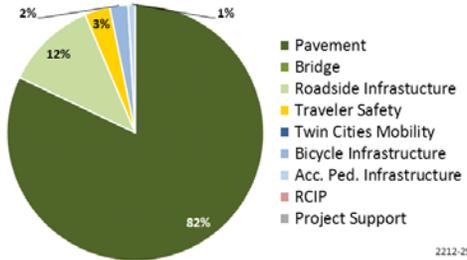
Hwy 109
 Winnebago to Wells
 Bridge 22X05, & 22X06
 State Project No. 2212-28, 2212-29



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a bituminous reclamation on about 12 miles of Hwy 109 from Winnebago to Wells.

Recent Changes and Updates

These are two separate projects. SP 2212-28 and SP 2212-29 are substantially complete.

Project History:

These are pavement preservation projects.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.3	\$ 13.6
Other Construction Elements:	\$ 2.5	\$ 1.7
Engineering:	\$ 2.9	\$ 3.3
Right of Way:	\$ 0.2	\$ 0.1
Total:	\$ 19.7	\$ 18.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The construction letting cost estimate for the 2014 project, SP 2212-28, is \$9 million. The projects were both let. The current estimate is based on the actual letting cost of both the projects.

Project Risks:

Project is substantially complete so there are no further risks.

Schedule:

Environmental Approval Date: 2011
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Not Needed
 Original Letting Date: 01/01/2013
 Current Letting Date: 05/18/2012
 Construction Season: 2012; 2014
 Estimated Substantial Completion: 07/06/2015



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Brett Benzkofer

Revised Date: 12/15/2015

PROJECT SUMMARY

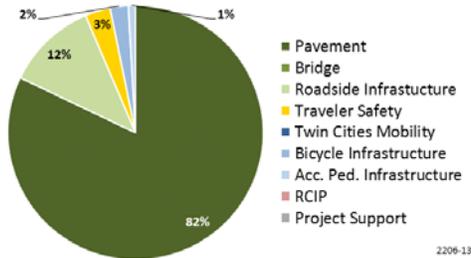
Hwy 109
Hwy 22 in Wells to I-90 in Alden
State Project No. 2206-13



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay on Hwy 109 from the Hwy 22 intersection in Wells to the I-90 intersection in Alden. Sidewalk and pedestrian ramps will be updated in Alden to meet current ADA standards.

Sidewalk will be installed from the Dairy Queen to the Dollar General store on the south side of Hwy 109 in Wells.

Two box culverts will be replaced along the Hwy 109 corridor as well as several pipes. There will be a detour to accommodate these activities.

Recent Changes and Updates

The construction limits are complete. New sidewalk will be constructed in the city of Wells and most of the sidewalk in Alden will be replaced.

Project History:

The project was scoped and pedestrian ramps and sidewalk will be replaced to meet ADA requirements in Alden. There is a railroad crossing in Alden, and a railroad agreement will be needed.

This project will resurface the pavement to achieve a smooth riding surface.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.9	\$ 6.3
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.2
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 7.4	\$ 8.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The key cost estimate assumption is the pavement fix, which is anticipated to be a medium resurfacing and overlay. Transverse joint repairs are included and estimated at 15 joints per mile. This is estimated in 2012 dollars inflated to 2017 dollars.

Project Risks:

There are 47 pipes identified with a poor condition rating. These pipes should be inspected for possible lining or replacement. The two bridge box culverts and one maintenance box culvert should be further evaluated for extension or replacement.

Schedule:

Environmental Approval Date: Pending
Municipal Consent Approval Date: 12/7/2015
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Pending
Original Letting Date: 01/01/2017
Current Letting Date: 02/24/2017
Construction Season: 2017
Estimated Substantial Completion: Oct. 2017



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/15/2015

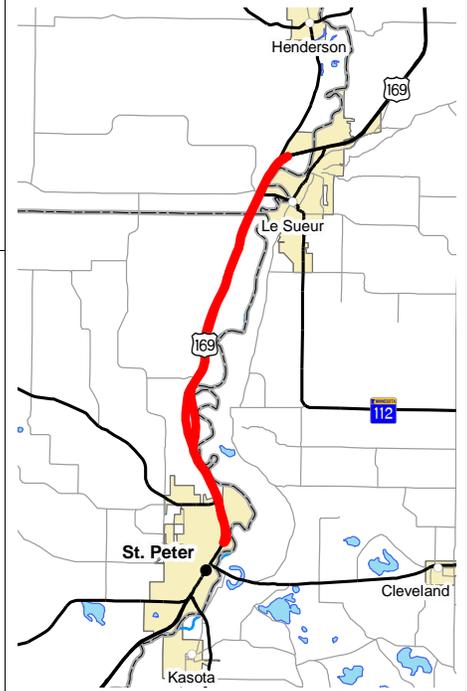
PROJECT SUMMARY

Hwy 169

From Hwy 22 in St Peter to Hwy 93 at Le Sueur

Bridge 52002, 52004, 8961, 8649

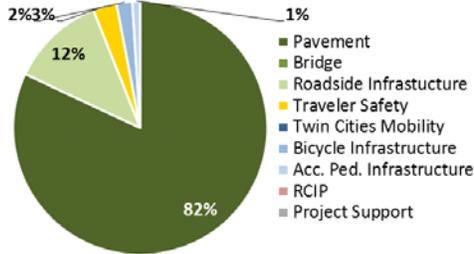
State Project No. 5209-74



Primary Purpose:

Performance-based Need: Pavement Condition, Bridge Condition

Investment Category:



Project Description:

This project provides for an unbonded concrete overlay on the northbound lanes of Hwy 169 for about 10 miles from Hwy 22 to the north junction of Hwy 93 in Le Sueur.

Recent Changes and Updates

The project scope changed from a bituminous mill and overlay to an unbonded concrete overlay in order to provide a longer service life.

Along with the pavement change, this project may include some additional bridge and/or culvert work. The magnitude of this work is yet to be determined. The bridges that are being evaluated for repair/replacement include: #52002, #52004, #8961 and #8649.

This work may require a second year of construction (2019).

Project History:

The purpose of this project is provide a smooth riding surface on the northbound lanes of Hwy 169, which is a High Priority Interregional Corridor.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.3	\$ 6.4
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.8	\$ 7.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

COST ESTIMATE UPDATE PENDING. The cost estimate shown is for a bituminous mill and overlay. The new cost estimate is between \$17M and \$25M, depending on the amount and type of bridge/culvert repairs included in the final project scope.

Project Risks:

The scope of the bridge work is unknown at this time. The schedule for determining the construction limits (for R/W acquisition) is very tight. The project is not completely funded yet. If additional funding is not identified, D7 will defer a different project in order to pay for this one.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 11/17/2017
 Current Letting Date: 11/17/2017
 Construction Season: 2018-2019
 Estimated Substantial Completion: 2019



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Chris Bower

Revised Date: 12/15/2015

PROJECT SUMMARY

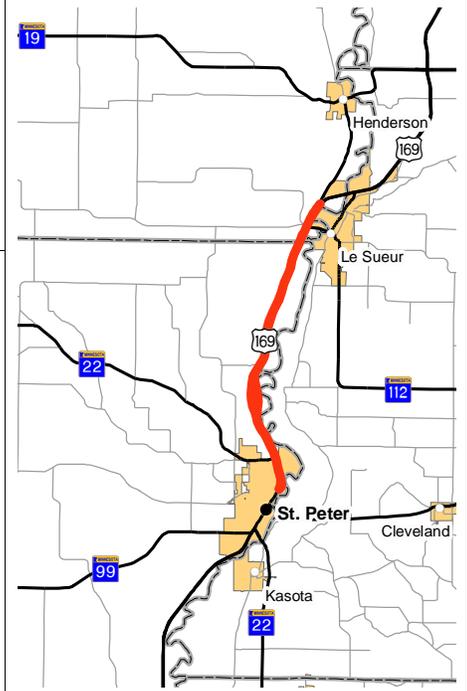
Hwy 169

St. Peter to Le Sueur, south of the Minnesota River Bridge

State Project No. 5209-66

<http://www.dot.state.mn.us/d7/projects/floodmitigation/>

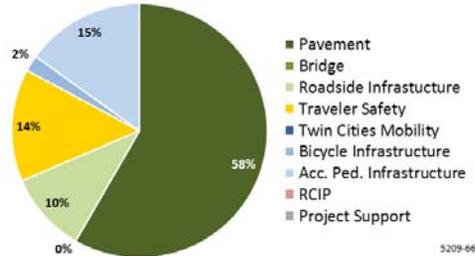
Substantially Complete



Primary Purpose:

Performance-based Need: Flood Mitigation

Investment Category:



Project Description:

This project raised the grade of the southbound lanes in two areas and preserved the southbound lanes in non-grade raise areas between St. Peter and Le Sueur.

Recent Changes and Updates

This project was constructed in 2014 with the clean up work occurring in the spring of 2015.

Project History:

The project scope was updated to include the additional work to regrade sections of the road to be reconstructed for high water events. This project is an alternate bid project.

When the highway was originally constructed in the early 1960s, the Minnesota River high water elevation was assumed at 751.0 feet, and the roadway was constructed accordingly. The actual 100 year flood elevation in this area ranges from about 756.0 feet to 756.6 feet.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.3	\$ 10.7
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 2.3	\$ 2.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 14.5	\$ 13.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

A bituminous alternative was used for the cost estimate. Shredded tire and light-weight fill will be used in the muck areas. The current estimate is the actual let amount.

Project Risks:

The project was constructed in 2014 and project risks were retired.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 04/25/2014
 Current Letting Date: 04/11/2014
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 169

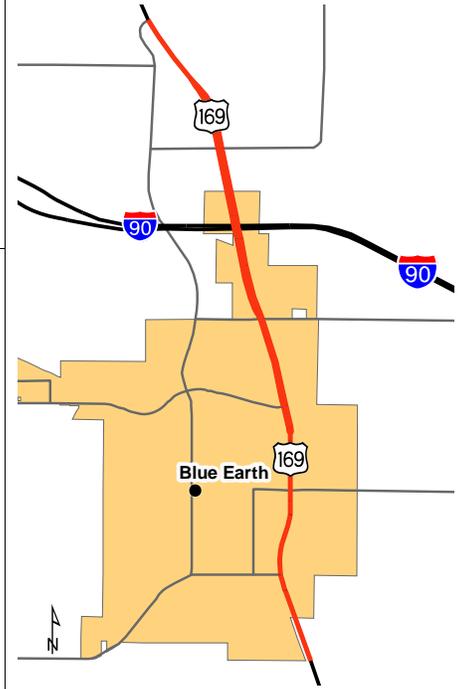
Blue Earth from the south limits at 14th Street to County Road 6

Bridge 22001

State Project No. 2207-32, 2208-42

mndot.gov/d7/projects/169blueearth/

Substantially Complete



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Open to traffic in fall 2013.

Project History:

This project improves deteriorated pavement and sub-surface utilities. Access and safety improvements are also necessary at intersections.

Project Description:

This project is a reconstruction from north of railroad bridge to CR 44, and includes new pavement, curb and gutter, sidewalks, three roundabouts, storm sewer, sanitary sewer and water main. From Co Rd 44 to CR 6, the project is a mill and bituminous overlay.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2007

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.2	\$ 10.8
Other Construction Elements:	\$ 0.9	\$ 0.6
Engineering:	\$ 1.4	\$ 2.1
Right of Way:	\$ 0.5	\$ 0.0
Total:	\$ 12.0	\$ 13.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate is in 2010 dollars inflated to 2013 dollars. The current estimate is the actual costs based on receipts.

Project Risks:

The risks were retired because the project is substantially complete.

Schedule:

Environmental Approval Date: 09/01/2008
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: 4/2012
 Construction Limits Established Date: 04/01/2011
 Original Letting Date: 12/14/2007
 Current Letting Date: 04/26/2013
 Construction Season: 2013
 Estimated Substantial Completion: Summer 2014



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Brett Benzkofer

Revised Date: 12/15/2015

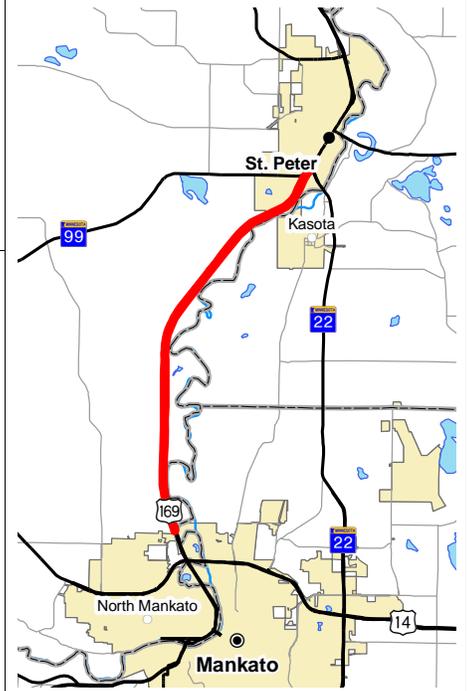
PROJECT SUMMARY

Hwy 169

Hwy 14 in Mankato to St. Peter

State Project No. 5211-59, & 5211-59ED

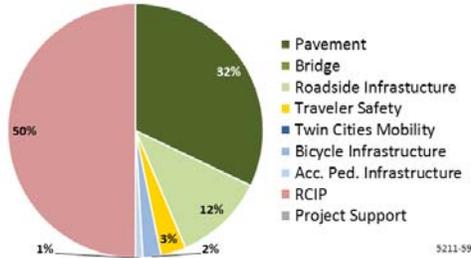
<http://www.dot.state.mn.us/d7/projects/floodmitigation/>



Primary Purpose:

Regional & Community Improvement Priority

Investment Category:



Project Description:

This project reconstructs and raises 3.2 miles of Hwy 169 over a 9.1 mile stretch from Mankato to St. Peter. It includes installing a median barrier down the center of Hwy 169 to mitigate cross median crashes.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.6	\$ 14.6
Other Construction Elements:	\$ 1.2	\$ 1.2
Engineering:	\$ 2.7	\$ 2.7
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 18.6	\$ 18.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Recent Changes and Updates

The final design is complete.

Project History:

The preliminary design is complete. The final design work is complete. This project received a \$9.8 million federal grant from the Economic Development Administration, U.S. Department of Commerce.

Key Cost Estimate Assumptions:

The estimate is based on concrete pavement and high tension median guardrail. A detour will be required. This is estimated using 2012 dollars inflated to 2016 dollars.

Project Risks:

Wetlands are present along the route requiring a Standard Individual Permit. Traffic handling during construction could result in congestion. Concrete and aggregate costs could swing the total cost of the project by 10%. There is potential for delays due to the river flooding.

Schedule:

Environmental Approval Date: 03/11/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: 06/01/2014
 Original Letting Date: 11/20/2015
 Current Letting Date: 11/20/2015
 Construction Season: 2016
 Estimated Substantial Completion: Fall 2016



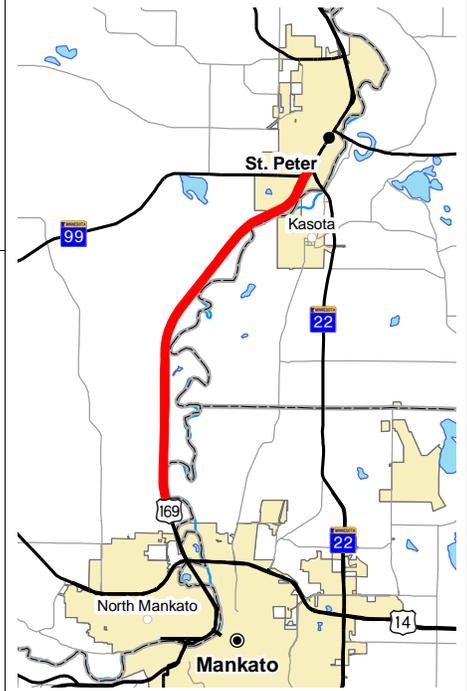
Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Peter Harff

Revised Date: 12/15/2015

PROJECT SUMMARY

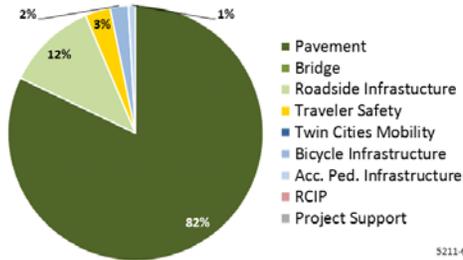
Hwy 169
Hwy 14 in Mankato to St. Peter
State Project No. 5211-61



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The project preserves almost 6 miles of pavement along Hwy 169 from Mankato to St. Peter. It also installs a median barrier down the center of Hwy 169 to mitigate cross median crashes to improve safety.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.2	\$ 11.3
Other Construction Elements:	\$ 0.6	\$ 0.7
Engineering:	\$ 1.8	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.6	\$ 14.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Recent Changes and Updates

The cost estimate increased due to the decision to use concrete median barrier for safety and using full depth concrete for the median pavement to speed up construction.

Project History:

This project is the counterpart to SP 5211-59, which is the reconstruction project from Mankato to St. Peter. This project does not have EDA funding.

Key Cost Estimate Assumptions:

The estimate is based on concrete pavement with high tension median guardrail. It is estimated in 2012 dollars inflated to 2016 dollars.

Project Risks:

There is a potential for delays due to flooding. There is a design risk in making the overlay match in at the median.

Schedule:

Environmental Approval Date: Not needed
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: 06/01/2014
Original Letting Date: 10/20/2015
Current Letting Date: 12/18/2015
Construction Season: 2016
Estimated Substantial Completion: Fall 2016



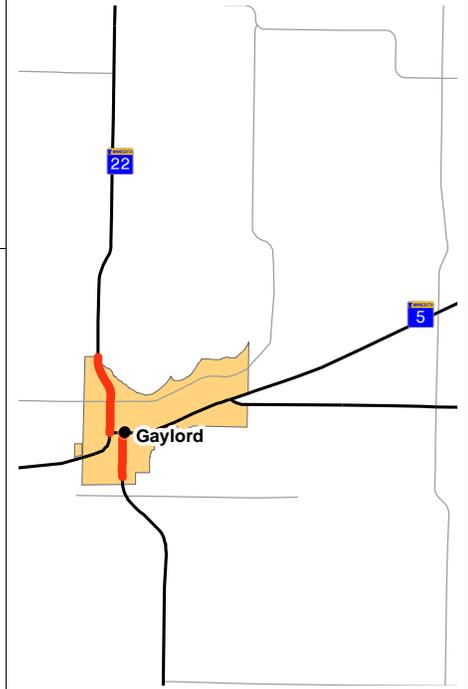
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Peter Harff

Revised Date: 12/15/2015

PROJECT SUMMARY

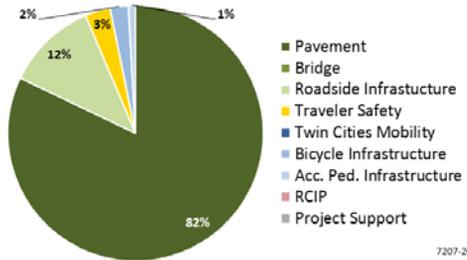
Hwy 22, Hwy 5, Hwy 19
Gaylord
State Project No. 7207-20



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project reconstructs approximately 1.5 miles of Hwys 5, 19 and 22 and will overlay another 0.3 miles of Hwy 22. All the work is in Gaylord. The project will also replace failing city utilities.

Recent Changes and Updates

Construction was completed in the fall of 2015.

Project History:

The project was completed in the fall of 2015.

This project was first identified as a resurfacing project, but was ultimately revised to be primarily a full reconstruction to accommodate the replacement of failing city utilities. The portion of Hwy 22 south of the railroad tracks remains a mill and overlay section. The project letting slipped by one month due to a large volume of project lettings at the central office.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.1	\$ 6.9
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 7.1	\$ 8.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates for this project. All costs are in 2014 dollars. The original estimate was based on bituminous pavement with a contingency added for possible concrete pavement in the downtown business area. The Current Estimate reflects the actual letting results, which includes concrete pavement in the downtown business area, combined with the original estimated costs for the other three categories. Local cost share adds an additional \$3.3 million to the construction letting costs estimate.

Project Risks:

The project is complete so risks are retired.

Schedule:

Environmental Approval Date: 01/07/2014
Municipal Consent Approval Date: 11/06/2013
Geometric Layout Approval Date: 01/23/2013
Construction Limits Established Date: 09/20/2012
Original Letting Date: 12/20/2013
Current Letting Date: 05/16/2014
Construction Season: 2014 / 2015
Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

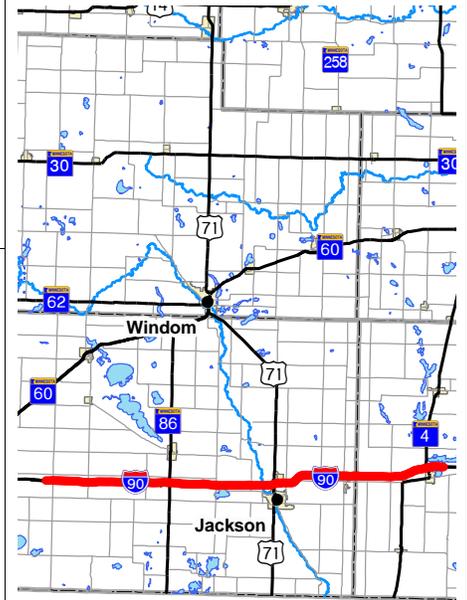
District Engineer: Greg Ous
Project Manager: Steve Bowers

Revised Date: 12/15/2015

PROJECT SUMMARY

I-90

Eastbound from Hwy 86 to Hwy 4 & westbound from Hwy 5 to Hwy 4
State Project No. 3280-126



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

40 miles of bituminous were paved this year. The remaining miles are to be paved in concrete next year.

Very near the letting the FHWA elected to make this project a PODI (Project of Division Interest). The additional review requirements caused a shift in letting from January to February 2015.

Project History:

This project now includes work on what used to be SP's 3280-120, 3280-121, and 3208-122. The pavement surface is rough and the ride quality index does not meet the statewide targets set for interstate highways. This project will resurface the pavement in order to provide a smooth ride and meet performance targets for ride quality, as well as providing a longer service life.

Project Description:

This project is a pavement resurfacing project on I-90. The resurfacing includes the eastbound lanes between Hwy 86 and Hwy 4 and the westbound lanes between Hwy 5 and Hwy 4. The pavement surface will have both concrete and bituminous sections. This is an attempt to maximize the service life of the repair.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 36.3	\$ 36.3
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 2.0	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 39.1	\$ 39.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

This is a variable scope, fixed cost project. Design/Build.

Project Risks:

Trying to define a variable scope project in an RFP is challenging. There may be a need to shift money from Construction Letting to Other Construction Elements in order to keep the Total Project Cost Estimate (TPCE) under \$39.1 M.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 01/21/2015
Current Letting Date: 02/24/2015
Construction Season: May 2015/Nov 2015
Estimated Substantial Completion: 7/31/2016



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matt Rottermond

Revised Date: 12/15/2015

PROJECT SUMMARY

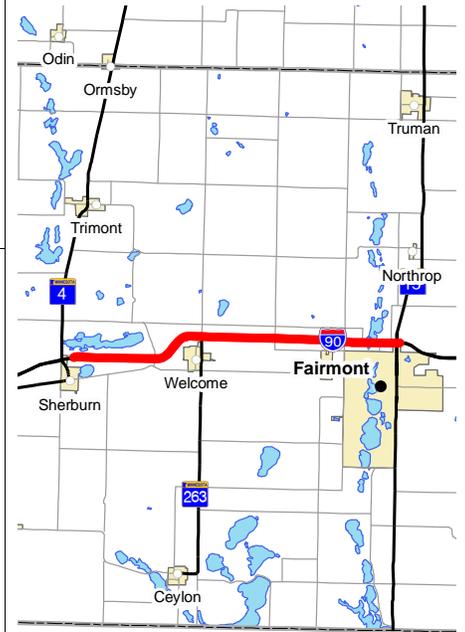
I-90

From Sherburn to Fairmont westbound

Bridge Multiple

State Project No. 4680-126

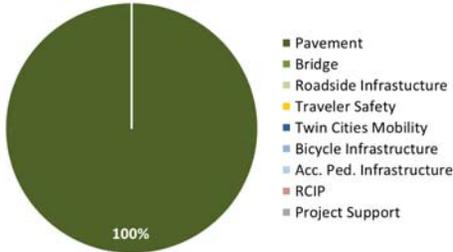
<http://www.dot.state.mn.us/d7/projects/I90preserve/>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and bituminous overlay of the westbound lanes between Hwy 4 in Sherburn and just east of Hwy 15 in Fairmont. There will also be some drainage, lighting, and guardrail repairs. Plus the bridge end posts will be upgraded.

Recent Changes and Updates

The end post upgrades were added to the project in order to meet current guardrail safety standards.

Project History:

This project was added to the FY 2017 program. This acceleration was made possible due to an additional \$25M investment in I-90 made in 2014/2015, which was funded by savings from other projects.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.7	\$ 9.7
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.5	\$ 1.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.7	\$ 11.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The current cost estimate was based on a unit-cost basis, with the inclusion of 10% "other" work, yet to be identified. The contingency was zeroed as of 8/24/15. The pipe repair cost estimate is based on scoping-level data. The initial cost estimate was based on similar projects and didn't include some of the details captured in the current unit-cost based estimate.

Project Risks:

The schedule for the bridge end post design is a risk because the bridge office has a huge workload for the November 2016 letting, so to balance their work out they will try and get the end posts for this project designed early.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not required
 Geometric Layout Approval Date: Not required
 Construction Limits Established Date: Not Required
 Original Letting Date: 12/16/2016
 Current Letting Date: 12/16/2016
 Construction Season: 2017
 Estimated Substantial Completion: 12/01/2017



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

District Engineer: Greg Ous
Project Manager: Chris Bower

Revised Date: 12/15/2015

PROJECT SUMMARY

I-90

Westbound from Rushmore to Worthington & eastbound from Worthington to Hwy 264

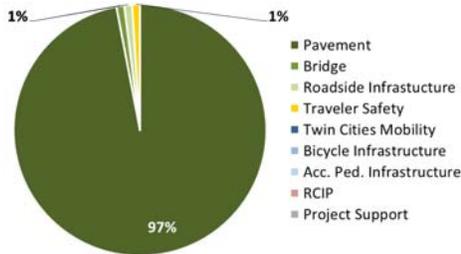
Bridge 53815, &, 53816
State Project No. 5380-133



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project includes resurfacing the eastbound and westbound lanes of I-90 from Hwy 60 in Worthington to Rushmore. The type and thickness for the resurfacing have yet to be determined. The project will also include lighting replacement, drainage repairs and possibly some bridge repairs as well.

Recent Changes and Updates

The upgrade to replace end posts for bridges #53815 and #53816 was added in order to meet current guardrail safety standards.

To balance the construction workload, it was decided to build the project in late 2016 making it an FY 17 Early Let-Late Award, or ELLA, project.

Project History:

This project for resurfacing west of Hwy 60 was scoped in 2012 for a potential 2016 letting. The project was deferred indefinitely due to a lack of funding.

The resurfacing project for east of Hwy 60 was scoped in 2014 for a potential 2018 letting. The resurfacing project for west of Hwy 60 was moved back into the program in FY 2017 because additional funds were made available from savings on other projects. Both projects were combined to realize some project delivery and scale efficiencies.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.6	\$ 9.7
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.2	\$ 12.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Assuming the following pavement fixes, which are subject to change: the westbound lanes will have a bituminous overlay and ultrathin bonded wearing course, while the eastbound lanes will have a 2" mill and bituminous overlay.

Project Risks:

MnDOT's alternate bid policy is under revision. It is unknown at this time if this project will be an alternate bid candidate, if the decision is made to use alternate bidding, cost and schedule will be impacted.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: Not Needed
Construction Limits Established Date: Not Needed
Original Letting Date: 10/28/2015
Current Letting Date: 03/25/2016
Construction Season: 2016
Estimated Substantial Completion: 12/01/2016



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

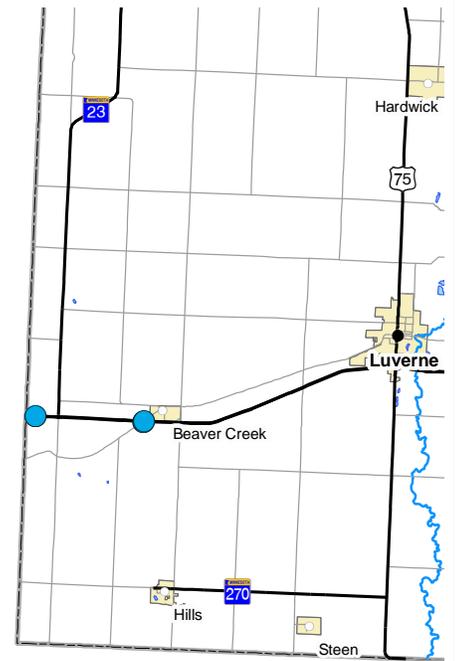
District Engineer: Greg Ous
Project Manager: Chris Bower

Revised Date: 12/15/2015

PROJECT SUMMARY

I-90

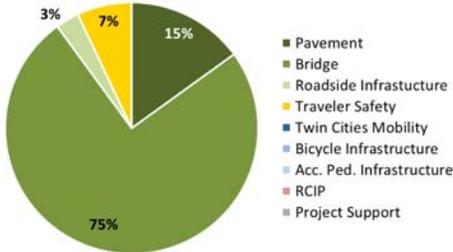
From the South Dakota border to 2.9 mi East of Hwy 23
 Bridge 9685, 9686, 9689, &, 9690
 State Project No. 6780-105
<http://www.dot.state.mn.us/d7/projects/I90preserve/>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

This project involves rehabilitating four bridges on I-90 near Beaver Creek. The project will also construct permanent median crossovers for traffic control and safety. A stormwater pond will be constructed to meet permit requirements.

Recent Changes and Updates

No changes now. The project design is on hold pending the bridge rehabilitation recommendations.

Project History:

The bridges were built in the early 1960s and the purpose of the project is to rehabilitate the bridges.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 4.6
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 5.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The scope of the bridge work is unknown at this time. The cost estimate will be revised once the bridge rehabilitation recommendations are completed.

Project Risks:

The scope of the bridge work is unknown at this time. The project risks will be revised once the bridge rehabilitation recommendations are completed.

Schedule:

Environmental Approval Date: Pending Approval
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Not Needed
 Construction Limits Established Date: Pending Approval
 Original Letting Date: 03/24/2017
 Current Letting Date: 03/24/2017
 Construction Season: Summer 2017
 Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation
 District 7
 2151 Bassett Drive
 (507) 304-6100

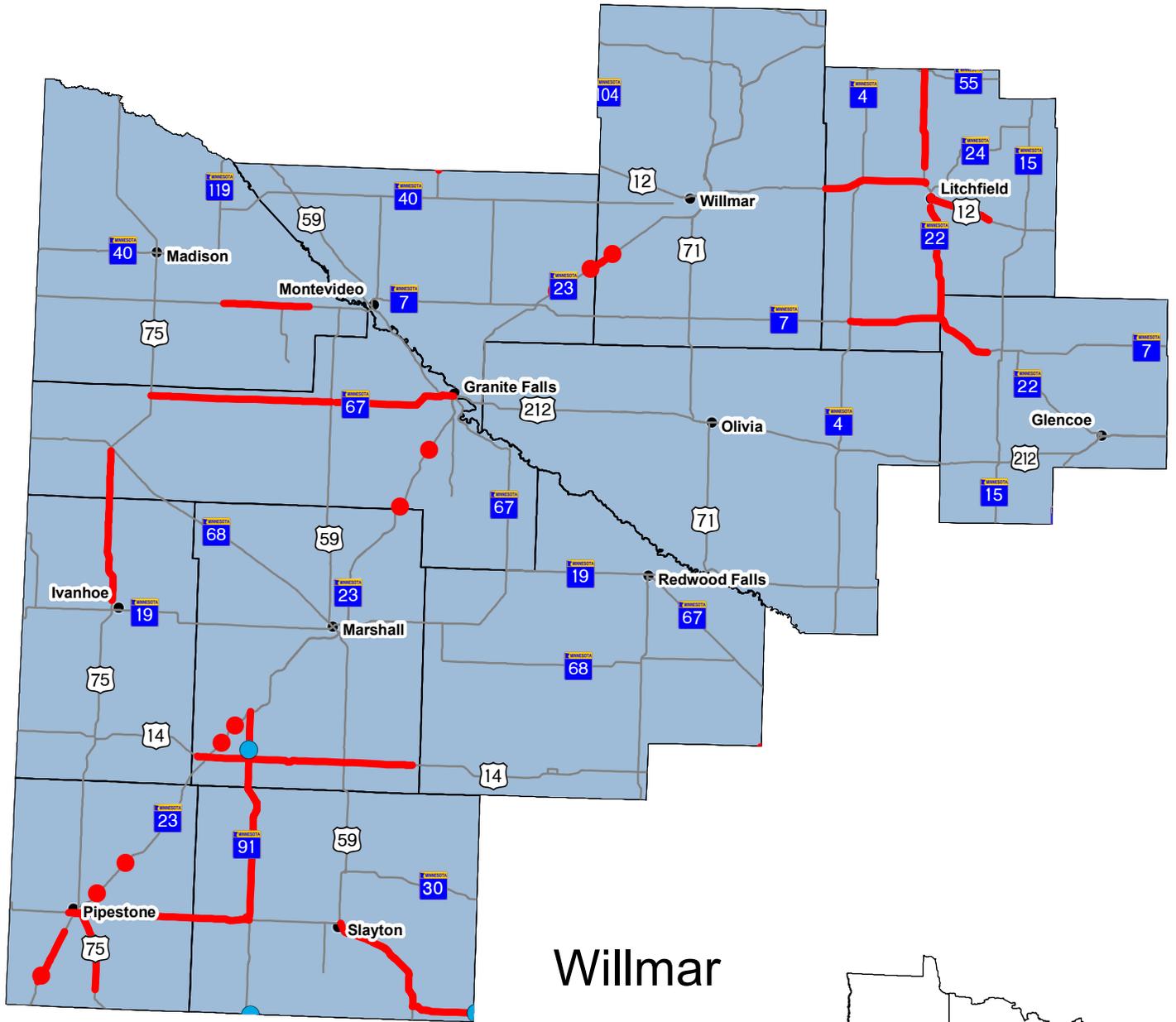
District Engineer: Greg Ous
Project Manager: Chris Bower

Revised Date: 12/15/2015



Major Highway Projects 2015

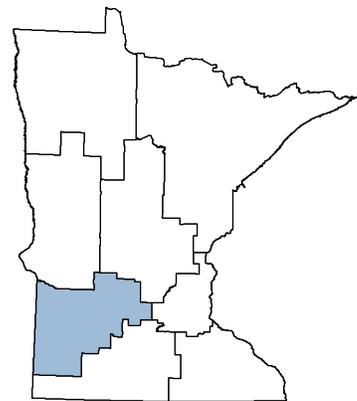
District 8



Willmar

Major Highway Projects

- Bridge Projects
- Roadway Projects
- Trunk Highway System



District Project Summary
District 8

Route	State Project #	Project Location	Page
Hwy 7	4703-26	Cosmos to Hwy 22	G 2
Hwy 12	4704-89	4th Street to the south junction of Hwy 22, south of the railroad tracks, in Litchfield	G 3
Hwy 12	4704-47	West Meeker County line to Hwy 22	G 4
Hwy 14	4201-41	Florence to Tracy	G 5
Hwy 22	4710-27	Just north of Hwy 12 to Hwy 55 in Eden Valey	G 6
Hwy 22	4308-34	From the junction of Hwy 7 to the south edge of Litchfield	G 7
Hwy 23	4206-22	Interstate 90 to Willmar	G 8
Hwy 30 & 75	5101-15	Pipestone; Hwy 30 in town, Hwy 30 east, and Hwy 75 south	G 9
Hwy 59	5104-39	From Hwy 62 at Fulda to the south junction of Hwy 30 at Slayton	G 10
Hwy 67 & 212	8705-18	West of Clarkfield and Clarkfield to Granite Falls	G 11
Hwy 75	4109-29	Hwy 19 in Ivanhoe to Canby	G 12
Hwy 91	5108-12	Hwy 30 in Lake Wilson to Bridge #9094, just north of Hwy 14	G 13
Hwy 212	3706-41	First Street in Dawson to 3.15 miles west of Hwy 59	G 14

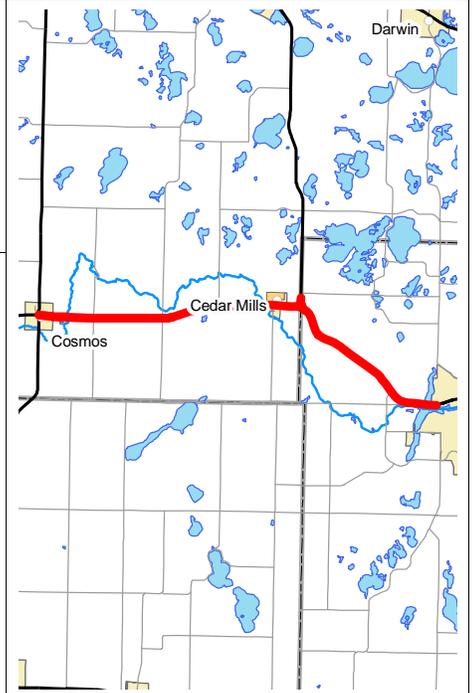
PROJECT SUMMARY

Hwy 7

Cosmos to Hwy 22

State Project No. 4703-26

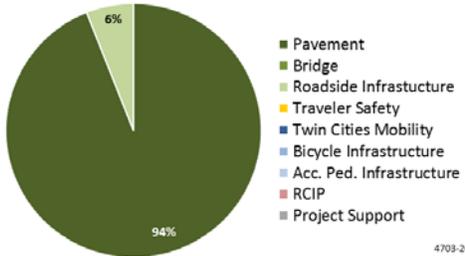
<http://www.dot.state.mn.us/d8/projects/hwy7and22/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay of approximately 10 miles from the city of Cosmos to Hwy 22. It also includes 2 miles of bituminous replacement near the bridges.

Recent Changes and Updates

Construction on this project is complete.

Project History:

This project was tied to two other adjoining projects for letting. The current estimate was updated to reflect the actual tied letting amount for all three of the projects.

This roadway has deteriorated pavement, resulting in a rough ride and high maintenance costs. The project will strengthen pavement, improve ride quality, and reduce maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.7	\$ 7.1
Other Construction Elements:	\$ 0.3	\$ 0.1
Engineering:	\$ 1.2	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 7.2	\$ 8.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Current Construction Letting estimate is the awarded cost for the project. Other Construction Elements of \$0.1M is for unknown costs, such as incentives, Supplemental Agreements, and overruns. Engineering estimates reflect 20 percent of construction letting.

Project Risks:

No significant project risks.

Schedule:

Environmental Approval Date: 11/15/2010
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 02/27/2009
 Current Letting Date: 12/20/2013
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2014



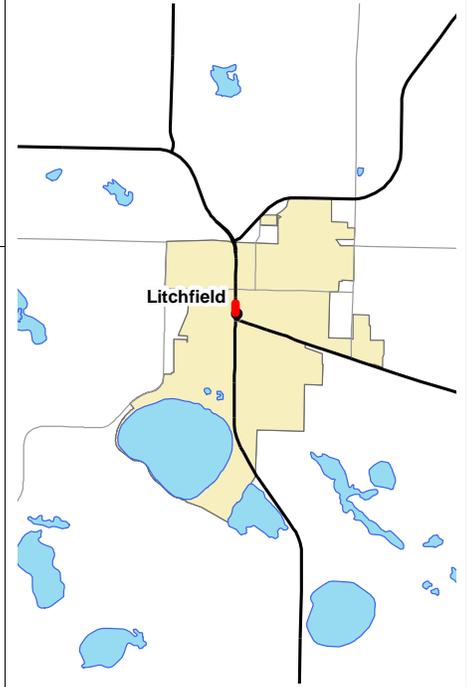
Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
Project Manager: Kelly Brunkhorst

Revised Date: 12/15/2015

PROJECT SUMMARY

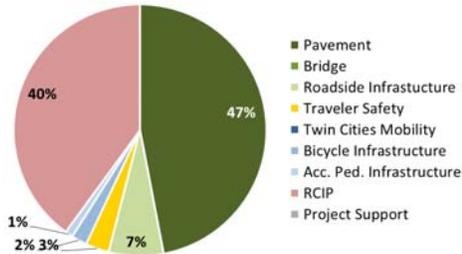
Hwy 12
4th Street to the south junction of Hwy 22, south of the railroad tracks, in
Litchfield
State Project No. 4704-89



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a reconstruction project through downtown Litchfield, with a distance of approximately 1/3 mile.

Recent Changes and Updates

First year in report.

Project History:

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.7	\$ 3.7
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.6	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.5	\$ 4.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

This project does have right of way costs, but less than \$0.1M.

Project Risks:

This project has many risks inherent with the reconstruction in an urban commercial setting, including: unknown utility issues, historical buildings, uncertain pedestrian improvement (ADA) needs, and potential for hazardous materials.

Schedule:

Environmental Approval Date: Not Complete
Municipal Consent Approval Date: Not Complete
Geometric Layout Approval Date: Not Complete
Construction Limits Established Date: Not Complete
Original Letting Date: 03/22/2019
Current Letting Date: 03/22/2019
Construction Season: 2019
Estimated Substantial Completion: Fall 2019



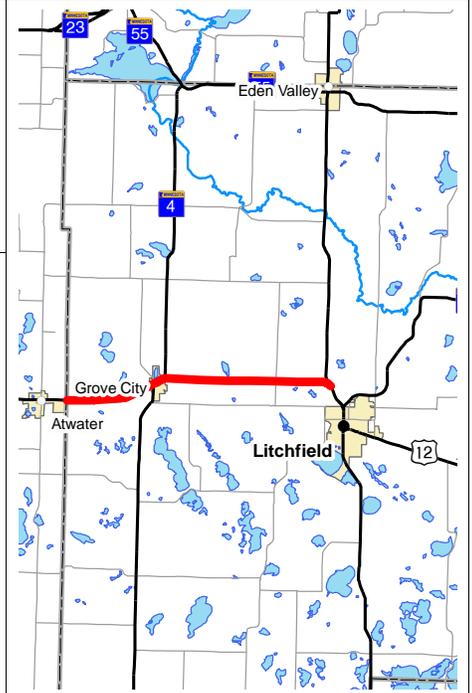
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Lowell Flaten

Revised Date: 12/15/2015

PROJECT SUMMARY

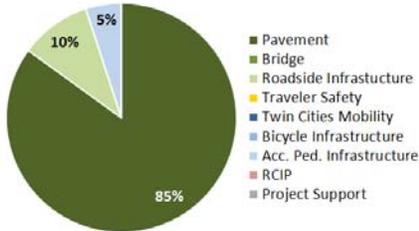
Hwy 12
West Meeker County line to Hwy 22
State Project No. 4704-47



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This is an alternate bid project for a bituminous reclamation. The project is approximately 11 miles in length and will include some minor culvert repairs.

Recent Changes and Updates

Construction on this project is to be completed in the fall of 2015. The current estimate was updated to reflect the actual letting cost of the project.

Project History:

The project was increased from a short term to a longer term fix as a part of a statewide effort to increase investment on pavement for principal arterials in order to improve the long-term condition of the system. This is reflected in the higher current estimate. Funding for the increased scope was provided through the Statewide Performance Program (SPP).

This project was identified because of rough riding pavement and the deteriorating condition of the underlying structure, which resulted in higher maintenance costs. This project will provide long-term improvement to the ride condition and stabilize the underlying structure, resulting in reduced maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 2.0	\$ 5.9
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.4	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 2.5	\$ 7.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Current Construction Letting estimate is the awarded cost for the project. Other Construction Elements of \$0.1M is for unknown costs, such as incentives, Supplemental Agreements, and overruns. Engineering estimates reflect 20 percent of construction letting.

Project Risks:

No significant project risks remain.

Schedule:

Environmental Approval Date: 07/16/2014
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: NA
Construction Limits Established Date: NA
Original Letting Date: 11/21/2014
Current Letting Date: 11/21/2014
Construction Season: 2015
Estimated Substantial Completion: Fall 2015



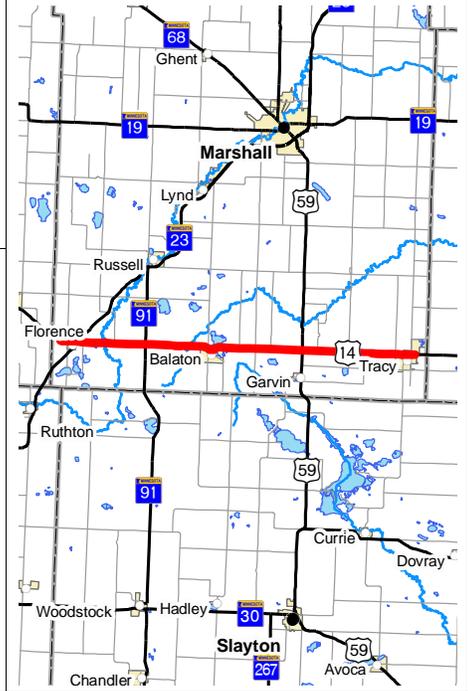
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Kelly Brunkhorst

Revised Date: 12/15/2015

PROJECT SUMMARY

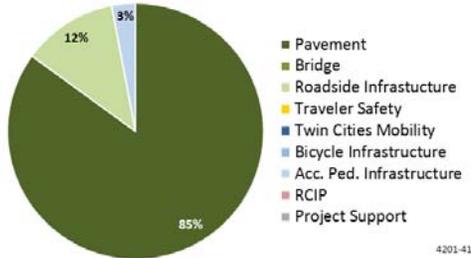
Hwy 14
 Florence to Tracy
 State Project No. 4201-41
<http://www.dot.state.mn.us/d8/projects/hwy14florence/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is approximately 20 miles of bituminous overlay from Florence to Tracy. The project also includes a mill and overlay in Balaton.

Recent Changes and Updates

Completion of this project has been delayed due to soils not settling as quickly as expected for flood mitigation associated with the project. The roadway is currently open to traffic and construction will be complete in the fall of 2015.

The current cost estimate reflects the actual awarded costs for the projects tied to SP 4201-41. The project was tied to adjoining work for letting, which was SP 4201-90 for flood mitigation near Florence. The current estimate has been updated to reflect the actual tied letting amount for the multiple projects.

Project History:

This project was tied to an adjoining project for letting. The current estimate has been updated to reflect the actual tied letting amount for the two projects.

This project was identified and prioritized based upon the existing and predicted poor ride condition of the pavement. This project will improve the ride condition and replace 1.5 miles of

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 3.5	\$ 5.2
Other Construction Elements:	\$ 0.1	\$ 0.7
Engineering:	\$ 0.7	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.3	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Includes a 1.5 mile stretch of full depth bituminous replacement. Current Construction Letting estimate is the awarded cost for the project. Engineering estimate reflects 20 percent of construction letting. Planning level estimate type.

Project Risks:

No significant risks remain.

Schedule:

Environmental Approval Date: 03/18/2013
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 11/22/2013
 Current Letting Date: 11/22/2013
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
Project Manager: Lowell Flatten

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 22

Just north of Hwy 12 to Hwy 55 in Eden Valley

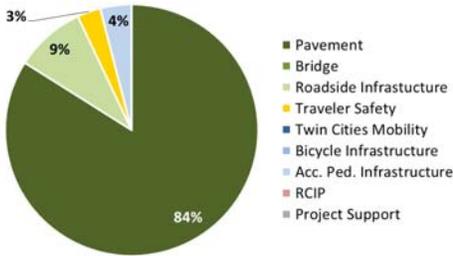
State Project No. 4710-27



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project includes a thick bituminous overlay on Hwy 22 from just north of Hwy 12 to Hwy 55 in Eden Valley.

The project is approximately 12 miles in length. Approximately 10 pedestrian ramps and 21 driveways will be upgraded to meet ADA standards in Eden Valley as part of this project.

Recent Changes and Updates

This project was advanced from 2020 to 2018. This is the first year in the report.

Project History:

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.3	\$ 5.3
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.3	\$ 6.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Engineering estimates reflect 20% of construction letting. This project does have right of way costs, but they are expected to be less than \$0.1M.

Project Risks:

No known significant project risks. Pedestrian improvements (ADA) in the urban section may incur costs for unknown issues.

Schedule:

Environmental Approval Date: Not Complete
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: Not Complete
 Construction Limits Established Date: Not Complete
 Original Letting Date: 02/23/2018
 Current Letting Date: 02/23/2018
 Construction Season: 2018
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

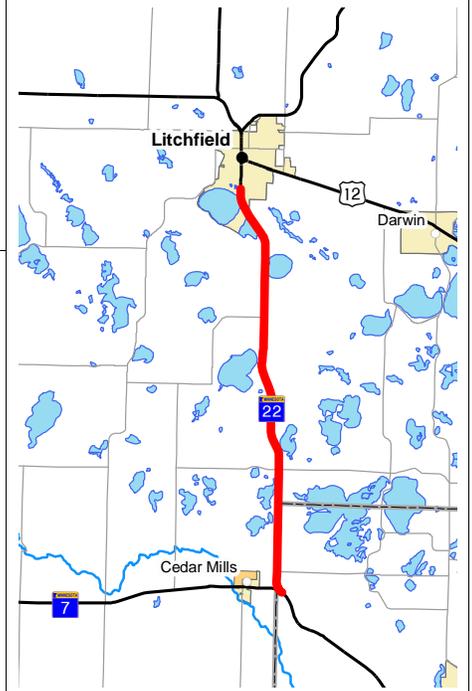
District Engineer: Jon Huseby
Project Manager: Kelly Brunkhorst

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 22

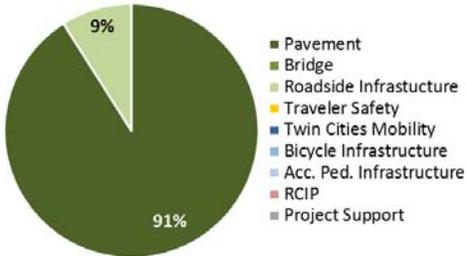
From the junction of Hwy 7 to the south edge of Litchfield
State Project No. 4308-34



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a thick overlay of approximately 12 miles of Hwy 22 between the west junction of Hwy 7 to the southern limits of the city of Litchfield.

Recent Changes and Updates

The environmental documentation for this project is in progress.

Project History:

This segment was identified as having rough riding pavement and deteriorating condition of the underlying structure, resulting in high maintenance costs. This project's purpose is to provide long-term improvements to the ride condition and stabilize the structure, resulting in reduced maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.0	\$ 6.0
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.2	\$ 7.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Engineering estimates reflect 20 percent of construction letting. The cost estimates shown reflect the bituminous fix, but this project is anticipated to be an alternate bid project.

Project Risks:

This cost estimate reflects a thick bituminous overlay, but the project could be an alternate bid; the concrete option would approximately double the letting cost of the project. Minor risk exists for extra costs to be incurred at a short reconstruction section in a swampy area.

Schedule:

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: June 2015
Construction Limits Established Date: NA
Original Letting Date: 01/27/2017
Current Letting Date: 01/27/2017
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



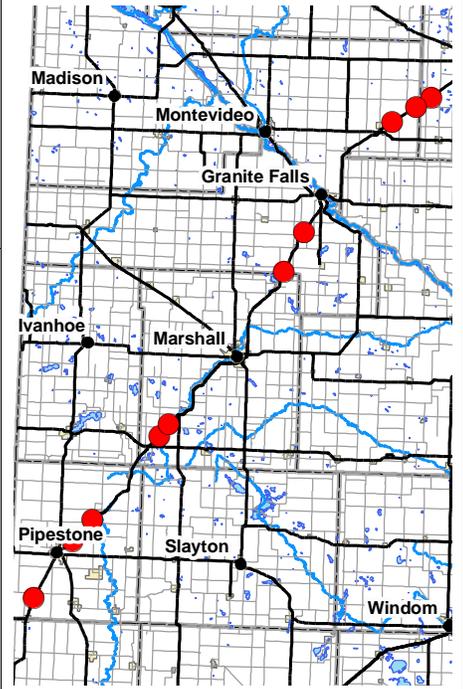
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Kelly Brunkhorst

Revised Date: 12/15/2015

PROJECT SUMMARY

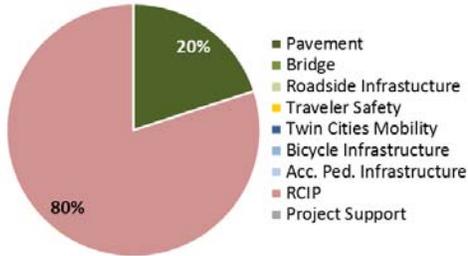
Hwy 23
 Interstate 90 to Willmar
 State Project No. 4206-22
<http://www.dot.state.mn.us/d8/projects/hwy23passinglanes/>



Primary Purpose:

Performance-based Need: Interregional Corridor Mobility

Investment Category:



Project Description:

This project includes the construction of passing lane segments along Highway 23 between Interstate 90 and Willmar.

Recent Changes and Updates

For construction purposes, this project was split into two projects. Due to the location of the parallel railroad line and two townships that are unwilling to close township roads, two of the passing lanes were impacted, but will still be built.

The current cost estimate is based on the current level of design, which is about 75% to 100% complete, for the two projects. The earlier estimate was not based on design quantities, but increased cost is due to passing lane sites being determined and designed to be staggered passing lanes, rather than concurrent lanes.

Project History:

This project was identified for the Corridors of Commerce program to provide additional highway capacity and improve the movement of freight and reduce barriers to commerce. An assessment of the corridor, as well as input gathered from a manufacturer's perspective study, resulted in selecting locations spread along the corridor, to provide the biggest benefit.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.3	\$ 12.6
Other Construction Elements:	\$ 1.0	\$ 0.4
Engineering:	\$ 1.7	\$ 2.5
Right of Way:	\$ 1.6	\$ 0.0
Total:	\$ 14.6	\$ 15.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Engineering estimates reflect 20 percent of construction letting.

Project Risks:

The risks were retired.

Schedule:

Environmental Approval Date: 6/01/2015
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 06/01/2015
 Construction Limits Established Date: 6/1/2015
 Original Letting Date: 02/26/2016
 Current Letting Date: 10/23/2015
 Construction Season: 2016
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

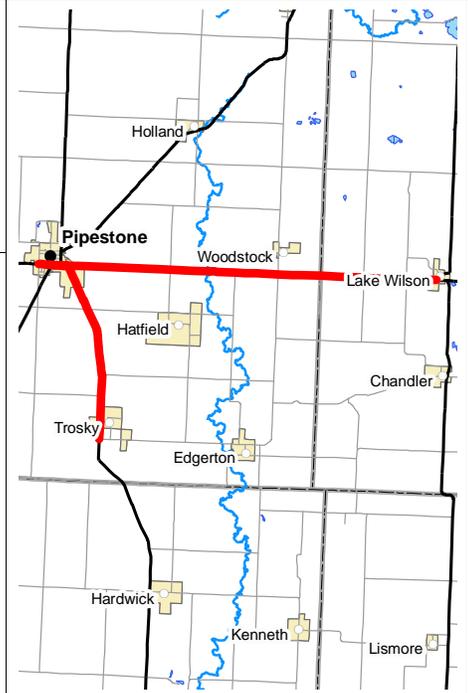
District Engineer: Jon Huseby
Project Manager: Matt Brua

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 30 & 75

Pipestone; Hwy 30 in town, Hwy 30 east, and Hwy 75 south
 State Project No. 5101-15, 5903-21, & 5905-25
<http://www.dot.state.mn.us/d8/projects/hwy30/index.html> and
<http://www.dot.state.mn.us/d8/projects/hwy75/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

This project was let, and is expected to be complete in the fall of 2015.

The City of Pipestone made some utility improvements in advance of this project, which resulted in shortening the west end of project by four blocks in the city of Pipestone. The current cost is the awarded cost for the project that was reduced in length to accommodate the City of Pipestone's need to perform their work.

Project History:

Three individual projects are being tied together at letting, for better coordination of contractors, staging and to minimize impacts to the public. Tying these three projects together now meets the minimum threshold for inclusion in this report.

This segment was identified as having rough pavement resulting in high maintenance costs. The project's purpose is to improve ride condition and reduce maintenance costs.

Project Description:

This project includes a mill and overlay of Hwy 30 in the city of Pipestone. The project also includes an overlay of Hwy 30 between Pipestone and Lake Wilson and an overlay of Hwy 75 from the junction of County Road 9 to Pipestone.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.7	\$ 3.3
Other Construction Elements:	\$ 0.3	\$ 0.2
Engineering:	\$ 1.0	\$ 0.7
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.1	\$ 4.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Current Construction Letting estimate is the awarded cost for the project. Engineering estimates reflect 20 percent of construction letting.

Project Risks:

No significant project risks.

Schedule:

Environmental Approval Date: 07/23/2014
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 02/27/2015
 Current Letting Date: 01/30/2015
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
Project Manager: Lowell Flaten

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 59

From Hwy 62 at Fulda to the south junction of Hwy 30 at Slayton

State Project No. 5104-39

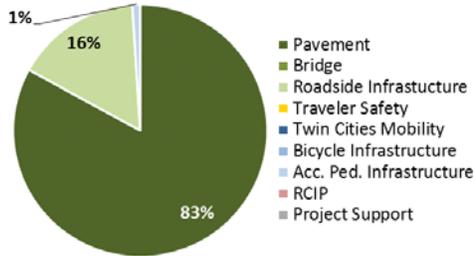
<http://www.dot.state.mn.us/d8/projects/hwy59/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay of approximately 13 miles of Hwy 59 from the junction with Hwy 62 to the south junction of Hwy 30 at Slayton. The project includes pedestrian ramp improvements in the city of Avoca.

Recent Changes and Updates

This project was moved from the 2016 to the 2015 construction season due to stakeholder input and the rapidly deteriorating pavement condition. The current estimate reflects the actual awarded letting cost for the project. The decrease is due to estimate refinements, and the removal of inflationary increases because the project letting was moved two years earlier.

Project History:

This segment was identified as having rough pavement resulting in high maintenance costs. The project's purpose is to improve ride condition and reduce maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 2.5
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.7	\$ 0.5
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 5.0	\$ 3.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

This project does have right of way costs, but less than \$0.1M. Current Construction Letting estimate is the awarded cost for the project. Engineering estimates reflect 20 percent of construction letting.

Project Risks:

No significant project risks remain.

Schedule:

Environmental Approval Date: 11/24/2014
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 08/22/2014
 Construction Limits Established Date: 08/22/2014
 Original Letting Date: 01/22/2016
 Current Letting Date: 01/22/2016
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
Project Manager: Lowell Flaten

Revised Date: 12/15/2015

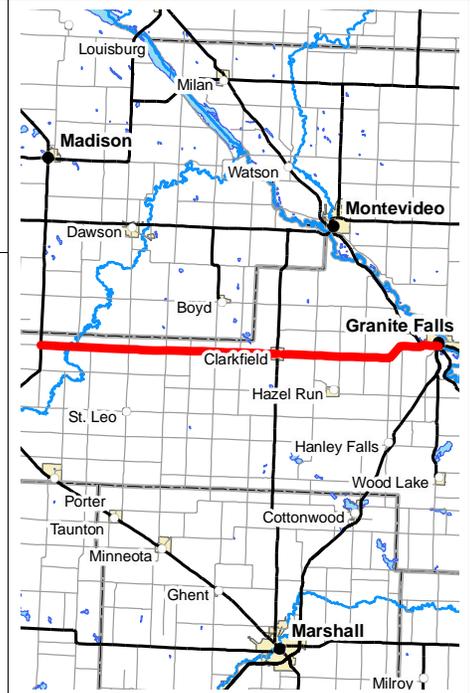
PROJECT SUMMARY

Hwy 67 & 212

West of Clarkfield and Clarkfield to Granite Falls

State Project No. 8705-18, 8706-23, & 8712-31

<http://www.dot.state.mn.us/d8/projects/hwy67-212/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

These tied projects were let.

The current estimate reflects the awarded cost of the tied letting. The difference in cost can be attributed to better bid costs due to the economy of scale offered by the combined projects, and the previous estimate being the result of additive rounding (up) errors inherent in the three individual estimates, combined into one.

Project History:

Three individual projects are being tied together at letting, for better coordination of contractors, staging and to minimize impacts to the public. Tying these three projects together now meets the minimum threshold for inclusion in this report.

This segment was identified as having rough pavement resulting in high maintenance costs. The project's purpose is to improve ride condition and reduce maintenance costs.

Project Description:

This project includes a mill and overlay of Hwy 67 from the junction with Hwy 75 to Granite Falls (excluding the city of Clarkfield) and a mill and overlay of Hwy 212 in Granite Falls

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 5.6
Other Construction Elements:	\$ 0.3	\$ 0.1
Engineering:	\$ 1.2	\$ 1.1
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 8.7	\$ 6.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Current Construction Letting estimate is the awarded cost for the project. Other Construction Elements of \$0.1M is for unknown costs, such as incentives, Supplemental Agreements, and overruns. Engineering estimates reflect 20 percent of construction letting.

Project Risks:

No significant project risks.

Schedule:

Environmental Approval Date: 07/23/2014
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 01/30/2015
 Current Letting Date: 01/30/2015
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2015



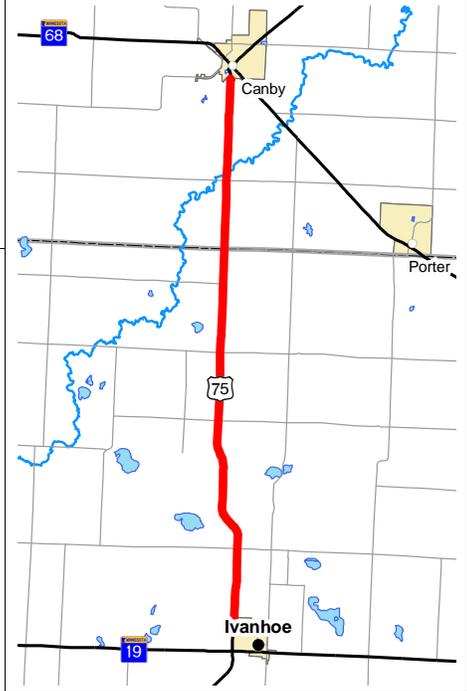
Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
Project Manager: Bill Knofczynski

Revised Date: 12/15/2015

PROJECT SUMMARY

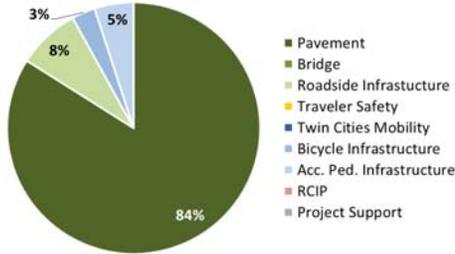
Hwy 75
 Hwy 19 in Ivanhoe to Canby
 State Project No. 4109-29



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

This project is a mill and overlay of approximately 17 miles from Hwy 19 in Ivanhoe to Canby. It also includes the replacement of low-tension guardrail and raising of the approach panel adjacent to the bridge, lining 20 to 30 pipes and replacing 5 culverts.

Recent Changes and Updates

First year in report.

Project History:

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.6	\$ 4.6
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.5	\$ 5.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Engineering estimates reflect 20% of construction letting. This project does have right of way costs, but they are expected to be less than \$0.1M.

Project Risks:

No known significant project risks.

Schedule:

Environmental Approval Date: Not Complete
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: Not Complete
 Construction Limits Established Date: Not Complete
 Original Letting Date: 03/22/2019
 Current Letting Date: 03/22/2019
 Construction Season: 2019
 Estimated Substantial Completion: Fall 2019



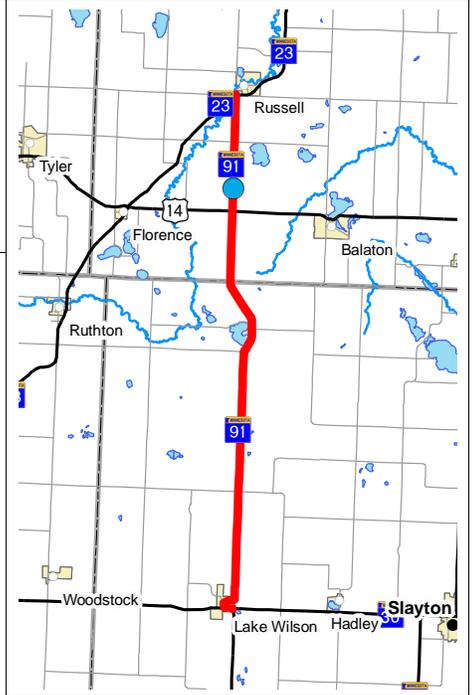
Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
Project Manager: Kent Medalen

Revised Date: 12/15/2015

PROJECT SUMMARY

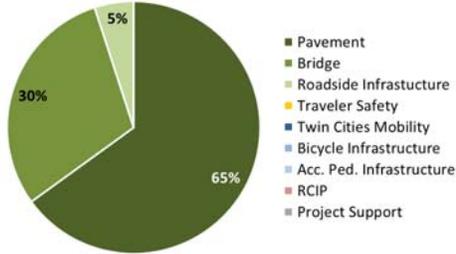
Hwy 91
 Hwy 30 in Lake Wilson to Bridge #9094, just north of Hwy 14
 Bridge 9094
 State Project No. 5108-12



Primary Purpose:

Performance-based Need: Pavement and Bridge Condition

Investment Category:



Project Description:

This project is a mill and overlay of approximately 23 miles from Hwy 30 in Lake Wilson to Hwy 23. It also includes the replacement of Bridge 9094.

Recent Changes and Updates

First year in report.

Project History:

This project is tied with two other 2019 projects on Hwy 91, one of which is in District 7.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.1	\$ 7.1
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.4	\$ 8.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Engineering estimates reflect 20% of construction letting. This project does have right of way costs, but they are expected to be less than \$0.1M.

Project Risks:

No known significant project risks. Relatively minor cost risk for culverts scoped for liners, may need to be replaced. Pedestrian improvements (ADA) in the urban section may incur costs for unknown issues.

Schedule:

Environmental Approval Date: Not Complete
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: Not Complete
 Construction Limits Established Date: Not Complete
 Original Letting Date: 02/22/2019
 Current Letting Date: 02/22/2019
 Construction Season: 2019
 Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
Project Manager: Nick Klisch

Revised Date: 12/15/2015

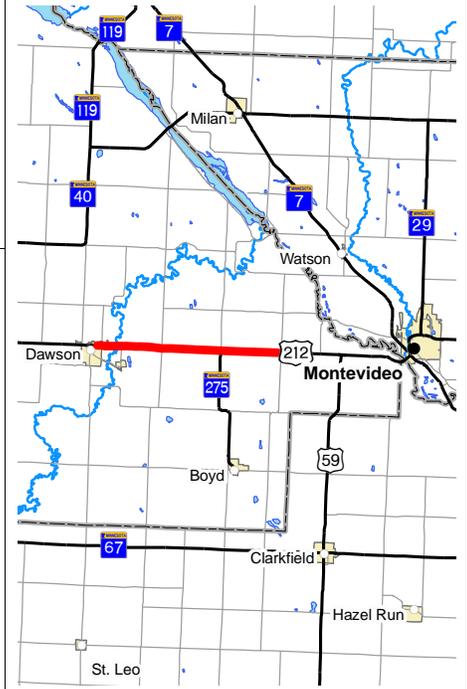
PROJECT SUMMARY

Hwy 212

First Street in Dawson to 3.15 miles west of Hwy 59

State Project No. 3706-41

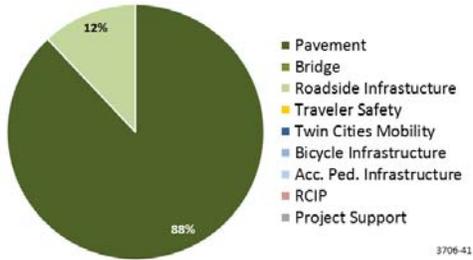
<http://www.dot.state.mn.us/d8/projects/hwy212montevideo/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



3706-41

Project Description:

This project includes a mill and thick overlay of Hwy 212 from First Street in Dawson to about 3 miles from the western junction of Hwy 59. The project is approximately 9 miles in length and will be an alternative bid selection project.

Recent Changes and Updates

Construction was completed in the fall of 2014.

Project History:

The project scope was refined by reducing the amount of work to be performed within the city limits of Dawson in order to provide a more consistent pavement section through the city. The current estimate was updated to reflect the actual bid amount

This segment was identified as having rough riding pavement and deteriorating condition of the underlying structure, resulting in high maintenance costs. This project's purpose is to provide long-term improvements to the ride condition and stabilize the structure, resulting in reduced maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 7.0	\$ 6.1
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.4	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.6	\$ 7.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Engineering estimates reflect 20 percent of construction letting.

Project Risks:

No significant project risks remain.

Schedule:

Environmental Approval Date: 03/26/2013
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 08/23/2013
 Current Letting Date: 09/27/2013
 Construction Season: 2014
 Estimated Substantial Completion: Fall 2014



Minnesota Department of Transportation
 District 8
 2505 Transportation Road
 (320) 231-5195

District Engineer: Jon Huseby
 Project Manager: Susann Karnowski

Revised Date: 12/15/2015



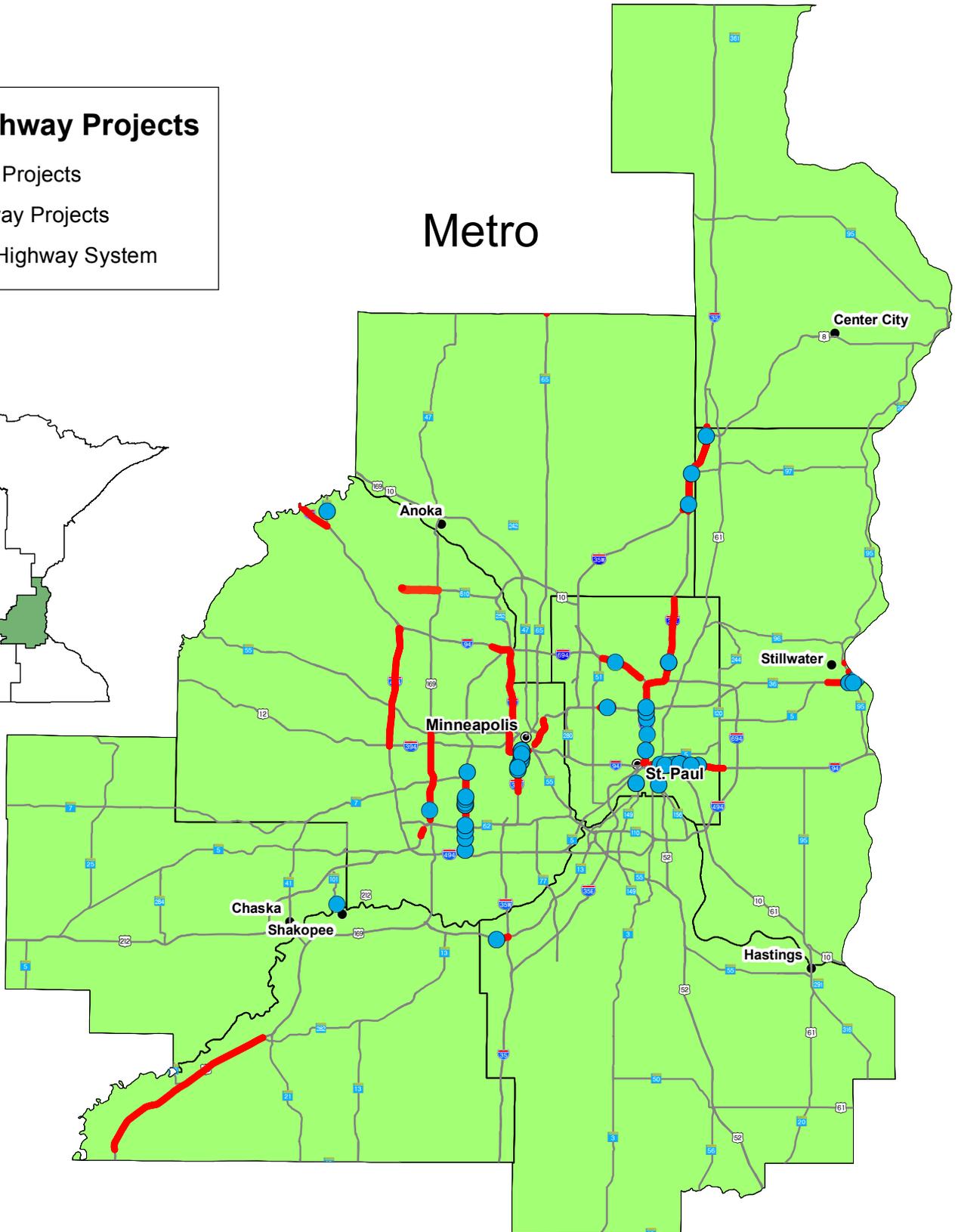
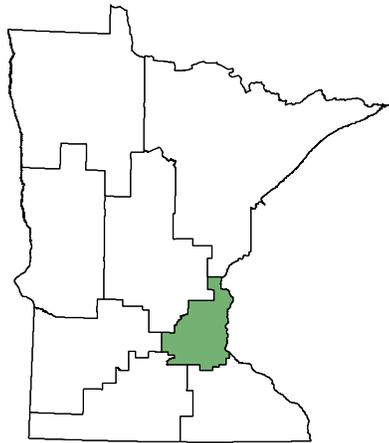
Major Highway Projects 2015

Metro District



Major Highway Projects

- Bridge Projects
- Roadway Projects
- Trunk Highway System



District Project Summary
District Metro

Route	State Project #	Project Location	Page
Hwy 10	0202-95	Hwy 10 at County Road 83 (Armstrong Blvd) interchange	H 2
Hwy 13	1901-148	County Road 5 in Burnsville	H 3
Hwy 36	6212-148	Lexington Ave bridge over Hwy 36 in Roseville	H 4
Hwy 36	8221-01	Oak Park Heights, Stillwater and Bayport	H 5
Hwy 52	6244-30	Lafayette River Bridge over Mississippi River in St. Paul	H 6
Hwy 100	2734-33	36th Street to 25 1/2 Street in St. Louis Park	H 7
Hwy 100	2733-89	St. Louis Park	H 8
Hwy 101	1009-24	Minnesota River Bridge in Shakopee to Hwy 61 in Chanhassen	H 9
Hwy 101	2738-28	At County Road 144 in Rogers	H 10
Hwy 149	6223-20	Smith Avenue High Bridge over the Mississippi River in St. Paul	H 11
Hwy 169	2772-113	Nine Mile Creek Bridge (Hopkins, Edina, Minnetonka)	H 12
Hwy 169	7007-34	Mn 19 to Ash St in Belle Plaine	H 13
Hwy 169	2772-105	North of Hwy 62 in Edina to Hwy 55 in Golden Valley	H 14
Hwy 169	7008-111	Scott County, from Hwy 25 in Belle Plaine to Hwy 282 in Jordan	H 15
Hwy 212	2763-49	At Shady Oak Road in Eden Prairie	H 16
Hwy 610	2771-37	Hwy 81 to I-94 in Maple Grove	H 17
I-35	8280-47	Washington, Anoka Counties	H 18
I-35E	6281-47	Little Canada Rd in Little Canada to Ramsey County Rd J in White Bear Lake	H 19
I-35E	6280-308	Cayuga Bridge between University Ave and Maryland Ave	H 20
I-35E	6280-367	I-35E between Pennsylvania Ave and Little Canada Road	H 21
I-35E	6281-25	Vadnais Heights and White Bear Lake - Goose Lake Road Bridges	H 22
I-35W	0280-74	Blaine (Lake Dr) to Lino Lakes (Sunset Rd)	H 23
I-35W	2783-136	3rd and 4th Street ramp to Johnson Street in Minneapolis	H 24
I-35W	2782-327	43rd Street to I-94 Commons	H 25
I-94	6283-234	I-94 (Mounds Blvd to Hwy 120) and Hwy 61 (Burns Avenue to Hwy 5)	H 26
I-94	2781-432	Nicollet Avenue in Minneapolis to Shingle Creek Bridge in Brooklyn Center	H 27
I-494	2785-330	I-394 in Minnetonka to I-94/494/694 in Maple Grove	H 28
I-694	6285-143	Little Canada to Arden Hills	H 29

PROJECT SUMMARY

Hwy 10

Hwy 10 at County Road 83 (Armstrong Blvd) interchange

Bridge 02007, &, 02586

State Project No. 0202-95

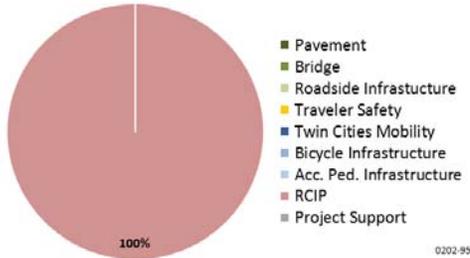
<http://www.highway10andarmstrong.com/>



Primary Purpose:

Twin Cities Mobility: Spot Mobility Improvement

Investment Category:



Project Description:

Construct Hwy10/County Road 83 interchange and railroad grade- separation, access closures, and frontage road.

Recent Changes and Updates

The project's expected completion date is in December 2015.

Since the 2014 MHP report, the Counties Transportation Improvement Board (CTIB) awarded this project a grant of \$10M in November 2014.

Changes to the TPCE are based on bids and final engineering costs.

Project History:

Project funding includes a CIMS grant of \$10M in 2013, local funds from Anoka Co. and City of Ramsey, Local Roads Improvement Program, and BNSF. The CIMS grants includes the MnDOT share of the project, while the remainder of the project is funded from the City, Co., TIGER grant, LRIP bonds, a contribution from BNSF, and possible CTIB funding. This project was awarded a \$10M federal TIGER grant in September 2014. Prior to the TIGER grant, the city and county portion of the project share was greater. Changes to the construction letting amount were updated as design has been refined, A consultant was hired for final design. Right of way costs also

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.0	\$ 29.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 5.0	\$ 5.1
Right of Way:	\$ 7.0	\$ 7.0
Total:	\$ 35.0	\$ 41.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Current Estimate based on bids and final engineering costs.

Project Risks:

A full funding package has been one of the project risks, however, with the TIGER grant and CTIB grants, that risk was reduced.

Schedule:

Environmental Approval Date: 06/04/2013
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 10/1/2013
 Construction Limits Established Date: 01/01/2014
 Original Letting Date: 11/01/2014
 Current Letting Date: 3/31/15
 Construction Season: 2015
 Estimated Substantial Completion: Fall 2015



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Phil Bergem

Revised Date: 12/15/2015

PROJECT SUMMARY

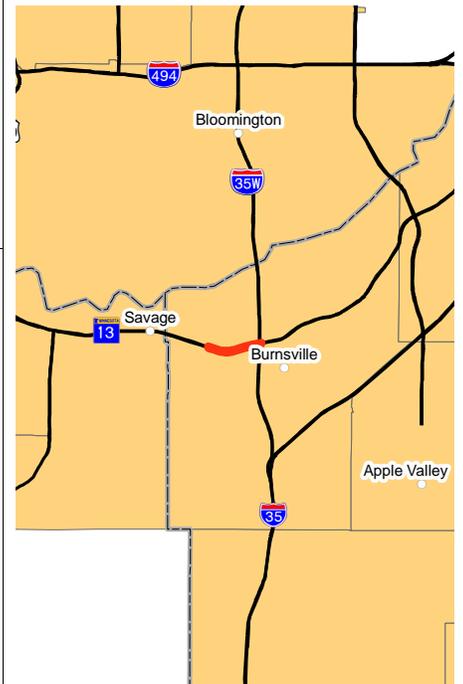
Hwy 13

County Road 5 in Burnsville

Bridge 19036

State Project No. 1901-148

<http://www.co.dakota.mn.us/Transportation/CurrentConstruction/CR5Interchan>



Primary Purpose:

Twin Cities Mobility: Spot Mobility Improvement

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

This project is under construction, with an anticipated completion of Summer 2015.

Last year's MHP report did not include engineering costs. This report includes engineering costs.

Project History:

Current estimate reflects the low bid. Right of way was purchased by Dakota County and is estimated at \$10.6M.

Traffic volumes have increased in the project area to the point that the traffic demand is exceeding the capacity of the at-grade intersection, which in turn results in extended periods of heavy congestion during peak hours. This intersection ranked 21st in the state's top worst crash cost intersections in 2009.

MnDOT completed design work and Dakota County will complete construction oversight.

Project Description:

Construct a grade separated interchange at Hwy 13/County Road 5 in Burnsville. The project will add a new bridge (with trail) to carry County Road 5 over Hwy 13. Construction will include noise walls, retaining wall and ponding.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.9	\$ 27.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.8	\$ 1.4
Right of Way:	\$ 10.0	\$ 10.6
Total:	\$ 39.7	\$ 39.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop costs. Construction will occur while Hwy 13 is open to traffic. MnDOT completed design work and Dakota County will complete construction oversight.

Project Risks:

Project was awarded in fall 2012, construction currently underway and will be completed in 2015. Dakota County is leading construction oversight.

Schedule:

Environmental Approval Date: 02/14/2012
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 7/28/2011
Construction Limits Established Date: Need Unknown
Original Letting Date: 2013
Current Letting Date: 09/15/2012
Construction Season: 2013/2015
Estimated Substantial Completion: 2015



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Dakota County

Revised Date: 12/15/2015

PROJECT SUMMARY

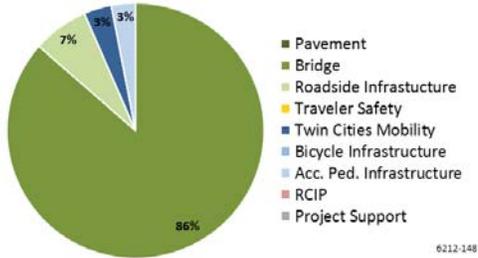
Hwy 36
Lexington Ave bridge over Hwy 36 in Roseville
Bridge 5723
State Project No. 6212-148



Primary Purpose:

Performance-based need: Bridge Condition

Investment Category:



Project Description:

Replacement of Lexington Ave bridge including access ramps. Including addressing ADA issues on the multiuse trail and replace two existing signals at the ramp terminals.

Recent Changes and Updates

Project letting date was moved to avoid conflicts with I-35E work in 2015. Added pavement work on westbound Hamline Ave ramps and added pavement for staging/future MnPASS lane.

Project History:

The condition of the Lexington Avenue Bridge is the driving force behind this project. The Lexington Avenue Bridge was constructed in 1938 and is in need of major rehabilitation. The bridge has a sufficiency rating of 61 with a status of "structurally deficient".

Bridge 5723 is identified as a Chapter 152 bridge and is mandated by the Legislature to be replaced by 2018.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.6	\$ 12.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.5	\$ 2.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 16.1	\$ 15.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Lexington Ave will be closed for bridge construction while traffic uses the temporary bypass. Four lanes of traffic will be maintained on TH 3 during construction.

Project Risks:

Project risks include traffic control during construction.

Schedule:

Environmental Approval Date: 8/7/2012
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: 4/25/2014
Construction Limits Established Date: August 2012
Original Letting Date: 01/25/2002
Current Letting Date: 10/23/2015
Construction Season: Summer/Fall 2016
Estimated Substantial Completion: Fall 2016



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Michael Kruse

Revised Date: 12/15/2015

PROJECT SUMMARY

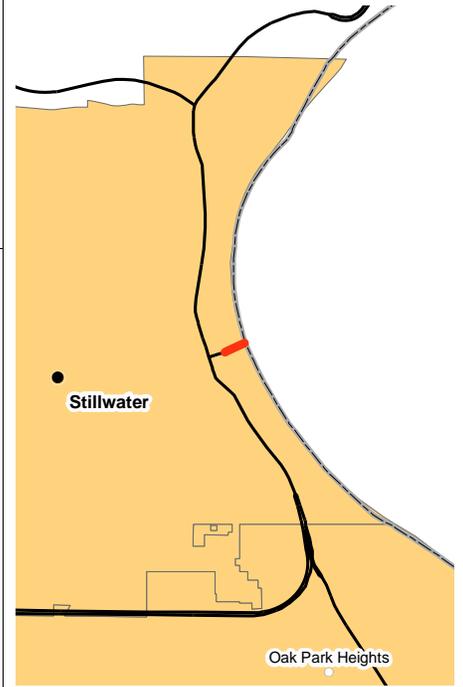
Hwy 36

Oak Park Heights, Stillwater and Bayport

Bridge 82043, 82047, 82048, 82045

State Project No. 8221-01, 8214-114, 8221-82045A, etc.

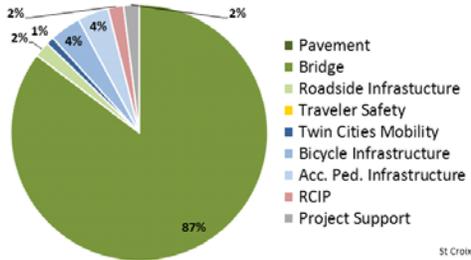
www.mndot.gov/stcroixcrossing/



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

Replace a major river bridge over the St. Croix River and construct/reconstruct 7 miles of highway (4 in Minn. and 3 in Wisc.). In Minnesota, reconstruct two intersections (Hwy 36/Osgood, Hwy 36/Greeley) and one interchange (Hwy 36/Hwy 95). In Wisconsin, construct one overpass (WIS 64/WIS 36) and one interchange (WIS 64/County Rd E). Convert the Stillwater Lift Bridge to a bicycle/pedestrian bridge and construct a 4.5 mile bicycle and pedestrian loop trail that connects the lift bridge and the new St. Croix Crossing with trails in both states. Project costs are split between MnDOT and WisDOT.

Recent Changes and Updates

Hwy 36/Hwy 95 roadway approach work substantially completed in June 2015 in Minnesota. Casting yard for new bridge segments is occupying the Hwy36/Hwy95 interchange.

Hwy 64 approach work underway in Wisconsin. Grading of new roadway and interchange being performed.

Bridge construction is underway. The bridge schedule changed in September 2015 to open the bridge to traffic in late 2017, instead of 2016. This delay is a result of a number of factors, including an early cold season in fall of 2014 that impacted construction and complexity of work with rebar in the bridge.

Project History:

The Stillwater Lift Bridge (Bridge 4654) was built in 1931. The lift bridge is structurally deficient and functionally obsolete. A detailed purpose and need statement can be found in the project's supplemental final environmental impact study. Congressional approval was granted in March 2012 to allow the project to proceed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 410.8	\$ 472.1
Other Construction Elements:	\$ 136.2	\$ 79.1
Engineering:	\$ 55.0	\$ 81.2
Right of Way:	\$ 31.4	\$ 14.4
Total:	\$ 633.4	\$ 646.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Commitments made in supplemental final environmental impact study are being implemented, including the roadway design, bridge type and mitigation. Total project costs shown above are split with Wisconsin DOT and include construction, right-of-way & risk.

Baseline estimate assumed only the MN portion of the contingency costs and was a planning level estimate. Current estimates are based off of 6/30/15 data, with itemized cost tracking from 2002 to 6/30/15, and includes contingencies for both MN and WI.

Financial Plan, signed by MnDOT & WisDOT was provided to FHWA in September 2015, and is based on all current cost and letting information.

Project Risks:

Permits, cost and schedule are potential risks.

Schedule:

Environmental Approval Date: 09/05/2012
 Municipal Consent Approval Date: 2006 & 2012
 Geometric Layout Approval Date: 1995 through 2014
 Construction Limits Established Date: 2006
 Original Letting Date: 1997
 Current Letting Date: 2013
 Construction Season: 2013/2017
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Todd Clarkowski

Revised Date: 12/15/2015

PROJECT SUMMARY

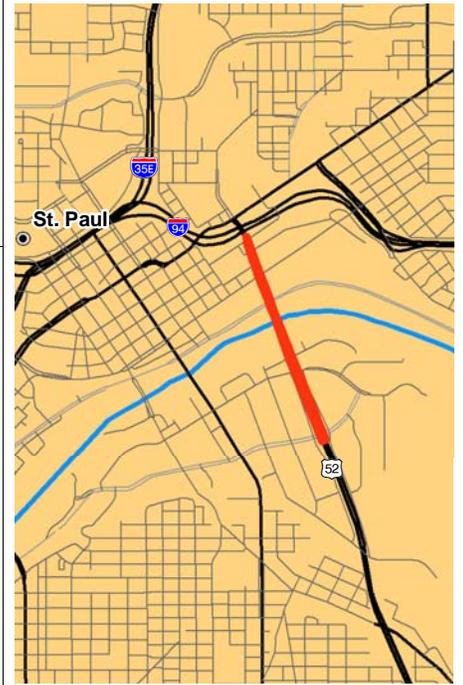
Hwy 52

Lafayette River Bridge over Mississippi River in St. Paul

Bridge 62026, 9800

State Project No. 6244-30

<http://www.dot.state.mn.us/lafayettebridge/>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

The anticipated completion of construction is October 2015. Costs have not changed since the 2014 MHP report.

Project History:

The Lafayette Bridge was built in 1968. The span over the Mississippi River is considered fracture critical. The project will replace the river bridge and reconstruct or redeck the Hwy 52 bridges over Plato Blvd and I-94. MnDOT in partnership with St. Paul and a citizen's committee looked at alternatives for alleviating congestion and enhancing traffic safety for the connections to East 7th Street and I-94. The preferred alternative (also recommended by a value engineering study in 9/08) is shown.

Funded through the bridge replacement program in STIP (FY 2011). Northbound bridge completion expected by late 2013 and southbound by late 2015. The construction letting cost is \$130.4 million.

Project Description:

Major river bridge replacement, ramps, loops to I-94 and connection to East 7th Street, replace/rehab Hwy 52 bridge over Plato Blvd and Hwy 52 bridge over I-94, as well as a full length pedestrian bridge.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2009

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 130.4	\$ 130.4
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 26.1	\$ 26.1
Right of Way:	\$ 16.2	\$ 16.2
Total:	\$ 172.7	\$ 172.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Probable environmental contamination, potential need to build LRT bridge footings in river, permits required from FAA and Coast Guard. The location of LRT maintenance facility and relocation of utilities - Xcel transmission lines as well as water main.

Project Risks:

Probable environmental contamination, potential need to build LRT bridge footings in river, permits required from FAA and Coast Guard. The location of LRT maintenance facility and relocation of utilities - Xcel transmission lines as well as water main.

Schedule:

Environmental Approval Date: 09/17/2009
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: Pending Approval
 Construction Limits Established Date: Pending Approval
 Original Letting Date: (10/21/2011)
 Current Letting Date: 11/19/2010
 Construction Season: 2011/2015
 Estimated Substantial Completion: November 2015



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Dale Gade

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 100

36th Street to 25 1/2 Street in St. Louis Park

Bridge 5308, 5309, 5462, 5598,

State Project No. 2734-33

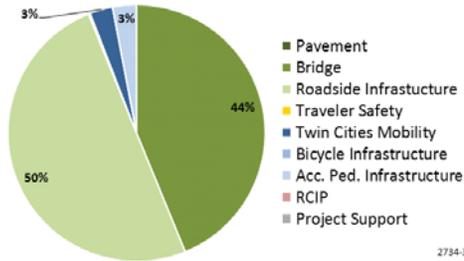
<http://www.dot.state.mn.us/metro/projects/hwy100slp/>



Primary Purpose:

Twin Cities Mobility: Spot Mobility
Improvement Performance-based Need:
Roadside Infrastructure Condition

Investment Category:



2734-33

Project Description:

Freeway and interchange reconstruction from West 36th Street to Cedar Lake Rd. Replace bridges, grading, surfacing, drainage, utilities, noise and retaining walls, as well as installation of traffic management cameras.

Recent Changes and Updates

Construction began in August of 2014. The current estimate has not changed since the 2014 MHP reports. Substantial progress was made and the project is on track to be complete in fall 2016.

Project History:

Concept layout with CORSIM (Corridor Simulation) analysis was developed for reconstruction of a four-lane freeway to a six-lane freeway, including bridge replacements by 2005.

In 2006, low cost temporary improvements were made to add a third lane in each direction in preparation for the Crosstown project. Concept project was rescoped to reduce costs and address substandard bridges. The preferred alternative was selected end of 2010/early 2011.

Agreements with the railroad, HCRRA, utilities, city and county as well as right of way acquisition were executed. Retirement of risk and contingency have contributed to the deviation from the baseline estimate.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 60.0	\$ 44.0
Other Construction Elements:	\$ 4.0	\$ 3.6
Engineering:	\$ 13.0	\$ 9.3
Right of Way:	\$ 3.0	\$ 4.5
Total:	\$ 80.0	\$ 61.4

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Assumes approval of the reduced scope design standards.

Project Risks:

Typical construction risks remain.

Schedule:

Environmental Approval Date: 06/10/2013
Municipal Consent Approval Date: 12/03/2012
Geometric Layout Approval Date: 9/17/2013
Construction Limits Established Date: 08/15/2012
Original Letting Date: 07/08/2015
Current Letting Date: 05/16/2014
Construction Season: 2014/2016
Estimated Substantial Completion: 11/01/2016



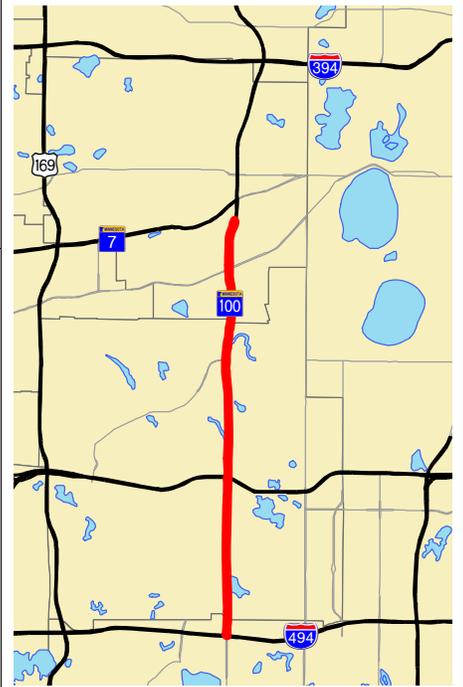
Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: April Crockett

Revised Date: 12/15/2015

PROJECT SUMMARY

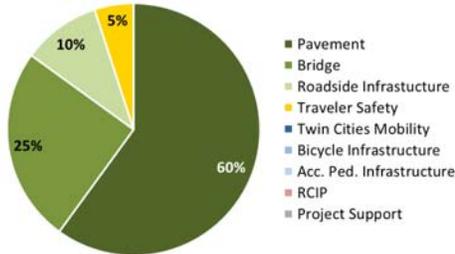
Hwy 100
 St. Louis Park
 Bridge 9431, 9500, 27103, 27104, 27210, 9432, 27029, 27102
 State Project No. 2733-89
<http://www.dot.state.mn.us/metro/projects/hwy100slp/>



Primary Purpose:

Performance-based needs: Bridge Condition and Pavement Condition

Investment Category:



Project Description:

Bituminous overlay, drainage, guardrail improvements, overlay four bridges and repairs to four other bridges on Hwy 100 from I-494 to just north of West 36th St in St. Louis Park.

Recent Changes and Updates

Since the 2014 MHP report, the project has been under construction for one season. Work is progressing to meet a traffic opening by fall 2016.

Project History:

This project is part of a segment that is the last sub-standard section on Hwy 100 south of I-394 and is one of the most congested freeways in the Metro area. Originally built in the mid-1930s, it is part of the first beltway around the Twin Cities. This segment from I-494 to W 36th St is the last phase of a project on the highway that includes work on pavement and bridges north to I-394. 2014 was the first year this project was included in the Major Highway Projects report.

The change in the baseline to current estimate was a result of a change from a concrete pavement repair to 4" in. bituminous overlay based on the Materials Unit recommendation. Additional traffic control costs dropped due to the change from CPR to bituminous overlay.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.9	\$ 16.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.8	\$ 2.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 18.7	\$ 19.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to development estimates for this project.

Project Risks:

Typical project constructions risks remain.

Schedule:

Environmental Approval Date: 2015
 Municipal Consent Approval Date: na
 Geometric Layout Approval Date: na
 Construction Limits Established Date: na
 Original Letting Date: 06/14/2018
 Current Letting Date: 06/05/2015
 Construction Season: 2015
 Estimated Substantial Completion: 11/15/2015



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Chad Casey

Revised Date: 12/15/2015

PROJECT SUMMARY

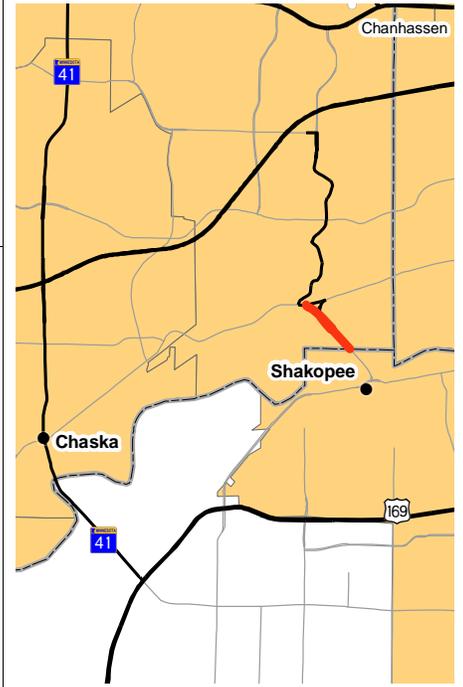
Hwy 101

Minnesota River Bridge in Shakopee to Hwy 61 in Chanhassen

Bridge 10004

State Project No. 1009-24

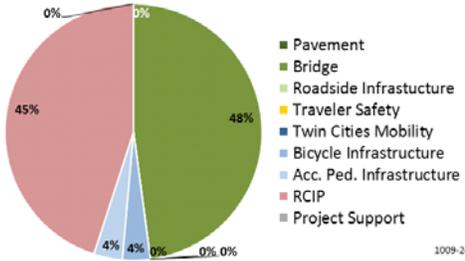
<http://www.dot.state.mn.us/metro/projects/hwy101river/index.html>



Primary Purpose:

Performance-based Need: Bridge & Flood Mitigation

Investment Category:



Project Description:

Construction of a new Hwy 101 bridge over the floodplain, above the 100-yr flood elevation, between the existing Hwy 101 Minnesota River bridge in Shakopee at County Road 61/Flying Cloud Drive in Chanhassen. Carver County is the project lead, which now includes work on Flying Cloud Drive and a roundabout at the intersection of Hwy 101 and Flying Cloud Drive.

Recent Changes and Updates

This project is substainally complete, with a ribbon cutting date of November 23, 2015. Some additional activities, such as landscaping, will happen into 2016.

Project History:

Hwy 101 is a two-lane roadway over the Minnesota River that has closed six times in the last 12 years due to flooding. A flood mitigation study completed in Sept 2011 determined a "lower cost" project to allow an additional river crossing over the Minnesota River to be open during flooding. Hwy 101 was selected as the option to move forward from the study. A four-lane section was developed after the study for Hwy 101. The project includes a roundabout at Hwy 101 and Flying Cloud Drive and additional widening along Flying Cloud Drive to the intersection of Bluff Creek Drive. In 2013, the overall project costs increase from the Baseline Estimate due to additional scope added to the project in the area of the Flying Cloud Drive/Hwy 101/Bluff Creek Drive.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.0	\$ 49.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 4.2	\$ 4.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 46.2	\$ 53.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

State Aid standards and Project delivery process. 4,100-ft long bridge with a 10-ft trail on bridge. Hwy 101 to stay open to traffic during construction.

Project Risks:

Very poor soils and possibly artesian conditions are found all over the project area. Deep muck and poor soils have resulted in a design that includes pile supported embankment, a longer bridge and muck excavation. Archeological site was discovered in the area of Flying Cloud Drive and Bluff Creek Drive.

Schedule:

Environmental Approval Date: 09/04/2013
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: Summer 2013
 Construction Limits Established Date: Need Unknown
 Original Letting Date: 05/16/2014
 Current Letting Date: 05/16/2014
 Construction Season: 2014/2015
 Estimated Substantial Completion: 11/23/2015



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

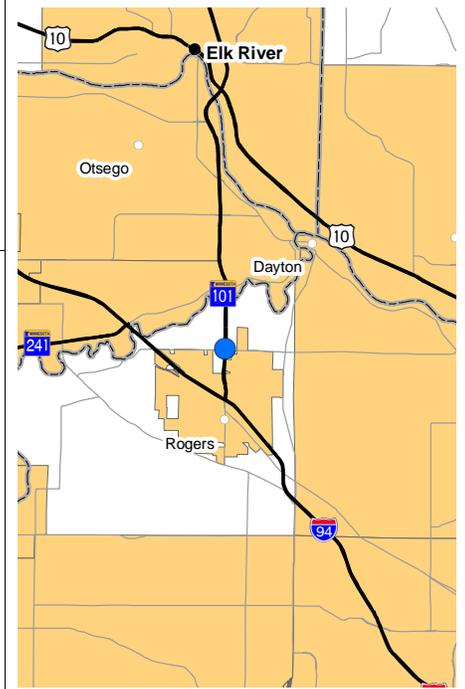
District Engineer: Scott McBride
Project Manager: Molly Kline

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 101
At County Road 144 in Rogers
Bridge 27299
State Project No. 2738-28

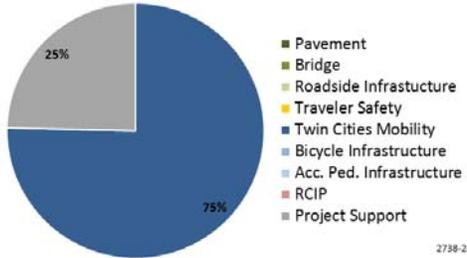
Substantially Complete



Primary Purpose:

Twin Cities Mobility: Spot Mobility Improvement

Investment Category:



Project Description:

Construction of a grade-separated interchange at the intersection of Hwy 101 and County Road 144 in Rogers.

Recent Changes and Updates

The project was complete in the fall of 2014. The Total Project Cost Estimate has not changed from the 2013 Major Highway Projects report.

Project History:

Hwy 101 is a four-lane, major arterial roadway in the northwestern Metro. In 2003, Hwy 101 was reconstructed from County Road 36 to Hwy 10, converting it from a two-lane expressway to a four-lane controlled access facility.

Local governments had a difficult ROW process. This project is tied with a pavement project (SP 2738-29 and 238-010-003).

Bid came in under Engineer's Estimate. A competitive bid environment, coupled with Value Engineering steps and early consultation with contractors association, contributed to the difference between the construction baseline estimate and letting amount.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 16.2	\$ 14.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.2	\$ 3.0
Right of Way:	\$ 3.0	\$ 3.0
Total:	\$ 22.6	\$ 20.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project funding used \$9.2M from the Safety and Mobility Interchange Program (SaM) grant and \$5.5M of STP funds out of \$7.5 M secured by the City of Rogers.

Project Risks:

Local acquisition of right of way for the project. Condemnation hearings still are underway.

Schedule:

Environmental Approval Date: Pending
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 9/25/2012
Construction Limits Established Date: 09/15/2012
Original Letting Date: 11/22/2013
Current Letting Date: 02/28/2014
Construction Season: 2014
Estimated Substantial Completion: 10/29/2014



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Ramankutty Kannankutty

Revised Date: 12/15/2015

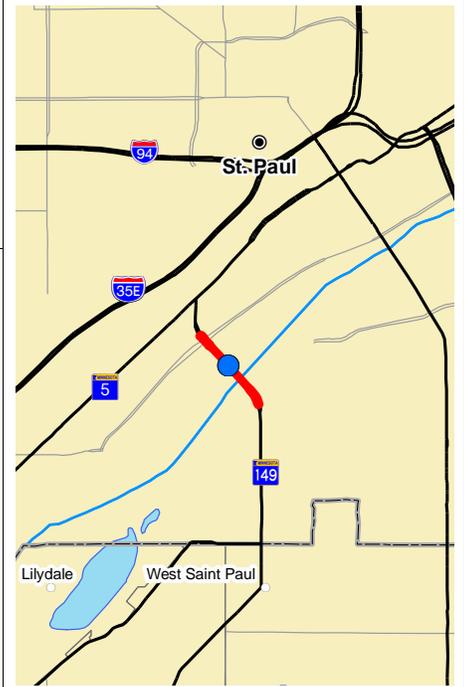
PROJECT SUMMARY

Hwy 149

Smith Avenue High Bridge over the Mississippi River in St. Paul

Bridge 62090

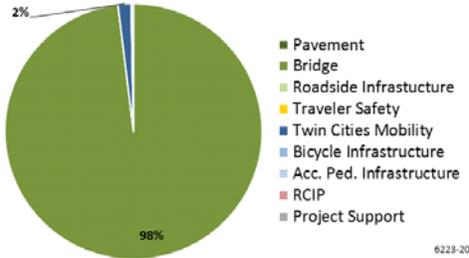
State Project No. 6223-20



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

Redeck the Smith Avenue High Bridge over the Mississippi River. Associated miscellaneous work, such as approach panels also will be replaced with this project. ADA facilities adjacent to the bridge will also be upgraded to comply with the current standards.

Recent Changes and Updates

The updating current letting date was changed to 1/27/17, with an estimated substantial completion date of 1/26/18. A pavement project in West St. Paul (SP1917-45) is now being tied to the bridge project.

Project History:

A low-slung concrete overlay was placed on the deck when it was first constructed in 1986. Ground penetrating radar results in 2009 exhibited 7 percent of the deck needs replacement. The bridge was built with uncoated rebar in the bottom of the deck. 10 percent of the bottom deck exhibits visual spalling, delamination and water saturation along with extensive transverse cracks. The loose and falling concrete from the deck bottom cannot be controlled without major expense and thus the entire bridge deck will be replaced.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.2	\$ 12.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.8	\$ 2.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 17.0	\$ 14.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop estimates for this project.

Project Risks:

Environmental issues and permits required to demolish and construct over the Mississippi River.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: Pending
 Geometric Layout Approval Date: Pending
 Construction Limits Established Date: Pending
 Original Letting Date: 06/14/2017
 Current Letting Date: 01/27/2017
 Construction Season: 2017
 Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Tara McBride

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 169

Nine Mile Creek Bridge (Hopkins, Edina, Minnetonka)

Bridge 27568

State Project No. 2772-113

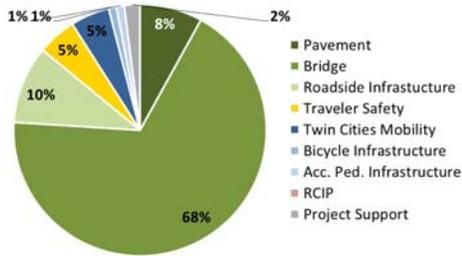
<http://www.dot.state.mn.us/metro/projects/hwy169hopkins/index.html>



Primary Purpose:

Performance-based needs: Bridge Condition

Investment Category:



Project Description:

Replace Bridge #27568 (New Br # 27W35) over Nine Mile Creek in Hopkins/Edina and replace culvert 90478 (new Culvert 27X15). Design build project tied to 2772-104, 2772-105, 2772-110)

Recent Changes and Updates

This is the first year this project was included in the MHP. As a result of the 2015 legislative session, funding was provided for additional preservation projects and the Nine Mile Creek Bridge project (SP 2772-113) was selected to be moved into SFY 2017. The bridge project will now be delivered in calendar year 2016 (SFY 2017) and will be tied to a pavement project on US 169 (SP 2772-105).

Before the 2015 legislative session funding, this project was planned in SFY 2021 of the Capital Highway Investment Proposal.

Project History:

Replacing the bridge over Nine Mile Creek on Hwy 169. The current bridge conditions require that it be replaced by 2020. The bridge is being built to accommodate any future expansion of Hwy 169. The bridge is approximately 3,000 ft. long and replacement is a significant undertaking.

This project is being done with a pavement project on Hwy 169, acceleration and deceleration lanes lengthening by Cedar Lake Road and a ramp closure of West 16th Street in St. Louis Park.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 65.9	\$ 65.9
Other Construction Elements:	\$ 1.8	\$ 1.8
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.9	\$ 0.9
Total:	\$ 69.9	\$ 69.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Project is Design Build - project estimate assumes/includes a design build innovation savings of \$2.3M.

Project Risks:

Risks include agency permits, remove pilings, flood plain mitigation, noise walls, a July 2016 letting, traffic impacts of a full road and bridge closure, and traffic impacts of parallel projects.

Schedule:

Environmental Approval Date: pending
 Municipal Consent Approval Date: pending
 Geometric Layout Approval Date: pending
 Construction Limits Established Date: 42219
 Original Letting Date: 44361
 Current Letting Date: 42578
 Construction Season: 2016/2017
 Estimated Substantial Completion: 2017



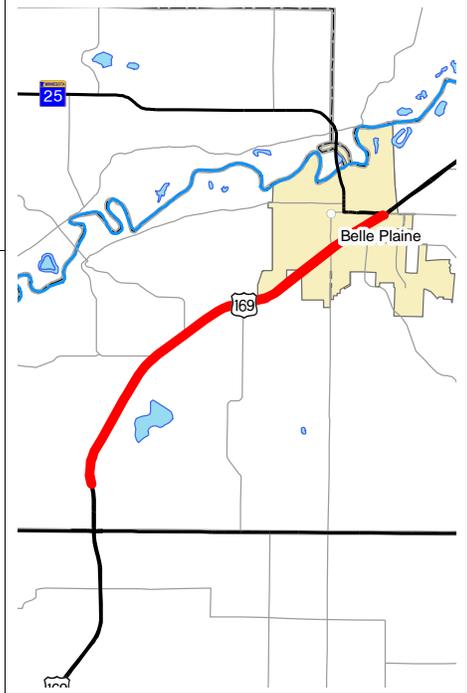
Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Andrew Lutaya

Revised Date: 12/15/2015

PROJECT SUMMARY

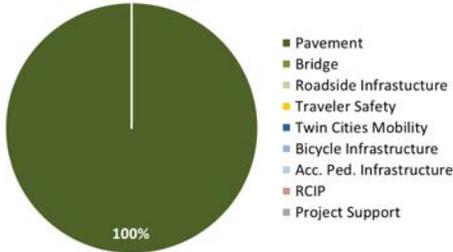
Hwy 169
Mn 19 to Ash St in Belle Plaine
State Project No. 7007-34



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Unbonded concrete overlay of Hwy 169 from Hwy 19 to Ash Street in Belle Plaine. Includes some minor CPR work and minor drainage repairs.

Recent Changes and Updates

This is the first year this project is included in the MHP report.

Project History:

The goal of the unbonded concrete overlay is to improve the ride (smoothness) and restore the pavement structure of this segment for a projected period of 30-33 years. The goal of the minor CPR and Diamond Grinding is to improve the ride and restore the pavement structure of this segment for a projected period of 14-16 years.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 21.5	\$ 21.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.6	\$ 3.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 25.1	\$ 25.1

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates for this project.

Project Risks:

Project risks include traffic detour and access for adjacent properties, including a school and businesses

Schedule:

Environmental Approval Date: pending
Municipal Consent Approval Date: pending
Geometric Layout Approval Date: pending
Construction Limits Established Date: pending
Original Letting Date: 43308
Current Letting Date: 43308
Construction Season: 2018/2019
Estimated Substantial Completion: 03/07/2019



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Chad Casey

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 169

North of Hwy 62 in Edina to Hwy 55 in Golden Valley

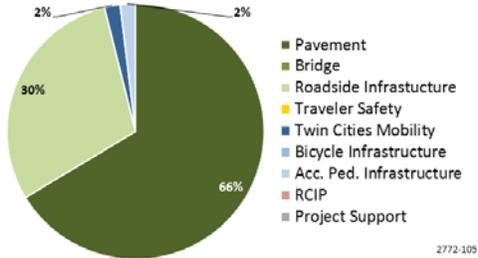
State Project No. 2772-105



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



2772-105

Project Description:

Concrete pavement repair project with diamond grinding, mill and overlay and drainage work.

Recent Changes and Updates

This project is now being done in conjunction with the Nine Mile Creek Bridge on Hwy 169. That project was added to the STIP as a result of additional funding made available to MnDOT through the 2015 MN Legislative session.

Bus shoulders between TH 55 ramps & loops were removed from the project. Reducing some of the construction letting costs.

Project History:

Scoping for this pavement preservation project was completed in October 2012. At that time, the project did not include the Nine Mile Creek Bridge.

The present pavement smoothness of this section ranges from the poor to fair category. The current concrete, paved in 1983, has deteriorated. Issues include transverse joints failing, concrete pop-outs, and mid panel cracks. Diamond grinding is necessary to correct "rough" ride built in from the original concrete paving. A bituminous overlay on the north section, done in 1998, has tenting & transverse cracking and longitudinal joint raveling.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 16.5	\$ 12.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 2.3
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 17.8	\$ 14.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

One year construction staging project must be let in July 2016 to allow 1 year construction.

Project Risks:

This project involves concrete patching and repair which introduces risk because exact quantities needed won't be known until construction begins. Both directions of Hwy 169 over Nine Mile Creek will be closed from between Bren Road/Londonderry Road and 7th Street South/Interlachen Road (5th Street/Lincoln Drive) interchanges from Fall 2016 through fall 2017. Coordination with Nine Mile Creek Bridge project.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: Not Needed
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 06/14/2017
 Current Letting Date: 07/27/2016
 Construction Season: 2016/2017
 Estimated Substantial Completion: 11/01/2017



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

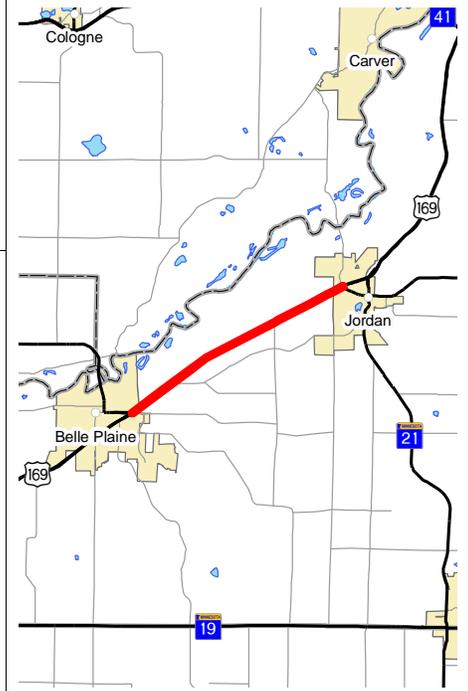
District Engineer: Scott McBride
Project Manager: Jeff Gibbens

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 169

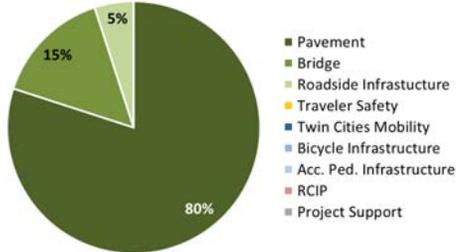
Scott County, from Hwy 25 in Belle Plaine to Hwy 282 in Jordan
State Project No. 7008-111



Primary Purpose:

Performance Need: Pavement Conditions, District Safety Plan

Investment Category:



Project Description:

This project is an unbonded concrete overlay, median closures, add U-turns, and cable guardrails on Hwy 169 from Hwy 25 in Belle Plaine to Hwy 282 in Jordan.

Recent Changes and Updates

This is the first year this project is included in the MHP report.

The northern project limit is shifting about 1,000 feet south of Hwy 282. This segment is being reconstructed in the 2015 Jordan pavement project so that the Hwy 169/Hwy 282/CR 9 intersection is not impacted again in 2018.

Project History:

This is the first year this project is included in the MHP report. The project is being driven by pavement needs. Additional access management may be implemented if there is support from local partners.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 18.0	\$ 18.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.0	\$ 3.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 21.0	\$ 21.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Median closures and turn lane costs are based on prior projects and will be adjusted after layout preparation and quantity development. Cost will be revised during the Fall of 2014 to cover the 1,000 ft. extension.

Project Risks:

Potential local opposition to R-cuts. Extent of culvert work not fully known.

Schedule:

Environmental Approval Date: Pending
Municipal Consent Approval Date: NA
Geometric Layout Approval Date: Pending
Construction Limits Established Date: Pending
Original Letting Date: 07/21/2017
Current Letting Date: 07/21/2017
Construction Season: 2018
Estimated Substantial Completion: 01/26/2019



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Chad Casey

Revised Date: 12/15/2015

PROJECT SUMMARY

Hwy 212

At Shady Oak Road in Eden Prairie

State Project No. 2763-49

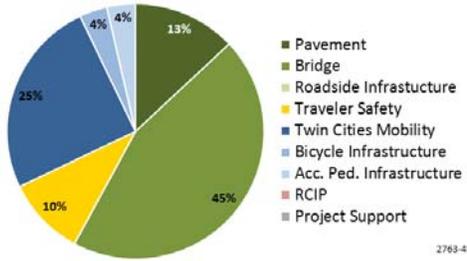
<http://www.edenprairie.org/community/infrastructure-projects/shady-oak-road>



Primary Purpose:

Twin Cities Mobility: Spot Mobility
Improvement Performance-based Need:
Bridge Condition

Investment Category:



2763-49

Project Description:

Reconstruct of an existing local interchange to handle additional capacity.

Recent Changes and Updates

This is a locally-led project is expected to be complete in November 2015.

Project History:

Hwy 212 is a principal arterial in the western metro area. The proposed project will reconstruct the existing diamond interchange to provide additional capacity on Shady Oak Road and improve access to Hwy 212. There is coordination with the City of Eden Prairie, MnDOT, and Southwest LRT. This is a locally-led project and received TED funding of \$7.1M in 2012.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.2	\$ 23.2
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 4.9	\$ 4.9
Right of Way:	\$ 3.5	\$ 3.5
Total:	\$ 31.7	\$ 31.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Local governments provided cost estimates and engineering. MnDOT has oversight and review of project design. The project received \$7.1 million in 2012 TED funding, which constitutes the extent of MnDOT's share of the project.

Project Risks:

This is a locally led project. There are logistical challenges related to this type of partnership.

Schedule:

Environmental Approval Date: Local Prep
Municipal Consent Approval Date: Not Needed
Geometric Layout Approval Date: 3/26/2013
Construction Limits Established Date: 3/26/2013
Original Letting Date: 08/15/2014
Current Letting Date: 05/15/2014
Construction Season: 2014/2015
Estimated Substantial Completion: November 2015



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: April Crockett

Revised Date: 12/15/2015

PROJECT SUMMARY

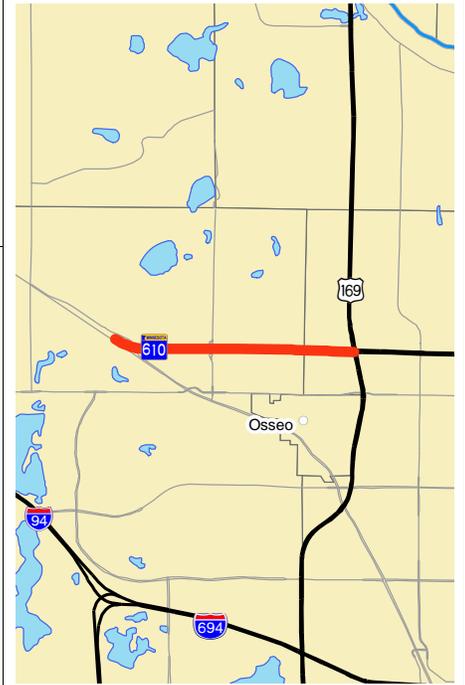
Hwy 610

Hwy 81 to I-94 in Maple Grove

Bridge 27228, 27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16

State Project No. 2771-37

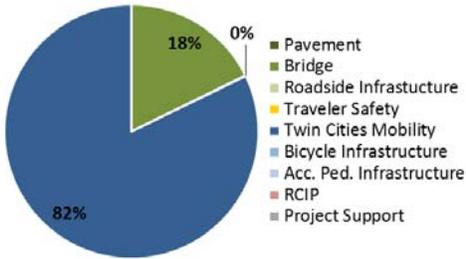
<http://www.dot.state.mn.us/metro/projects/610west/index.html>



Primary Purpose:

Regional & Community Improvement Priority:
Corridors of Commerce Project: Metro
Capacity Development

Investment Category:



Project Description:

Realign and extend highway from County Road 81 and Elm Creek Boulevard to I-94, including construct Hwy 610 bridge over Fernbrook Lane, construct interchange at Hwy 610 and Maple Grove Parkway, close and remove a half mile segment of 101st Avenue North, between I-94 and Fernbrook Lane, and extend 105th Ave west from Holly Lane across I-94 to a new intersection with 101st Ave.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 112.0	\$ 80.7
Other Construction Elements:	\$ 11.0	\$ 10.0
Engineering:	\$ 3.6	\$ 3.6
Right of Way:	\$ 49.0	\$ 45.6
Total:	\$ 175.6	\$ 139.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Recent Changes and Updates

This project has been under construction for the last year. The project costs have not changed since the 2014 MHP report. The current schedule is to be open to traffic by the fall of 2016.

Project History:

This project is the final connection of I-94 to Hwy 610. This project will connect I-94 to the existing portion of Hwy 610 that currently ends at the CSAH 81, Elm Creek Blvd., and Hwy 610 interchange. Project costs changed in the 2014 MHP report due to the award of the construction bid at \$80.7M in 2014. The project is being built with design-build as the contracting process.

Key Cost Estimate Assumptions:

The Baseline Estimate is based on a report the Project Manager submitted to Metro on Dec. 27, 2013. These costs were then entered into the 2014-2017 STIP Amendment. The Current Estimate reflects costs that were updated and entered into the 2015-2018 Final STIP, which is going through the approval process. See the Recent Changes section for details on the cost difference.

Project Risks:

Remaining risks include typical Design/Build construction risks.

Schedule:

Environmental Approval Date: 02/27/2014
Municipal Consent Approval Date: 03/03/2014
Geometric Layout Approval Date: 6/2/2014
Construction Limits Established Date: 10/08/2013
Original Letting Date: 08/08/2014
Current Letting Date: 08/08/2014
Construction Season: Oct. 2014/Oct. 2016
Estimated Substantial Completion: 42664



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Jerome Adams

Revised Date: 12/15/2015

PROJECT SUMMARY

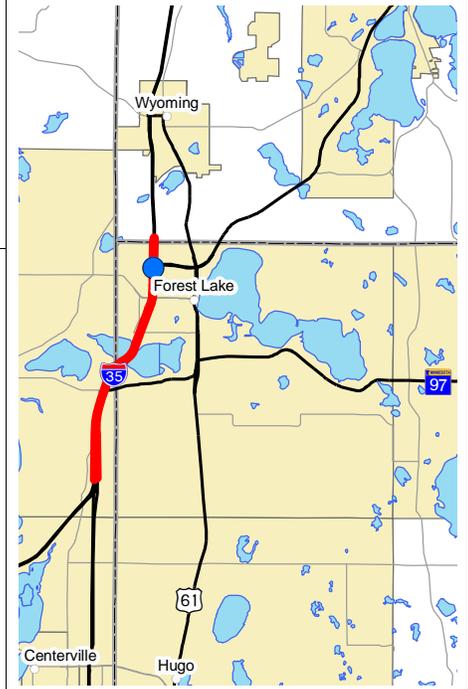
I-35

Washington, Anoka Counties

Bridge 82815, 02804, 02806

State Project No. 8280-47

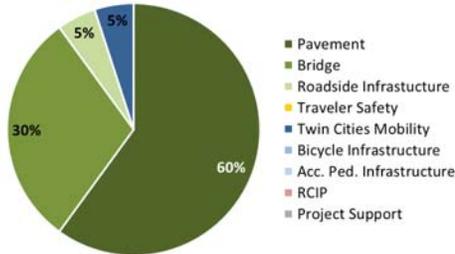
<http://www.dot.state.mn.us/metro/projects/35linolakes/index.html>



Primary Purpose:

Performance-based Need: Pavement Condition and Bridge Condition.

Investment Category:



Project Description:

This project consists of an unbonded concrete overlay, and replacement of three bridges. Limits of the project are on I-35E from 80th St E to the junction of I-35/I-35W/I-35E & on I-35W from north of Main St. to the junction of I-35/I-35W/I-35E and on I-35 from the junction of I-35/I-35W/I-35E to north of Hwy 8. The three bridges are: northbound I-35W over southbound I-35E, Hwy 97 over I-35, and Hwy 8 over I-35.

Recent Changes and Updates

Current estimate reflected updated inflation (1/21/2015).

Project History:

This project first was included in the MHP in 2014. Pavement and bridge project to address poor pavement and bridge condition.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 39.6	\$ 38.9
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 6.4	\$ 6.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 46.0	\$ 45.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates for this project.

Project Risks:

Traffic impacts during construction. Anoka County leading an interchange study at I-35/Hwy 97.

Schedule:

Environmental Approval Date: 10/07/2015
 Municipal Consent Approval Date: 10/07/2015
 Geometric Layout Approval Date: pending
 Construction Limits Established Date: 01/16/2015
 Original Letting Date: 07/21/2017
 Current Letting Date: 04/28/2017
 Construction Season: 2017/2018
 Estimated Substantial Completion: 11/15/2018



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Ryan Coddington

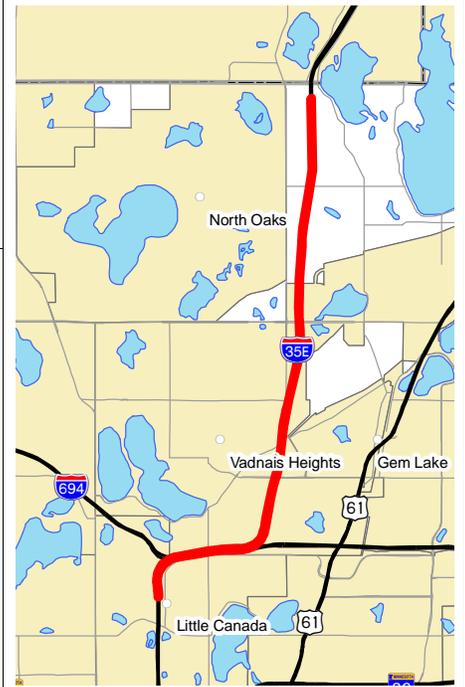
Revised Date: 12/15/2015

PROJECT SUMMARY

I-35E

Little Canada Rd in Little Canada to Ramsey County Rd J in White Bear Lake
State Project No. 6281-47

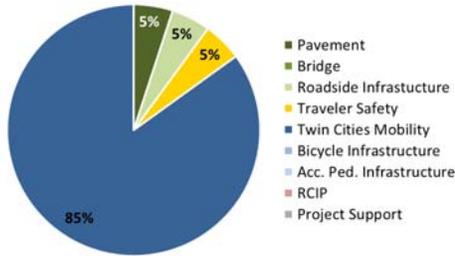
<http://www.dot.state.mn.us/metro/projects/i35vadnaisheights/index.html>



Primary Purpose:

Twin Cities Mobility: Managed Lanes

Investment Category:



Project Description:

I-35E MnPASS extension from Little Canada Road to CSAH 96 in both directions (with exceptions in the I35E/694 Commons areas) and north to County Road J for the northbound lane only.

Recent Changes and Updates

This is the first year this project is being included in this report because it is being added to SFY 2016 of the 2016-2019 STIP.

Project History:

This project is an extension of the I-35E MnPASS lane along I-35E, from Little Canada Road to CSAH 96 in both directions (with exceptions in the I35E/694 Commons areas) and north to County Road J for the northbound lane only. Where the Goose Lake Bridge Project will take place a MnPASS lane will already be added.

The Goose Lake Road Bridges project number is SP 6281-25 and is included as a separate entry in this report.

Project funded comes from a Managed Lane setaside and Chapter 152 Transit Advantage bonds.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 19.4	\$ 19.4
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.3	\$ 3.3
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 23.0	\$ 23.0

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates for this project.

Project Risks:

Project is timed with other area project, especially the Goose Lake Bridge project (6281-25). This area has high traffic flow and staging must be carefully planned to minimize accidents during construction. Potential impacts of environmentally sensitive areas.

Schedule:

Environmental Approval Date: December 2015
Municipal Consent Approval Date: February 2015
Geometric Layout Approval Date: pending
Construction Limits Established Date: pending
Original Letting Date: 42454
Current Letting Date: 03/25/16
Construction Season: 2016
Estimated Substantial Completion: 2016



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Dale Gade

Revised Date: 12/15/2015

PROJECT SUMMARY

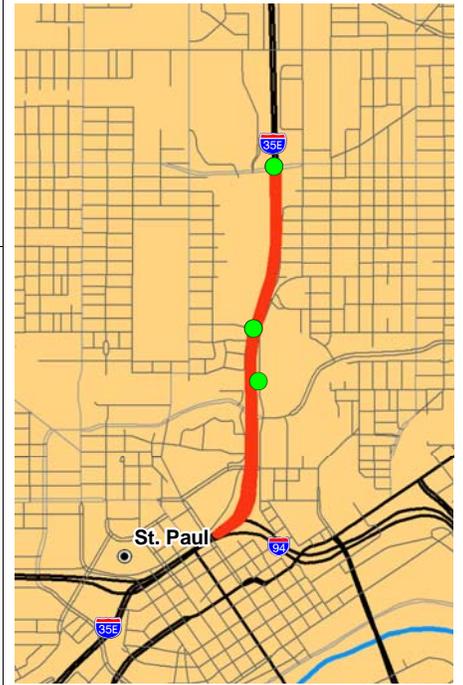
I-35E

Cayuga Bridge between University Ave and Maryland Ave

Bridge 6515, 9265, 6517

State Project No. 6280-308

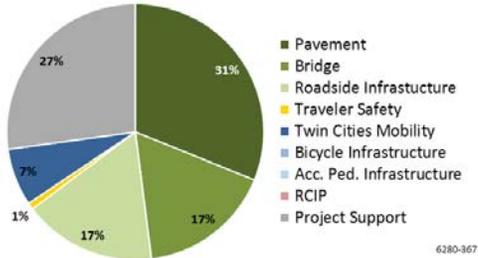
<http://www.dot.state.mn.us/metro/projects/35estpaul/cayuga.html>



Primary Purpose:

Performance-based Need: Bridge Condition

Investment Category:



Project Description:

Replace Cayuga Bridge (6515), Pennsylvania Ave. Bridge (9265), BNSF RR Bridge (6517). Replace the Pennsylvania interchange with the interchange at Cayuga to solve safety and operational problems. Improve geometrics on 35E. Extend auxiliary lane from Pennsylvania to Maryland.

Recent Changes and Updates

While the project is substantially complete, there is additional work, such as frontage roads and landscaping, that will continue into 2016. Total Project Cost Estimate has not changed since the 2013 MHP report.

Project History:

The Cayuga Bridge was built in 1965. Since then it has undergone bridge repair and paint in 1975 and "limited service" overlay in 2004. Inspection in 2008, NBI deck: 5, super: 4, sub: 4, sufficiency rating: 40.8. need to replace bridge by 2018 per Chapter 152 requirements.

Late start to construction season in 2013 and under-estimated asbestos delayed completion of Cayuga St. to Westminster Street. The estimate reflects construction letting of \$116 million.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2010

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 143.9	\$ 116.0
Other Construction Elements:	\$ 5.3	\$ 11.0
Engineering:	\$ 24.4	\$ 25.5
Right of Way:	\$ 11.3	\$ 18.2
Total:	\$ 184.9	\$ 170.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Risk added for roadway construction (i.e. soils, water resources, and pavement design), environmental cleanup and oversight, railroad agreement (\$2.2M estimate), and utility relocation (\$5.4 million).

Project Risks:

High potential for environmental contamination and poor soils. North/south and east/west non-motorized connectivity issues and potential for scope and budget increases.

Schedule:

Environmental Approval Date: 09/15/2011
 Municipal Consent Approval Date: 09/05/2012
 Geometric Layout Approval Date: 5/10/2012
 Construction Limits Established Date: 05/16/2011
 Original Letting Date: 04/25/2014
 Current Letting Date: 11/16/2012
 Construction Season: 2012/2016
 Estimated Substantial Completion: 04/01/2016



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Dale Gade

Revised Date: 12/15/2015

PROJECT SUMMARY

I-35E

I-35E between Pennsylvania Ave and Little Canada Road
 Bridge 6509, 6510, 6511, 6512, 6514, 6579, 9117, 9118, 9119, 9120
 State Project No. 6280-367
<http://www.dot.state.mn.us/metro/projects/35estpaul/mnpass.html>

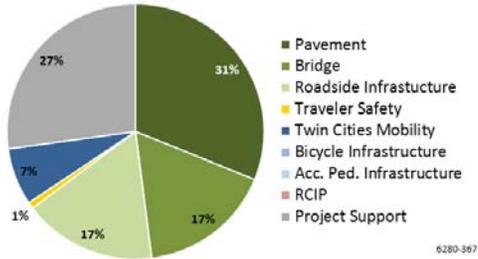


Primary Purpose:

Twin Cities Mobility: Managed Lanes

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

The I-35E MnPASS Project includes long-term pavement rehabilitation between Maryland Ave. and Little Canada Rd., replacement of the Arlington, Wheelock and Larpenteur bridges, and replacement of the I-35E mainline bridges at Roselawn, County Road B and Hwy 36.

Recent Changes and Updates

Costs have not changed since the 2013 MHP report. The MnPASS lanes will be open in late November 2015 with construction of the Caguya interchange and frontage roads will continue into 2016.

Project History:

The MnPASS System II study identified I-35E north of St. Paul as the top candidate for the region's next MnPASS facility due to congestion levels, transit demand and the opportunity to coordinate construction of the MnPASS Express Lanes and 35E/Caguya.

Current estimate increased in 2013 when design build contract was let. The construction letting of \$98.6 million is reflected in the current estimate.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 73.6	\$ 98.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 18.4	\$ 22.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 92.0	\$ 120.8

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates for this project.

Project Risks:

Standard construction and project risks assumed. Legal actions by unsuccessful bidders. Unresolved non-motorized issues.

Schedule:

Environmental Approval Date: 03/01/2013
 Municipal Consent Approval Date: 02/20/2013
 Geometric Layout Approval Date: 2/12/2013
 Construction Limits Established Date: 02/12/2013
 Original Letting Date: 06/14/2013
 Current Letting Date: 07/24/2013
 Construction Season: 2014/2015
 Estimated Substantial Completion: November 2015



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Dale Gade

Revised Date: 12/15/2015

PROJECT SUMMARY

I-35E

Vadnais Heights and White Bear Lake - Goose Lake Road Bridges
 Bridge 9567, (new, 62729), &, 9568, (new, 62730)

State Project No. 6281-25

<http://www.dot.state.mn.us/metro/projects/i35vadnaisheights/index.html>



Primary Purpose:

Performance-based needs: Bridge Condition and Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Cost increases in construction letting from 2014 to 2015 are \$2M and are a result of railroad agreement costs, changing the pavement fix, and bridge clearance. The railroad agreement costs are now included in 'Construction Letting' costs. The project changed to 4 in. mill and 9 in. concrete overlay over 1 in. of Permeable Asphalt Stabilized Stress Relief Course with reconstruction of the two transition areas at the both ends of the project. To maintain the minimum bridge vertical clearance over the railroad, the profile of I-35E need to be raised by 1.2 ft.

Baseline and Current Estimates are updated. In previous report, the Baseline Estimate did not include costs for Other Construction Elements or Engineering.

Project History:

From 2013 to 2014, the project costs increased from \$10.1M to \$20M due to a mill and concrete overlay project being combined into it, as well as preparing the bridges and pavement to be ready for a MnPASS extension into this area. While the costs increased, there was efficiency and cost savings in combining the bridge and pavement project as well as the MnPASS project. The I-35E MnPASS Extension project is a separate entry in this report.

The I-35E bridges over Goose Lake Road and the BNSF railroad in Vadnais Heights will be replaced with new wide structures to accommodate three lanes of traffic and profile adjustment of pavement on both sides of the bridges. There will be a mill & concrete overlay on the mainline and concrete pavement repair on 3 ramps at Co Rd E.

Project Description:

Replace Goose Lake Road Bridges including profile adjustment on both sides of the bridges, mill and unbonded concrete overlay, ADA, retaining walls, ponding, guardrail, drainage and transportation management system improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 10.1	\$ 22.4
Other Construction Elements:	\$ 0.4	\$ 0.2
Engineering:	\$ 2.1	\$ 4.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.5	\$ 26.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Some of the key cost estimates include a wider shoulder for future MnPASS extension lanes, and an unique bridge construction phasing including building the middle portion of the bridge first and then the outside portions.

Project Risks:

The project letting was extended until 6/5/15 to complete the design work to accommodate the future MnPASS extension. This area has high traffic flow and staging must be carefully planned to minimize accidents during construction. Potential impacts of environmentally sensitive areas.

Schedule:

Environmental Approval Date: 3/16/2015
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: 41935
 Construction Limits Established Date: 12/2014
 Original Letting Date: 42027
 Current Letting Date: 42160
 Construction Season: 2015/2016
 Estimated Substantial Completion: 42644



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Mohammad Dehdashti

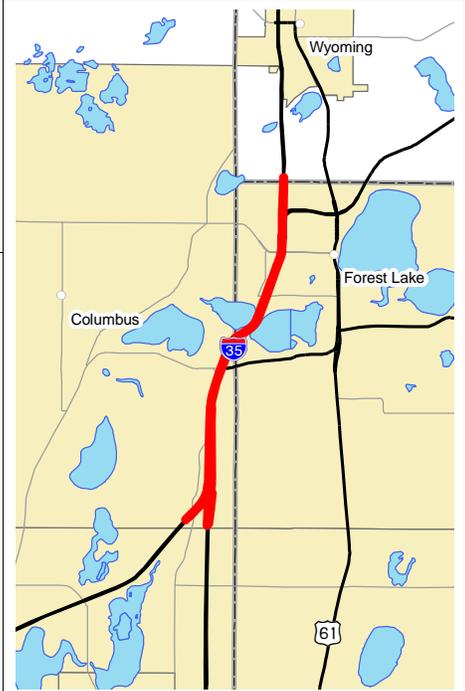
Revised Date: 12/15/2015

PROJECT SUMMARY

I-35W

Blaine (Lake Dr) to Lino Lakes (Sunset Rd)

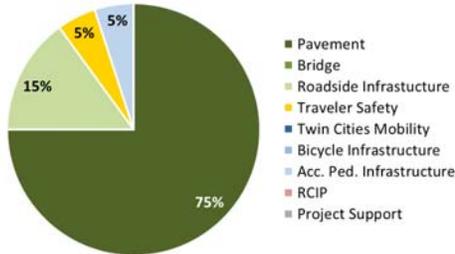
State Project No. 0280-74



Primary Purpose:

Performance-based needs: Pavement Condition

Investment Category:



Project Description:

Concrete overlay of I-35W in Blaine and Lino Lakes.

Recent Changes and Updates

This is the first year this project is included in the MHP report.

Project History:

The current ride smoothness on this segment ranges from the fair to good category. The pavement has transverse and longitudinal fatigue cracking issues. There are many bituminous tenting areas where maintenance has had to come in and mill the tops off the bumps from the underlying BOC, and scattered patching which leads to a rough ride. The last overlay was in 1999. It is nearing an end to its service life cycle, a longer term fix is recommended (unbonded concrete overlay).

The goal of this project is to improve the ride smoothness and restore the pavement structure of this segment, so that the ride quality of this section of roadway remains at or above a pavement condition considered to be in the "Good" category for a projected period of 30 years.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.0	\$ 13.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.2	\$ 2.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 15.2	\$ 15.2

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

- 4" Mill, 8.5" Unbonded Concrete Overlay plus 1" PASSR
- Replace/Repair deteriorated pipes and hydraulic structure
- No R/W costs were included due to the lack of information for ponding needs

Project Risks:

Right of way costs for ponding needs are a project risk.

Schedule:

Environmental Approval Date: pending
 Municipal Consent Approval Date: pending
 Geometric Layout Approval Date: pending
 Construction Limits Established Date: pending
 Original Letting Date: 43308
 Current Letting Date: 43308
 Construction Season: 2018
 Estimated Substantial Completion: 43531



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Mark Lindeberg

Revised Date: 12/15/2015

PROJECT SUMMARY

I-35W

3rd and 4th Street ramp to Johnson Street in Minneapolis
 State Project No. 2783-136
<http://www.dot.state.mn.us/metro/projects/i35wandfourthst/>

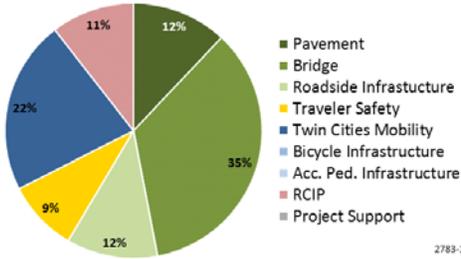
Substantially Complete



Primary Purpose:

Twin Cities Mobility: Spot Mobility
 Improvement Performance-based Need:
 Bridge Condition

Investment Category:



Project Description:

Construct new ramp from downtown Minneapolis to northbound I-35W and auxiliary lane from 3rd and 4th Street north to Johnson St.

Recent Changes and Updates

This project was completed in the spring of 2015. This is the first year it is identified as "Substantially Complete".

Project History:

This project was developed by Hennepin Co. for a design-build letting. Their application identified an estimated construction cost of \$15.4M and was granted \$9.4M from TED funds. At that time, the total project costs were \$13.4M. The best value bid for the Design Build contract came in at \$15.4M. The TPCE based on the bid amount came to \$20.M. After review of the estimate, it was determined that the higher cost was attributed to the design of the retaining walls and the risk associated with the construction of the retaining walls. The proposed retaining walls required retention of the slopes with the use of sheet piling to allow for the construction of the permanent retaining walls in many locations and original estimates did not account for this need. Also, the costs estimated for the installation of drainage tile to capture water seeping from the existing slopes was estimated low and bid at a higher amount.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2011

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 9.7	\$ 15.4
Other Construction Elements:	\$ 1.5	\$ 1.5
Engineering:	\$ 2.2	\$ 3.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 13.4	\$ 20.6

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Total cost estimate including all construction costs, right of way, utility work, agreements, project delivery costs and risk contingency were calculated as part of the TED application and award.

Project Risks:

The project is complete and no risks remain.

Schedule:

Environmental Approval Date: 12/03/2013
 Municipal Consent Approval Date: 12/29/2011
 Geometric Layout Approval Date: 10/28/2011
 Construction Limits Established Date: 10/28/2011
 Original Letting Date: 02/14/2012
 Current Letting Date: 03/19/2014
 Construction Season: 2014/2015
 Estimated Substantial Completion: 04/01/2014



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Scott Pedersen

Revised Date: 12/15/2015

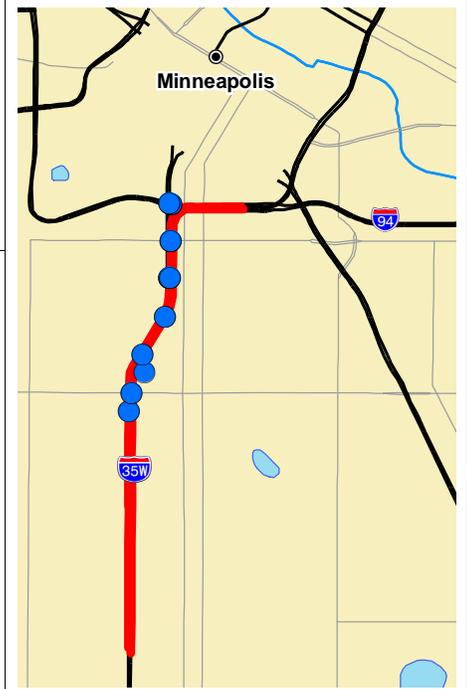
PROJECT SUMMARY

I-35W

43rd Street to I-94 Commons

Bridge 9731, 9733, 27842, 27843, 27867, 27868, 27869, 27870, 27871, 27872

State Project No. 2782-327



Primary Purpose:

Twin Cities Mobility: Managed Lanes

Performance-based Need: Bridge and Pavement Condition

Investment Category:

*This project was designed and scoped before the current highway investment plan MnSHIP was developed, which breaks projects into investment categories.

Recent Changes and Updates

Hennepin County is the lead agency on this project. Other partners are the City of Minneapolis and the Metropolitan Council. Public involvement is ongoing, with municipal consent expected in fall 2015.

The project will transition from Hennepin County as the Lead Agency to MnDOT as the lead agency in the fall of 2014.

The Current Estimate includes funding from all project partners.

The 40th St pedestrian bridge was added to this project.

The Current Estimate was reduced because of risk being retired.

Project History:

This project has been pursued since the mid-90s. The scope of the project and the previous studies identified the need for an on-line transit station, access to Lake Street from SB I-35W, access to 28th Street from NB I-35W, extension of the HOT Lane on I-35W in and out of Downtown Minneapolis. The current schedule has the project letting in June 2017.

Project Description:

Adjust the horizontal and/or vertical alignment of I-94, I-35, and Hwy 65. Replace 40th Street Pedestrian, 31st Street, Lake Street, Midtown Greenway, 28th Street, 26th Street, 24th Avenue pedestrian bridge, Southbound Braid, Franklin Ave, Northbound Flyover, and Hwy 65 over I-94. Repair bridges at 38th Street, 1st Avenue, and Portland Avenue. Replace all pavements on I-35W from 43rd Street into I-94 Commons. The project will also construct an on-line transit station on I35W at Lake Street to improve transit access and add access from northbound I-35W to 28th Street and southbound I-35W to Lake Street to improve access into the Lake Street business district.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 265.5	\$ 243.0
Other Construction Elements:	\$ 0.0	\$ 30.6
Engineering:	\$ 44.5	\$ 47.5
Right of Way:	\$ 3.6	\$ 3.6
Total:	\$ 313.6	\$ 324.7

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

The baseline estimate includes the MnDOT portion (\$121 million). This large project will include pieces done in partnership with Minneapolis, Hennepin County and the Metropolitan Council. The Current Estimate includes funding from all proeject partners.

Project Risks:

Full funding from project partners was not identified. Storm water tunnels/drainage also present a potential project risk. Traffic impacts during construction.

Schedule:

Environmental Approval Date: Spring 2016
 Municipal Consent Approval Date: Spring 2016
 Geometric Layout Approval Date: 10/19/2015
 Construction Limits Established Date: November 28, 2015
 Original Letting Date: 07/21/2017
 Current Letting Date: 06/07/2017
 Construction Season: 2017/2021
 Estimated Substantial Completion: 11/01/2021



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Scott Pedersen

Revised Date: 12/15/2015

PROJECT SUMMARY

I-94

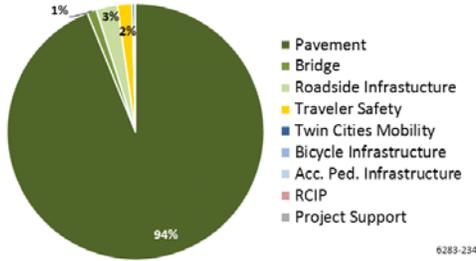
I-94 (Mounds Blvd to Hwy 120) and Hwy 61 (Burns Avenue to Hwy 5)
 Bridge 9147, 9148, 62706, 62838, 62861, 62862, 62868, 62869, and, 62870
 State Project No. 6283-234
<http://www.dot.state.mn.us/metro/projects/i94stpaul/>



Primary Purpose:

Performance-based Need: Pavement
 Condition Performance-based Need: Bridge
 Condition

Investment Category:



Project Description:

Unbonded concrete overlay on I-94 from Mounds Blvd to east of Ruth St., bituminous resurfacing to east of Hwy 120 and on Hwy 61 north of Mounds Blvd, white topping etc. Repair of nine bridges. Signal, signing, lighting, guardrail, concrete median barrier, drainage, TMS and ADA are also included.

Recent Changes and Updates

This project's construction costs increased in 2015 from \$32M to \$43.3M, a result of a number of project changes. A portion of the project, (approx 2 mi from Mounds Blvd. to just west of White Bear Lake Ave.) was changed from a mill and overlay to an unbonded concrete overlay which required raising the profile of road and ramps in that area. Other changes include adding a median barrier, improvements to storm sewer curbs and gutters, and slope work, on-street bike/pedestrian trails, ADA and signal improvements, and work being done on Hwy 120. \$2M for Traffic Control Mitigation was added to the project. The Water Resources cost estimate was increased by \$2.54M. The Bridge Office increased the cost estimate of their bridge repairs.

Increased costs for the pavement project are being funded from a cost savings from a mill and overlay project on I-35W in Roseville and from the Congestion Mitigation Safety Program.

Project History:

The scope of the project changed by extended project limits from Mounds Blvd to east of Hwy 120.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 32.5	\$ 43.3
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 6.5	\$ 8.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 39.0	\$ 51.9

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

A down-scoped project provided additional state and federal funding which resulted in this project having a longer life cycle pavement repair. Traffic Control Mitigation was increased to \$2M. Water Resources cost estimate was increased by \$2.54M.

Project Risks:

This project will have a large traffic impact to a congested interstate in downtown Saint Paul.

Schedule:

Environmental Approval Date: 05/14/2015
 Municipal Consent Approval Date: NA
 Geometric Layout Approval Date: NA
 Construction Limits Established Date: NA
 Original Letting Date: 11/20/2015
 Current Letting Date: 11/20/2015
 Construction Season: 2016/2017
 Estimated Substantial Completion: 11/01/2017



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Jeff Gibbons

Revised Date: 12/15/2015

PROJECT SUMMARY

I-94

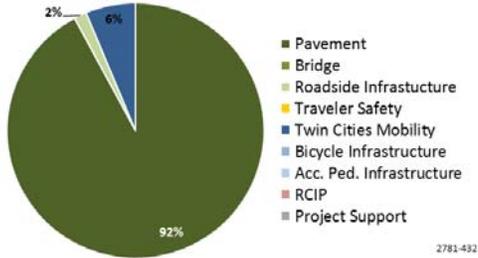
Nicollet Avenue in Minneapolis to Shingle Creek Bridge in Brooklyn Center
 Bridge multiple, bridges, (50+)
 State Project No. 2781-432



Primary Purpose:

Performance-based Need: Pavement Condition

Investment Category:



Project Description:

Concrete pavement repair and diamond grinding south of Hwy 55, bituminous overlay north of Hwy 55, drainage and weeping slope repair, Lowey Tunnel tile repair, Portland Tunnel joint repair, bridge redeck of westbound I-94 over southbound Mey 252, and misc. repair of 49 bridges.

Recent Changes and Updates

A Value Engineering study conducted in spring of 2015 recommended that a bituminous overlay replace the concrete pavement repair on mainline I-94, north of Hwy 55. This would significantly reduce traffic impacts and enable the pavement preservation construction to take place in 2017 to avoid other major roadway projects in 2018.

Since the last MHP report, the current estimate increased due to traffic control mitigation, and bridge maintenance.

Project History:

Scoping for this pavement preservation project was completed in December 2012. Additional risk and contingency were added in 2013 to the estimate to account for the risks associated with the major concrete patching and repair project.

In the 2014 MHP report, costs increased from the baseline estimate by \$14.2M because of a project revision request in 2013 that added 48 bridge maintenance activities, fiber wrap, and tile repair projects to the project. The CPR estimate showed larger pavement degradation than expected.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 23.4	\$ 40.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.3	\$ 7.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 25.7	\$ 48.3

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

- Concrete Pavement Rehabilitation
- Includes Traffic Mitigation
- Bridge Cost and Scope are based on December 2014 bridge recommendations

Project Risks:

This project involves concrete patching and repair, which introduces risk to a project because exact quantities needed won't be known until construction begins. The potential for a significant event (i.e. 2018 Superbowl) may require an accelerated schedule for Design and Construction. There will be some impact to traffic during the construction period for the project. Fluctuating Bridge scope. Additional project needs for corridor lighting (\$6M) and guardrails were identified but funding needs to be identified.

Schedule:

Environmental Approval Date: Pending
 Municipal Consent Approval Date: Not Applicable
 Geometric Layout Approval Date: Not Applicable
 Construction Limits Established Date: Pending
 Original Letting Date: 06/14/2013
 Current Letting Date: 11/18/2016
 Construction Season: 2017
 Estimated Substantial Completion: 11/01/2017



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Ron Rauchle

Revised Date: 12/15/2015

PROJECT SUMMARY

I-494

I-394 in Minnetonka to I-94/494/694 in Maple Grove

State Project No. 2785-330

<http://www.dot.state.mn.us/metro/projects/i494plymouth/>

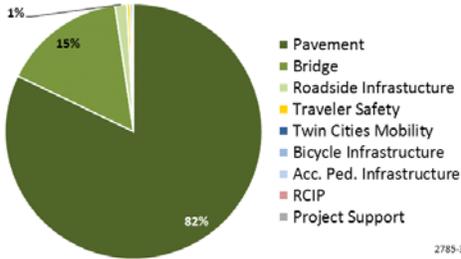


Primary Purpose:

Twin Cities Mobility: Managed Lanes

Performance-based Need: Pavement Condition

Investment Category:



2785-330

Project Description:

Add general purpose lane between Hwy 55 and I-94/I-694, add auxiliary lane NB between I-394 and Carlson Parkway, add auxiliary lanes between Hwy 55 AND CR 6, pavement resurfacing and reconstruction, ponds, noise walls, signal revisions, lighting, TMS, replace bridges and repair.

Recent Changes and Updates

The project has been under construction for the last year. Substantial progress has been made and the project is anticipated to be open to traffic in the fall of 2016. The project costs have not changed since the 2014 MHP report.

Project History:

MnDOT received formal approval late in summer 2013 to construct a dynamic shoulder as part of this project. In 2014, the scope of the project was changed from the dynamic shoulder to adding a third general purpose lane between Hwy 55 and the I-494/I-694/I-94 interchange when additional funding was identified from savings on other construction projects. When the scope of the project changed from the addition of a dynamic shoulder on the outside to the addition of a general purpose lane on the inside, costs increased.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 61.2	\$ 86.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 11.8	\$ 16.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 73.0	\$ 102.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Standard practices were used to develop cost estimates. Additionally, the scope of work changed, which is explained under Recent Changes and Updates.

Project Risks:

Typical construction risks remain for this project. Opening to traffic in the fall of 2015 to mark halfway completion.

Schedule:

Environmental Approval Date: Spring 2014
 Municipal Consent Approval Date: Fall 2013
 Geometric Layout Approval Date: 8/22/2013
 Construction Limits Established Date: Spring 2013
 Original Letting Date: 07/28/2008
 Current Letting Date: 02/20/2015
 Construction Season: 2015/2017
 Estimated Substantial Completion: 06/30/2017



Minnesota Department of Transportation
 District M
 1500 West County Road B2
 (651) 234-7500

District Engineer: Scott McBride
Project Manager: Chad Casey

Revised Date: 12/15/2015

PROJECT SUMMARY

I-694

Little Canada to Arden Hills

Bridge 62723

State Project No. 6285-143

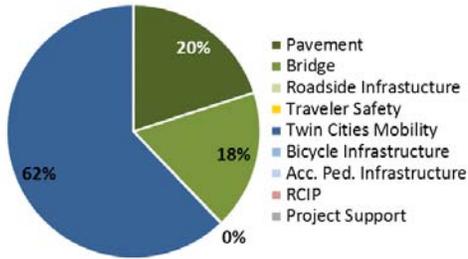
<http://www.dot.state.mn.us/enhance694/>



Primary Purpose:

Regional & Community Improvement Priority:
Corridors of Commerce Project, Metro
Capacity Development

Investment Category:



Project Description:

Construction of a dynamic shoulder lane on I-694 from Rice St. in Little Canada to Lexington Ave. in Arden Hills and reconstruct existing lanes, low slump overlay on the (Island Lake Channel bridge, noise wall and median barrier construction.

Recent Changes and Updates

Project costs have not changed since the 2014 MHP report. The project was selected for the Corridors of Commerce program in 2013. The project was initially included a Dynamic Shoulder Lane but has been changed to a General Purpose Lane.

Project History:

This project was awarded Corridors of Commerce funds in 2013. This will add a third general purpose lane in each direction between Rice Street and Lexington Avenue, pavement reconstruct I-694 between Rice Street and Lexington Avenue, rebuild interstate ramps at Lexington Avenue, Victoria Street and Rice Street, open the right lane of the bridge from northbound I-35E to westbound I-694. There will also be improved storm water drainage throughout the corridor.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 42.2	\$ 42.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 7.8	\$ 7.8
Right of Way:	\$ 1.5	\$ 1.5
Total:	\$ 49.5	\$ 49.5

Construction cost estimates are adjusted to the mid-year of construction, using inflation rates provided by OTSM.

Key Cost Estimate Assumptions:

Concrete pavement with stainless steel dowel bars and construction staging assuming the need to cross-over traffic to build it one-half at a time.

Project Risks:

Land required for water treatment to build stormwater ponds.

Schedule:

Environmental Approval Date: pending / Oct 2014
Municipal Consent Approval Date: Pending / Dec 2014
Geometric Layout Approval Date: In Process
Construction Limits Established Date: 02/01/2014
Original Letting Date: 06/12/2015
Current Letting Date: 11/20/2015
Construction Season: 2016/2017
Estimated Substantial Completion: 11/01/2017



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Mark Lindeberg

Revised Date: 12/15/2015

Major Highway Projects (2020-2031)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (In Millions)	Total Project Cost Estimate (In Millions)
1	Hwy 200	1106-15	PM TBD: District 2 PM	2019	South Jct Hwy 371 in Walker to Hwy 84	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.5 - \$6.8	\$6.7 - \$8.1
1	I35	5880-189	Roberta Dwyer	2020		Replace bridges over the Snake River	NA	NA	NA	NA	\$7.7 - \$11.1	\$10.1 - \$14.6
1	HWY61	3805-99	Derek Fredrickson	2020		Rehabilitate bridge over the Stewart River	NA	NA	NA	NA	\$3.4 - \$4.9	\$4.4 - \$6.4
1	HWY61	1602-20, 1603-51	Roberta Dwyer	2020		Pavement resurfacing from North of Cutface Creek to South of County Road 14	NA	NA	NA	NA	\$4.9 - \$7.0	\$6.4 - \$9.2
1	HWY53	3608-48	Brian Larson	2020		Pavement resurfacing and sidewalk replacement in International Falls	NA	NA	NA	NA	\$4.1 - \$5.9	\$5.3 - \$7.7
1	HWY1	3101-37, 6901-29	Michael Kalnbach	2020		Pavement resurfacing from Highway 65 to East of Highway 73	NA	NA	NA	NA	\$6.3 - \$9.1	\$8.3 - \$11.9
1	HWY37	6914-19	Michael Kalnbach	2020		Pavement resurfacing and sidewalk replacement from Highway 53 to Highway 135	NA	NA	NA	NA	\$2.8 - \$4.1	\$3.7 - \$5.4
1	HWY65	3111-30	Michael Kalnbach	2020		Pavement resurfacing from Highway 200 to Highway 169	NA	NA	NA	NA	\$9.9 - \$14.3	\$13.0 - \$18.7
1	HWY169	6936-19	Brian Larson	2020		Pavement resurfacing from North of Highway 53 to County Road 304	NA	NA	NA	NA	\$3.2 - \$4.7	\$4.2 - \$6.1
1	HWY2	3104-60, 3105-16	Not assigned	2021		Pavement resurfacing from East of the Prairie River to Highway 200	NA	NA	NA	NA	\$9.7 - \$14.1	\$12.8 - \$18.4
1	HWY1	3101-XXX	Not assigned	2021		Pavement resurfacing from North of County Road 38 to Highway 65	NA	NA	NA	NA	\$14.8 - \$21.4	\$19.4 - \$28.0
1	HWY27	0104-XXX	Not assigned	2021		Pavement resurfacing from Highway 65 to the Aitkin-Carlton County Line	NA	NA	NA	NA	\$2.7 - \$3.8	\$3.5 - \$5.0
1	HWY65	3609-41	Not assigned	2021		Pavement resurfacing from South of County Road 8 to Highway 71	NA	NA	NA	NA	\$4.2 - \$6.0	\$5.5 - \$7.9
1	HWY61	6926-XXX, 3804-XXX	Not assigned	2022		Pavement resurfacing from North of the Knife River to North of the DM&IR Railway Bridge	NA	NA	NA	NA	\$5.2 - \$7.5	\$6.8 - \$9.8
1	HWY61	1603-XXX, 1604-XXX, 1605-XXX	Not assigned	2022		Pavement resurfacing from South of Reservation River Bridge to HWY-Canada Border	NA	NA	NA	NA	\$9.1 - \$13.2	\$11.9 - \$17.2
1	I35	6982-XXX	Not assigned	2022		Pavement reconstruction on Thompson Hill, from South of Boundary Avenue to Highway 23	NA	NA	NA	NA	\$11.7 - \$16.9	\$15.3 - \$22.1
1	I35	5807-9791	Not assigned	2022		Replace or Rehabilitate Bridge over Highway 23	NA	NA	NA	NA	\$2.5 - \$3.6	\$3.3 - \$4.8
1	HWY65	3113-XXX, 3609-XXX	Not assigned	2022		Pavement resurfacing from Highway 1 to 10 miles South of County Road 8	NA	NA	NA	NA	\$7.3 - \$10.6	\$9.6 - \$13.9
1	HWY73	6930-XXX	Not assigned	2022		Pavement Resurfacing from National Forest Development Road 111 to Highway 1	NA	NA	NA	NA	\$9.7 - \$14.0	\$12.7 - \$18.3
1	I35	5880-9790	Not assigned	2023		Replace the Northbound Bridge over the Burlington Northern Santa Fe Rail Road North of Highway 48	NA	NA	NA	NA	\$3.6 - \$5.2	\$4.7 - \$6.8
1	I35	5880-9789	Not assigned	2023		Replace the Southbound Bridge over the Burlington Northern Santa Fe Rail Road North of Highway 48	NA	NA	NA	NA	\$2.8 - \$4.1	\$3.7 - \$5.4
1	HWY2	6907-XXX, 6908-XXX	Not assigned	2023		Pavement resurfacing from West of County Road 874 to Highway 194	NA	NA	NA	NA	\$2.8 - \$4.0	\$3.6 - \$5.2
1	HWY61	6925-XXX, 6926-XXX	Not assigned	2023		Pavement resurfacing in Duluth from North of Superior Street to County Road 33 (McQuade Road)	NA	NA	NA	NA	\$4.0 - \$5.7	\$5.2 - \$7.5
1	HWY61	3808-XXX, 1601-XXX	Not assigned	2023		Pavement Resurfacing from North of County Road 6 to South of County Road 79	NA	NA	NA	NA	\$7.4 - \$10.6	\$9.7 - \$13.9
1	HWY23	5807-XXX, 5809-XXX	Not assigned	2023		Pavement Resurfacing from I-35 to Main Street in Askov	NA	NA	NA	NA	\$4.0 - \$5.7	\$5.2 - \$7.5
1	HWY23	0901-XXX	Not assigned	2023		Pavement Resurfacing from East of the Pine-Carlton County Line to the Saint Louis River Bridge	NA	NA	NA	NA	\$10.3 - \$14.9	\$13.5 - \$19.5
1	HWY23	6910-XXX	Not assigned	2023		Pavement Resurfacing from Northeast of 130th Avenue to North of Highway 39	NA	NA	NA	NA	\$3.5 - \$5.1	\$4.6 - \$6.7
1	HWY73	6930-XXX	Not assigned	2023		Pavement Resurfacing from County Road 66 (13th Street Northwest) to National Forest Development Road 111	NA	NA	NA	NA	\$3.3 - \$4.8	\$4.4 - \$6.3
1	HWY194	6932-XXX	Not assigned	2023		Pavement Resurfacing from Highway 2 to West of Highway 53	NA	NA	NA	NA	\$3.2 - \$4.6	\$4.1 - \$6.0
1	HWY53	6917-XXX	Not assigned	2024		Pavement Resurfacing Northbound from North of Highway 33 to South of County Road 52	NA	NA	NA	NA	\$6.1 - \$8.9	\$8.0 - \$11.6
1	HWY169	6935-XXX	Not assigned	2024		Pavement Resurfacing Northbound, from South of County Road 67 to West of County Road 109	NA	NA	NA	NA	\$6.8 - \$9.8	\$8.9 - \$12.9
1	HWY169	6935-XXX	Not assigned	2024		Pavement Resurfacing Southbound from South of County Road 5 to West of County Road 109	NA	NA	NA	NA	\$3.9 - \$5.6	\$5.1 - \$7.4
1	HWY194	6933-XXX	Not assigned	2024		Pavement Resurfacing Northbound and Southbound, in Duluth, from East of Highway 53 (Trinity Road) to North of Mesaba Avenue	NA	NA	NA	NA	\$3.9 - \$5.6	\$5.0 - \$7.3
1	I35	6982-XXX	Not assigned	2024		Concrete Pavement Restoration Northbound and Southbound, in Duluth, from Lake Avenue to Highway 61	NA	NA	NA	NA	\$4.7 - \$6.8	\$6.2 - \$8.9
1	HWY65	0111-XXX	Not assigned	2024		Pavement Resurfacing from North of County Road 4 (Dam Lake Street) to North Highway 27	NA	NA	NA	NA	\$5.9 - \$8.6	\$7.8 - \$11.3
1	HWY65	0112-XXX	Not assigned	2024		Pavement Resurfacing from West of Highway 210 to South of the Sandy River	NA	NA	NA	NA	\$5.9 - \$8.5	\$7.7 - \$11.1
1	HWY2	3103-XXX	Not assigned	2025		Pavement Resurfacing Eastbound and Westbound, in Grand Rapids, West of 19th Avenue Northwest to East of Highway 169	NA	NA	NA	NA	\$3.6 - \$5.1	\$4.7 - \$6.7
1	HWY53	6918-XXX, 6919-XXX	Not assigned	2025		Pavement Resurfacing from 12th Ave West in Virginia to North of Wayside Rest	NA	NA	NA	NA	\$5.5 - \$7.9	\$7.2 - \$10.4
1	HWY11	3605-XXX	Not assigned	2025		Pavement Resurfacing in International Falls, from West of County Road 332 to 12th Ave	NA	NA	NA	NA	\$5.2 - \$7.5	\$6.8 - \$9.9
1	HWY61	6925-XXX	Not assigned	2025		Pavement Resurfacing Northbound and Southbound, in Duluth, from 28th Avenue East to 60th Avenue East	NA	NA	NA	NA	\$3.4 - \$4.9	\$4.4 - \$6.4
1	HWY61	1601-6202	Not assigned	2025		Bridge Replacement Over the Two Island River	NA	NA	NA	NA	\$3.3 - \$4.7	\$4.3 - \$6.2
1	HWY210	0915-XXX	Not assigned	2025		Pavement Resurfacing from East End of the Bridge over Railroad to West of I 35	NA	NA	NA	NA	\$8.4 - \$12.2	\$11.1 - \$16.0
1	HWY38	3108-XXX	Not assigned	2025		Pavement Resurfacing from Highway 2 to North of County Road 49	NA	NA	NA	NA	\$3.2 - \$4.6	\$4.2 - \$6.1
1	HWY73	6927-XXX	Not assigned	2025		Pavement Resurfacing from North of County Road 86 to South Highway 2	NA	NA	NA	NA	\$4.5 - \$6.4	\$5.8 - \$8.4
1	HWY73	6929-XXX	Not assigned	2025		Pavement Resurfacing from North of bridge over the West Swan River to South of Highway 169, Dillon Road	NA	NA	NA	NA	\$5.3 - \$7.7	\$7.0 - \$10.0
1	HWY 135	6913-XXX	Not assigned	2025		Pavement Resurfacing from North of the Embarrass River to Highway 1	NA	NA	NA	NA	\$6.8 - \$9.8	\$8.8 - \$12.8
2	Hwy 2	6004-24	N/A	2020	In Erskine	Urban reconstruction	Pending approval	Not needed	Not needed	Pending Approval	\$4.2 -	\$5.0 -
2	Hwy 1	N/A	N/A	2021	From Thief River Falls to Hwy 219	Bituminous reclaim	Pending approval	Not needed	Not needed	Pending Approval	\$7.2 -	\$8.6 -
2	Hwy 1	N/A	N/A	2021	In Red Lake	Urban reconstruction	Pending approval	Pending approval	Pending approval	Pending Approval	\$5.1 -	\$6.1 -
2	Hwy 2	N/A	N/A	2021	Westbound lanes from East Grand Forks to Fisher	Crack & overlay	Pending approval	Not needed	Not needed	Pending Approval	\$9.5 -	\$11.4 -
2	Hwy 2	N/A	N/A	2022	Eastbound lanes from Hwy 32 To Erskine	Bituminous mill and overlay	Pending approval	Not needed	Not needed	Pending Approval	\$6.4 -	\$7.7 -
2	Hwy 75	N/A	N/A	2022	From Hallock to Canadian border	Bituminous mill and overlay and bridge replacement	Pending approval	Not needed	Not needed	Pending Approval	\$7.4 -	\$8.9 -
2	Hwy 200	N/A	N/A	2022	From Mahanomen/Clearwater Co line to Hwy 92	Bituminous mill and overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.8 -	\$5.8 -
2	Hwy 1	N/A	N/A	2023	From S. Jct. Hwy 89 to E Red Lake Reservation Line	Bituminous mill and overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.8 -	\$5.8 -
2	Hwy 87	N/A	N/A	2023	From Hwy 71 to Hubbard	Bituminous rehabilitation/reconstruction	Pending approval	Not needed	Not needed	Pending Approval	\$6.2 -	\$7.4 -
2	Hwy 89	N/A	N/A	2023	From N. Red Lake Reservation Line to CSAH 54	Bituminous mill and overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.8 -	\$5.8 -

Major Highway Projects (Planned 2020-2031)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (In Millions)	Total Project Cost Estimate (In Millions)
2	Hwy 1	N/A	N/A	2024	From S. Jct. Hwy 89 to N. Jct. Hwy 89	Bituminous mill and overlay	Pending approval	Not needed	Not needed	Pending Approval	\$8.2 -	\$9.9 -
2	Hwy 11	N/A	N/A	2024	From Roseau to Warroad	Bituminous mill and overlay	Pending approval	Not needed	Not needed	Pending Approval	\$9.8 -	\$11.8 -
2	Hwy 11	N/A	N/A	2024	From Warroad to Roseau/Lake of the Woods Co. Line	Bituminous mill and overlay/widening	Pending approval	Not needed	Not needed	Pending Approval	\$6.4 -	\$7.7 -
2	Hwy 71	N/A	N/A	2024	From Hwy 197 to End of Four Lane	Bituminous reclaim	Pending approval	Not needed	Not needed	Pending Approval	\$5.8 -	\$7.0 -
2	Hwy 25	1102-XX	Schiller	2024	R.P. 147.5 to Cass/Tasca Co Line	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.1 - \$5.1	\$5.0 - \$6.1
2	HWY6	3107-XXX	Not assigned	2025	Pavement Resurfacing from 11th Avenue in Deer River to North of County Road 136		NA	NA	NA	NA	\$7.0 - \$10.1	\$9.1 - \$13.2
2	Hwy 2	N/A	N/A	2025	In East Grand Forks	Replace 4th St. bridge	Pending approval	Not needed	Not needed	Pending Approval	\$5.8 -	\$7.0 -
2	Hwy 2	N/A	N/A	2025	Eastbound lanes from Bagley to Wilton	Bituminous mill and overlay	Pending approval	Not needed	Not needed	Pending Approval	\$5.1 -	\$6.1 -
2	Hwy 32	N/A	N/A	2025	From Middle River to Hwy 11	Bituminous reclaim and bridge replacement	Pending approval	Not needed	Not needed	Pending Approval	\$9.2 -	\$11.0 -
2	Hwy 59	N/A	N/A	2025	In Thief River Falls	Replace Red Lake River bridge	Pending approval	Not needed	Not needed	Pending Approval	\$7.5 -	\$9.0 -
2	Hwy 75	N/A	N/A	2025	From Donaldson to Hallock	Bituminous mill and overlay/urban reconstruction	Pending approval	Not needed	Not needed	Pending Approval	\$8.8 -	\$10.6 -
3	I-94	8680-173	Indihar	2020	Monticello to Clearwater (Westbound)	Place a new concrete surface on top of existing concrete surface	N/A	N/A	N/A	N/A	\$11.7 - \$14.3	\$14.0 - \$17.2
3	Hwy 84	1110-14	Schiller	2020	Pine River to Hwy 200	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.1 - \$6.3	\$6.2 - \$7.5
3	Hwy 4	7301-38	Dumont	2020	Kandiyohi/Stearns Co Line to I-94	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.1 - \$5.1	\$5.0 - \$6.1
3	Hwy 6	1802-53	Schiller	2020	Stagehorn Lane to south Emily and from north Emily to Outing	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$5.0 - \$6.1	\$6.0 - \$7.3
3	HWY210	0120-XXX	Not assigned	2021		Pavement resurfacing from Highway 169 to Highway 65	NA	NA	NA	NA	\$6.2 \$9.0	\$8.1 - \$11.7
3	HWY6	3106-XXX	Not assigned	2021		Pavement resurfacing from the Cass-Itasca County Line to Highway 2	NA	NA	NA	NA	\$5.3 \$7.6	\$6.9 - \$10.0
3	I-94	8680-XX	Dumont	2021	Monticello to Clearwater (Eastbound)	Place a new concrete surface on top of existing concrete surface	N/A	N/A	N/A	N/A	\$11.7 - \$14.3	\$14.0 - \$17.2
3	Hwy 10	7102-XX	Dumont	2021	Joplin St to Norfolk Ave in Elk River	Reconstruction	N/A	N/A	N/A	N/A	\$13.3 - \$16.3	\$16.1 - \$19.6
3	Hwy 55	7312-XX	Dumont	2021	Pope/Stearns Co line to Stearns/Kandiyohi Co line	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.2 - \$6.4	\$6.3 - \$7.7
3	Hwy 55	7315-XX	Dumont	2021	Meeker/Stearns Co line to east Annandale	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.4 - \$6.6	\$6.5 - \$7.9
3	Hwy 200	1107-XX	Hallgren	2021	MN 84 to Remer	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.0 - \$6.2	\$6.0 - \$7.4
3	Hwy 12	8601-XX	Dumont	2021	Howard Lake to Delano	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$5.6 - \$6.8	\$6.7 - \$8.2
3	HWY47	0108-XXX	Not assigned	2022		Pavement resurfacing from the Mille Lacs-Aitkin County Line to Highway 169	NA	NA	NA	NA	\$7.5 - \$10.8	\$9.8 - \$14.2
3	Hwy 10	0502-XX	Dumont	2022	West of St. Germain Street in St. Cloud to Benton/Sherburne Co line	Reconstruction	N/A	N/A	N/A	N/A	\$9.0 - \$11.0	\$11.8 - \$14.2
3	Hwy 23	0503-XX	Dumont	2022	Pedestrian Bridge in St. Cloud to west of Benton Co CSAH 1	Reconstruction and replacement of Bridges #9021 and #9022 over Hwy 10	N/A	N/A	N/A	N/A	\$15.6 - \$19.0	\$18.8 - \$22.9
3	Hwy 25	1808-XX	Schiller	2022	Pierz to Jct MN 210 in Brainerd	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$8.5 - \$10.4	\$10.2 - \$12.5
3	Hwy 47	3304-XX	Indihar	2022	Ogilvie to Isle	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.1 - \$5.0	\$4.9 - \$5.9
3	Hwy 95	3006-39	Dumont	2023	Fern Street to Davis Street in Cambridge	Urban reconstruction	N/A	N/A	N/A	N/A	\$6.3 - \$7.7	\$8.6 - \$10.2
3	Hwy 95	3006-39	Dumont	2023	West of Isanti Co CSAH 15 to west city limits of Cambridge	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$5.1 - \$6.3	\$6.2 - \$7.5
3	Hwy 210	1805-74	Hallgren	2023	Brainerd	Replace Bridge #5060 over the Mississippi River in Brainerd	N/A	N/A	N/A	N/A	\$13.6 - \$16.6	\$19.3 - \$22.9
3	Hwy 238	4913-XX	Dumont	2023	3rd Avenue in Upsala to MN 27	Bituminous resurfacing	N/A	N/A	N/A	N/A	\$6.8 - \$8.3	\$8.2 - \$10.0
3	HWY169	0116-XXX	Not assigned	2024		Pavement Resurfacing from North of Highway 210 to Highway 200	NA	NA	NA	NA	\$14.0 - \$20.2	\$18.3 - \$26.5
3	HWY18	0102-XXX	Not assigned	2024		Pavement Resurfacing from North of Highway 169 to North of Highway 47	NA	NA	NA	NA	\$7.6 - \$11.0	\$10.0 - \$14.4
3	HWY200	0105-XXX	Not assigned	2024		Pavement Resurfacing from Cass-Aitkin County Line to South of Highway 169	NA	NA	NA	NA	\$3.6 - \$5.3	\$4.8 - \$6.9
3	Hwy 27	4904-XX	Hallgren	2024	Little Falls	Replace Bridge #5907 over the Mississippi River in Little Falls	N/A	N/A	N/A	N/A	\$12.7 - \$15.5	\$15.4 - \$18.8
3	Hwy 6	1103-XX	Indihar	2024	Bridge #11005 over Roosevelt Lake in Outing to Jct MN 200 in Remer	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$5.9 - \$7.3	\$7.1 - \$8.7
3	Hwy 10	7102-XX	Dumont	2024	3.3 mi E of Big Lake	Replace Bridge #5444 over BNSF	N/A	N/A	N/A	N/A	\$7.1 - \$8.7	\$8.5 - \$10.4
3	Hwy 23	4801-XX	Schiller	2024	Milaca to Groundhouse River east of Ogilvie	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$5.4 - \$6.6	\$6.5 - \$7.9
3	Hwy 28	7308-XX	Indihar	2024	North of Jct US 71 to north of Swanville	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$6.1 - \$7.5	\$7.3 - \$9.0
3	Hwy 71	7319-XX	Dumont	2024	I-94 to 4th Street in Sauk Centre	Urban Reconstruction	N/A	N/A	N/A	N/A	\$11.0 - \$13.4	\$13.2 - \$16.1
3	Hwy 169	1804-XX	Schiller	2024	Begin 4-lane south of Garrison to Pike Road north of Garrison	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.3 - \$5.3	\$5.2 - \$6.3
3	Hwy 23	0504/4801-XX	Dumont	2025	West of Ronneby to west of Milaca	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$5.0 - \$6.2	\$6.0 - \$7.4
3	Hwy 23	0504/4801-XX	Dumont	2025	Central Avenue to East 1st Street in Milaca	Urban Reconstruction	N/A	N/A	N/A	N/A	\$4.5 - \$5.5	\$5.4 - \$6.6
3	Hwy 23	7305-XX	Dumont	2025	West of 36th Avenue to MN 15 in St. Cloud	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$5.1 - \$6.3	\$6.2 - \$7.5
3	Hwy 64	1109-XX	Indihar	2025	MN 210 east of Motley to Jct MN 87	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$9.0 - \$11.0	\$10.8 - \$13.2
3	Hwy 71	7319/7707-XX	Schiller	2025	North Sauk Centre to south Long Prairie	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$7.7 - \$9.4	\$9.2 - \$11.2
3	Hwy 71	8003/8004-XX	Schiller	2025	Franklin Avenue in Wadena to Red Eye River in Sebeka	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$5.8 - \$7.0	\$6.9 - \$8.4
3	I-94	7380-XX	Indihar	2025	Sauk Centre to Melrose	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$6.5 - \$7.9	\$7.8 - \$9.5
3	I-94	7380-XX	Indihar	2025	2.4 mi E of Melrose (EB)	Replace Br 6870 over Sauk River	N/A	N/A	N/A	N/A	\$4.3 - \$5.3	\$5.2 - \$6.3
3	I-94	7380-XX	Indihar	2025	2.5 mi NW of Melrose (EB)	Replace Br 6897 over Sauk River	N/A	N/A	N/A	N/A	\$4.3 - \$5.3	\$5.2 - \$6.3
3	I-94	8680-XX	Dumont	2025	East of Monticello west of MN 241 in St. Michael	Unbonded Overlay	N/A	N/A	N/A	N/A	\$12.6 - \$15.4	\$15.1 - \$18.5
3	Hwy 210	1805-1806-XX	Schiller	2025	Beginning of 4-Lane west of Baxter to end of 4-Lane east of Brainerd	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$10.6 - \$13.0	\$12.7 - \$15.6
3	Hwy 210	1807/0118-XX	Schiller	2025	East of Deerwood to west of Aitkin	Concrete Pavement Rehab	N/A	N/A	N/A	N/A	\$5.0 - \$6.2	\$6.0 - \$7.4
3	Hwy 271	1809-XX	Indihar	2025	Safari North Zoo to MN 210 (NB & SB)	Bituminous Resurfacing	N/A	N/A	N/A	N/A	\$4.5 - \$5.5	\$5.4 - \$6.6
4	Hwy 87	0306-30	Tom Pace	2021	Hwy 10 to Becker Co Line	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.9 - \$13.3	\$11.6 - \$17.3
4	Hwy 75/10	1406-72 (1401-175 is the assoc SP)	Tom Lundberg	2021	Moorhead	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.7 - \$7.0	\$6.1 - \$9.1
4	Hwy 28	7503-38	Brian Bausman	2022	Chokio to Morris	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.1 - \$6.2	\$5.3 - \$8.1
4	Hwy 55	2609-28	Tom Pace	2024	Elbow Lake to Barrett	Reclaim, shoulder widening	Pending approval	Pending approval	Pending approval	Pending approval	\$4.9 - \$7.4	\$6.4 - \$9.6
4	I94WB	NA	Not assigned	2024	Hwy 114 to Hwy 29	Concrete Rehab & Shoulders	Pending approval	Pending approval	Pending approval	Pending approval	\$3.4 - \$5.1	\$4.4 - \$6.6
4	Hwy 10 EB	NA	Not assigned	2024	CSAH 10 to 6 miles E of perham (NE end of Br over RR)	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$6.9 - \$10.4	\$9.0 - \$13.5

Major Highway Projects (Planned 2020-2031)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (In Millions)	Total Project Cost Estimate (In Millions)
4	Hwy 34	NA	Not assigned	2024	Hwy 225 to E Becker Co Line	Reclaim and Widen Shoulders	Pending approval	Pending approval	Pending approval	Pending approval	\$3.3 - \$5.0	\$4.3 - \$6.5
4	Hwy 28	NA	Not assigned	2024	Pomme deTerre Bridge to Starbuck	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$6.7 - \$10.1	\$8.7 - \$13.1
4	Hwy 59	NA	Not assigned	2025	South Grant County Line to Hwy 55 in Barrett	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$5.7 - \$8.5	\$7.4 - \$11.1
4	Hwy 59	NA	Not assigned	2025	3 Miles North of I-94 to North Limit of Erhard	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$5.0 - \$7.5	\$6.5 - \$9.8
4	Hwy 34	NA	Not assigned	2025	2 Miles East of CSAH 29 to Ponsford Road	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$9.9 - \$14.8	\$12.9 - \$19.2
4	Hwy75	NA	Not assigned	2025	Hwy 27 in Wheaton to RR North of Hwy 55	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$5.4 - \$8.0	\$7.0 - \$10.4
4	Hwy 9	NA	Not assigned	2026	.1 Mile North of I-94 to Hwy 10	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.8 - \$7.2	\$6.2 - \$9.4
4	Hwy 27	NA	Not assigned	2026	South Junction Hwy 75 in Wheaton to 1.1 Miles East of CSAH 7	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$5.0 - \$7.6	\$6.5 - \$9.9
4	Hwy 12	0603-16	Brian Bausman	2020/2021	Hwy 75 to Hwy 59	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.3 - \$12.4	\$10.8 - \$16.1
4	Hwy 55	2609-36	Tom Lundberg	2021/2022	Highway 59 to Douglas/Grant County Line	Medium mill and overlay/Bridge Replacement	Pending approval	Pending approval	Pending approval	Pending approval	\$5.1 - \$7.6	\$6.6 - \$9.9
4	Hwy 9	8409-26	Tom Lundberg	2022/2023	Barnesville to Breckenridge	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.0 - \$12.0	\$10.4 - \$15.6
4	Hwy 55	8404-47	Brian Bausman	2024/2025	SD Border to Grant/Wilkin Co Line	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$7.2 - \$10.8	\$9.4 - \$14.0
6	Hwy 63	7908-35	Kjersti Anderson	2018	N/A	Mill and resurface from north of County Road 14 to County Road 78	N/A	N/A	N/A	N/A	\$7.9 - \$11.4	\$9.5 - \$13.7
6	Hwy 14	5503-45	Heather Lukes	2017	N/A	Mill and resurface from east of County Road 19 to Hwy 74	N/A	N/A	N/A	N/A	\$5.0 - \$7.3	\$6.0 - \$8.7
6	Hwy 52	2506-77	David Tsang	2018	N/A	Mill and resurface from County Road 7 to 2 miles south of Hwy 19	N/A	N/A	N/A	N/A	\$4.8 - \$7.0	\$5.8 - \$8.4
6	Hwy 52	5507-64	Heather Lukes	2019	N/A	Mill and resurface from County Road 5 to south Hwy I-90	N/A	N/A	N/A	N/A	\$6.3 - \$8.2	\$5.2 - \$7.6
6	I-90	2482-74	Jake Gasper	2019	N/A	Resurface westbound lanes from Hwy 13 to County Road 46	N/A	N/A	N/A	N/A	\$4.1 - \$5.9	\$4.9 - \$7.1
6	Hwy 61	7906-96	Kjersti Anderson	2019	Hwy 42 to Lake City	Mill and resurface from Hwy 42 to one mile north of Lake City	N/A	N/A	N/A	N/A	\$10.9 - \$15.7	\$13.1 - \$18.9
6	Hwy 16	5003-17	David Tsang	2019	I-90 to Spring Valley	Mill and resurface from I-90 to Spring Valley	N/A	N/A	N/A	N/A	\$5.5 - \$7.9	\$6.6 - \$9.5
6	Hwy 60	6607-49	David Tsang	2019	Faribault to Kenyon	Mill and resurface from east Faribault to Kenyon	N/A	N/A	N/A	N/A	\$4.7 - \$6.8	\$5.6 - \$8.2
6	Hwy 60	7902-25	Heather Lukes	2018	N/A	Mill and resurface from Hwy 52 to Hwy 63	N/A	N/A	N/A	N/A	\$5.4 - \$7.3	\$5.2 - \$7.5
6	I-90	8580-167	Chad Hanson	2020	N/A	Mill and resurface from near Hwy 61 Dakota	N/A	N/A	N/A	N/A	\$3.6 - \$5.2	\$4.4 - \$6.3
6	Hwy 61	8504-79	Chad Hanson	2019	N/A	Mill and resurface from north of I-90 to County Road 15	N/A	N/A	N/A	N/A	\$12.1 - \$17.5	\$14.6 - \$21.0
6	Hwy 60	7903-54	Heather Lukes	2020	N/A	Mill and resurface from Hwy 63 to Hwy 61	N/A	N/A	N/A	N/A	\$8.7 - \$12.5	\$10.4 - \$15.1
6	Hwy 218	NEW	Not assigned	2021	N/A	Mill and resurface from Hwy 30 to Hwy 14	N/A	N/A	N/A	N/A	\$5.6 - \$8.1	\$6.7 - \$9.7
6	Hwy 42	NEW	Not assigned	2021	N/A	Mill and resurface from north of Hwy 247 to Hwy 61	N/A	N/A	N/A	N/A	\$4.7 - \$6.8	\$5.7 - \$8.2
6	US 52	5507-69	Heather Lukes	2020	N/A	Bituminous overlay, northbound and southbound from .2 miles south of I 90 to US 63	N/A	N/A	N/A	N/A	\$4.4 - \$6.0	\$5.6 - \$7.5
6	Hwy 61	NEW	Not assigned	2022	N/A	Mill and resurface from Hwy 248 to northwest of Hwy 60	N/A	N/A	N/A	N/A	\$12.4 - \$17.9	\$14.9 - \$21.5
6	I-35	NEW	Not assigned	2023	N/A	Concrete pavement rehab from the Iowa/Minnesota state line to north of Hwy 30	N/A	N/A	N/A	N/A	\$12.9 - \$16.8	\$10.6 - \$15.3
6	Hwy 57	NEW	Not assigned	2022	Kasson to Wanamingo	Mill and resurface from Kasson to Wanamingo	N/A	N/A	N/A	N/A	\$7.9 - \$11.4	\$9.5 - \$13.7
6	Hwy 218	NEW	Not assigned	2022	N/A	Mill and resurface from I-90 to Hwy 30	N/A	N/A	N/A	N/A	\$6.1 - \$8.8	\$7.3 - \$10.6
6	US 61	New	not assigned	2022	N/A	Bituminous mill and overlay from .1 miles north MN 248 to 1.7 miles northwest of MN 60	N/A	N/A	N/A	N/A	\$11.9 - \$15.2	\$11.5 - \$15.6
6	I 90	New	not assigned	2022	N/A	Unbonded concrete overlay eastbound from CSAH 46 (Petran) to .4 miles east of MN 105	N/A	N/A	N/A	N/A	\$12.9 - \$16.4	\$12.5 - \$16.9
6	I 90	New	not assigned	2023	N/A	Bridge replacement westbound bridge 6868 over the Cedar River and westbound bridge 9178 over 6th Street NE	N/A	N/A	N/A	N/A	\$4.4 - \$5.6	\$4.2 - \$5.7
6	US 218	New	not assigned	2023	N/A	Bituminous mill and overlay from Iowa border to I-90	N/A	N/A	N/A	N/A	\$5.8 - \$7.2	\$5.2 - \$7.1
6	MN 30	New	not assigned	2023	N/A	Bituminous mill and overlay from US 63 to US 52	N/A	N/A	N/A	N/A	\$7.1 - \$8.9	\$6.5 - \$8.8
6	Hwy 52	NEW	Not assigned	2025	N/A	Mill and resurface from Hwy 63 to 85th Street	N/A	N/A	N/A	N/A	\$9.3 - \$13.4	\$11.1 - \$16.1
6	Hwy 61	NEW	Not assigned	2023	N/A	Mill and resurface from north of Lake City to south of Red Wing	N/A	N/A	N/A	N/A	\$4.1 - \$5.9	\$4.9 - \$7.1
7	US 71	1706-XX	Not assigned	2020	Windom to TH 30	Mill and Overlay from RP 27.936 to RP 41.223	N/A	N/A	N/A	N/A	\$5.0 -	\$6.3 -
7	MN 111/MN 2	5208-XX, 7207-XX	Not assigned	2020	Nicollet to Gaylord	Reclaim, From RP .5 to RP 9.798 on TH 111, From RP 80 to RP 89.375 on TH 22	N/A	N/A	N/A	N/A	\$10.9 -	\$13.6 -
7	MN 60	3204-XX	Not assigned	2020	North of Heron Lake to Windom	Major CPR/D. Grinding from RP 35.900 to RP 40.696	N/A	N/A	N/A	N/A	\$6.0 -	\$7.5 -
7	MN 99	5206-XX	Not assigned	2020	Nicollet to St Peter	Mill and Overlay from RP 0 to RP 12	N/A	N/A	N/A	N/A	\$5.9 -	\$7.4 -
7	US 14	5202-XX	Not assigned	2021	New Ulm to Nicollet	Mill and Overlay from RP 104.454 to RP 117.678	N/A	N/A	N/A	N/A	\$6.4 -	\$7.9 -
7	30	1701-27	Not Assigned	2021	Murray/Cottonwood Co. Line to Jct TH 71	From RP 56.267 to RP 73.707, Thick Mill/Overlay	N/A	N/A	N/A	N/A	\$11.3 -	\$14.2 -
7	MN 4	4602-XX	Not assigned	2022	South of Sherburn to Martin/Watonwan County Line	Mill and Overlay from RP 10 to RP 26	N/A	N/A	N/A	N/A	\$7.8 -	\$9.8 -
7	US 169	2208-XX	Not assigned	2022	From TH 109 to Amboy	Unbonded Overlay from RP 20.282 to RP 28.242	N/A	N/A	N/A	N/A	\$10.2 -	\$12.8 -
7	MN 22	2205-XX	Not assigned	2023	Wells to Mapleton	Mill and Overlay from RP 18.4 to RP 35.4	N/A	N/A	N/A	N/A	\$8.6 -	\$10.7 -
7	MN 19	4004-XX	Not assigned	2023	From US 169 to New Prague	Thick Overlay from RP 132.9 to RP 150.381	N/A	N/A	N/A	N/A	\$10.2 -	\$12.7 -
7	90	6780-XX	Not Assigned	2024	Beaver Creek to Luverne	From RP 3.907 to RP 13.151, WB, Major CPR	N/A	N/A	N/A	N/A	\$9.5 -	\$12.0 -
7	15	4603-XX	Not Assigned	2024	Iowa to Fairmont	From RP 0.00 to RP 933471, Medium Mill/Overlay	N/A	N/A	N/A	N/A	\$5.6 -	\$8.0 -
7	60	4006-35	Matt Rpttermond	2024	TH 60 to Waterville	From RP 116.480 to RP 132.335 Medium Mill/Overlay	N/A	N/A	N/A	N/A	\$8.8 -	\$13.0 -
7	75	6704-XX	Not Assigned	2024	Iowa to Luverne	From RP 0.00 to RP 9.606, Medium Mill/Overlay	N/A	N/A	N/A	N/A	\$6.0 -	\$9.0 -
7	169	0713-XX	Not Assigned	2025	RP 104.370	Rehab Bridge 08042 (Vets Bridge)	N/A	N/A	N/A	N/A	\$5.0 -	\$10.0 -
7	90	4680-XX	Not Assigned	2025	Sherburn to Fairmont	From RP 87.814 to RP 102.168, EB, Thick Mill/Overlay	N/A	N/A	N/A	N/A	\$8.7 -	\$12.0 -
7	14	0702-XX	Not Assigned	2025	TH 14 to TH 60	From RP 134.392 to RP 140.775, EB, Major CPR	N/A	N/A	N/A	N/A	\$5.7 -	\$9.0 -
7	19	7204-XX	Not Assigned	2025	Gibbon to Winthrop	From RP 97.255 to RP 109.418, Major CPR	N/A	N/A	N/A	N/A	\$10.4 -	\$13.0 -
8	Hwy 23	4203-50	Ryan Barney	2020	Cottonwood to Granite Falls	Mill 3" of existing pavement and replace with 7" of concrete	Not started	Not started	Not started	Not started	\$25.1 - \$30.4	\$30.2 - \$36.5
8	Hwy 7	3401-20AC	Teal Spellman	2020	Jct. Hwy 23 Clara City to US 71	Mill portion of existing concrete pavement, grind up underlying pavement structure and place bituminous surface on top	Not started	Not needed	Not started	Not started	\$8.6 - \$10.0	\$10.4 - \$12.0
8	Hwy 68	4210-49	Nick Klisch	2020	Minnesota to Marshall	Improve the condition and operation of poor drainage structures along the corridor through replacement and widening the shoulders.	Not started	Not needed	Not started	Not started	\$7.2 - \$9.1	\$8.8 - \$11.1
8	Hwy 15	4304-53	Kelly Brunkhorst	2020	5th Ave. SW to 2nd Ave, downtown Hutchinson	Urban Reconstruction	Not started	Not started	Not started	Not started	\$4.8 - \$6.3	\$5.8 - \$7.6
8	Hwy 19	6402-22	Nick Klisch	2022	Marshall to W. Jct. Hwy 67	Mill 1.5" of existing pavement and replace with 3" of new bituminous.	Not started	Not needed	Not started	Not needed	\$6.3 - \$7.3	\$7.5 - \$8.7
8	Hwy 7	4703-XX	Teal Spellman	2022	US 71 to MN 4 in Cosmos	2" mill and 3" overlay	Not started	Not started	Not started	Not started	\$6.8 - \$8.3	\$8.2 - \$9.9
8	Hwy 30	5103-XX	Lance Kalthoff	2022	US 59 to the Murray/Cottonwood County line	3" mill and overlay	Not started	Not started	Not started	Not started	\$5.6 - \$6.5	\$6.7 - \$7.8
8	Hwy 40	1210-XX	TBD	2023	Mn 29 to Mn 277	3" mill and overlay	Not started	Not started	Not started	Not started	\$4.8 - \$5.5	\$5.7 - \$6.6
8	Hwy 23	5902-XX	TBD	2024	US 75 in Pipestone to 0.6 miles east of Lyon County CSAH 18	3" mill and overlay	Not started	Not started	Not started	Not started	\$13.5 - \$15.6	\$16.2 - \$18.7

Major Highway Projects (Planned 2020-2031)

District	Route	S.P.	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate (In Millions)	Total Project Cost Estimate (In Millions)
S	Hwy 59	4209-26	TBD	2024	CSAH 33, just north of Marshall to Yellow Medicine County CSAH 3	3" mill and overlay	Not started	Not started	Not started	Not started	\$7.6 - \$9.2	\$9.1 - \$11.0
S	Hwy 19	4205-XX	TBD	2025	Marshall	Urban Reconstruction	Not started	Not started	Not started	Not started	\$9.6 - \$12.6	\$11.7 - \$15.4
M	Hwy 65	2710-47	Ron Rauchle	2020	Hwy 65 (Central/3rd Ave Bridge) over the Mississippi River in Minneapolis	Major rehabilitation of Bridge #2440 including deck, railings and superstructure	Not known	Not known	Not known	Not known	\$30.0 - \$36.0	\$35.4 - \$42.5
M	I-494	1985-148	Mohammad Dehdashti	2020	Dakota County	Minor concrete pavement repair, diamond grind and medium mill and overlay from Hardman Avenue to the Minnesota River	Not known	Not known	Not known	Not known	\$20.0 - \$24.0	\$23.6 - \$28.3
M	Hwy 65	N/A	0807-110	2020	Anoka County	Medium mill and overlay from County Road 10 to 153rd Avenue	Not known	Not known	Not known	Not known	\$12.0 - \$14.4	\$14.2 - \$17.0
M	Hwy 5	N/A	Not assigned	2021	St. Paul	RECONSTRUCT, MED MILL AND OVERLAY	Not known	Not known	Not known	Not known	\$11.6 - \$13.9	\$13.7 - \$16.4
M	Hwy 35	1909-99	Not assigned	2021	Dakota County	Redeck/Overlay Br 19819, Br 19827	Not known	Not known	Not known	Not known	\$10.0 - \$12.0	\$11.8 - \$14.2
M	Hwy 65	N/A	Not assigned	2021	Anoka County	WHITETOPPING	Not known	Not known	Not known	Not known	\$12.9 - \$15.5	\$15.2 - \$18.3
M	I-35W	N/A	Not assigned	2021	Ramsay, Anoka County	MED/THICK MILL AND OVERLAY, I-694 TO 1 mi N of Lake Dr	Not known	Not known	Not known	Not known	\$10.5 - \$12.6	\$12.4 - \$14.9
M	Hwy 36	N/A	Not assigned	2022	Roseville to White Bear Lake	Medium Mill and Overlay, from Jct I-35W to Jct US61 Br	Not known	Not known	Not known	Not known	\$12.3 - \$14.8	\$14.5 - \$17.4
M	I-494	N/A	Not assigned	2023	Bloomington, Mendota Heights	REHAB BR 9217E I 494 EB OVER THE MN RIVER AND BR 9217W I 494 WB OVER THE MN RIVER	Not known	Not known	Not known	Not known	\$10.0 - \$12.0	\$11.8 - \$14.2
M	Hwy 50	N/A	Not assigned	2023	Dakota County	Full Depth Reclaim OR Whitetopping from Br 19011 of US 52 to US 61	Not known	Not known	Not known	Not known	\$12.4 - \$14.9	\$14.6 - \$17.6