

December 15, 2018

The Honorable Paul Torkelson, Chair
House Transportation Finance Committee
381 State Office Building
Saint Paul, MN 55155

The Honorable Linda Runbeck, Chair
House Transportation & Regional Governance Policy
Committee
417 State Office Building
Saint Paul, MN 55155

The Honorable Frank Hornstein, DFL Lead
House Transportation Policy & Finance Committee
243 State Office Building
Saint Paul, MN 55155

The Honorable Scott Newman, Chair
Senate Transportation Finance & Policy Committee
3105 Minnesota Senate Building
Saint Paul, MN 55155

The Honorable Scott Dibble
Ranking Minority Member
Senate Transportation Finance & Policy Committee
2213 Minnesota Senate Building
Saint Paul, MN 55155

The Honorable Connie Bernardy, DFL Lead
House Transportation & Regional Governance Policy
Committee
253 State Office Building
Saint Paul, MN 55155

RE: 2018 Major Highway Projects, Trunk Highway Fund Expenditures, and Efficiencies report

Dear Legislators:

The Minnesota Department of Transportation is pleased to present the annual report to the legislature on major highway projects, trunk highway fund expenditures and efficiencies.

As required by [Minnesota Statute 174.56](#), the report details the projects that are either under construction, programmed for construction, or planned for construction within the next 15 years. The report includes the status of major highway projects around the state, an environmental mitigation cost comparison for representative projects and trunk highway fund expenditures.

Please let me know if you have questions. You can also contact Ed Idzorek at ed.idzorek@state.mn.us or 651-366-3770.

Sincerely,



Charles A. Zelle
Commissioner

Major Highway Projects, Trunk Highway Fund Expenditures and Efficiencies Report

December 2018



Prepared by:

The Minnesota Department of Transportation
395 John Ireland Boulevard
Saint Paul, Minnesota 55155-1899

Phone: 651-296-3000

Toll-Free: 1-800-657-3774

TTY, Voice or ASCII: 1-800-627-3529

To request this document in an alternative format, call 651-366-4718 or 1-800-657-3774 (Greater Minnesota).
You may also send an email to ADArequest.dot@state.mn.us

Table of Contents

Legislative Request	5
Purpose and Scope of the Report	7
Introduction	7
Summary of Report Contents	7
Major Highway Projects Summary	10
State Highway Investment Planning Process	10
Project Selection	12
Impacts of Project Cost Changes	13
Project Prioritization	13
Project Summary Sheets	14
Environmental Mitigation and Compliance Analysis	15
Metro District Project: TH 100 between 36 th St. and 25-½ St. in St. Louis Park (Hennepin County)	15
Greater Minnesota Project: TH 25 from 7 th St. (Hwy 55) to Caitlin St. in Buffalo (Wright County)	17
Trunk Highway Fund Expenditures	19
Products and Services Budget and Spending	21
Methodology	21
Agency Overhead	21
2018 Products and Services Summary	22
2018 Products and Services Framework	22
Department Summary	23
Division Summary	24
Productivity Measures	37
Introduction	37
Bridges: Inspection Cost per Square Foot of Deck Area	38
Bridges: Maintenance Cost per Square Foot of Deck Area	40
Pavement: Cost per roadway mile-year added	42
Snow and Ice: Cost per Plow-Mile Driven	45
Pavement Markings: Cost per Mile Striped	46
Transit: MnDOT Administrative Cost per Transit Passenger Trip	48
Freight: MnDOT Cost per Oversize/Overweight Permit Issued	50
Program Planning and Delivery to Construction Expenditure Ratio	52

Efficiencies.....	56
Background	56
Methodology.....	56
State Road Construction	59
Administration, Maintenance & Operations	62
Appendix A: Products and Services Summary List and Descriptions	69
2018 Products and Services Framework.....	69
Products and Services Descriptions	70
Appendix B: Glossary of Terms	74
Appendix C: Major Highway Project Summary Pages.....	78
District 1 Project List	81
District 2 Project List	118
District 3 Project List	141
District 4 Project List	174
District 6 Project List	205
District 7 Project List	248
District 8 Project List	305
Metro District Project List	317
Appendix D: Future Major Highway Projects (planned 2021-2032)	348
Appendix E: Efficiency Pages	355

Legislative Request

This report was completed to comply with [Minnesota Statute 174.56](#).

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.

Report cost

The cost of preparing the report elements required by Minn. Stat. 174.56 is approximately \$106,900.

The costs reported for the 2018 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, productivity measures and efficiencies.

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, or 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 of planning, building, operation and maintenance of 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:

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

Together, this information provides the 2017 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 these 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 Report Contents

Major Highway Projects

This section of the report identifies major projects on the state trunk highway system, which includes the interstate and national highway systems. Per [Minnesota Statutes 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 (2017-2018) or identified for construction in the next four years (2019-2022), a project summary is included that provides detailed information on project location, purpose, scope, schedule and cost. Each project planned for construction in 2023-2033 is included in Appendix D and contains the basic information on project location, description, schedule and preliminary estimated cost.

All the projects are arranged by MnDOT districts. 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 2018.

Environmental Mitigation and Compliance Costs

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

1. The Metro district project on Trunk Highway 100, located in Hennepin County. This project was highlighted because it represents some of the types of mitigation that are commonly part of projects in Minnesota's largest metropolitan area.
2. For Greater Minnesota, the Trunk Highway 25 project in Wright County was chosen because it is an example of the types of environmental mitigation involved along an urban corridor in a mid-sized city in Greater Minnesota.

Trunk Highway Fund Expenditures

Fiscal year 2018 expenditure information is provided for each of the categories specified in the statute.

Products and Services Budget

MnDOT developed a 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 2018, as appropriated. It also includes expenses for services that may have been rendered in fiscal year 2017, but due to processing time would have been paid in fiscal year 2018.

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 2017 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).

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

The report includes the following measures:

- Bridge inspection: Cost per square foot of deck area
- Bridge 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
- Program Planning and Delivery to construction expenditure ratio

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.

Three of the eight productivity measures show the inflation-adjusted unit costs declining. Specifically, bridge maintenance cost per square foot of deck area, pavement markings cost per mile striped, and cost per oversize/overweight permit issued all show a declining trend in inflation-adjusted unit costs over the analysis period. Three of the eight measures show an overall flat trend. Specifically, the bridge inspection cost per square foot of bridge deck area, cost per plow-mile driven and MnDOT administrative cost per transit trip all show a relatively flat trend over the last 10 years. The cost per additional roadway mile-year added shows a slight increase over the analysis period. A trend line was not applied to the program, planning and delivery to construction expenditure ratio measure but the trend appears to be increasing over the analysis period.

Efficiencies

MnDOT consistently aims to be a good steward of public funds. Starting in 2015, the department decided to take a more targeted approach to identify and quantify these efficiencies, while looking for additional best practices and improvements. In FY 2018, MnDOT identified an estimated \$75 million in savings from new and revised practices deployed across the organization. The majority of these efficiencies identified in FY 2018 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.

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 [Minnesota Statutes 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 534 projects that met the statutory cost threshold. The information provided in this report is current as of November 2018.

Table 1: Projects included in 2018 Major Highway Projects report

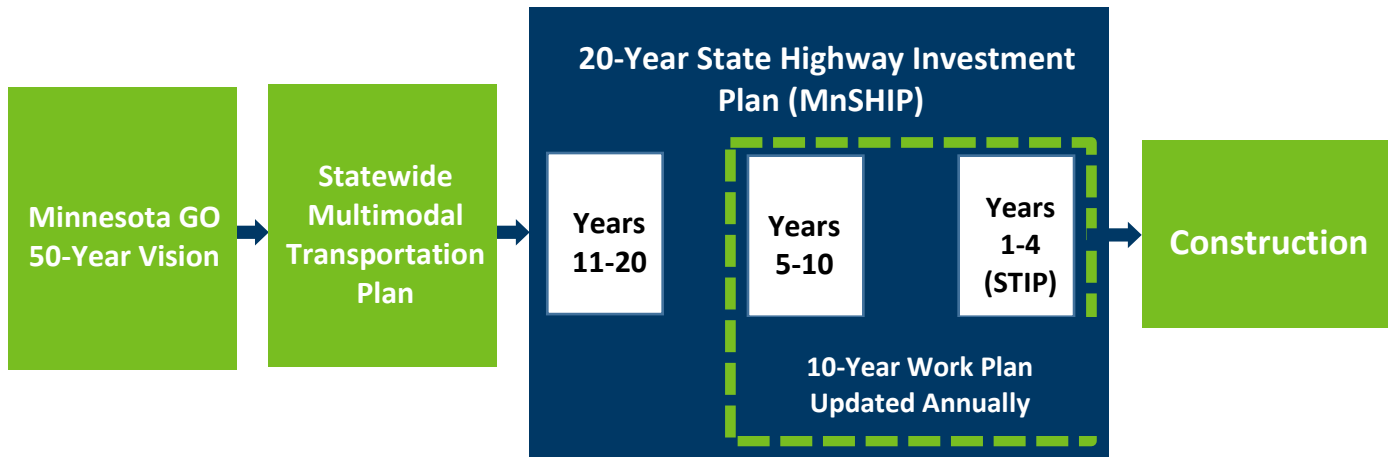
MnDOT District	Number of projects completed, under construction or listed in the STIP	Projects in years 2021-2032	Total Projects
1	35	38	73
2	21	32	53
3	31	48	79
4	29	24	53
6	41	48	90
7	54	31	85
8	10	20	30
Metro	30	42	72
TOTAL	251	283	534

Of the 534 projects reported this year, 72 are in the Twin Cities metro area and 462 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 actual capital improvements made to the state highway system. MnSHIP sets a “fiscally constrained” framework (that is, using only forecasted funding) for future capital improvements by identifying investment needs and priorities. This plan will serve as the framework for statewide investment on trunk highways for the next year 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 1: 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 2019-22) are those listed in the [2019-2022 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 2023-28) 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 2029-37); 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 funding requirements related to the MAP-21 and the FAST Act transportation programs.

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 are designed to make progress towards these goals.

Project Selection

MnDOT selects projects through 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 Plan

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 the performance requirements started in Moving Ahead for Progress in the 21st Century Act, or MAP-21, and continued in the more recent passage of the Fixing America's Surface Transportation Act, or FAST Act, 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. The greater emphasis on the NHS was continued in the FAST Act. If MnDOT fails to adequately progress towards the national goals, some federal funding flexibility is at risk. Further, an analysis highlighted the expectation that MnDOT maintain NHS routes in a state of 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 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 Project Cost Changes

Changes to project costs and schedules affect the state trunk highway capital investment program. These effects are most directly seen through revisions to the [STIP](#), which is a master listing of 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 and right of way acquisition. 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 and 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 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 that 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 likely to be subject to schedule delays or cost revisions.

Project Prioritization

All projects identified within the 2019-22 STIP can be funded with current revenue projections and are high priority projects to local stakeholders, districts and Area Transportation Partnerships. Projects within the 2023-32 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 provided in 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 2017-18.

This segment of Trunk Highway 100 is located in Hennepin County and within 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 largest metropolitan area.

The Trunk Highway 25 project in Wright County is located in MnDOT's District 3. This segment of Trunk Highway 25 was chosen because it is an example of the types of environmental mitigation involved along an urban corridor in a mid-sized city in Greater Minnesota.

Metro District Project: Trunk Highway 100 between 36th Street and 25-½ Street in St. Louis Park (Hennepin County)

This MnDOT Metro District project included replacing structurally deficient bridges, improve mainline safety and mobility and improving the driving surface. Trunk Highway 100 is the oldest controlled access freeway in the Twin Cities and the intersection of TH 100 and Trunk Highway 7 was the first cloverleaf design interchange in the state, built in 1930. At the time, the city of St. Louis Park embraced this changing transportation system and subsequent beginning of the suburban era by marketing the city as the place "where the highways meet," even including wayside areas designed for picnicking. This stretch of highway, also known as the Lilac Way because of the many lilac plantings, became a destination for public gatherings. While freeway right of way is no longer used for recreation, visual concepts can promote that same sense of innovation and integration. A Visual Quality Advisory Committee worked to connect travelers with neighbors and to allow for comfortable crossings by assisting with design for noise and retaining walls, landscaping, signage and pedestrian bridge design.

Environmental mitigation and compliance costs of \$6,643,800 are detailed below and account for approximately 11.5 percent of project costs.

The total project cost (also detailed below) was \$57.7 million. The construction cost of the project was \$43.3 million, right of way costs were \$7.7 million and project engineering costs were \$6.7 million.

Table 2: Environmental Mitigation Percentage for Trunk Highway 100 in Hennepin County

Environmental Mitigation & Compliance Costs Breakdown: Trunk Highway 100	
Environmental Process and Documents: Costs NOT included in the mitigation cost total	
Environmental Assessment/Worksheet	\$96,300
TOTAL	\$96,300
Preconstruction Engineering Costs	
Contaminated Properties Investigation	\$154,600
Regulated Material Investigation	\$42,300
Erosion Control and Stormwater Management	\$143,800
Stormwater Ponds	\$38,772
Landscaping	\$30,800
Noise & Air Analysis*	\$147,500
Sub-Total	\$557,772
Construction Engineering / Administration Costs	
Erosion Control and Stormwater Management	\$41,900
Stormwater Ponds	\$11,300
Noise Walls	\$150,000
Sub-Total	\$203,200
Construction Costs	
Contaminated Properties Assessment and Remediation	\$134,600
Regulated Material Investigation	\$43,300
Erosion Control and Stormwater Management	\$1,198,300
Stormwater Ponds	\$323,100
Landscaping	\$256,700
Noise Walls	\$4,300,000
Sub-Total	\$6,256,000
Total Environmental Mitigation and Compliance Costs	
TOTAL	\$7,016,972
Project Delivery Costs (Engineering)	
Preconstruction Engineering	\$5,196,300
Construction Engineering / Administration	\$1,515,600
Sub-Total	\$6,711,900
Right of Way Costs (land only)	
Total Project Right of Way Costs	\$7,670,100
Sub-Total	\$7,670,100
Construction Costs	
Total Project Construction Costs	\$43,302,400
Sub-Total	\$43,302,400
Total Project Costs	
Total Project Delivery Costs (Engineering)	\$6,711,900
Total Right of Way Costs	\$7,670,100
Total Project Construction Costs	\$43,302,400
TOTAL	\$57,684,400

*Noise Analysis is mandated for major construction projects that are federally-funded and meet additional criteria. Noise walls are only constructed when analysis shows they are safe, feasible, a reasonable cost, provide adequate noise reduction, and those impacted vote to proceed.

Environmental Mitigation & Compliance Costs Breakdown:

TH 100 cont'd

Percentage of Project Costs for Environmental Mitigation & Compliance	
Total Environmental Mitigation Costs divided by Total Project Costs	
\$7,016,972 divided by \$57,684,400 =	12.2%

Greater Minnesota Project: Trunk Highway 25 from 7th Street (Highway 55) to Caitlin Street in Buffalo (Wright County)

This District 3 project on Trunk Highway 25 was a project that reconstructed the intersection of TH 25 and Trunk Highway 55, including dual left turn lanes on each roadway approach, traffic signal upgrades and widening to accommodate four lanes from north of TH 55 to south of Caitlin Street. MnDOT coordinated with the city of Buffalo to allow them to complete the Highway 25 downtown reconstruction, partly funded by the Corridor Investment Management System program.

Environmental mitigation and compliance costs of \$263,600 are detailed below and account for approximately 3.0 percent of project costs.

The total project cost, detailed below, was \$8.8 million. The construction cost of the project was \$7.3 million, right of way costs were \$266,700 and project engineering costs were \$1.1 million.

Table 3: Environmental Mitigation Percentage for Trunk Highway 25 in Wright County

Environmental Mitigation & Compliance Costs Breakdown:

Trunk Highway 25

Environmental Documents: Costs NOT included in the mitigation cost total	
Preliminary Investigation (Categorical Exclusion)	\$38,000
TOTAL	\$38,000
Preconstruction Engineering Costs	
Stormwater Ponds/Pretreatment Systems	\$12,000
Contaminated Properties Investigation	\$20,900
Noise Analysis	\$16,800
Erosion Control	\$11,100
Sub-Total	\$60,800
Construction Engineering / Administration Costs	
Stormwater Ponds/Pretreatment Systems	\$3,500
Erosion Control	\$3,300
Sub-Total	\$6,800
Construction Costs	
Stormwater Ponds/Pretreatment Systems	\$99,700
Contaminated Materials Construction Monitoring	\$59,600
Regulated Materials Disposal (Salvage)	\$59,000
Erosion Control	\$92,900
Sub-Total	\$311,200
Total Environmental Mitigation and Compliance Costs	
TOTAL	\$378,800

Environmental Mitigation & Compliance Costs Breakdown:		Trunk Highway 25
Project Delivery Costs (Engineering)		
Preconstruction Engineering		\$884,400
Construction Engineering / Administration		\$258,000
	Sub-Total	\$1,142,400
Right of Way Costs (land only)		
Total Project Right of Way Costs		\$266,700
	Sub-Total	\$266,700
Construction Costs		
Total Project Construction Costs		\$7,370,200
	Sub-Total	\$7,370,200
Total Project Costs		
Total Project Delivery Costs (Engineering)		\$1,142,400
Total Right of Way Costs		\$266,700
Total Project Construction Costs		\$7,370,200
	TOTAL	\$8,779,300
Percentage of Project Costs for Environmental Mitigation & Compliance		
Total Environmental Mitigation Costs divided by Total Project Costs		
	\$ 378,800 divided by \$8,779,300 =	4.3%

Trunk Highway Fund Expenditures

The following contains fiscal year 2018 cost information for each of the categories listed in the graph below. The graph lists the budgetary expenditures by category. A brief explanation follows, describing what is included in each cost category.

Table 4: Trunk highway fund and trunk highway bond fund expenditures by category (millions)

Number	Category Name	TH Fund Expenditures
1	Road construction	\$1,024.4
2	Design and engineering	\$202.3
3	Labor	\$410.2
4	Acquisition of right of way	\$48.8
5	Litigation	\$5.9
6	Maintenance	\$124.1
7	Road operations	\$239.1
8	Planning	\$13.9
9	Environmental compliance	\$19.4
10	Administration	\$116.2

Note: In \$ millions

1. Road construction costs include all actual costs and encumbrances for road and bridge construction contracts. It includes the design and engineering and construction cost portions of design/build contracts, and project related consultant costs.
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 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, including bridges and structures inspection and maintenance and system roadways structure maintenance.
7. Road operations costs are all costs and encumbrances related to such activities as snow and ice removal, roadside and auxiliary infrastructure and traffic devices operation and maintenance.
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), environmental assessment worksheets, environmental impact statements and environmental plans. Both internal employee and consultant costs are included.
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. Also, these 10 categories are not mutually exclusive; some expenditures are reported in more than one category, such as labor and administration.

Products and Services Budget and Spending

Since 2014, 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 2018 for all funds.

Methodology

The financial information presented includes spending by each MnDOT office and district. 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

- Budgets are estimated at the beginning of each year and are not updated to reflect the various changes that occur throughout the year, including carryforward of funds from prior years, legislative actions, change in scope, etc. For State Road Construction, original budget amounts are based on the draft Statewide Transportation Improvement Plan and do not reflect the updates that occur later in the year.
- 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 provided throughout the department, such as:

- | | |
|---|---------------------------------|
| • leave time | • government relations |
| • fleet support | • audit |
| • buildings | • research |
| • building services and maintenance | • communication |
| • finance and accounting | • citizen participation |
| • human resources and workforce relations | • customer relations |
| • training | • management and administration |
| • supervision | • risk reserve |
| • IT | • workers' compensation |
| • legal services | • insurance and unemployment |

2018 Products and Services Summary

2018 Products and Services Framework

Table 5: 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 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	State Road Construction
Trunk Highway Debt Service	Trunk Highway Debt Service
Trunk Highway Operations and Maintenance	Bridges and Structures Inspection and Maintenance Roads and Roadside Maintenance Snow and Ice Traffic Operations 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

Notes External Partner Support can be used by any office and any budget activity. Starting in FY2018, Roadside Auxiliary Infrastructure and System Roadway Structures Maintenance were combined into Road and Roadside Maintenance.

Department Summary

	2016-17 Biennium					
Department Summary	2016 Totals		2017 Totals		2018 Totals	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent
Airports	85,339	57,270	108,916	54,864	131,356	79,454
Aviation Safety Operation and Regulation	19,677	21,951	17,792	15,607	4,875	4,971
Bicycle and Pedestrian Planning and Grants	4,860	27,124	435	1,051	509	609
Bridges and Structures Inspection and Maintenance	9,575	10,526	11,372	12,754	12,106	10,978
Commercial Truck and Bus Safety	4,230	3,514	4,458	4,000	4,733	2,995
County State Aid Highway	932,872	871,147	968,594	833,636	1,078,683	898,845
Develop Highway Improvement Projects - PE	93,760	86,603	86,626	67,825	77,816	67,090
External Partner Support	93,641	84,860	232,137	60,453	192,653	57,520
Freight Rail Improvements	3,311	3,821	2,270	1,974	5,291	2,007
Freight System Planning	267	168	177	154	1,095	31
Highway Construction Management Oversight - CE	53,179	49,959	48,688	46,702	47,392	43,808
Intercity Passenger Rail Improvement	8,094	5,971	4,316	4,092	2,089	1,428
Light and Commuter Rail	4,199	3,991	1,403	-	-	
Municipal State Aid Highway	183,244	187,444	180,968	151,168	194,378	192,989
Plan Highway System	26,121	16,080	35,765	21,629	25,053	22,678
Port Improvements	5,899	4,030	1,582	771	2,078	230
Radio Towers and Communications	3,852	17,009	15,566	17,854	14,411	12,748
Rail Safety	14,064	10,027	9,589	9,251	14,974	4,998
Research and Development	9,186	7,779	16,166	7,186	12,842	11,646
Road and Roadside Maintenance*	-	-	-	-	57,380	61,116
Roadside and Auxiliary Infrastructure (FY17)*	15,584	17,899	22,460	22,172	-	-
System Roadway Structures Maintenance (FY17)*	36,488	37,913	45,471	45,389	-	-
Snow and Ice	74,351	66,322	76,005	81,847	70,132	73,147
State Road Construction	1,148,859	1,054,348	1,026,474	1,194,411	1,180,545	1,120,670
Traffic Operations and Maintenance	41,613	46,821	55,047	40,272	39,568	41,715
Transit Planning and Grants	132,051	114,760	131,814	149,717	128,604	154,064
Trunk Highway Debt Service	197,381	183,156	231,199	195,704	224,131	211,412
Direct	3,201,697	2,990,493	3,335,290	3,040,483	3,522,693	3,077,147
Agency Overhead	391,084	294,068	272,407	355,726	418,077	336,849
Grand Total	3,592,781	3,284,561	3,607,697	3,396,209	3,940,770	3,413,995

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, beginning in FY15 fleet and inventory costs were included in Direct Expenses. Fleet and inventory (including salt/sand purchases) totaled \$70M in FY 16, \$98M in FY 17, and \$69M in FY 18.

Note: The Agency Overhead amounts above include items such as workers compensation, severance (medical portion), unemployment, and statewide indirect costs. These specifics items totaled \$13,415 in FY 16, \$13,837 in FY 17, and \$16,747 in FY 18.

*Starting in FY 18, Roadside and Auxiliary Infrastructure and System Roadway Structures Maintenance were combined into Road and Roadside Maintenance.

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, Maintenance	-	-	-	-	-	-
Commercial Truck and Bus Safety	-	-	-	-	-	-
County State Aid Highway	-	-	-	-	-	-
Develop Highway Improvement Projects - PE	-	-	466	631	-	-
External Partner Support	-	-	-	-	-	-
Freight Rail Improvements	-	-	-	-	-	-
Freight System Planning	-	-	-	-	-	-
Highway Construction Management Oversight - CE	-	-	391	797	-	-
Intercity Passenger Rail Improvement	-	-	-	-	-	-
Light and Commuter Rail	-	-	-	-	-	-
Municipal State Aid Highway	-	-	-	-	-	-
Plan Highway System	-	-	1,834	1,613	-	-
Port Improvements	-	-	-	-	-	-
Radio Towers and Communications	-	-	-	-	-	-
Rail Safety	-	-	-	-	-	-
Research and Development	-	-	284	-	-	-
Road and Roadside Maintenance	-	-	-	-	-	-
Snow and Ice	-	-	-	-	-	-
State Road Construction	-	-	-	-	-	-
Traffic Operation and Maintenance	-	-	-	-	-	-
Transit Planning and Grants	-	-	-	-	-	-
Trunk Highway Debt Service	-	-	-	-	-	-
Direct	-	-	2,975	3,041	-	-
Agency Overhead	6,910	5,377	6,536	4,932	3,000	2,576
Grand Total	6,910	5,377	9,511	7,973	3,000	2,576

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

Division Summary (continued)	Chief Financial Officer Division*		Corporate Services Division		Engineering Services 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	-	-	10	8	1,860	1,274
Commercial Truck and Bus Safety	-	-	-	-	-	-
County State Aid Highway	-	-	-	-	-	-
Develop Highway Improvement Projects - PE	263	-	724	1,215	28,497	24,661
External Partner Support	3	281	111	62	57,026	15,456
Freight Rail Improvements	-	-	-	-	-	-
Freight System Planning	-	-	-	-	-	-
Highway Construction Management Oversight - CE	-	-	474	540	8,406	7,561
Intercity Passenger Rail Improvement	-	-	-	-	-	-
Light and Commuter Rail	-	-	-	-	-	-
Municipal State Aid Highway	-	-	-	-	-	-
Plan Highway System	325	747	32	20	1,847	1,375
Port Improvements	-	-	-	-	-	-
Radio Towers and Communications	-	-	-	-	-	-
Rail Safety	-	-	-	-	-	-
Research and Development	-	-	13	29	2,455	1,875
Road and Roadside Maintenance	-	-	6	7	721	532
Snow and Ice	-	-	0	-	42	5
State Road Construction	-	-	-	-	1,140	2,034
Traffic Operations and Maintenance	-	-	7	36	128	320
Transit Planning and Grants	-	-	-	-	-	-
Trunk Highway Debt Service	52	-	2,500	403	-	-
Direct	642	1,028	3,876	2,320	102,123	55,094
Agency Overhead	12,322	10,042	135,717	63,860	30,121	31,262
Grand Total	12,964	11,070	139,594	66,180	132,244	86,356

*Chief Financial Officer (CFO) Division is new

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

Division Summary (continued)	Modal Planning & Program Management Division		Operations Division		State Aid for Local Transportation Division	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
Airports	131,356	79,454	-	-	-	-
Aviation Safety Operation and Regulation	4,875	4,971	-	-	-	-
Bicycle and Pedestrian Planning and Grants	509	609	-	-	-	-
Bridges and Structures Inspection and Maintenance	-	-	10,237	9,696	-	-
Commercial Truck and Bus Safety	4,733	2,995	-	-	-	-
County State Aid Highway	-	-	20,200	3,984	1,058,483	894,861
Develop Highway Improvement Projects - PE	1,585	866	46,282	39,717	-	-
External Partner Support	1,639	2,384	124,383	31,609	9,491	7,728
Freight Rail Improvements	5,291	2,007	-	-	-	-
Freight System Planning	1,095	31	-	-	-	-
Highway Construction Management Oversight - CE	0	(0)	38,120	34,910	-	-
Intercity Passenger Rail Improvement	2,089	1,428	-	-	-	-
Light and Commuter Rail	-	-	-	-	-	-
Municipal State Aid Highway	-	-	-	-	194,378	192,989
Plan Highway System	16,346	14,288	4,670	4,635	-	-
Port Improvements	2,078	230	-	-	-	-
Radio Towers and Communications	-	-	-	-	14,411	12,748
Rail Safety	9,974	4,998	5,000	-	-	-
Research and Development	8,589	7,352	1,501	2,390	-	-
Road and Roadside Maintenance	-	-	56,652	60,577	-	-
Snow and Ice	-	-	70,090	73,142	-	-
State Road Construction	235,924	35,177	943,481	1,083,459	-	-
Traffic Operations and Maintenance	160	293	39,273	41,065	-	-
Transit Planning and Grants	128,604	154,064	-	-	-	-
Trunk Highway Debt Service	221,579	211,009	-	-	-	-
Direct	776,425	522,156	1,359,889	1,385,183	1,276,763	1,108,326
Agency Overhead	19,337	15,237	194,505	196,561	9,629	7,002
Grand Total	795,762	537,393	1,554,395	1,581,745	1,286,392	1,115,327

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		Total	
Products and Services	Budget	Spent	Budget	Spent
Agency Overhead	6,910	5,377	6,910	5,377
Grand Total	6,910	5,377	6,910	5,377

Commissioner's Office Division	Commissioner's Staff		Total	
Products and Services	Budget	Spent	Budget	Spent
Agency Overhead	3,000	2,576	3,000	2,576
Grand Total	3,000	2,576	3,000	2,576

Chief of Staff Division	Chief of Staff		Civil Rights		Communications		Equity & Diversity		Public Engagement & Constituent Services		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Develop Highway Improvement Projects	-	-	466	631	-	-	-	-	-	-	466	631
Hwy Construction Management Oversight	-	-	391	797	-	-	-	-	-	-	391	797
Plan Highway System	-	-	1,834	1,613	-	-	-	-	-	-	1,834	1,613
Research and Development	-	-	284	-	-	-	-	-	-	-	284	-
Direct	-	-	2,975	3,041	-	-	-	-	-	-	2,975	3,041
Agency Overhead	501	259	2,425	1,313	1,318	1,124	921	1,117	1,371	1,118	6,536	4,932
Grand Total	501	259	5,400	4,354	1,318	1,124	921	1,117	1,371	1,118	9,511	7,973

Chief Financial Officer Division	Audit		Financial Management		Chief Financial Officer		Organizational Plan and Management		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Develop Highway Improvement Projects - PE	-	-	263	-	-	-	-	-	263	-
External Partner Support	-	-	3	281	-	-	-	-	3	281
Plan Highway System	-	-	325	747	-	-	-	-	325	747
Trunk Highway Debt Service	-	-	52	-	-	-	-	-	52	-
Direct	-	-	642	1,028	-	-	-	-	642	1,028
Agency Overhead	1,922	1,851	9,483	7,524	912	664	6	3	12,322	10,042
Grand Total	1,922	1,851	10,125	8,552	912	664	6	3	12,964	11,070

Corporate Services Division	Administration		Human Resources		Technology Investment Management		Corporate Services Division Administration		Corporate Accounts		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Bridges and Structures Inspection and Maintenance	-	-	10	8	-	-	-	-	-	-	10	8
Develop Highway Improvement Projects	-	-	724	1,215	-	-	-	-	-	-	724	1,215
External Partner Support	111	62	-	-	-	-	-	-	-	-	111	62
Hwy Construction Management Oversight	-	-	474	540	-	-	-	-	-	-	474	540
Plan Highway System	-	-	32	20	-	-	-	-	-	-	32	20
Research and Development	-	-	13	29	-	-	-	-	-	-	13	29
Snow and Ice	-	-	0	-	-	-	-	-	-	-	0	-
Traffic Operations and Maintenance	-	-	7	36	-	-	-	-	-	-	7	36
Trunk Highway Debt Service	-	-	-	-	-	-	-	-	2,500	403	2,500	403
Road and Roadside Maintenance	-	-	6	7	-	-	-	-	-	-	6	7
Direct	111	62	1,266	1,855	-	-	-	-	2,500	403	3,876	2,320
Agency Overhead	13,327	13,000	6,650	7,066	29,087	26,490	836	557	85,817	16,747	135,717	63,860
Grand Total	13,437	13,062	7,916	8,920	29,087	26,490	836	557	88,317	17,150	139,594	66,180

Engineering Services Division	Bridges		Construction & Innovative Contracting		Environmental Stewardship		Land Management		Materials & Road Research	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Bridges and Structures Inspection and Maintenance	1,177	978	-	-	0	0	-	-	-	-
Develop Highway Improvement Projects - PE	4,693	3,757	385	188	2,396	1,937	7,516	6,291	3,153	2,290
External Partner Support	49,328	10,550	85	77	251	37	6,088	2,557	1,083	707
Highway Construction Management Oversight - CE	1,147	938	1,180	1,273	131	148	619	271	3,933	3,661
Plan Highway System	87	78	-	-	340	358	3	-	65	58
Research and Development	64	88	-	-	141	128	-	2	1,723	1,241
Snow and Ice	2	2	-	-	39	3	-	-	-	-
State Road Construction	150	803	-	-	60	62	470	456	410	412
Traffic Operations and Maintenance	10	17	-	-	3	0	-	-	-	-
Road and Roadside Maintenance	38	10	-	-	432	200	251	322	-	-
Direct	56,695	17,221	1,650	1,538	3,792	2,874	14,947	9,900	10,368	8,369
Agency Overhead	3,706	4,345	1,750	1,905	3,134	3,218	4,922	4,283	5,105	5,618
Grand Total	60,401	21,566	3,400	3,442	6,926	6,092	19,869	14,183	15,473	13,986

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	-	-	683	296	1,860	1,274
Develop Highway Improvement Projects - PE	4,462	3,856	5,892	6,341	28,497	24,661
External Partner Support	193	1,528	-	-	57,026	15,456
Highway Construction Management Oversight - CE	724	757	672	514	8,406	7,561
Plan Highway System	44	22	1,307	859	1,847	1,375
Research and Development	5	12	522	404	2,455	1,875
Snow and Ice	-	-	1	-	42	5
State Road Construction	50	301	-	-	1,140	2,034
Traffic Operations and Maintenance	-	-	116	303	128	320
Road and Roadside Maintenance	-	-	-	-	721	532
Direct	5,478	6,477	9,194	8,717	102,123	55,094
Agency Overhead	5,020	5,869	6,484	6,024	30,121	31,262
Grand Total	10,498	12,345	15,678	14,741	132,244	86,356

Modal Planning & Program Management Division	Aeronautics		Freight & Commercial Vehicle Operations		Passenger Rail		Transit and Active Transportation	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Airports	131,356	79,454	-	-	-	-	-	-
Bicycle and Pedestrian Planning and Grants	-	-	-	-	-	-	509	609
Aviation Safety Operation and Regulation	4,875	4,971	-	-	-	-	-	-
Commercial Truck and Bus Safety	-	-	4,733	2,995	-	-	-	-
Develop Highway Improvement Projects - PE	-	-	-	-	-	-	-	-
External Partner Support	-	-	1,241	1,892	225	445	23	23
Freight Rail Improvements	-	-	5,291	2,007	-	-	-	-
Freight System Planning	-	-	1,095	31	-	-	-	-
Highway Construction Management Oversight - CE	-	-	-	-	-	-	-	-
Intercity Passenger Rail Improvement	-	-	-	-	2,089	1,428	-	-
Plan Highway System	-	-	-	-	-	-	233	199
Port Improvements	-	-	2,078	230	-	-	-	-
Rail Safety	-	-	9,974	4,998	-	-	-	-
Research and Development	-	-	-	-	-	-	-	-
State Road Construction	-	-	-	-	-	-	-	-
Traffic Operations and Maintenance	-	-	-	-	-	-	-	-
Transit Planning and Grants							128,604	154,064
Trunk Highway Debt Service	-	-	-	-	-	-	-	-
Direct	136,231	84,425	24,411	12,151	2,314	1,872	129,369	154,895
Agency Overhead	2,615	2,571	3,692	3,504	76	72	1,456	1,371
Grand Total	138,846	86,996	28,102	15,655	2,389	1,945	130,826	156,266

Modal Planning & Program Management Division (continued)	Transportation System Management		Modal Planning & Program Management Division Administration		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent
Airports	-	-	-	-	131,356	79,454
Bicycle and Pedestrian Planning and Grants	-	-	-	-	509	609
Aviation Safety Operation and Regulation	-	-	-	-	4,875	4,971
Commercial Truck and Bus Safety	-	-	-	-	4,733	2,995
Develop Highway Improvement Projects - PE	442	316	1,143	550	1,585	866
External Partner Support	150	25	-	-	1,639	2,384
Freight Rail Improvements	-	-	-	-	5,291	2,007
Freight System Planning	-	-	-	-	1,095	31
Highway Construction Management Oversight - CE	0	(0)	-	-	0	(0)
Intercity Passenger Rail Improvement	-	-	-	-	2,089	1,428
Plan Highway System	16,113	14,089	-	-	16,346	14,288
Port Improvements	-	-	-	-	2,078	230
Rail Safety	-	-	-	-	9,974	4,998
Research and Development	8,589	7,352	-	-	8,589	7,352
State Road Construction	235,924	35,177	-	-	235,924	35,177
Traffic Operations and Maintenance	160	293	-	-	160	293
Transit Planning and Grants					128,604	154,064
Trunk Highway Debt Service	221,579	211,009	-	-	221,579	211,009
Direct	482,958	268,262	1,143	550	776,425	522,156
Agency Overhead	5,995	4,005	5,503	3,714	19,337	15,237
Grand Total	488,953	272,267	6,646	4,264	795,762	537,393

Operations Division	District 1		District 2		District 3		District 4	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Bridges and Structures Inspection and Maintenance	1,298	1,287	643	440	713	594	412	432
County State Aid Highway	390	8	260	36	-	-	-	-
Develop Highway Improvement Projects - PE	5,312	2,191	4,358	3,678	4,267	4,049	2,522	2,510
External Partner Support	123	35	82	711	175	513	1,178	1,463
Highway Construction Management Oversight - CE	4,029	6,192	1,857	1,376	3,038	3,376	2,135	1,478
Plan Highway System	182	343	303	299	241	183	203	234
Rail Safety	-	-	-	-	-	-	-	-
Research and Development	-	-	1	-	4	-	1	-
Snow and Ice	9,012	9,123	5,670	6,211	8,591	9,054	5,480	5,818
State Road Construction	123,747	138,671	45,792	52,514	75,454	70,799	50,630	52,381
Traffic Operations and Maintenance	1,746	1,429	770	734	2,613	2,283	1,525	1,653
Road and Roadside Maintenance	5,279	6,306	3,597	3,981	6,138	6,309	4,620	4,945
Direct	151,119	165,586	63,333	69,982	101,233	97,160	68,705	70,915
Agency Overhead	15,361	17,164	8,964	10,928	15,672	16,709	10,261	11,989
Grand Total	166,480	182,750	72,297	80,909	116,905	113,869	78,966	82,904

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	1,627	1,600	771	773	715	621	3,977	3,910
County State Aid Highway	690	167	970	110	-	-	17,890	3,662
Develop Highway Improvement Projects - PE	5,770	5,166	3,208	2,648	1,815	1,547	17,223	16,012
External Partner Support	14,816	12,815	430	194	69	118	105,894	14,466
Highway Construction Management Oversight - CE	8,723	6,243	2,629	2,171	2,080	1,586	13,174	12,219
Plan Highway System	295	348	209	208	235	225	1,173	1,435
Rail Safety	-	-	-	-	5,000	-	-	-
Research and Development	2	-	0	-	0	-	27	0
Snow and Ice	9,021	9,213	6,805	7,206	4,760	4,946	19,442	20,505
State Road Construction	95,806	68,592	103,960	121,817	30,512	52,848	397,667	521,608
Traffic Operations and Maintenance	2,360	2,874	1,190	1,347	827	629	18,272	18,791
Road and Roadside Maintenance	5,711	6,432	7,142	7,075	2,762	3,065	16,683	17,577
Direct	144,820	113,450	127,315	143,549	48,777	65,585	611,421	630,185
Agency Overhead	15,926	17,586	11,857	14,382	9,210	10,054	54,396	55,944
Grand Total	160,746	131,036	139,171	157,931	57,987	75,639	665,817	686,129

Operations Division (continued)	Maintenance		Traffic Engineering		Operations Division Administration		Total	
Products and Services	Budget	Spent	Budget	Spent	Budget	Spent	Budget	Spent
Bridges and Structures Inspection and Maintenance	81	18	1	20	0	(0)	10,237	9,696
County State Aid Highway	-	-	-	-	-	-	20,200	3,984
Develop Highway Improvement Projects - PE	-	-	1,491	1,596	315	320	46,282	39,717
External Partner Support	5	-	1,328	964	282	330	124,383	31,609
Highway Construction Management Oversight - CE	-	-	406	120	49	150	38,120	34,910
Plan Highway System	-	-	1,829	1,361	-	-	4,670	4,635
Rail Safety	-	-	-	-	-	-	5,000	-
Research and Development	-	-	1,465	1,393	-	996	1,501	2,390
Snow and Ice	1,308	999	-	0	1	66	70,090	73,142
State Road Construction	-	-	19,912	4,007	-	222	943,481	1,083,459
Traffic Operations and Maintenance	8,488	8,545	180	82	1,303	2,698	39,273	41,065
Road and Roadside Maintenance	4,721	4,886	-	-	-	-	56,652	60,577
Direct	14,603	14,448	26,613	9,542	1,951	4,781	1,359,889	1,385,183
Agency Overhead	44,721	35,305	2,116	2,377	6,022	4,125	194,505	196,561
Grand Total	59,324	49,753	28,729	11,918	7,972	8,906	1,554,395	1,581,745

State Aid Division	State Aid for Local Transportation		Statewide Radio Communications		Total	
	Budget	Spent	Budget	Spent	Budget	Spent
Products and Services						
County State Aid Highway	1,058,483	894,861	-	-	1,058,483	894,861
External Partner Support	1,089	347	8,402	7,381	9,491	7,728
Municipal State Aid Highway	194,378	192,989	-	-	194,378	192,989
Radio Towers and Communications	-	-	14,411	12,748	14,411	12,748
Direct	1,253,950	1,088,196	22,813	20,129	1,276,763	1,108,326
Agency Overhead	5,524	3,220	4,105	3,782	9,629	7,002
Grand Total	1,259,474	1,091,416	26,918	23,911	1,286,392	1,115,327

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.

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:

- Bridge inspection: cost per square foot of deck area
- Bridge 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
- Program planning and delivery to construction expenditure ratio

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 mission 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 Transportation Performance Report](#).

Costs are presented in inflation adjusted and unadjusted terms. The base year for inflation adjusted data is 2018; therefore, the adjusted and unadjusted values for 2018 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 2.5 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 2008-2018.

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 2 percent per year from 2008-2018. 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 3 percent per year from 2008-2018.

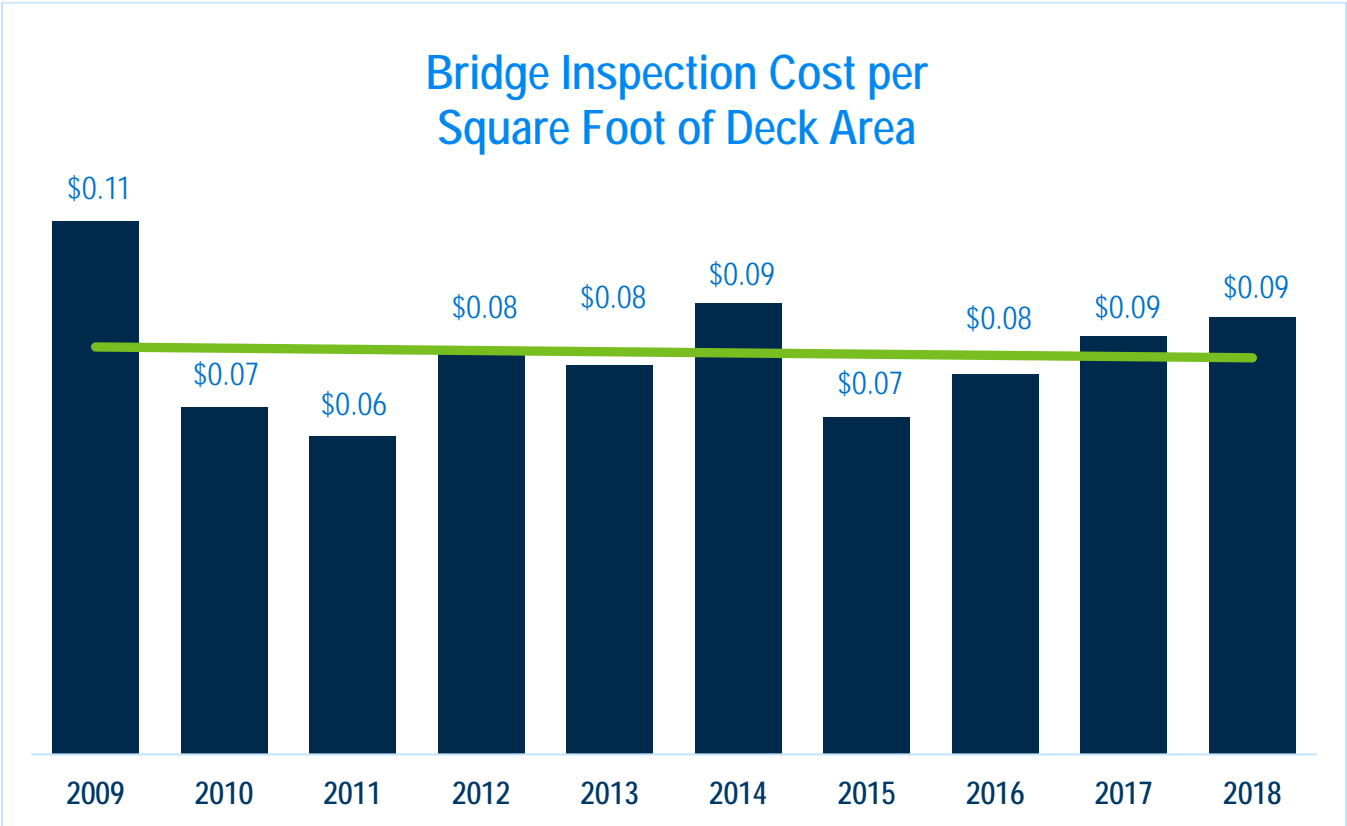
Bridges: Inspection Cost per Square Foot of Deck Area

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.

Figure 2: State Fiscal Year 2009-2018 Bridge Inspection Cost per Sq. Ft. of Deck Area



The square foot of deck area for 2009–2011 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 2018 dollars using a 2.5 percent annual inflation factor based on historic MnDOT labor inflation.

Results and analysis

The cost per square foot for bridge inspections were fairly stable in the years following a spike in 2008. Bridge inspection expenses and cost per square foot peaked in fiscal year 2008 when the governor mandated accelerated inspections for all bridges. Changes to the National Bridge Inspection Standards in 2016 intensified inspection and documentation requirements thereby increasing inspection costs.

Table 6: Inflation-adjusted bridge inspection cost per square foot of deck area

State Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bridge inspection expenses (\$1,000)	\$3,457	\$2,283	\$2,027	\$2,141	\$2,322	\$2,295	\$2,137	\$2,338	\$2,488	\$2,734
Sq. ft. of bridge deck inspected (1,000s)	31,804	32,243	31,236	25,752	29,220	24,934	31,044	30,107	29,182	30,862
Cost per sq. ft. of inspection	\$0.11	\$0.07	\$0.06	\$0.08	\$0.08	\$0.09	\$0.07	\$0.08	\$0.09	\$0.09

Note: Costs were adjusted to 2018 dollars using a 2.5 percent annual inflation factor based on historic MnDOT labor inflation. Bridge inspection numbers are as reported in October following the end of fiscal year.

Table 7: Actual (unadjusted) bridge inspection cost per square foot of deck area

State Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bridge inspection expenses (\$1,000)	\$2,768	\$1,874	\$1,705	\$1,846	\$2,052	\$2,079	\$1,984	\$2,225	\$2,428	\$2,734
Sq. ft. of bridge deck inspected (1,000s)	31,804	32,243	31,236	25,752	29,220	24,934	31,044	30,107	29,182	30,862
Cost per sq. ft. of inspection	\$0.09	\$0.06	\$0.06	\$0.07	\$0.07	\$0.08	\$0.06	\$0.07	\$0.08	\$0.09

Note: Numbers within the table are not adjusted for inflation. Bridge inspection numbers are as reported in October following the end of each fiscal year.

Major influencing factors

Primary factors that influence this measure include changes to:

- Inspection intensity and documentation requirements – changes implemented in 2016 described above.
- Fracture critical inspection frequency - changes to the fracture critical bridge inspection frequency from every 48 months to every 24 months in 2008. Fracture critical inspections take more time and are more expensive per square foot of bridge deck area than routine inspections.
- Age of infrastructure and condition of the structure, resulting in more deterioration to monitor and increased inspection times.
- Size and complexity of bridges - trends toward certain new and reconstructed bridges as complex bridges also add inspection time and create access issues.
- Increases in traffic control requirements and the cost of equipment and materials.

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.

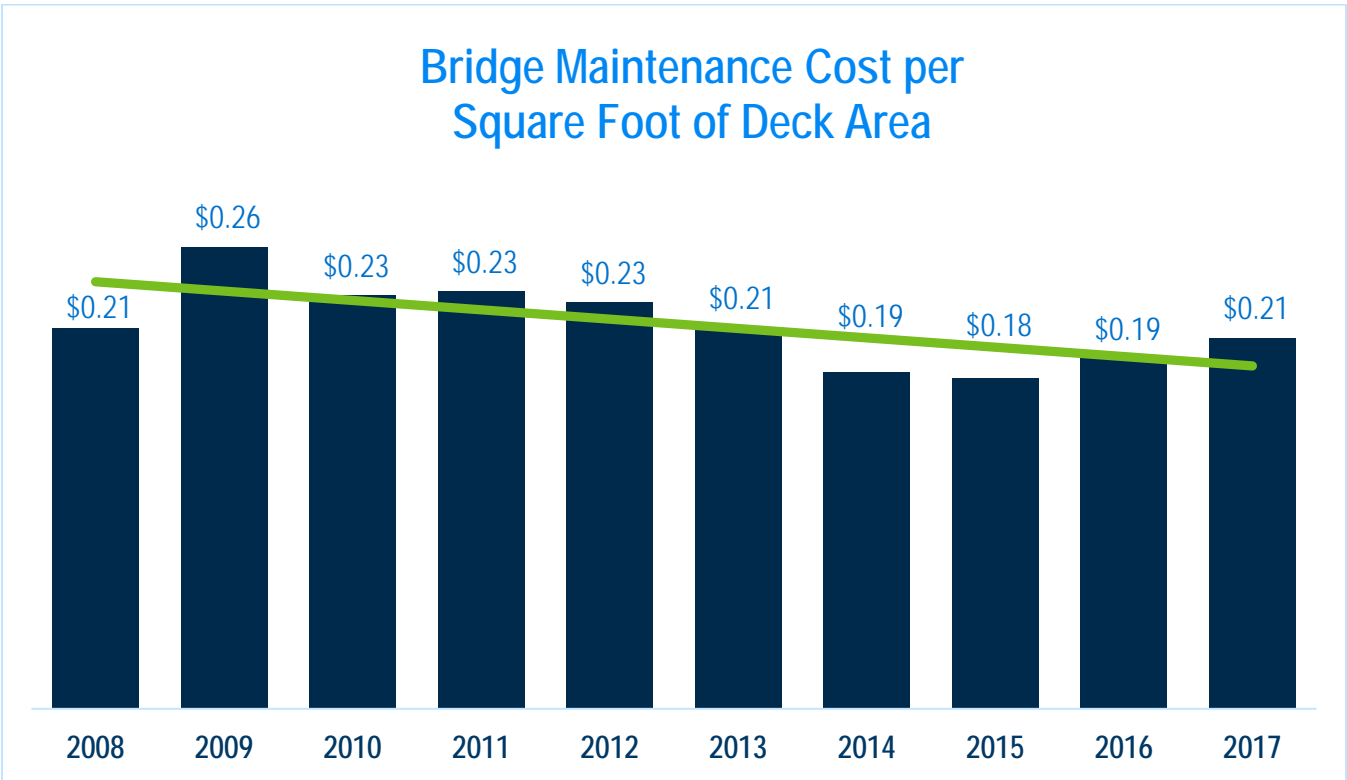
Bridges: Maintenance Cost per Square Foot of Deck Area

Bridge preservation keeps bridges in sound condition and slows their deterioration through preventive and reactive maintenance. Preventive maintenance includes routine maintenance activities performed on a cyclical basis and 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.

Figure 3: Calendar Year 2008-2017 Bridge Maintenance Cost per Sq. Ft. of Deck Area



Note: Costs were adjusted to 2018 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 \$0.18 and \$0.25 per square foot was spent on average to perform preventive and reactive maintenance adjusting for inflation. The overall trend is a slight decline. As a reference, it costs an average of \$150 per square foot to construct a new bridge.

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.

Table 8: Inflation-adjusted bridge maintenance cost per square foot of deck area

Calendar Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Preventive Maintenance Expenditures (\$1,000)	\$4,353	\$4,599	\$3,984	\$4,541	\$3,174	\$2,872	\$3,200	\$3,283	\$3,270	\$6,141
Reactive Maintenance Expenditures (\$1,000)	\$5,678	\$7,539	\$6,920	\$6,469	\$7,554	\$7,291	\$6,148	\$6,327	\$5,957	\$3,744
Total Maintenance (3% inflation)	\$10,031	\$12,138	\$10,904	\$11,010	\$10,727	\$10,162	\$9,347	\$9,609	\$9,227	\$9,885
Total Bridge Deck sq. ft. (1,000)	47,576	47,373	47,531	47,543	47,567	48,034	50,003	52,417	47,456	47,390
Maintenance Cost per sq. ft.	\$0.21	\$0.26	\$0.23	\$0.23	\$0.23	\$0.21	\$0.19	\$0.18	\$0.19	\$0.21

Note: Costs were adjusted to 2018 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Table 9: Actual (unadjusted) bridge maintenance costs

Calendar Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Preventive Maintenance Expenditures (\$1,000)	\$3,239	\$3,525	\$3,145	\$3,692	\$2,658	\$2,477	\$2,843	\$3,004	\$3,082	\$5,962
Reactive Maintenance Expenditures (\$1,000)	\$4,225	\$5,778	\$5,463	\$5,260	\$6,326	\$6,289	\$5,462	\$5,790	\$5,615	\$3,635
Total Maintenance	\$7,464	\$9,303	\$8,608	\$8,952	\$8,984	\$8,766	\$8,305	\$8,794	\$8,697	\$9,597
Total Bridge Deck sq. ft. (1,000)	47,576	47,373	47,531	47,543	47,567	48,034	50,003	52,417	47,456	47,390
Maintenance Cost per sq. ft.	\$0.16	\$0.20	\$0.18	\$0.19	\$0.19	\$0.18	\$0.17	\$0.17	\$0.18	\$0.20

Note: 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 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 preservation activities, but future reporting efforts may include contract maintenance work.

Pavement: Cost per roadway mile-year added

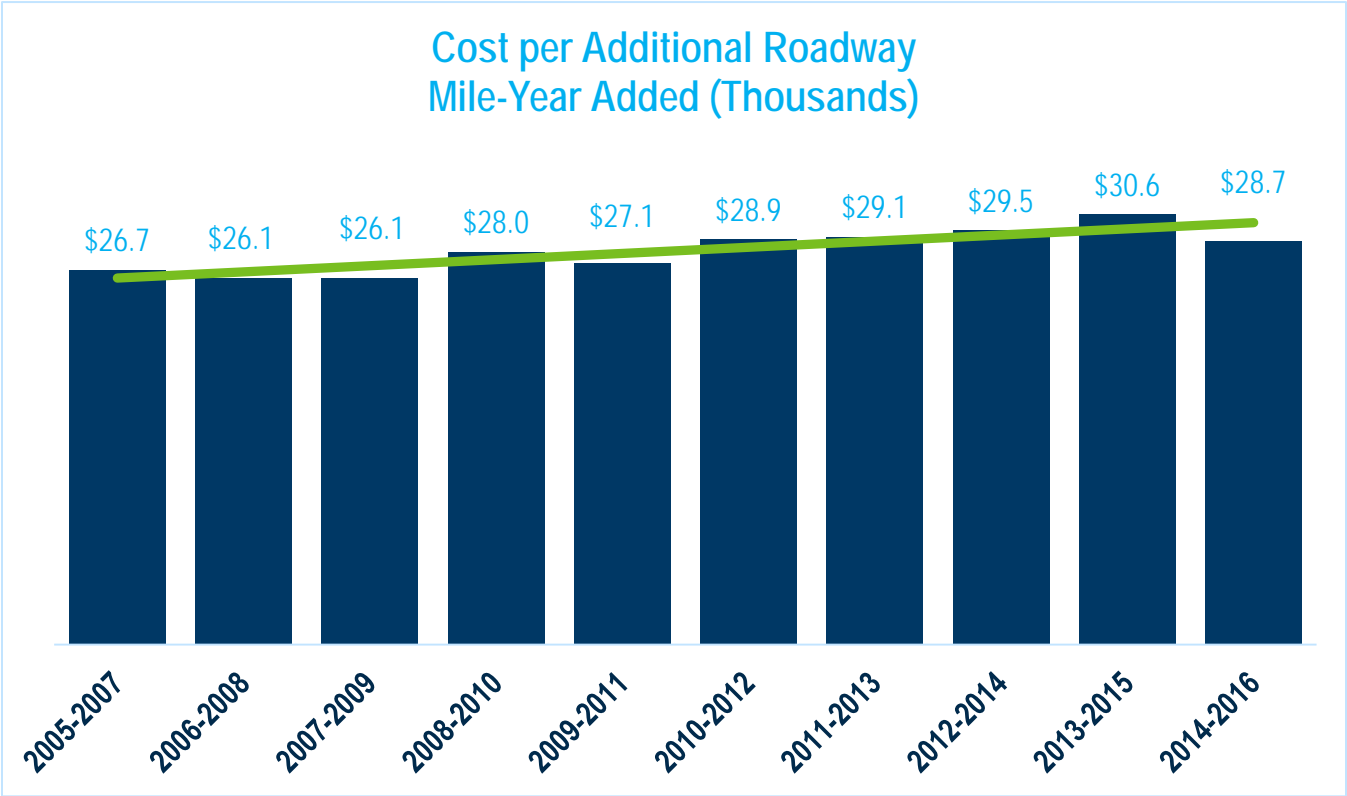
Preserving the functional and structural integrity of Minnesota's highways is a priority for MnDOT because timely repair and replacement reduces long-term costs and because highway smoothness greatly affects Minnesotans' satisfaction with overall state highway maintenance. MnDOT performs a variety of 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 is 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.

Figure 4: Three-year Rolling Average 2005-2016 of Cost per Roadway Mile-Year Added (Thousands)



Note: Costs were adjusted to 2018 dollars using the actual annual Pavement Surfacing Index from the MnDOT Construction Cost Index that has been volatile but increased an average of 2 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. 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 and short life fixes 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 through 2016 show the trend in cost per roadway mile-year added is slightly increasing over time. The increasing trend might be related to more items being included in pavement jobs than in previous decades such as culverts, ADA improvements, trails and shoulder improvements for bicyclists. 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.

Table 10: Inflation-adjusted cost per roadway mile-year added

3-year averages	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
Pavement Preservation spending (millions)	\$313.8	\$266.9	\$310.1	\$357.5	\$401.5	\$429.7	\$478.9	\$473.5	\$424.6	\$350.4
Mile-Years added (1,000s)	11.8	10.2	11.9	12.8	14.8	14.9	16.5	16.0	13.9	12.2
Cost per roadway mile year added (1,000s)	\$26.7	\$26.1	\$26.1	\$28.0	\$27.1	\$28.9	\$29.1	\$29.5	\$30.6	\$28.7

Note: Costs were adjusted to 2018 dollars using the actual annual Pavement Surfacing Index from the MnDOT Construction Cost Index that has been volatile but increased an average of 3 percent per year for the last 10 years.

Table 11: Actual (unadjusted) cost per roadway mile-year added

3-year averages	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
Pavement Preservation spending (millions)	\$210.9	\$208.7	\$258.3	\$310.4	\$350.8	\$396.6	\$462.8	\$479.1	\$439.4	\$353.1
Mile-Years added (1,000s)	11.8	10.2	11.9	12.8	14.8	14.9	16.5	16.0	13.9	12.2
Cost per roadway mile year added (1,000s)	\$17.9	\$20.4	\$21.7	\$24.3	\$23.7	\$26.6	\$28.1	\$29.9	\$31.7	\$29.0

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 MnDOT's 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

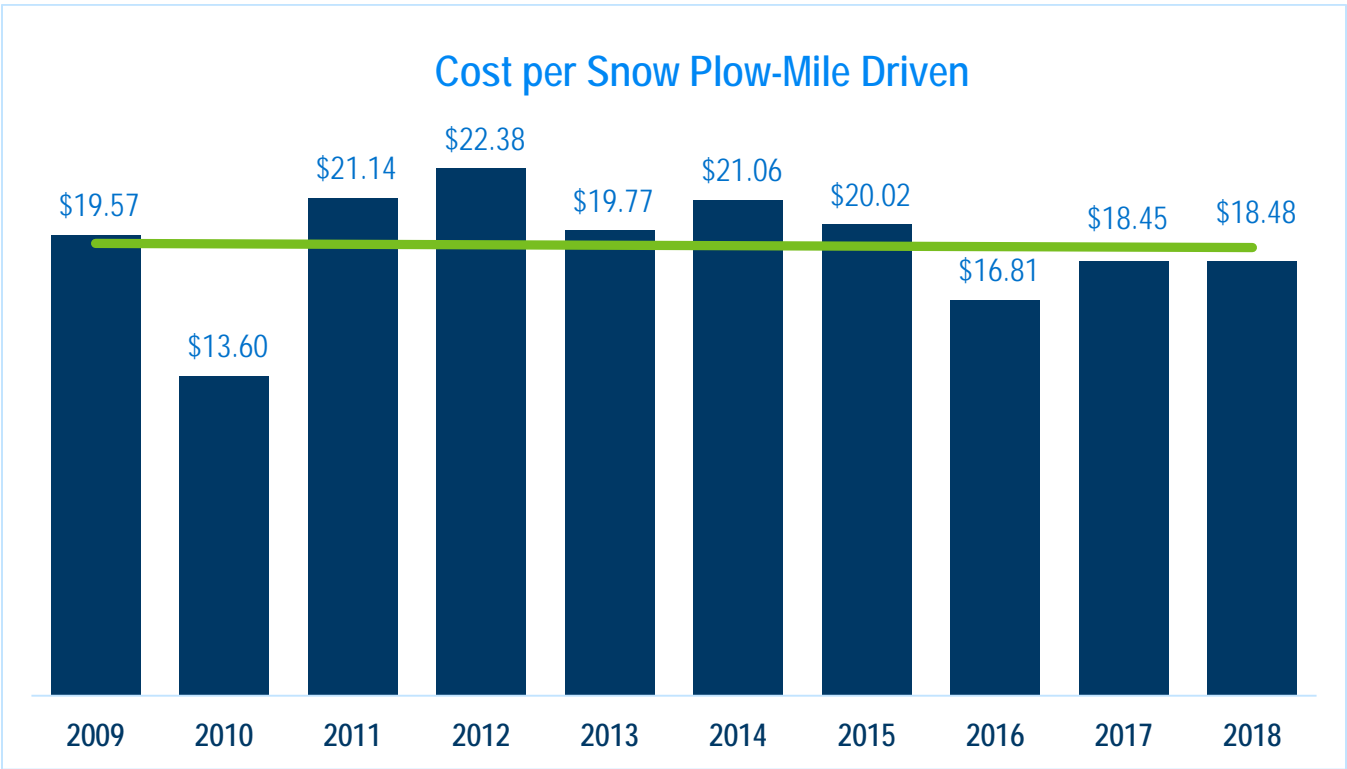
Fast and effective snow and ice control is critically important to Minnesotans’ quality of life during the winter months. It preserves mobility, increases traveler safety, reduces damage to vehicles and limits the extent of weather-induced congestion.

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 through snow fences and prevent the formation of ice through 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.

Figure 5: State Fiscal Year 2009-2018 Cost per Snow Plow-Mile Driven



Note: Costs were adjusted to 2018 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.

Table 12: Inflation-adjusted cost per snow plow-mile driven

State Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Costs (\$millions)	\$91.7	\$75.9	\$107.2	\$62.0	\$112.3	\$136.2	\$87.9	\$94.2	\$97.0	\$123.9
Plow Miles Driven (1000s)	6,111	7,068	6,235	3,306	6,583	7,282	4,800	5,943	5,417	6,705
Cost per Mile	\$15.00	\$10.73	\$17.19	\$18.75	\$17.06	\$18.71	\$18.32	\$15.84	\$17.91	\$18.48

Note: Costs were adjusted to 2018 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Table 13: Actual (unadjusted) cost per snow plow-mile driven

State Fiscal Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Costs (\$millions)	\$119.6	\$96.1	\$131.8	\$74.0	\$130.2	\$153.3	\$96.1	\$99.9	\$99.9	\$124.9
Plow Miles Driven (1000s)	6,111	7,068	6,235	3,306	6,583	7,282	4,800	5,943	5,417	76,705
Cost per Mile	\$19.57	\$13.60	\$21.14	\$22.38	\$19.77	\$21.06	\$20.02	\$16.81	\$18.45	\$18.48

Note: Numbers within the table are not adjusted for inflation.

Major influencing factors

Major factors that influence expenses are winter severity (number of events, precipitation totals, wind, etc.) and event timing (rush hour and weekend events). To combat these factors MnDOT is increasing efficiency by implementing 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.

Figure 6: Calendar Year 2008-2017 Cost per Mile Striped



Note: Costs were adjusted to 2018 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.

Table 14: Inflation-adjusted cost per mile striped

Calendar Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Striping Costs (1000s)	\$10,599	\$9,698	\$8,642	\$7,330	\$9,271	\$6,559	\$7,085	\$7,102	\$7,302	\$6,865
Miles Striped (1000s)	18.7	18	16.1	15	16.7	14.4	15.1	14.7	14.9	15.7
Cost per mile	\$567	\$539	\$537	\$489	\$555	\$455	\$469	\$483	\$490	\$437

Note: Costs were adjusted to 2018 dollars using a 3 percent annual inflation factor based on historic MnDOT maintenance and operations commodity and labor inflation.

Table 15: Actual (unadjusted) cost per mile striped

Calendar Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Striping Costs (1000s)	\$7,887	\$7,433	\$6,822	\$5,960	\$7,764	\$5,658	\$6,295	\$6,499	\$6,883	\$6,665
Miles Striped (1000s)	18.7	18	16.1	15	16.7	14.4	15.1	14.7	14.9	15.7
Cost per mile	\$421	\$414	\$424	\$396	\$466	\$392	\$417	\$442	\$462	\$425

Note: Costs were not adjusted 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

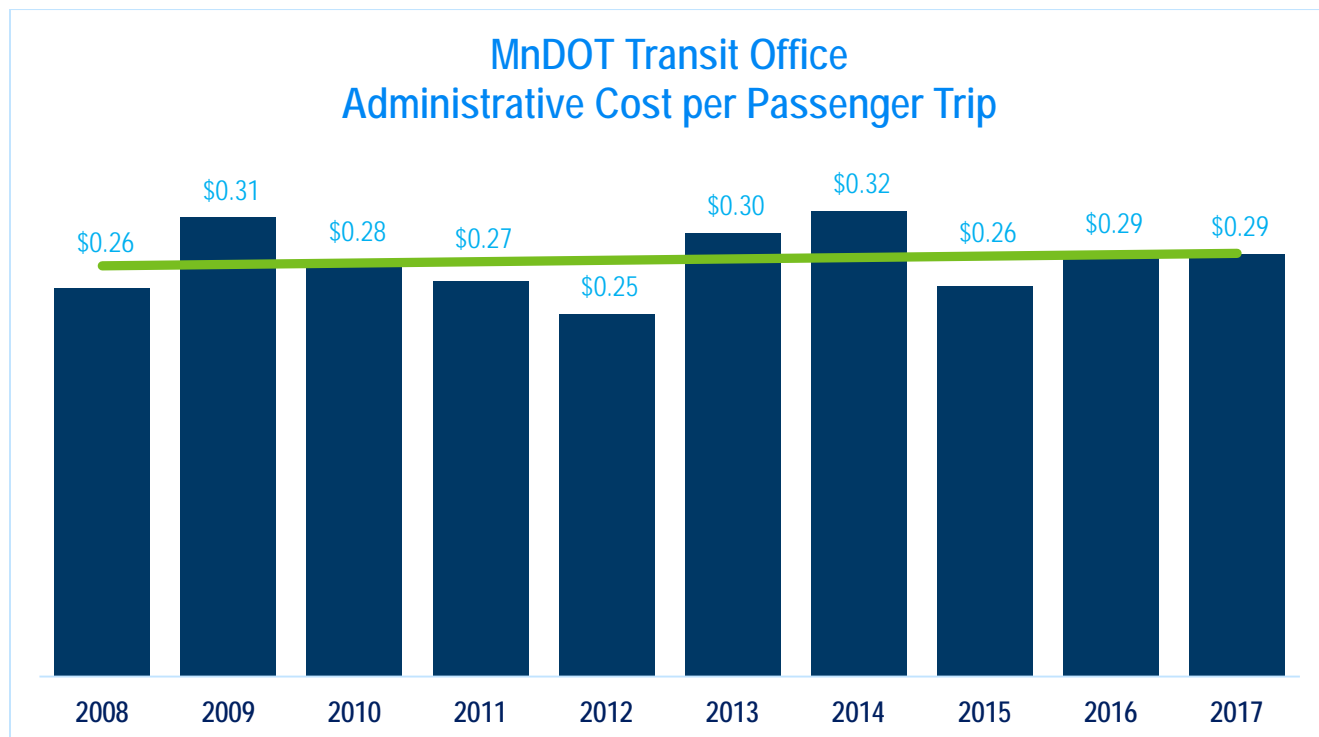
Transit connects people to jobs, family, schools, shopping, health care centers and sports and cultural events. These systems enhance the mobility of the elderly, low-income and persons with disabilities in communities across the state by providing a reliable transportation option. Transit can be an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

Greater Minnesota's 37 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 and Active Transportation 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 agreements 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.

Figure 7: Calendar Year 2008-2017 Transit Office Administrative Cost per Passenger Trip



Note: Costs were adjusted to 2018 dollars using a 2.5 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.

Table 16: Inflation-adjusted MnDOT administrative cost per transit passenger trip

Calendar Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Expenses (\$1,000)	\$3,191	\$3,803	\$3,613	\$3,534	\$3,284	\$4,158	\$4,367	\$3,680	\$3,913	\$4,014
Greater MN Ridership (1,000's)	12,128	12,216	12,772	13,189	13,368	13,826	13,839	13,920	13,566	14,020
Cost per Ride	\$0.26	\$0.31	\$0.28	\$0.27	\$0.25	\$0.30	\$0.32	\$0.26	\$0.29	\$0.29

Note: Costs were adjusted to 2018 dollars using a 2.5 percent annual inflation factor based on historic MnDOT labor inflation.

Table 17: Actual (unadjusted) MnDOT administrative cost per transit passenger trip

Calendar Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Expenses (\$1,000)	\$2,493	\$3,045	\$2,965	\$2,973	\$2,832	\$3,675	\$3,956	\$3,418	\$3,725	\$3,916
Greater MN Ridership (1,000's)	12,128	12,216	12,772	13,189	13,368	13,826	13,839	13,920	13,566	14,020
Cost per Ride	\$0.21	\$0.25	\$0.23	\$0.23	\$0.21	\$0.27	\$0.29	\$0.25	\$0.27	\$0.29

Note: 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. 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.

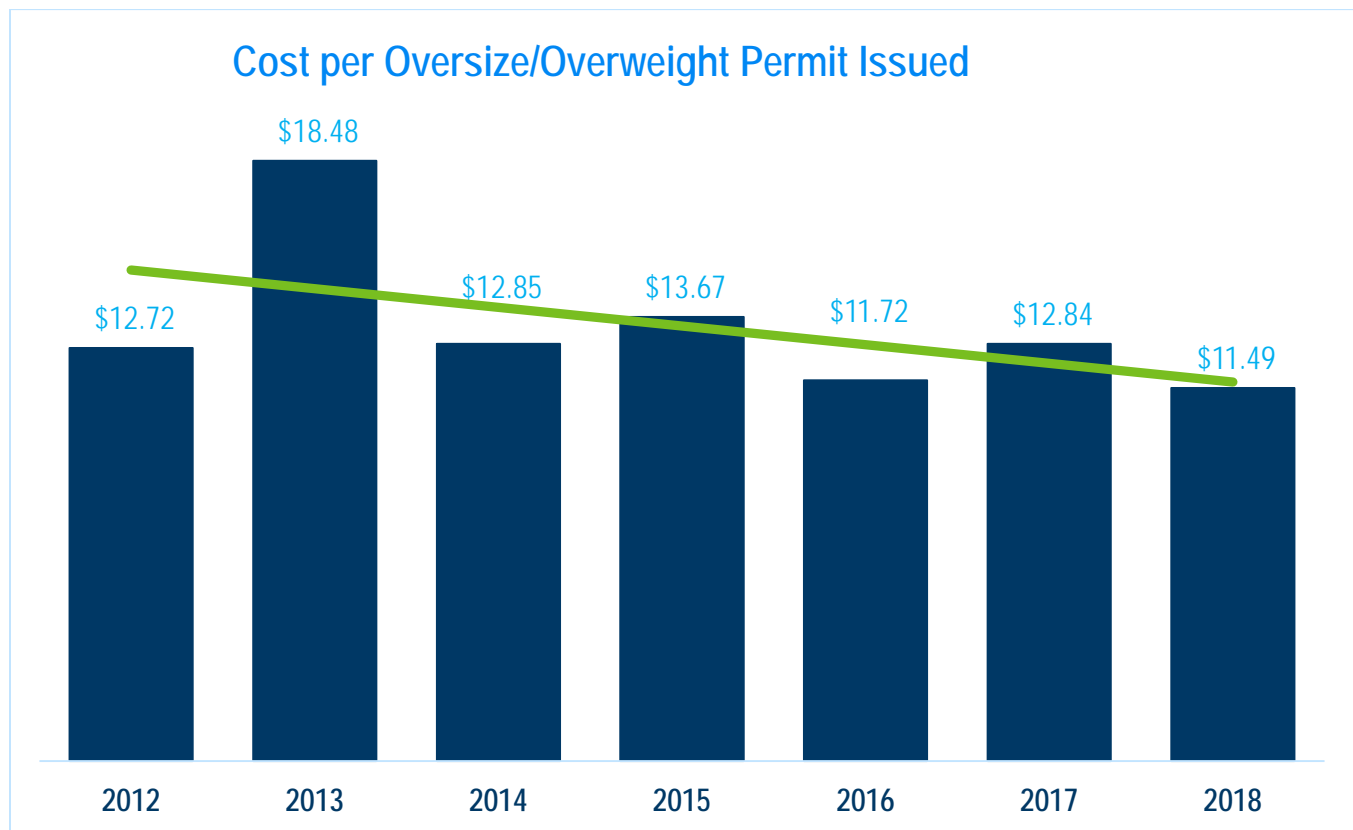
Freight: MnDOT Cost per Oversize/Overweight Permit Issued

Oversize/overweight permitting protects and preserves Minnesota's transportation infrastructure by directing oversized and/or overweight loads toward routes that can safely and efficiently accommodate them, minimizing damage to vulnerable infrastructure. 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 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.

Figure 8: State Fiscal Year 2012-2018 Inflation-adjusted MnDOT Administrative Cost per Oversize/Overweight Permit Issued



Note: Costs were adjusted to 2018 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 slightly downward over the last six state fiscal years. 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. Comparable data is not available for fiscal years prior to 2012 due to a change in accounting systems that year (from MAPS to SWIFT).

Table 18: Inflation-adjusted MnDOT administrative cost per oversize/overweight permit issued

State Fiscal Year	2012	2013	2014	2015	2016	2017	2018
Expenses (\$1,000)	\$1,132	\$1,670	\$1,152	\$1,189	\$974	\$1,005	\$894
Permits Issued	89,028	90,372	89,679	86,969	83,093	78,237	77,836
Cost per Permit	\$12.72	\$18.48	\$12.85	\$13.67	\$11.72	\$12.84	\$11.49

Note: Costs were adjusted to 2018 dollars using a 2.5 percent annual inflation factor based on historic MnDOT labor inflation.

Table 19: Actual (unadjusted) MnDOT administrative cost per oversize/overweight permit issued

State Fiscal Year	2012	2013	2014	2015	2016	2017	2018
Expenses (\$1,000)	\$977	\$1,476	\$1,044	\$1,104	\$927	\$980	\$894
Permits Issued	89,028	90,372	89,679	86,969	83,093	78,237	77,836
Cost per Permit	\$10.97	\$16.33	\$11.64	\$12.70	\$11.16	\$12.53	\$11.49

Note: 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.

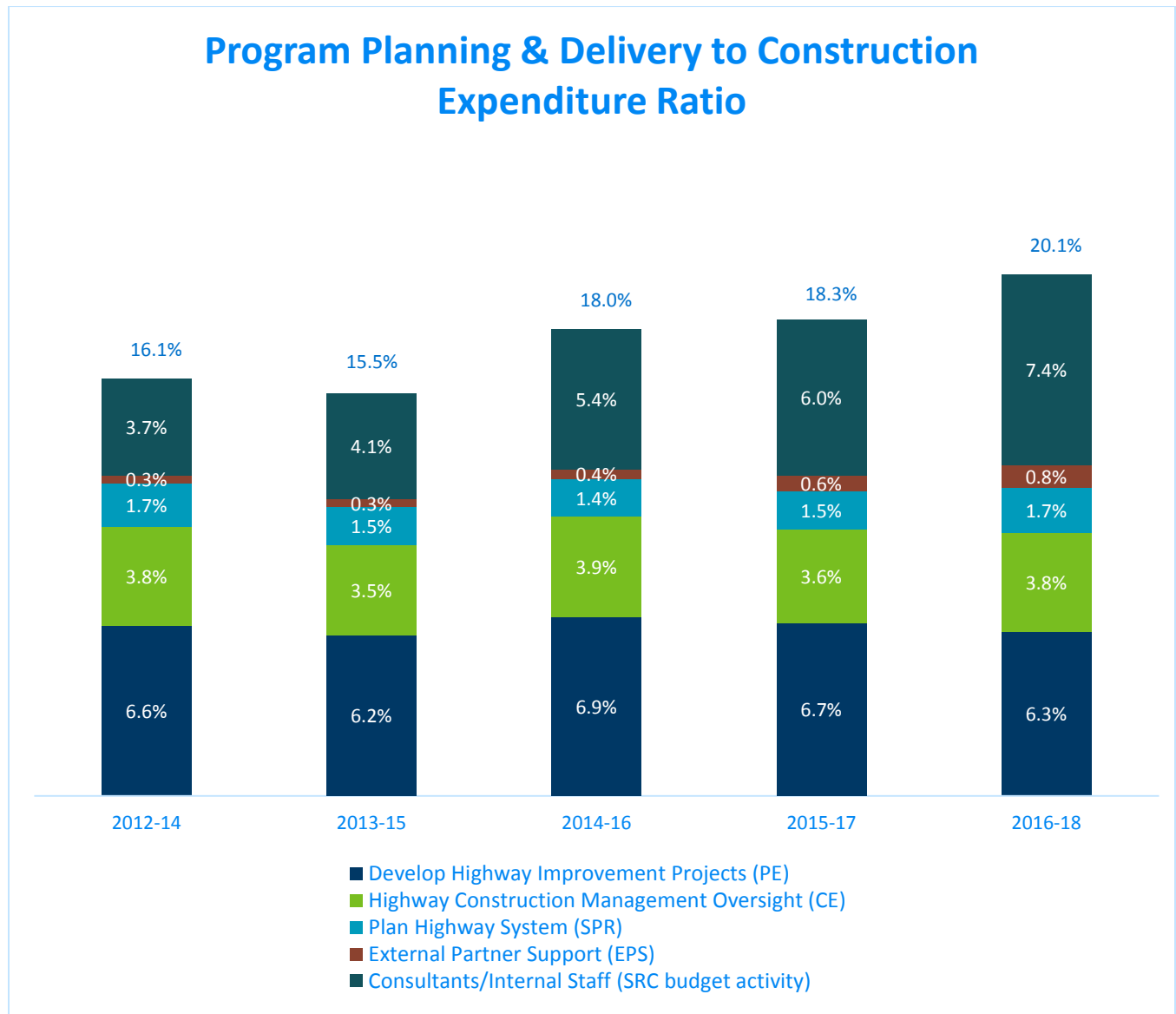
Program Planning and Delivery to Construction Expenditure Ratio

MnDOT manages and delivers the State Road Construction or SRC program. This includes planning at the state and district levels 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 MnDOT's 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*(see note under chart). For this measure, consultant-led program planning and delivery costs are subtracted from SRC expenditures and added into program planning and delivery expenditures. Three-year rolling averages are calculated for this measure because projects typically require multi-year planning and construction expenditures.

Figure 9: Fiscal Year 2012-2018 Program Planning & Deliver to Construction Expenditure Ratio



Note: Throughout this measure, expenditures reflect budgetary commitments (expenditures and encumbrances) and include consultant-led program planning and delivery. Program delivery expenditures were adjusted to 2018 dollars using a 2.5 percent annual inflation rate. Construction expenditures were adjusted to 2018 dollars using the actual annual MnDOT Construction Cost Index that has been volatile but increased an average of 3 percent per year for the last 10 years.

Table 20: Inflation-adjusted planning and delivery to construction expenditure ratio

State Fiscal Year	2012-14	2013-15	2014-16	2015-17	2016-18
Develop Highway Improvement Projects (\$1,000)	\$74,892	\$79,897	\$83,976	\$84,529	\$74,372
Highway Construction Management Oversight (\$1,000)	\$43,388	\$44,560	\$47,153	\$45,750	\$44,641
Plan Highway System (\$1,000)	\$19,429	\$18,916	\$17,446	\$18,912	\$20,512
External Partner Support (\$1,000)	\$3,196	\$3,709	\$4,884	\$7,552	\$9,955
Consultants (SRC budget activity) (\$1,000)	\$42,826	\$52,611	\$65,734	\$76,302	\$86,378
Program Planning and Delivery Expenditures (\$1,000)	\$183,732	\$199,694	\$219,191	\$233,045	\$235,857
State Road Construction Expenditures (\$1,000)	\$1,142,184	\$1,287,751	\$1,218,644	\$1,270,265	\$1,173,955
Program Delivery Expenditure/Construction Expenditure Ratio	16.1%	15.5%	18.0%	18.3%	20.1%

Note: Expenditures reflect budgetary commitments (expenditures and encumbrances) of direct costs and include consultant-led program planning and delivery. Program delivery expenditures were adjusted to 2018 dollars using a 2.5 percent annual inflation rate. Construction expenditures were adjusted to 2018 dollars using the actual annual MnDOT Construction Cost Index that has been volatile but increased an average of 3 percent per year for the last 10 years.

Table 21: Unadjusted planning and delivery to construction expenditure and ratio

State Fiscal Year	2012-14	2013-15	2014-16	2015-17	2016-18
Develop Highway Improvement Projects (\$1,000)	\$66,088	\$72,539	\$78,185	\$80,239	\$72,381
Highway Construction Management Oversight (\$1,000)	\$38,388	\$40,397	\$43,828	\$43,528	\$43,493
Plan Highway System (\$1,000)	\$17,163	\$17,116	\$16,197	\$18,036	\$20,063
External Partner Support (\$1,000)	\$2,862	\$3,352	\$4,545	\$7,279	\$9,734
Consultants (SRC budget activity) (\$1,000)	\$38,014	\$47,809	\$61,278	\$72,823	\$84,361
Program Planning and Delivery Expenditures (\$1,000)	\$162,514	\$181,213	\$204,033	\$221,906	\$230,032
State Road Construction Expenditures (\$1,000)	\$999,526	\$1,187,767	\$1,161,055	\$1,179,003	\$1,082,693
Program Delivery Expenditure/Construction Expenditure Ratio	16.3%	15.3%	17.6%	18.8%	21.2%

Note: Expenditures 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 in three-year averages from 2012-2018, broken out by products and services. Comparable data is not available 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 rolling average program planning and delivery to construction expenditure ratio is between 15.3 and 21.2 percent. In other words, to deliver the construction program, MnDOT spends between \$0.15 and \$0.21 in program planning and delivery direct expenditures for every dollar of construction expenditure.

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. 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.

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 do not exactly line up with the construction program delivered in the same year. The agency is using a three-year rolling average for this measure because projects typically require multi-year planning and construction expenditures. In addition, funding fluctuates. Construction funding increased with one-time programs such as Corridors of Commerce, the American Recovery and Reinvestment Act and the 2008 Chapter 152 bridge-bonding program. In the recent past, MnDOT increased its investment in program planning and delivery for the accelerated development of projects. 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 stormwater treatment.

Efficiencies

MnDOT aims to be a good steward of public funds. Starting in 2015, the department decided to take a more targeted approach to identify and quantify these efficiencies, while looking for additional best practices and improvements. In fiscal year 2018, MnDOT identified an estimated \$75 million in savings from new and revised practices deployed across the organization. Including fiscal year 2017 savings, MnDOT achieved an estimated \$157 million in saving from these practices over the previous two fiscal years. The majority of these efficiencies identified in FY 2018 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 were not implemented.

Background

Before embarking on the fiscal year 2015 analysis, MnDOT conducted research on efficiency measurement throughout the country looking at other state DOTs. There were, at the time, three state DOTs that report their overall department efficiencies to the public in a manner similar to the approach chosen for Minnesota: 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.

Compared to other states, MnDOT is 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 MnDOT's ability to stretch each dollar further, the agency 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 traditional performance 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.¹ 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 has worked and how it may

¹ Palmer, A. (1993). Performance Measurement in Local Government. *Public Money & Management*, 31-36.

work in the future.² The analysis looks to isolate key decisions and strategies that are maximizing outputs without compromising outcomes to the public.³

Internal efficiencies are essentially all the ways MnDOT maximizes the use of financial resources through deliberate decisions and business processes that allow the agency 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 in the individual project reports.

Data Limitations

MnDOT is required to evaluate the efficiency of the organization each fiscal year and report on the efficiencies that occurred in the previous two fiscal years. Projects usually take years to be developed. So, to identify efficient practices that have produced programmatic savings in the current fiscal year, MnDOT analyzed practices and processes that were implemented in previous years after the initial scoping process was completed, which impacted the overall project cost. For example, projects under construction in fiscal year 2018 were 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 cost.⁴ It analyzes what has worked, why it has worked, in what conditions it has worked and how it may work in the future.⁵ 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 10: 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, long term maintenance and operation of transportation systems

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

² Behn, R. D. (1993). Case-analysis research and managerial effectiveness. *Public management: The state of the art*, 40-54.

³ 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*.

⁴ 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.

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

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.

Administration, Maintenance and Operations were analyzed for efficiency at the program level. Efficient strategies and business process improvements were evaluated against former approaches. 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 Operation

- Automatic Flagger Assistance Devices
- Dynamic Message Sign Defrosters
- LED Ramp Meters
- Conversion to LED Roadway Lighting
- MDSS
- MnPASS System
- MnSTEP–MnDOT Stretching Together Employee Program
- Portable Signals
- Tow Plows
- Printing Business Practices
- Georilla
- Blowing Snow Control Using Benefit Cost Analysis
- Snow and Ice Control (Slurry Tanks)
- Connecting MnDOT Facilities by Fiber Optic Network
- Conversion of Fiber Optic Communication Standard (SONET to IP)
- Sign Placement Tool (Importing Sign Data using MicroStation)
- Agricultural Tractor Rental Program
- Wood Post Cold Storage Buildings
- Unmanned Aerial Systems (Drones) for Bridge Inspection
- Unmanned Aerial Systems (Drones) for Photogrammetrics

State Road Construction

Efficiencies identified in fiscal year 2018 came through project development for projects more than \$5 million and any regionally significant project let in FY 2018. 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 below.

Table 22: State Road Construction Efficiencies by Method for Fiscal Years 2015- 2018

SRC Savings Area	FY 2015	FY 2016	FY 2017	FY 2018
Pavement Design Methodology	\$7,315,000	\$9,072,175	\$6,410,000	\$9695000
Performance-Based Practical Design	\$35,792,500	\$34,815,205	\$39,200,000	\$26,465,000
Innovative Construction Staging	\$2,875,000	\$4,340,000	\$3,930,000	\$4,150,000
Value Engineering	\$9,948,000	\$10,153,350	\$17,885,000	\$15,985,000
Alternative Technical Concepts	\$3,710,500	\$1,571,325	\$3,490,000	\$6,095,000
Total Savings	\$59,641,000	\$59,952,055	\$70,915,000	\$62,390,000

Table 23: Total Detailed Efficiency Savings for the State Road Construction program for FY 2018

Project	Total Estimated Efficiency Savings
Hwy 2 - Fracture Critical Bridge Rehabilitation (Duluth)	\$1,175,000
Performance-based Practical Design	\$575,000
Value Engineering	\$600,000
Hwy 38 - Pavement Rehabilitation (Marcell, MN 14 miles)	\$350,000
Pavement Design Methodology	\$350,000
Hwy 92 - Urban Reconstruction in Bagley (1.1 miles)	\$600,000
Pavement Design Methodology	\$250,000
Performance-based Practical Design	\$350,000
Hwy 2 - Concrete Pavement Reconstruction, Bridge Rehab (5.5 miles) - Design-Build	\$1,200,000
Pavement Design Methodology	\$350,000
Innovative Construction Staging	\$500,000
Alternative Technical Concepts	\$350,000
Hwy 46 - Pavement Rehabilitation - Itasca County (10.1 miles)	\$350,000
Pavement Design Methodology	\$350,000
Hwy 72 - Baudette Bridge Replacement	\$3,250,000
Innovative Construction Staging	\$1,500,000
Value Engineering	\$1,750,000
Hwy 75 - Pavement Rehabilitation - Polk County (12 miles)	\$225,000
Pavement Design Methodology	\$225,000

Project	Total Estimated Efficiency Savings
Hwy 92 - Pavement Rehabilitation - Brooks to Trail, MN (21 miles)	\$750,000
Pavement Design Methodology	\$275,000
Performance-based Practical Design	\$275,000
Value Engineering	\$200,000
Hwy 10 - Pavement Rehabilitation - Clear Lake to Big Lake (16 miles)	\$625,000
Pavement Design Methodology	\$375,000
Value Engineering	\$250,000
Hwy 106 - Pavement Rehabilitation - Deer Creek, MN	\$915,000
Pavement Design Methodology	\$275,000
Performance-based Practical Design	\$590,000
Value Engineering	\$50,000
Hwy 27 - Pavement Rehabilitation -Wheaton and Dumont, MN (17.3 Miles)	\$1,025,000
Pavement Design Methodology	\$350,000
Performance-based Practical Design	\$375,000
Innovative Construction Staging	\$300,000
Hwy 28 - Pavement Rehabilitation, ADA Improvements Glenwood, MN (4 miles)	\$725,000
Pavement Design Methodology	\$225,000
Performance-based Practical Design	\$150,000
Innovative Construction Staging	\$350,000
Hwy 59 - Pavement Rehabilitation, Turn Lanes (9 Miles)	\$250,000
Pavement Design Methodology	\$250,000
Hwy 78 - Pavement Rehabilitation - Mill and Overlay (21 miles)	\$450,000
Pavement Design Methodology	\$450,000
Hwy 63 - Pavement Rehabilitation - Concrete Overlay (7 Miles)	\$350,000
Pavement Design Methodology	\$350,000
I-35 - Pavement Rehabilitation, Bridge Repair, Ramp Reconstruction	\$225,000
Pavement Design Methodology	\$225,000
Hwy 52 - Pavement Rehabilitation - Mill and Overlay Hwy 63 to I-90 (11.8 Miles)	\$325,000
Pavement Design Methodology	\$325,000
I-90 - Pavement Rehabilitation - Hwy 13 to Hwy 46 (12 Miles)	\$750,000
Pavement Design Methodology	\$350,000
Innovative Construction Staging	\$400,000
US 169 - Pavement Rehabilitation County Road 6 to County Road 12 (8 Miles)	\$550,000
Pavement Design Methodology	\$175,000
Performance-based Practical Design	\$200,000
Value Engineering	\$175,000
Hwy 14 - Reconstruction and Bridge Replacement - New Ulm	\$7,510,000
Pavement Design Methodology	\$250,000
Performance-based Practical Design	\$3,000,000
Value Engineering	\$4,260,000
Hwy 14 - Pavement Rehabilitation Mill and Overlay Mankato to North Mankato	\$295,000
Pavement Design Methodology	\$295,000
Hwy 169 - Pavement Rehabilitation Unbonded Overlay St. Peter to LeSueur	\$1,200,000
Pavement Design Methodology	\$850,000
Innovative Construction Staging	\$350,000
I-35W Pavement Rehabilitation - Mill and Overlay Minneapolis to Roseville	\$1,975,000
Pavement Design Methodology	\$1,725,000
Innovative Construction Staging	\$250,000

Project	Total Estimated Efficiency Savings
Hwy 149 Smith High Bridge Re-Decking in St. Paul	\$6,150,000
Performance-based Practical Design	\$4,750,000
Value Engineering	\$1,400,000
Hwy 169 Pavement Rehabilitation Unbonded Overlay Hwy 19 to Belle Plaine	\$1,600,000
Pavement Design Methodology	\$600,000
Performance-based Practical Design	\$750,000
Innovative Construction Staging	\$250,000
Hwy 169 Pavement Rehabilitation Unbonded Overlay Hwy 25 to Hwy 282	\$1,500,000
Pavement Design Methodology	\$550,000
Performance-based Practical Design	\$700,000
Innovative Construction Staging	\$250,000
I-35W Bridge Replacement, Roadway Reconstruction and Interchange	\$28,070,000
Pavement Design Methodology	\$275,000
Performance-based Practical Design	\$14,750,000
Value Engineering	\$7,300,000
Alternative Technical Concepts	\$5,745,000
Grand Total	\$62,390,000

Note: Three other projects were reviewed but no quantifiable efficiencies were identified. One major design-build project (Willmar Wye) was pushed to a FY 2019 letting because of needed railroad agreements.

Identified estimated savings reflect costs that were lower than if the efficient strategies were not implemented. Most of the savings realized through this process were reinvested into the state road construction program. The estimated savings identified in FY 2018 were the product of decisions made throughout project development – often over the course of four years. It was not feasible to retroactively calculate where each estimated dollar was repurposed. The agency is working to develop tracking software to better calculate the movement of funds during project development, but at this time is not equipped to measure at that level of detail. 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 2018 saved an estimated \$9.7 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 2018 saved an estimated \$26.5 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 2018 saved an estimated \$4.2 million.

Value Engineering

Value Engineering is a systematic process using a team of people from a variety of disciplines to improve the value of a project. Value can be increased by either improving the function or reducing the cost, while maintaining the safety, necessary quality and environmental attributes of the project. The VE process incorporates, to the extent possible, the values of design, construction, state, local, and federal approval agencies, other stakeholders and the public. Cost savings, risk reduction, schedule improvements, improved design and quality are common outcomes of VE studies. Through implementation of Value Engineering practices, projects let in FY 2018 saved an estimated \$16.0 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 2018 saved an estimated \$6.1 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 were implemented 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 (10 years unless otherwise noted). Summaries of the areas reviewed are listed in the following table.

Table 24: Total Efficiency Savings for the Administration, Maintenance and Operations

Program	Total Estimated Efficiency Savings (in 2017 Dollars) FY 2017	Total Estimated Efficiency Savings (in 2018 Dollars) FY 2018
Automated Flagger Assistance Devices*	\$13,000	\$14,000
Dynamic Message Sign Defrosters*	\$120,000	\$130,000
LED Ramp Meters*	\$66,000	\$74,000
LED Roadway Lighting	\$2,600,000	\$2,800,000
Maintenance Decision Support System	\$6,000,000	\$5,900,000
MnPASS Contracting*	\$200,000	\$210,000
MnSTEP	\$140,000	\$140,000
Portable Signals	\$100,000	\$280,000
Tow Plows	\$780,000	\$990,000
Printing Business Practices	\$20,000	\$23,000
Georilla	\$210,000	\$250,000
Blowing Snow Control	\$760,000	\$740,000
Slurry Tanks	\$55,000	\$100,000
Connecting MnDOT Facilities*	\$240,000	\$250,000
Conversion of Fiber Optic Communication Standard*	\$180,000	\$190,000
Sign Placement Tool	\$20,000	\$19,000
Ag Tractor Rental Program	\$450,000	\$500,000
Wood Post Cold Storage Building	\$50,000	N/A
Unmanned Aerial System (Drone) for Bridge Inspections		\$320,000
Unmanned Aerial System (Drone) for Photogrammetrics		\$77,000
TOTAL	\$12,004,000	\$13,007,000

*Growth due to inflation and/or rounding

Efficiencies identified in FY 2018 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. All efficiencies include implementation costs and those carried forward from 2017 to 2018 have a background inflation factor applied. Some have increased due to this inflation factor while others may appear unchanged due to rounding.

Automatic Flagger Assistance Devices

Automated Flagger Assistance Devices are portable traffic control devices used by flagging personnel instead of traditional flagging equipment. AFAD's use a rotating stop sign to control traffic movement. The deployment of AFADs increases safety and efficiency of flagging operations. Currently MnDOT operates one AFAD in District 3. 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. There were no significant changes to AFAD use in 2018. MnDOT is saving an estimated \$14,000 annually 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 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 operate well without any long-term maintenance impacts without using the defrosters. There were no changes to the DMS efficiency in 2018. MnDOT is saving an estimated \$130,000 per year by deactivating dynamic message sign defrosters.

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. A majority of ramp meter locations have 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. This efficiency continued in 2018 with no changes. For purposes of this analysis a 20-year life cycle is anticipated; so, including all implementation costs, MnDOT is saving an estimated \$74,000 a year through the use of LEDs on ramp meters.

Conversion to LED Roadway Lighting

The statewide LED lighting conversion project involves converting more than 28,500 roadway lights from traditional high-pressure sodium to LED or light emitting diode technology. LED lights have an average life of about 18 years, whereas the life of a sodium bulb is only about four years. The conversion includes replacing light fixtures and bulbs. Financial impacts will include a sizeable reduction in energy costs and the elimination of labor and equipment costs for the replacement of bulbs every four years. In 2018 MnDOT converted an additional 1,250 lights in Greater Minnesota, bringing totals to approximately 7,500 lights in Greater Minnesota and 18,500 lights in the Twin Cities Metro area. The entire conversion is anticipated to be complete by 2020. For purposes of this analysis a 17-year life cycle is anticipated. Average annual savings for MnDOT will be approximately \$2.8 million.

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 additional financial savings which include: fewer snowplow trips to clear roads, extended plow life, decreasing overtime and fuel savings. Other user benefits include improved network reliability and a more consistent experience for drivers. MDSS was fully operational in 2016 on approximately 600 plow trucks. The number of trucks with MDSS capabilities grew to 648 in 2018. By 2020 MnDOT's entire snow plow fleet will be outfitted with MDSS. Including all associated costs to implement, MDSS is generating an estimated \$5.9 million in annual savings.

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. For purposes of this analysis the benefit calculated is based on MnPASS's five year contract life and the elimination of a contract team. Including all associated costs to implement, MnDOT is saving an estimated \$210,000 a year compared to using long-standing system on this new business process.

MnSTEP–MnDOT Stretching Together Employee Program

An aging workforce, rising workers' compensation costs and increasingly sedentary lifestyles among workers are just some of the challenges that Safety and Loss professionals face while trying to keep employees' safe and costs under control. In 2010 MnDOT's District 3 implemented an employee flexibility program in an effort to: achieve a safe and healthy workplace, reduce the risk of overexertion injuries, increase work performance and reduce workers' compensation costs. After implementation of the program, recordable injuries decreased by 44 percent, lost time injuries decreased by 45 percent and overexertion injuries dropped by 62 percent. By reducing these types of injuries, in 2015 the average annual workers' compensation costs were down 47 percent and the number of claims were down 32 percent. This efficiency remains unchanged from 2017. For purposes of this analysis a five-year life cycle is anticipated. Including all associated costs to implement, MnDOT's District 3 is saving an estimated \$140,000 a year by instituting MnSTEP.

Portable Signals

Portable Signal Systems are traffic control devices used instead of traditional flagging personnel and equipment and do not require an operator. Efficiencies are realized through the elimination of personnel needed to flag traffic through a work area. The reduction in required personnel for flagging allows for reassignment of people to other projects, resulting in quicker turn around and faster project completion. MnDOT used 14 portable signal systems statewide in 2018. By replacing typical flagging operations with portable signals MnDOT is saving an estimated \$280,000 annually.

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. A tow plow 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 side of the truck. It has the capability to clear a path in excess of 24 feet wide. MnDOT deployed seven additional tow plows in 2018, thus growing the efficiency by \$210,000. Including all associated costs to implement, MnDOT is saving an estimated \$990,000 a year by using tow plows.

Printing Business Practices

Printing materials and documents represent a large cost category within administrative areas of the organization. In 2015, central office printers were defaulted to duplex printing. In 2018 MnDOT realized nearly a 900,000 sheet reduction. A majority of the sheet reduction can be attributed to the switch to automatic duplexing. Additional strategies such as signing and processing administrative documents electronically and transferring documents electronically are also being pursued. Implementation costs for the switch to duplex printing were negligible. MnDOT is saving an estimated \$23,000 annually by switching to duplex printing. Calculation is based on currently available data for a portion of Metro Area MnDOT offices.

Georilla

Georilla is a web mapping interface MnDOT's Metro District began using in 2010. Since its inception, it has gained wide acceptance and has become a department-wide resource. In 2018, Georilla had more than 600 users. Georilla brings disparate data and tools together in one interface, allowing managers and employees to access the vast amounts of data across the agency. Georilla provides a map, but also allows employees to drill down into the depths of the data to find greater detail. The financial benefits of Georilla from 2016 forward were evaluated through an agency-wide survey conducted in July 2016 in which 57 employees reported a total of 5,416 hours in annual time savings from Georilla-enabled efficiencies. Compensation was determined by grouping staff, which were generally in either technical or engineering positions, in proportion to hour-weighted reported savings. In 2018 there were more than 69,000 site visits to Georilla. Benefits from 2010-2015 were then prorated based on site visits for each year. Using this approach, MnDOT is saving an estimated \$250,000 annually by using Georilla.

Blowing Snow Control Using Benefit Cost Analysis

MnDOT uses an array of blowing snow control measures such as living snow fences, structural snow fences, standing corn rows, strategically placed bales, native tall grass plantings and road design elements. All are intended to either increase snow storage in the road ditch or to prevent snow from blowing from the field onto the roadway. MnDOT uses a web-based tool, developed in 2013 in conjunction with the University of Minnesota Center for Transportation Studies, to determine the benefit cost ratio of individual sites. Selection factors include land use, winter climate data and traffic volumes. More than 3,700 blowing and drifting snow problem sites covering approximately 1,200 miles of state highways have been identified as potential sites. In 2016 the benefits and costs were determined at seven sites where standing corn rows or bales were used. The median benefit cost ratio of the selected sites was 5 to 1 and this ratio was applied to the statewide program extent of 29 miles, up from two miles in 2017. MnDOT paid farmers or landowners an average \$5,376.55 per mile for standing corn rows/bales. Farmers are asked to leave five to six rows of standing corn approximately 200 feet from the centerline of the road. By 2026, the program is expected to grow to 50 miles of living snow fence. By applying the 5 to 1 benefit cost ratio to payments made and assuming an expanding program, the department expects to save approximately \$740,000 annually over the next 10 years.

Snow and Ice Control (Slurry Tanks)

Slurry tanks are molded tanks saddle-mounted either on the outside snowplow dump box or in the box itself. Each tank holds a liquid that is comprised of 70 percent granular salt and 30 percent salt brine solution. Saturating the salt before it is applied to the roadway reduces blow off and scatter and results in fewer snow plow runs to achieve bare pavement. Saturated salt also melts snow and ice more quickly. The financial benefits in this analysis result from reduced salt use. During the 2017-18 winter season, a total of 65 trucks in MnDOT District 6 and District 4 were using slurry systems. Including all associated costs to implement, use of those 23 slurry tanks are saving the department an estimated \$55,000 annually.

Connecting MnDOT Facilities by Fiber Optic Network

Connecting MnDOT facilities through a wide area network using the Regional Transportation Management Center fiber optic system provides significant cost savings, greater flexibility and more redundancy than historical connections. Capitalizing on the established fiber network also allows for enhanced capabilities like VOIP and facility monitoring. Starting in 2009, MnDOT began connecting its metro area facilities through its own fiber optic network, eliminating the need to pay monthly fees to service providers. Fees ranged from \$4,000 per month for a large facility such as the Central Office, to \$200 per month for a typical truck station. In 2018, MnDOT connected its 19th facility. Connecting metro area facilities via MnDOT-owned fiber optic network is saving the department an estimated \$250,000 annually.

Conversion of Fiber Optic Communication Standard (SONET to IP)

The electronics communications industry continues to develop new products that combine lower cost with greater capabilities. These new products enabled MnDOT's Regional Transportation Management Center to change the fiber optic communications system backbone from the SONET industry standard to an IP based communication system. Both standards have an approximate lifespan of 10 years. However, the cost of a typical IP switch is \$5,500 compared to \$35,000 for a SONET switch. By applying the reduced switch cost to the RTMC's 60 switches and including all associated costs to implement, MnDOT is saving an estimated \$190,000 annually.

Sign Placement Tool (Importing Sign Data using MicroStation)

The Sign Placement Tool was developed in MnDOT's Metro District after completing an accurate Geographic Information System sign inventory. The GIS based inventory was essential for furthering asset management within the organization. Development of the SPT then created efficiencies when generating maps, layouts and other resources for work orders and construction plans. The tool is initiated within MicroStation by entering the specific project roadway and associated reference points. The SPT and designer basically create an in-place signing plan at their desk with limited time in the field. This process is not only more efficient than the previous field logging technique but it's also safer and eliminates the need for "boots on the ground" field time. Each year, Metro District staff complete and average of six sign replacement projects using the tool. Prior to development of the tool, each project required three weeks of field work for one staff person. By using the tool, staff time is reduced to one week of combined field and MicroStation time. Including implementation costs, MnDOT is saving an estimated \$19,000 a year using the Sign Placement Tool.

Agricultural Tractor Rental Program

Modeled after a South Dakota program, district fleet staff implemented an agricultural tractor rental program in 2009. Working with manufacturers and implement dealers, MnDOT negotiates reduced rental rates for tractors used primarily for mowing roadsides. In turn, manufacturers and dealers get the benefit of having their product showcased to thousands of drivers and potential customers daily. Tractors are rented for up to 250 hours then returned to dealers where they are then sold, with a full warranty, at reduced prices. In 2018 MnDOT rented a total of 104 tractors using this program and realized savings of approximately \$500,000.

Wood Post Cold Storage Buildings

Historically, chemicals used to treat wood foundation posts for buildings have had a tendency to leech contaminants into the soil. Being cognizant of this fact, MnDOT moved to constructing steel post buildings for cold storage purposes. Recent industry advances in wood treatments that reduce soil contamination, have enabled MnDOT, in conjunction with the Office of Environmental Stewardship and the Department of Labor and Industry, to use wood posts to construct cold storage facilities. These wood post buildings are generally less expensive to construct. In 2017 MnDOT awarded a contract to construct one cold storage building using advanced wood post technology. Estimated costs for constructing a similar building using steel post construction would have additional construction costs of approximately \$50,000.

Unmanned Aerial Systems (Drones) for Bridge Inspection

MnDOT began researching drone use for bridge inspection in 2015. Traditional inspection methods can include under-bridge inspection vehicles, ladders, lifts, rope access, all of which can require lane closure. The use of drones, while not suitable for all bridge inspections, is a useful technology in many circumstances and can lower the cost and improve safety for workers and the traveling public, when compared to these traditional bridge inspection methods. Average inspection cost using traditional methods is approximately \$7,100 per bridge. The

average cost of a bridge inspected with a drone is approximately \$4,800. When this 32 percent savings is applied to the 64 bridges inspected by drone to date and drone inspections expected over the next four years, MnDOT is expecting average annual savings totaling \$320,000.

Unmanned Aerial Systems (Drones) for Photogrammetrics

Like using Drones for bridge inspection, using a drone for photogrammetric surveying is an effective way to conserve resources. Traditional aerial photogrammetric surveys are accomplished using fixed-winged aircraft. Typical consultant costs for fixed-winged surveys include mobilization and a variable cost of approximately \$9,500 per mile. Projects can be multiple miles in length. Per mile drone survey costs for MnDOT average approximately \$1,700 per mile. MnDOT completed 12 projects in 2018. Those projects included aerial surveying of a gravel pit in Wright County, snow fencing along Highway 169, and flood damage in numerous parts of the state. When you apply drone savings to MnDOT photogrammetric surveying projects the department expect to save approximately \$77,000 annually for the next four years.

Additional Efficiency Activity

Throughout the department, MnDOT continues to pursue other efficiencies. Many are smaller efforts like a minor change to snow plow blades that an operator determines will save time or perform better. Others are larger efforts that are not yet mature, such as using automatic vehicle locating systems for weed control. As these efforts mature or their deployment grows they will be considered for inclusion in future efficiency reports.

Appendix A: Products and Services Summary List and Descriptions

2018 Products and Services Framework

Table 25: 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 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	State Road Construction
Trunk Highway Debt Service	Trunk Highway Debt Service
Trunk Highway Operations and Maintenance	Bridges and Structures Inspection and Maintenance Roads and Roadside Maintenance Snow and Ice Traffic Operations 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

Notes: External Partner Support can be used by any office and any budget activity. Starting in FY2018, Roadside and Auxiliary Infrastructure and System Roadway Structures Maintenance were combined into Road and Roadside Maintenance.

Products and Services Descriptions

Aeronautics

Airports: Funds and administers airport grants, assists local units of government and installs and operates navigational aids.

Aviation Safety Operations and Regulation: Protects aviation users, promotes aeronautics safety and develops aviation policies and regulations in Minnesota.

Freight

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

Freight Rail Improvements: Provides funding 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: Develops 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: Provides funding to public port authorities through the Port Development Assistance Program. This includes developing related agreements and administering related grants and loans.

Rail Crossing Safety: Identifies and develops safety improvements at railroad grade crossings; coordinates rail crossing safety and rail regulatory activities and monitors 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: Develops and implements the Statewide Bicycle System Plan, Pedestrian System Plan, State Bikeway Route development, State Bicycle Map, bicycle and pedestrian design guidance and program administration. Administers Safe Routes to School grant programs and manages the ABC Ramps.

Transit Planning and Grants: Develops and implements 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: Manages or monitors 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: Manages or monitors 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: Administers and monitors MnDOT's research program. Guides policy decisions by developing, refines and tests methods for best practices and by using appropriate economic, demographic and labor market analysis. Provides strategic direction and establishes outcomes and performance measures for MnDOT's research program. Fosters the exchange of technical information and provides access to results of external and internal research.

Plan Highway System: Manages and integrates current data and best practices for multi-modal policy formation and investment packaging; coordinates transportation system plans and policies with other government entities; prepares updates of the statewide plan; applies 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; uses 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: Inspects, maintains and operates bridges and structures (bridges, box culverts and overhead sign structures). Conducts bridge inspections, provides inspection training, monitoring and certification; maintains and repairs bridges; inspects, maintains and repairs non-bridge structures such as earth retaining systems (retaining walls), noise walls, tower lighting, roadway lighting and traffic signal systems.

Roads and Roadside Maintenance: Inspects, maintains and operates the state highway system roadway structures, including pavement, shoulders and drainage and roadsides such as 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: Inspects, maintains, operates and manages 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.

Statewide Radio Communications

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

County State Aid Roads

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

Municipal State Aid Roads

Municipal State Aid Highway: Distributes and administers 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 time frame.

Change Order: see supplemental agreement

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, direct cost dollars 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 and 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 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.⁶

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 and the international significance and connections of Minnesota’s trade centers Attracts human and financial capital to the state.

⁶ {[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 that 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 that are important to the United States' strategic defense policy and that 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, 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: This document is reflective of Minnesotans' voices, as expressed throughout an 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 Program: 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](#); [MAP-21 Fact Sheet on Performance Management, National performance goals](#); and [FAST Act Fact Sheet on Performance Management](#)).
- 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

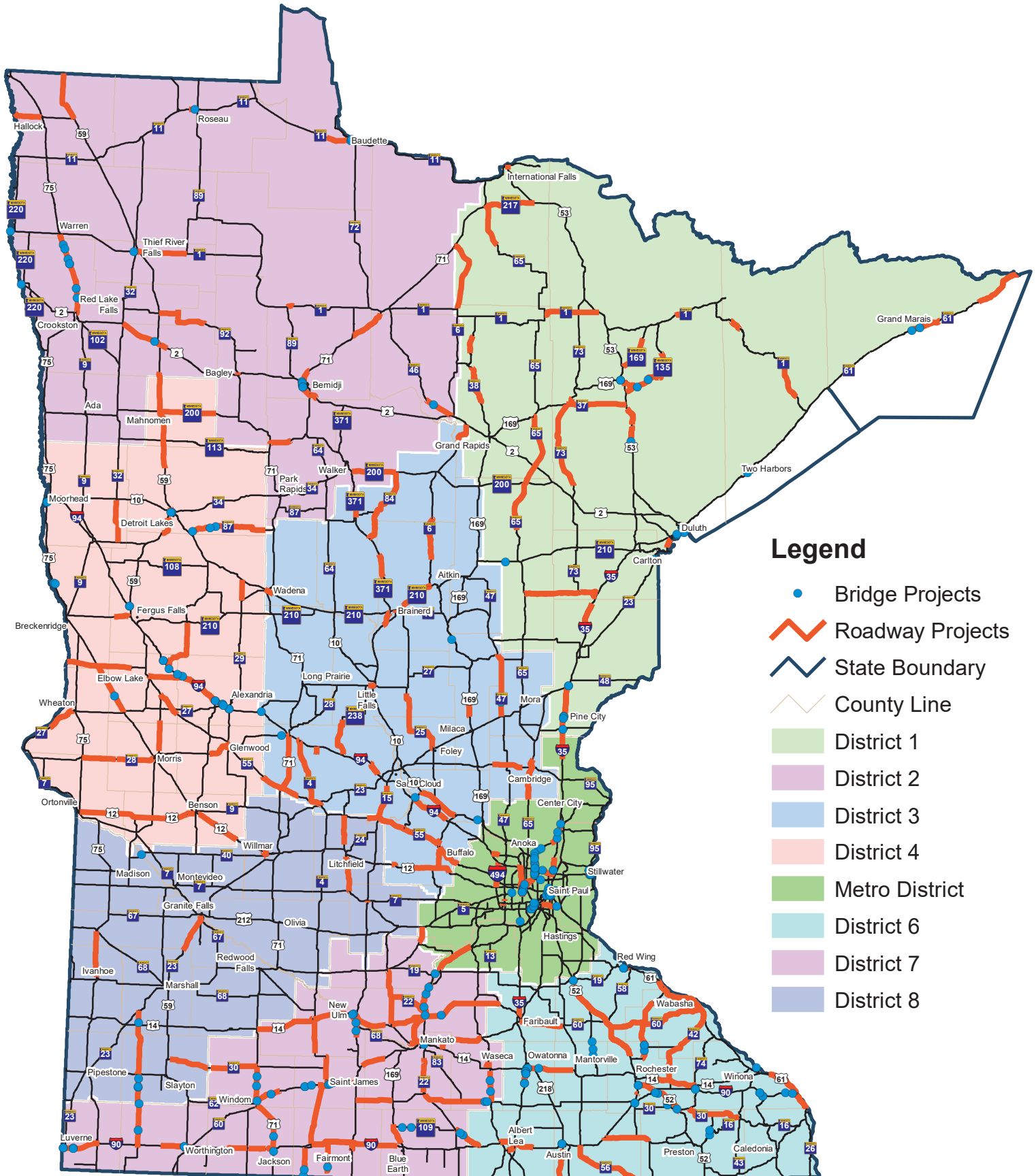
Supplemental Agreement (Change Order): According to the Minnesota Department of Transportation, *Standard Specifications for Construction, 2018 Edition*, a change order (synonymous with supplemental agreement) is a written agreement between the Department and the Contractor, executed on the prescribed form and approved as required by law, covering the performance of extra work or other alterations or adjustments to the Contract.⁷

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.

⁷ [Minnesota Department of Transportation Standard Specifications for Construction, 2018 Edition](#); p. 6, 12.

Appendix C: Major Highway Project Summary Pages

Major Highway Projects 2018

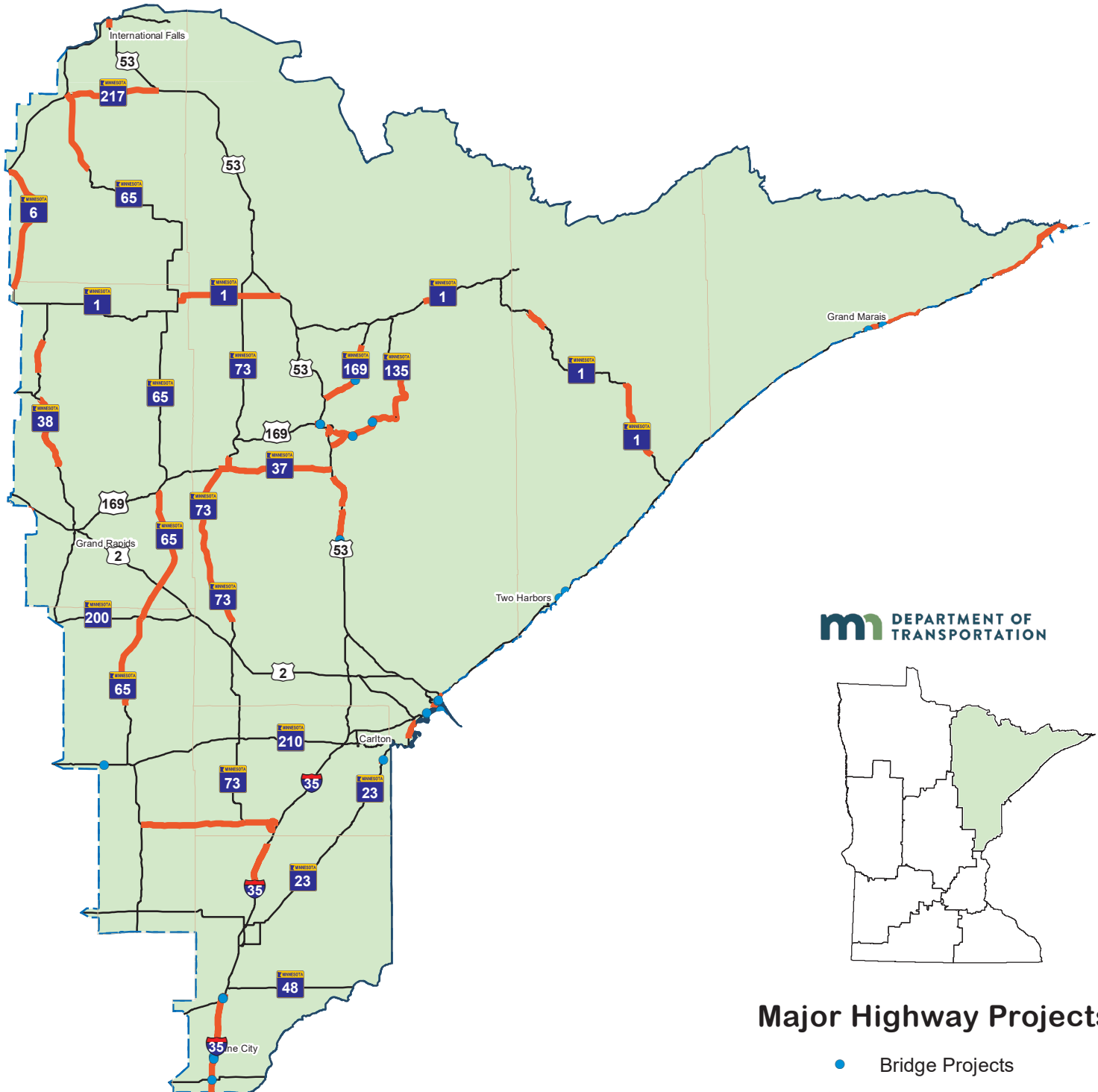


Legend

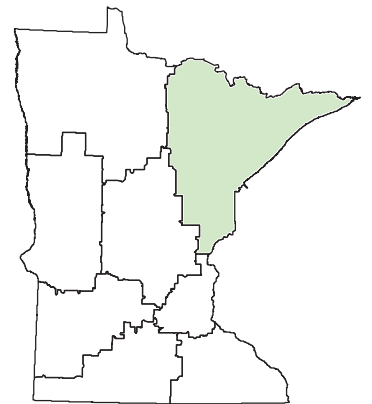
- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- District 1
- District 2
- District 3
- District 4
- Metro District
- District 6
- District 7
- District 8

Major Highway Projects 2018

D1-DULUTH



mn DEPARTMENT OF
TRANSPORTATION



Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- - - Construction District

District 1 Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
I-35	6982-322	I-35, I-535 & US 53 in Duluth, 0.16 Mi S 27th Ave W to Jct Garfield Ave Twin Ports Interchange Construction	A 2	82
Hwy 27	0104-06	From MN 65 to Aitkin/Carlton Co. Line and MN 73 to Moose Lake limits. MN 73 in Kettle River from MN 27 to County Hwy 12/Locker Plant Rd.	A 3	83
Hwy 65	3609-41	Mn 65 0.6 mi. S. Hwy 8 to Jct US 71 overlay	A 4	84
Hwy 1	3801-92	Hwy 1, N of the Kawishiwi River and Hwy 1 S of CR 2 to Isabella	A 5	85
Hwy 1	6904-46	Six Mile Lake Road to Bradach Road in St. Louis County	A 6	86
Hwy 1	3101-37	Hwy 65 to Hwy 53	A 7	87
Hwy 135	6912-77	From Hwy 53 to St. Louis County Road 21	A 8	88
Hwy 169	6935-89	Hwy 169 In Virginia from County Road 109 to Hoover Rd	A 9	89
Hwy 169	6936-19	Hwy 53 to County Hwy 26	A 10	90
Hwy 2	6937-102	In Duluth	A 11	91
Hwy 37	6914-19	US 53 to MN 135	A 12	92
Hwy 37	6947-50	From Highway 169 in Hibbing to Highway 53	A 13	93
Hwy 38	3108-70	County Road 19 to Marcell	A 14	94
Hwy 53	3608-48	In International Falls	A 15	95
Hwy 6	3603-14	On Hwy 6 from just north of Hwy 1 to Big Falls	A 16	96
Hwy 61	3805-99	Hwy 61 at Stewart River	A 17	97
Hwy 61	3805-79	Hwy 61 Silver Creek Crossing	A 18	98
Hwy 61	1604-45	Reservation Bay Rd to US/Canadian Border	A 19	99
Hwy 61	1602-50	Around Grand Marais	A 20	100
Hwy 65	3111-30	Hwy 200 to Hwy 169	A 21	101
Hwy 65	0112-52	South Sandy River to Hwy 200	A 22	102
Hwy 73	6928-28	Various locations on Highway 73 and Highway 2 that include the City of Cromwell and the City of Floodwood	A 23	103
I-535	6981-9030L	On the I-535 Blatnik Bridge over the St. Louis River between Duluth, MN and Superior, WI.	A 24	104
Hwy 169	6934-116	In Hibbing, from the intersection of Hwy 73 to east of County Road 5.	A 25	105
Hwy 169	3116-142	County Road 15 to County Road 7	A 26	106
Hwy 217	3614-20	Little Fork to Hwy 53	A 27	107
Hwy 23	0901-67	Hwy 23 near intersection with County Road 18	A 28	108
Hwy 23	6910-96	Hwy 23 In Duluth From Becks Road to 84th Avenue West	A 29	109
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 30	110
Hwy 53	6918-86	Between Eveleth and Virginia, relocate Hwy 53 away from United Taconite Operations	A 31	111
Hwy 53	6917-141	Southbound from the Paleface River to Augusta Lake Rd	A 32	112
Hwy 53	6917-142	On Hwy 53 from Central Lakes Road to the interchange with Hwy 37	A 33	113
I-35	5880-186	Replace two bridges on I-35 over the BNSF railroad south of Hwy 48	A 34	114
I-35	5880-191	South of County Road 11 to 1 mile south of Hinckley	A 35	115
I-35	5880-180	North of Pine County Rd 33 to south of the Carlton County line	A 36	116

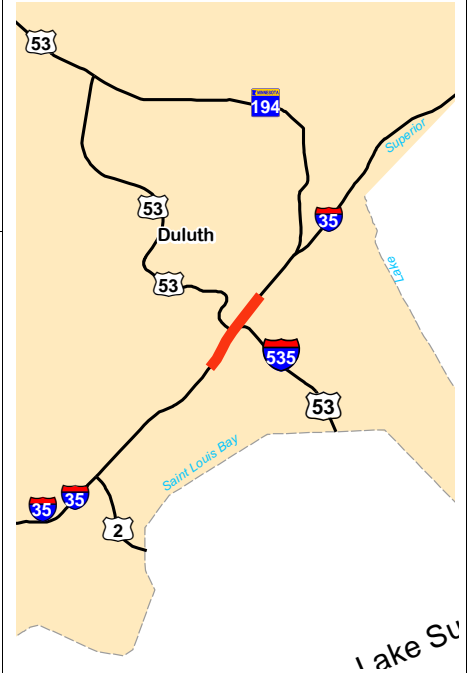
PROJECT SUMMARY

I-35

I-35, I-535 & US 53 in Duluth, 0.16 Mi. S. 27th Ave. W. to Jct. Garfield Ave.

State Project No. 6982-322

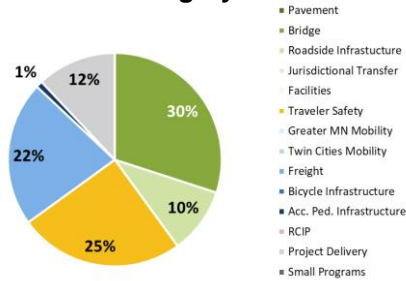
[I35, I-535, Hwy 53 Twin Ports Interchange](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

The Duluth Twin Ports Interchange project has three major components and one minor component. The major components are I-35/I-535/Hwy 53 interchange reconstruction, Hwy 53 reconstruction from I-35 to Third Street and I-535/Garfield Avenue interchange reconstruction. The reconstruction will replace 34 bridges. The minor component is a local street improvement project for traffic mitigation.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2018

	Baseline Est.	Current Est.
Construction Letting:	\$ 241.3	\$ 241.3
Other Construction Elements:	\$ 16.8	\$ 16.8
Engineering:	\$ 36.1	\$ 36.1
Right of Way:	\$ 2.0	\$ 2.0
Total:	\$ 296.2	\$ 296.2

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

Recent Changes and Updates

Current work includes environmental process and documentation, geometric layout development, railroad coordination, preliminary bridge design, foundation design and public outreach. A connection over I-35 between Lincoln Park and the Bayfront area is being considered as a result of community input. Combining Miller and Coffee Creeks into one crossing and a single outlet to the bay is under evaluation. Construction is anticipated to begin in 2020 and last 3 - 4 years. Estimates are planning/preliminary level only and will be refined in 12 months.

Project History

The project will address aging infrastructure, weight restrictions, increase safety, improve traffic flow and freight mobility. A construction manager/general contractor method of contracting is being used where the contractor has been selected and will begin collaborating with MnDOT on staging, design, risk, cost and schedule beginning in Oct. 2018. The existing interchange has the fourth highest crash rate of MnDOT interchanges due to blind merges and left exits.

Key Cost Estimate Assumptions

The baseline construction estimate does not include a potential new connection from Lincoln Park to Bayfront area (Railroad Street Connector) for 2019. A planning effort is in progress. The baseline estimate also does not include the 2019 design-bid-build traffic mitigation project on local streets. Right of way costs include \$200,000 for actual right of way, the balance is for railroad agreements required for construction on railroad property (does not include associated cost of railroad flagging that will be required, flagging cost is in construction letting cost).

Project Risks

Top 3 Cost Risks (9/18): market conditions for labor materials, etc. and potential to encounter contaminated soil/water and other unknowns. Top 3 Schedule Risks (9/18): railroad agreements, market conditions for labor materials, etc. and potential for archeological concerns during preconstruction.

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: Not established yet
Current Letting Date: Not established yet
Construction Season: Spring 2019 - Fall 2022
Estimated Substantial Completion: Fall 2023



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

District Engineer: Duane Hill
Project Manager: Roberta Dwyer/Pat Huston

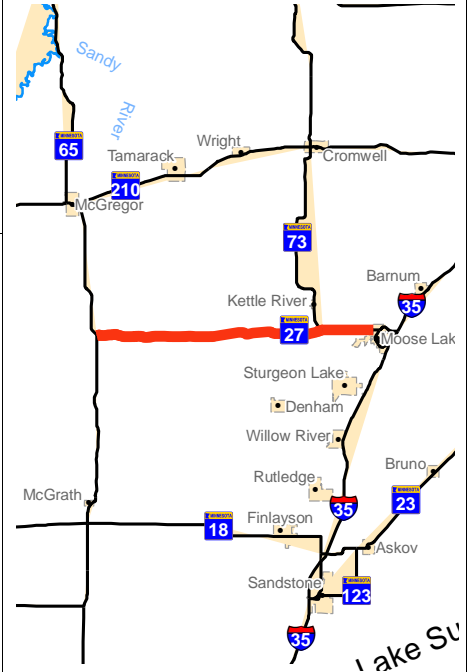
Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 27

N. Jct. MN 65 to Aitkin/Carlton Co. Line & N. Jct. MN 73 to W. Limit Moose Lake & MN 73, in Kettle River from W. Jct. MN 27 to 0.09 Mi. S. County Hwy 12/Locker Plant Rd.

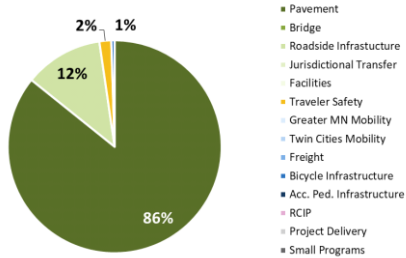
State Project No. 0104-06



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is about 14 miles of bituminous pavement resurfacing west of Moose Lake in Carlton County. Included in this project is about 2 miles of bituminous shoulder widening south of Kettle River.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.5	\$ 0.5
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 current and baseline estimates were prepared in June of 2017. Both estimates include costs for bituminous resurfacing. Also included is the addition of new bituminous shoulders on a portion that only had gravel shoulders.

Project Risks

Traffic handling during construction may require a detour.

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: 2/26/2021
Current Letting Date: 2/26/2021
Construction Season: Spring 2021
Estimated Substantial Completion: Fall 2021



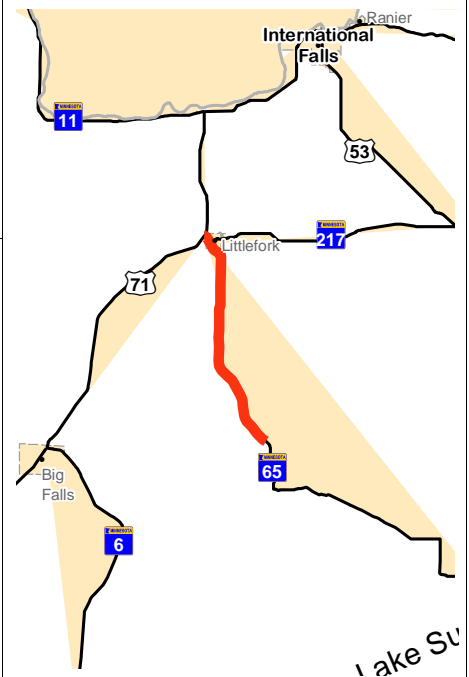
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/17/2018

PROJECT SUMMARY

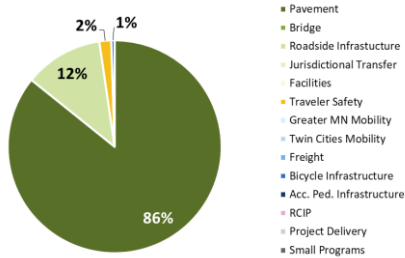
Hwy 65
0.6 Mi. S. Hwy 8 to Jct US 71
State Project No. 3609-41



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a resurfacing of Hwy 65 from 0.6 miles south of Koochiching County Road 8 to the junction of Hwy 71 in Littlefork, for a total distance of 16 miles. In addition to resurfacing, 2' of the 6' gravel shoulder will be paved, a number of culverts will be replaced or lined, and centerline and edge line rumble strips will be installed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.5	\$ 4.3
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.7	\$ 5.5

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

Key Cost Estimate Assumptions

The baseline estimate was prepared in May 2016. The current estimate was completed in Aug. 2018. Both estimates include costs for bituminous resurfacing. Also included is the addition of new bituminous shoulders on a portion that only had gravel shoulders. The cost decrease is due to lower than expected bituminous prices.

Project Risks

Recent Changes and Updates

New project.

Project History

The deteriorating pavement results in a rough ride, high maintenance costs and reduced load carrying capacity. The purpose of this project is to improve ride quality and extend the useful life of the highway.

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: 7/24/2020
Current Letting Date: 7/24/2020
Construction Season: Summer 2021
Estimated Substantial Completion: Fall 2021



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

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/17/2018

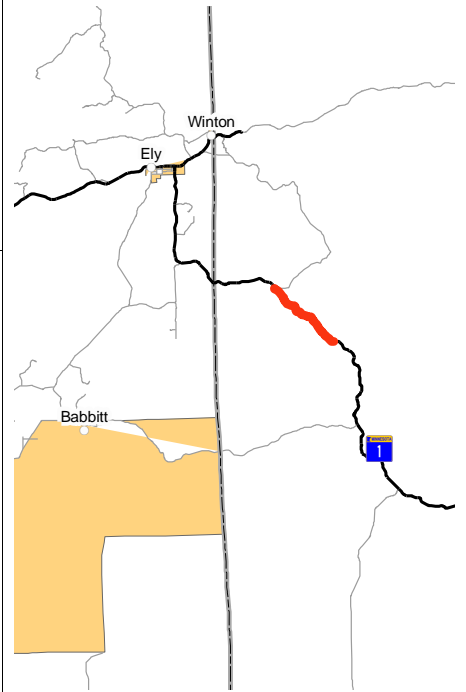
PROJECT SUMMARY

Hwy 1

N of the Kawishiwi River and Hwy 1 S. of CR 2 to Isabella

State Project No. 3801-92

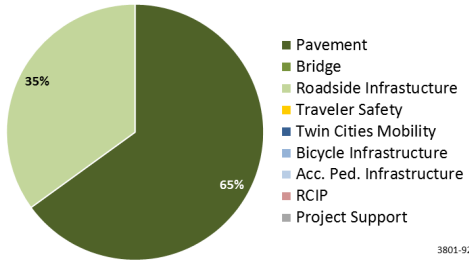
[Hwy 1 in Lake County](#)



Primary Purpose

Performance-based Need: Pavement

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.

In general, a 75' right of way or easement width will be acquired on each side of the highway centerline.

Recent Changes and Updates

Project has been let and is under construction.

Project History

Right of way acquisition was not complete for the 02/24/17 letting date. Letting date was changed to 04/28/17 so that the public interest finding could be developed. The letting date change did not impact start of construction. The project was programmed for a FY 2018 ELLA. Construction work began on Aug. 21, 2017, due to a delay in obtaining a permit to construct from the MnDNR. The majority of the project area was last resurfaced in 2000. A 2015 pavement condition rating indicated the ride quality index was poor resulting in a rough ride, high maintenance costs, and reduced load carrying capacity. The north project segment was initially planned to be reconstructed using the federal forest highway program, but due to limited funding it is no longer being pursued. This segment will now be resurfaced with drainage improvements and removal of rock outcroppings in some areas.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.6	\$ 4.7
Other Construction Elements:	\$ 0.4	\$ 0.5
Engineering:	\$ 1.4	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.2
Total:	\$ 8.4	\$ 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 was prepared during scoping. The project was let in April 2017. The current estimate is based on the bid amount. It includes the cost for pavement resurfacing and drainage improvements. The cost was reduced as project scoping progressed showing the need for fewer drainage improvements that lowered the current estimate.

Project Risks

Project work was completed October 2018. There are no remaining project risks.

Schedule

Environmental Approval Date: 10/6/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 02/27/2012
Current Letting Date: 04/28/2017
Construction Season: Fall 2017 - Fall 2018
Estimated Substantial Completion: September 2018



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

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/17/2018

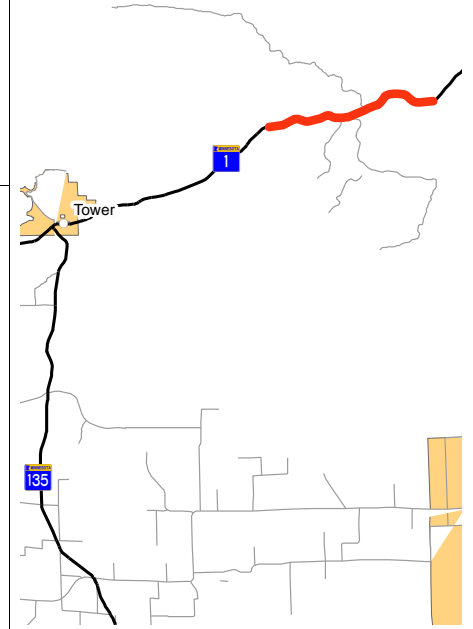
PROJECT SUMMARY

Hwy 1

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

State Project No. 6904-46

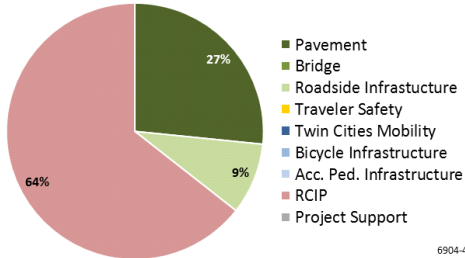
[Hwy 1/169 Eagles Nest Lake Area Project](#)



Primary Purpose

Performance-based Need: Regional & Community Improvement Priority

Investment Category



6904-46

Project Description

Reconstruction of Highway 1 from Six Mile Lake Road to Bradach Road in the Eagles Nest Lake Area.

Recent Changes and Updates

The project was completed in July 2018.

Project History

MnDOT received the wetland permit from the Corp of Engineers before project award. The low bidder started construction in Jan. 2017, performing tree clearing within the corridor. All associated contract work is on schedule for final completion in July 2018. The rock drilling program was completed in fall 2015. The lab test results were used to develop a rock mitigation plan in Aug. 2016 for the roadway construction plan. The project letting date was moved to Nov. 2016 with an anticipated construction date of Jan. 2017. A task force was formed to address concerns between the Virginia and Winton segment. 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 funds were provided for highway improvements. 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 10.5	\$ 16.4
Other Construction Elements:	\$ 0.5	\$ 1.2
Engineering:	\$ 2.2	\$ 5.0
Right of Way:	\$ 1.2	\$ 0.6
Total:	\$ 14.4	\$ 23.2

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 estimate is based on the actual bid amount, and includes costs for reconstruction of Highway 1 from Six Mile Lake Road to Bradach Road. The rock drilling program provided results for a rock mitigation plan where it identified a number of construction items to be added to the project with sulfide concerns in excavation of on-site materials. The additional construction items of rock mitigation were then accounted for within the current estimate.

Project Risks

The project is completed.

Schedule

Environmental Approval Date: 11/3/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 1/4/2016
Construction Limits Established Date: 6/1/2015
Original Letting Date: 12/17/2010
Current Letting Date: 11/18/2016
Construction Season: Spring 2017 - Summer 2018
Estimated Substantial Completion: Summer 2018



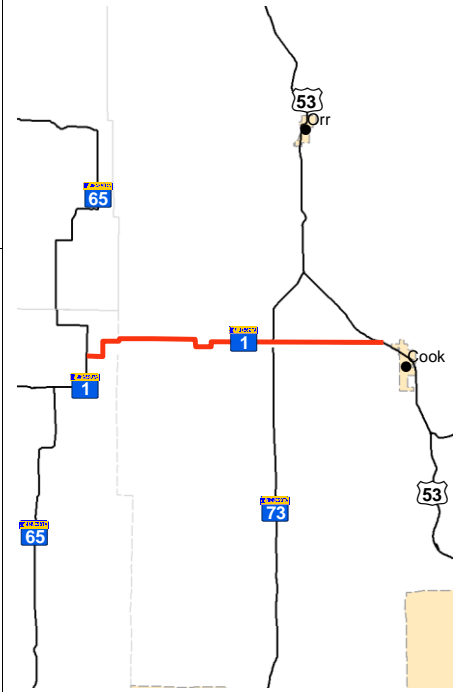
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/17/2018

PROJECT SUMMARY

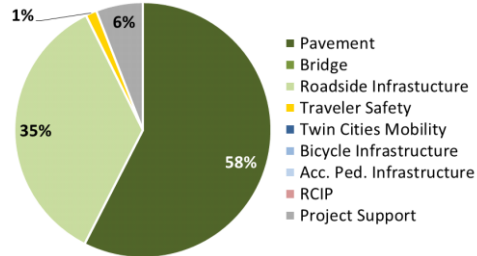
Hwy 1
Hwy 65 to Hwy 53
State Project No. 3101-37



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is 20.7 miles of bituminous pavement resurfacing from the junction with TH 65 to the junction of TH 53. Two sections of TH 1 that go around rock out-croppings will be realigned to improve the highway geometrics. Realignment work will also be completed at the TH53, TH1 intersection to improve geometrics.

Recent Changes and Updates

The project scope remains unchanged.

Project History

The project scope remains unchanged, however, the project description was updated to include the realignment of the TH 53 and TH 1 intersection. Deteriorating pavement resulted in a rough ride, high maintenance costs and reduced load carrying capacity for the roadway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.5	\$ 8.0
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.6	\$ 1.6
Right of Way:	\$ 0.8	\$ 0.8
Total:	\$ 11.8	\$ 11.3

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

Key Cost Estimate Assumptions

The baseline estimate was prepared in February 2016. The current estimate was completed in August 2017. Both estimates include costs for bituminous pavement resurfacing. The lower projected cost is due to lower bituminous prices.

Project Risks

This project may be linked to SP 6931-01 on TH 73 from the junction with TH 1 to the junction of TH 53.

Right of way acquisition is needed on this project, the costs to acquire the right of way may impact the total project cost estimate in the future.

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: 2/28/20
Current Letting Date: 2/28/2020
Construction Season: Spring 2020 - Fall 2020
Estimated Substantial Completion: Fall 2020



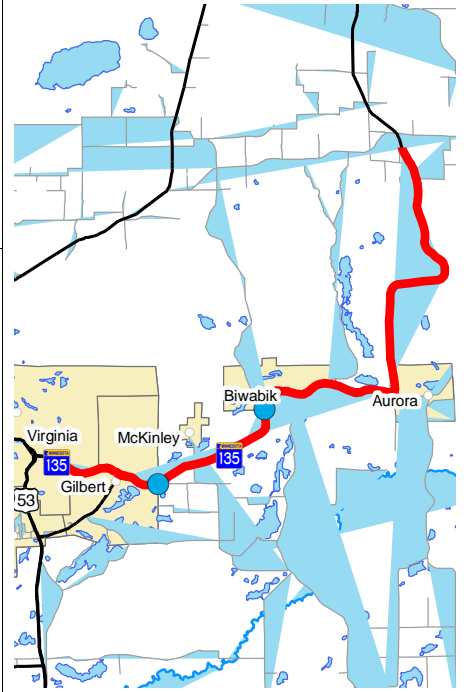
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Doug Kerfeld

Revised Date: 12/17/2018

PROJECT SUMMARY

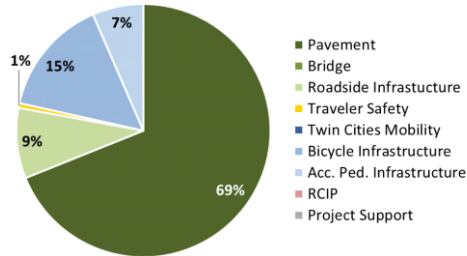
Hwy 135
Hwy 53 to St. Louis County Road 21
Bridge 69023, 69025, 6942
State Project No. 6912-77



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This is a pavement resurfacing project on Hwy 135 from the junction of Hwy 53 to the junction of St. Louis County Road 21, a distance of 23.1 miles. It includes Gilbert and Biwabik. The work in Biwabik includes ADA improvements and new curb and gutter. Biwabik plans to replace water and sewer lines under a cooperative agreement. There is minor work on 3 bridges and drainage repairs throughout the project. Intersection revisions will be done at the intersection of CR 100.

Recent Changes and Updates

The northerly project limit has changed to approximately 500' south of St. Louis County Road 21. Two feet of the gravel shoulder will be paved between the Embarrass River Bridge and this new northerly project end. At the request of St. Louis County, turn lanes to their public works facility off Hwy 135 near Virginia are being included. St. Louis County will be responsible for the cost. At the request of Gilbert a left turn lane will be added for the Holiday Store entrance backed by crash data.

Project History

Due to the scope of work in Biwabik, a separate project was programmed under SP 6912-79 in anticipation for a funding or project delivery problem which would delay a portion of work in Biwabik. A task force was created to help define the future vision of Hwy. 135 through town with a "complete streets" approach. The need for this project was driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity. The majority of the project area was last resurfaced in 2001. The 2015 pavement condition rating indicates the ride quality index was fair.

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	\$ 9.0
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 1.7	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 11.4	\$ 11.7

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

Key Cost Estimate Assumptions

The baseline estimate was prepared in Feb. 2015. The current cost estimate was prepared in Aug. 2018. Both estimates included pavement resurfacing. The baseline estimate included pedestrian infrastructure improvements in Biwabik while the current estimate did not. That portion of the job was moved to SP 6912-79. The cost change was due to additional bridge repair and intersection reconstruction in both Aurora and Gilbert and removal of the work in Biwabik.

Project Risks

Right of way acquisition is needed for two culvert locations which could impact the project schedule.

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: 03/22/19
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: Brian Larson

Revised Date: 12/17/2018

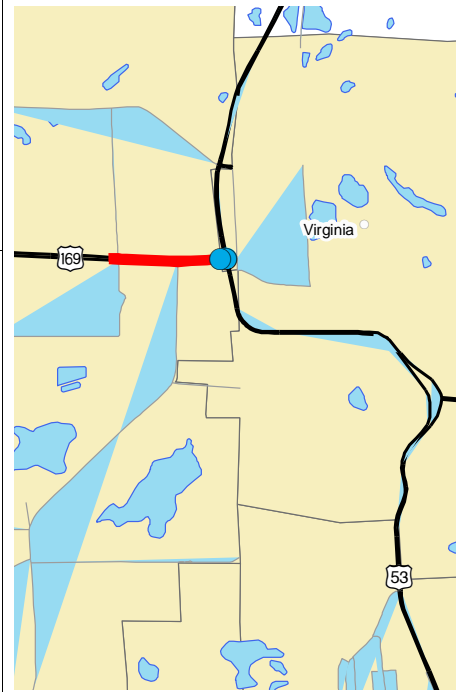
PROJECT SUMMARY

Hwy 169

In Virginia from County Road 109 to Hoover Rd.

Bridge 69034, &, 69035

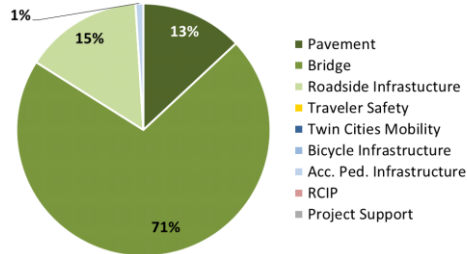
State Project No. 6935-89



Primary Purpose

Performance-based Need: Pavement Condition and Bridge Condition

Investment Category



Project Description

The project is one mile long on Hwy 169 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

This project was let in June 2017. Construction is in season two.

Project History

The project scoping was originally completed in Jan. 2014. The scoping document is currently being amended to include some traffic and safety improvements along the corridor in coordination with Mountain Iron and St. Louis County. The pavement recommendations for the divided highway section was changed from a bituminous overlay to a concrete pavement repair project. The need for this project is due to 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.6	\$ 8.8
Other Construction Elements:	\$ 0.8	\$ 0.5
Engineering:	\$ 0.8	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.2	\$ 10.6

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

Key Cost Estimate Assumptions

The current estimate is based on actual construction letting bid amounts. The estimate includes costs for pavement resurfacing, bridge rehabilitation and signal construction. The cost has increased because of the need to achieve bridge clearance over U.S. 53, an added signal system revision and additional concrete pavement repair.

Project Risks

Project risks include potential construction changes and traffic handling during bridge construction activities.

Schedule

Environmental Approval Date: 03/30/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/11/2016
Construction Limits Established Date: 8/11/2016
Original Letting Date: 05/19/2017
Current Letting Date: 06/9/2017
Construction Season: July 2017 - November 2018
Estimated Substantial Completion: Fall 2018



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

District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/17/2018

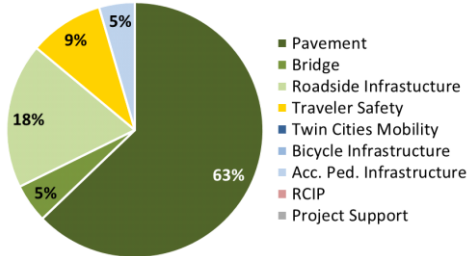
PROJECT SUMMARY

Hwy 169
Hwy 53 to County Hwy 26
Bridge 69088
State Project No. 6936-19

Primary Purpose

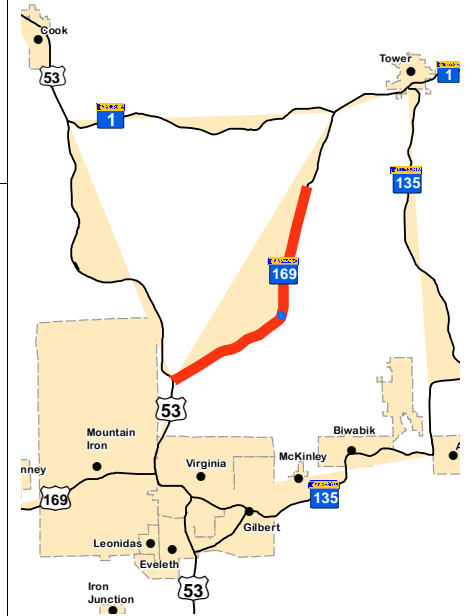
Performance-based Need: Pavement

Investment Category



Project Description

Project length is 13.044 miles. The project includes bituminous pavement resurfacing, culvert replacements and removing trees from the highway clear zone. Rehabilitation work on bridge 69088 over the Sandy River is included.



Recent Changes and Updates

The pavement repair recommendation consists of four different repair sections due to four different pavement distresses and includes removing up to 3" of pavement and adding up to 3" of new pavement, including shoulders.

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. The majority of the project area was last resurfaced in the late to mid 1990s. The 2015 pavement condition rating indicates the ride quality index is fair. Approximately 0.84 miles was added to the west end of the project to maintain a consistent pavement section through the corridor.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/16

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.5	\$ 6.0
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.1	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 7.1	\$ 7.8

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 prepared in February 2016. The current cost estimate was prepared in June 2017. The increase in cost was due to extending the job length by 0.84 miles. The estimate includes costs for pavement resurfacing, culvert work, tree removal and bridge rehabilitation.

Project Risks

The final pavement repair fix could change from when this project was programmed.

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: 10/25/19
Current Letting Date: 10/25/2019
Construction Season: Spring 2020 - Fall 2020
Estimated Substantial Completion: Fall 2020



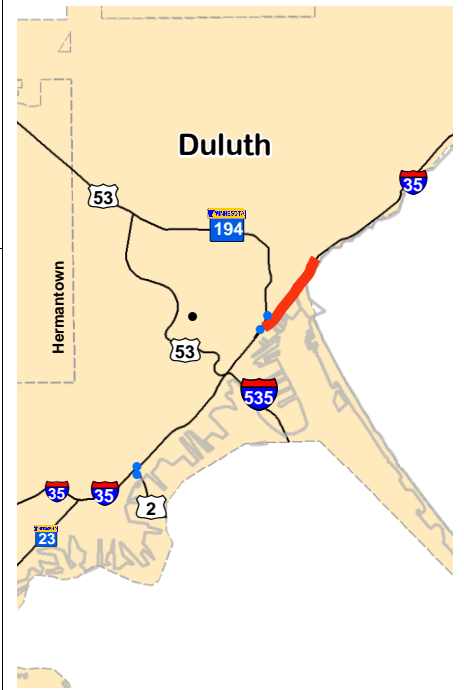
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Josie Olson

Revised Date: 12/17/2018

PROJECT SUMMARY

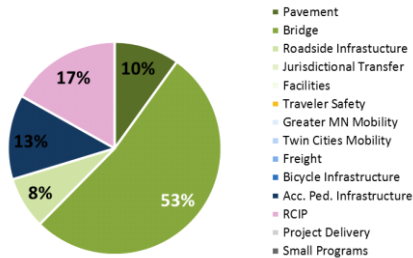
Hwy 2
In Duluth
Bridge 69101, 69102, 69839
State Project No. 6937-102
[Hwy 194/Mesaba Ave/Hwy 2 in Duluth](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

Located in Duluth, the project work includes bridge rehabilitation to bridge 69101 and 69102 on Hwy 2 and bridge 69839 on Hwy 194/Mesaba Ave. The rehabilitation work involves retrofitting the fracture critical pier caps. Traffic lane configuration changes will be made on bridge 69839. It also includes concrete pavement repair, storm sewer repair and ADA accessibility improvements on Hwy. 194/Mesaba Ave. between I-35 and Sixth Ave. East, a distance of 1.4 miles.

Recent Changes and Updates

This project was let and is under construction.

Project History

This project and the Hwy. 194/Mesaba Ave. (SP 6933-97) project are now tied together. When originally programmed, the bridge rehab work on Hwy. 2 (SP 6937-102) and Hwy. 194/Mesaba Ave. (SP 6933-95) were tied. In 2016, the Hwy. 194/Mesaba Ave. (SP 6933-97) pavement repair, ADA improvements and storm sewer repair project was tied to the bridge projects to better coordinate how traffic was handled during construction. Bundling these projects together resulted in a total cost estimate that fell in the major projects category.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 07/01/2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.8	\$ 7.4
Other Construction Elements:	\$ 0.6	\$ 0.6
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

The baseline cost estimate was prepared in Aug. 2016. The current estimate is based on actual bid letting costs. The estimates include bridge rehabilitation for SP 6937-102, a concrete pavement repair, storm sewer repair and ADA accessibility improvements for S.P. 6933-97.

Project Risks

Right of way or temporary rights to construct are needed so the ADA accessibility improvements can be made, which could impact project schedule. Duluth has a project on Superior St. in 2018-2020 that will require detouring traffic onto Mesaba Ave. The detour will require that bridge 69840 remain open with the consideration of deferring some or all of the bridge work associated with this project into construction season 2021.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Pending approval
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: 5/24/2016
Original Letting Date: 01/01/2018
Current Letting Date: 02/23/2018
Construction Season: Summer 2018
Estimated Substantial Completion: Fall 2018



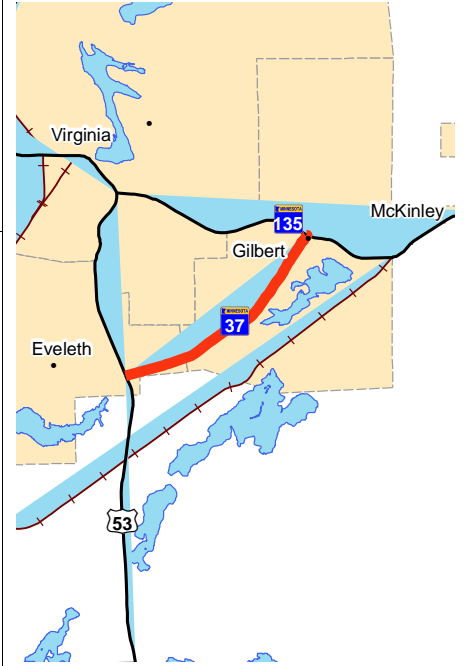
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/17/2018

PROJECT SUMMARY

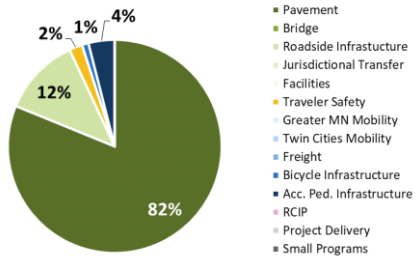
Hwy 37
US 53 to MN 135
State Project No. 6914-19



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is 3.7 miles long and extends from Hwy 53 to Hwy 135. Project improvements include: pavement resurfacing, drainage system improvements, curb ramp construction and sidewalk improvements in Gilbert. Gilbert will upgrade or replace its utilities along the highway with this project.

Recent Changes and Updates

Gilbert has committed to replacing or upgrading most of its sanitary sewer and water main along Hwy 37.

Project History

This is a new project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.4	\$ 6.0
Other Construction Elements:	\$ 0.4	\$ 0.5
Engineering:	\$ 1.0	\$ 1.2
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.9	\$ 7.8

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

Key Cost Estimate Assumptions

The baseline was completed in April 2017. The current estimate was prepared in Aug. 2018. The estimates include bituminous resurfacing and other road improvements. Also included in the estimates are pedestrian improvements within Gilbert. The increase in cost is due to more pedestrian improvements.

Project Risks

Coordination with Gilbert to include its utilities into the plan set. Right of way needs throughout the project area. Contaminated materials located with the project limits.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Need unknown
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Need unknown
Original Letting Date: 1/1/19
Current Letting Date: 11/22/2019
Construction Season: Spring 2020
Estimated Substantial Completion: Fall 2020



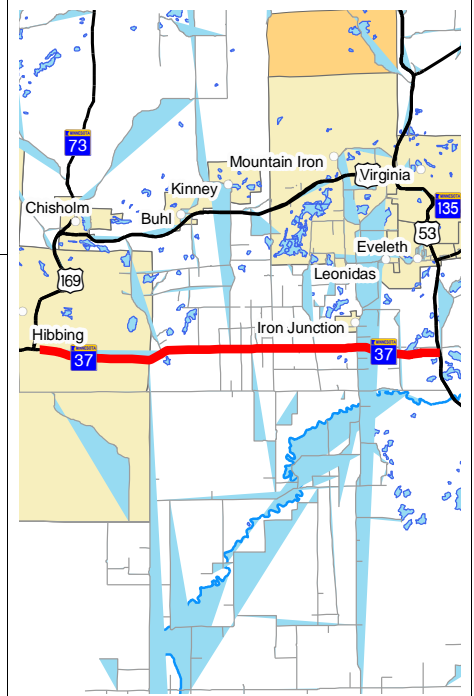
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Doug Kerfeld

Revised Date: 12/17/2018

PROJECT SUMMARY

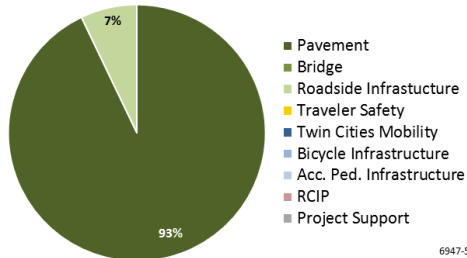
Hwy 37
Hwy 169 in Hibbing to Hwy 53
State Project No. 6947-50



Primary Purpose

Performance-based Need: Pavement

Investment Category



6947-50

Project Description

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

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.2	\$ 4.2
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.4	\$ 5.6

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

Recent Changes and Updates

Construction of this project was completed in summer 2018.

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. A project scoping report was completed in January 2015. The original letting date was changed to meet balanced letting requirements. The project is currently in the final design phase and is on schedule for letting in Dec. 2016. Construction was started in summer 2017 but was not completed. The project will carry over into summer 2018.

Key Cost Estimate Assumptions

This job was let in December 2016. The current estimate is based on actual bid letting amounts. The estimate includes costs for pavement resurfacing and drainage improvements.

Project Risks

Construction is complete, no risks remain.

Schedule

Environmental Approval Date: 12/12/2016
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: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: Spring 2018



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

District Engineer: Duane Hill
Project Manager: Randy Costley

Revised Date: 12/17/2018

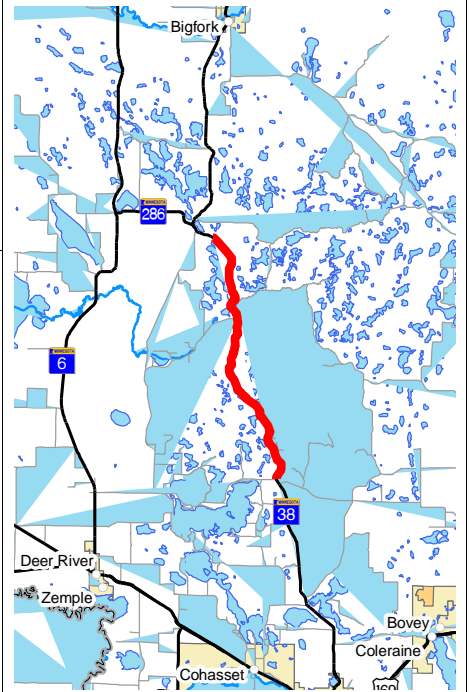
PROJECT SUMMARY

Hwy 38

County Road 19 to Marcell

State Project No. 3108-70

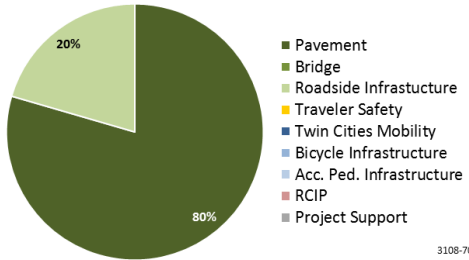
[Hwy 38 Resurfacing and Culvert Replacement Project](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



3108-70

Project Description

The project is 14 miles long, from County Road 19 to Marcell. The work consists of pavement resurfacing, drainage and other road improvements. The project also includes intersection improvements at the Hwy 38 intersections with both County Road 48 and County Road 49. 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.

Recent Changes and Updates

The letting date was delayed until Jan. 2018 due to right of way acquisition timing. The project was let and construction started in March 2018. Construction is on schedule for completion in fall 2018.

Project History

The project on Hwy 38 took longer than anticipated due to District 2 workload. There were two intersection improvement projects requiring project coordination with Itasca County. Additional time was needed to complete the Hwy 38 design and include County Road 48 and County Road 49 improvements. This additional time resulted in moving the letting date from Oct. 2017 to Dec. 2017. The project design is on schedule for delivery in March 2017, however the right of way acquisition process took longer than anticipated resulting in moving the construction letting date to fall 2017 with construction scheduled for 2018. The environmental assessment for property acquisition in the Chippewa National Forest was started in 2015. The purpose of this project is to recondition and resurface the existing highway to improve ride quality, extend the useful life and reduce maintenance costs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 12.2	\$ 8.1
Other Construction Elements:	\$ 1.0	\$ 0.8
Engineering:	\$ 2.3	\$ 2.3
Right of Way:	\$ 0.3	\$ 1.5
Total:	\$ 15.8	\$ 12.7

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

Key Cost Estimate Assumptions

The baseline estimate was completed in June 2013. The current cost estimate is the actual construction letting cost. Both estimates include costs for bituminous resurfacing and other road improvements. The current construction letting cost was lowered because of less subgrade correction needed. There was an increase to the projected right of way acquisition cost.

Project Risks

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

Schedule

Environmental Approval Date: 5/16/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 3/14/2016
Original Letting Date: 01/02/2009
Current Letting Date: 1/26/2018
Construction Season: 2018
Estimated Substantial Completion: Fall 2018



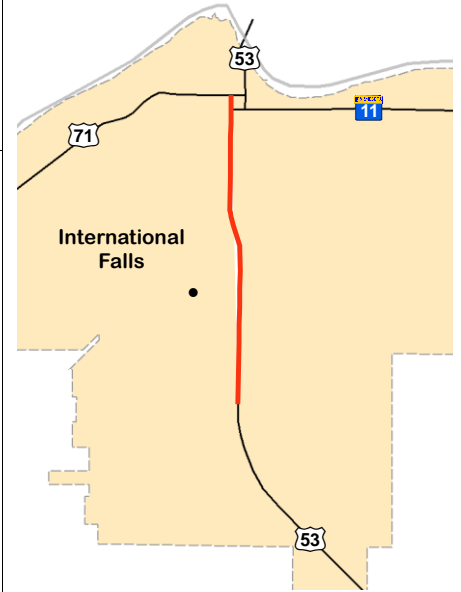
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/17/2018

PROJECT SUMMARY

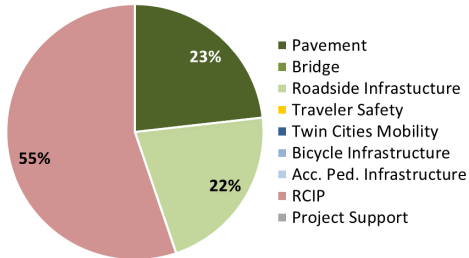
Hwy 53
In International Falls
State Project No. 3608-48



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

Project length is 1.6 miles. The project work includes pavement rehabilitation, storm sewer replacement, traffic signals and ADA accessibility improvements. The ADA improvements will include replacement of all curb and gutter and sidewalk.

Recent Changes and Updates

Geometric layout and construction limits are substantially complete. The cost for this project has increased based on: extending the project limits south to Memorial Drive, north to the International Bridge, reconstruction of curb and gutter, storm sewer, sidewalk and pavement to meet ADA requirements while minimizing impacts to adjacent private properties.

Project History

A consultant was hired to help deliver this project. Meetings with International Falls began Sept. 2017 to help define the future vision of the highway. A "complete streets" approach was used. Originally programmed for funding in FY 2015, the project was deferred due to funding constraints. Complying with ADA requirements significant sidewalk and curb and gutter replacement couldn't be funded in FY 2015 so the project was moved to FY 2020. The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs, and reduced load carrying capacity. The majority of the project area was last resurfaced in 1999. The 2015 pavement condition rating indicates the ride quality index varies from fair to poor.

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: 4/24/15
Current Letting Date: 10/25/2019
Construction Season: Spring 2020 - Fall 2020
Estimated Substantial Completion: Fall 2020

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.3	\$ 8.8
Other Construction Elements:	\$ 0.4	\$ 0.6
Engineering:	\$ 1.0	\$ 1.9
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.8	\$ 11.4

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

Key Cost Estimate Assumptions

The baseline estimate was prepared in March 2016. The current cost estimate was completed in Aug. 2018. Both estimates include costs for pavement rehabilitation, storm sewer replacement, traffic signals and ADA accessibility improvements. The cost increase is due to the need to lower the elevation of the road for pedestrian improvements.

Project Risks

Municipal consent from International Falls and their level of funding under the cooperative construction agreement is a risk. Risk encountering contaminated soils in International Falls could impact cost. There is a need for additional right of way or temporary rights to construct so that ADA improvements can be made which could impact schedule. Maintaining access to business from Hwy 53 during construction may be difficult resulting in potential controversy.



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

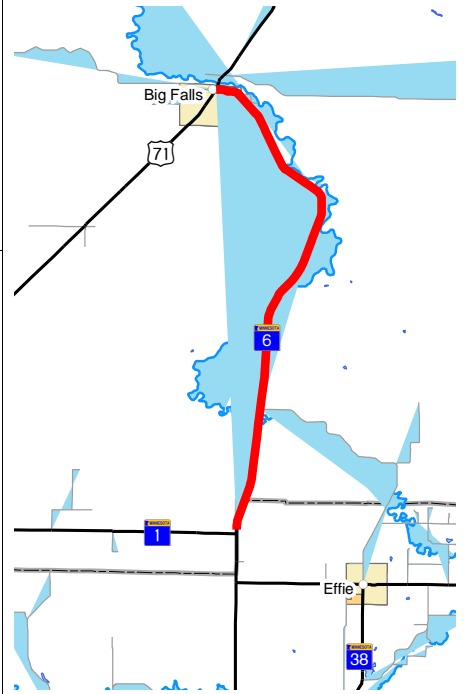
District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 6

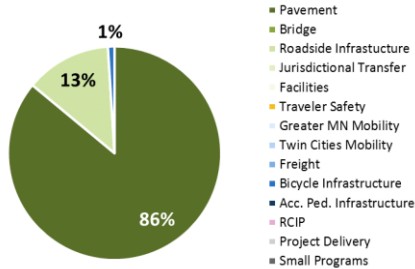
On Hwy 6 from just north of Hwy 1 to Big Falls
State Project No. 3603-14



Primary Purpose

Performance-based Need: Pavement

Investment Category



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.

Recent Changes and Updates

As noted in the Key Cost Estimate Assumptions, the baseline estimate was prepared in December 2014 during scoping. The current estimate prepared in July 2018 is based on a thinner pavement section being used than what was originally scoped.

Project History

This pavement resurfacing project is programmed for construction in calendar year 2019. Adding short segments of wider shoulders in select areas for truck pull-offs will be explored. Letting date changed for balanced letting purposes. The need for the project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs and reduced load carrying capacity. The 2015 pavement condition rating indicates the ride quality index is fair.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.2	\$ 6.1
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 9.0	\$ 8.1

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 Dec. 2014 before the project was scoped. The estimate includes costs for pavement resurfacing. The current estimate was prepared in July 2018. The reason for the lowered estimate was due to a thinner pavement section being needed.

Project Risks

The extent of the pavement repair has not been fully determined. Truck pull-off areas could result in wetland impacts and require right of way. Loggers/truckers who use the highway would like to see more substantial work than what is being planned such as wider shoulders, passing lanes, etc. resulting in possible controversy.

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: 11/16/2018
Construction Season: Spring 2019 - Fall 2019
Estimated Substantial Completion: Fall of 2019



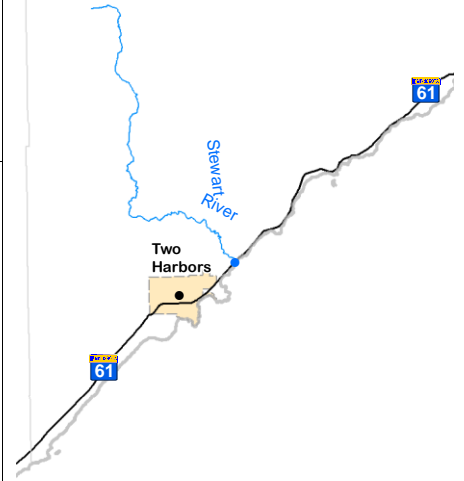
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/17/2018

PROJECT SUMMARY

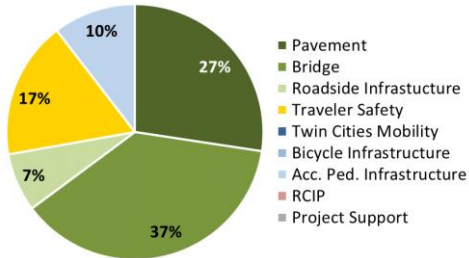
Hwy 61
Hwy 61 at Stewart River
Bridge 3589
State Project No. 3805-99



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

Rehabilitation of Hwy 61 bridge over the Stewart River. This bridge is designated as a historic bridge so more work is necessary to determine what the full project description will be.

Recent Changes and Updates

The project purpose and need has been determined. A consultant is currently performing an alternatives analysis study and environmental document.

Project History

A consultant was hired during the summer of 2017 to perform an alternatives analysis study and environmental document. This will aid in developing the project scope, schedule and budget. The Minnesota Department of Transportation is currently working with the Federal Highway Administration on the purpose and need for the project. This spandrel filled arch was originally constructed in 1924 and widened in 1939. This bridge is one of 24 bridges that MnDOT has committed to preserving.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/16

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.2	\$ 5.2
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.2	\$ 0.2
Total:	\$ 6.8	\$ 6.8

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 Feb. 2016 and includes cost for bridge repair.

Project Risks

Risks will be identified after the scoping document is completed. Traffic handling during construction will be a major risk depending on the project scope.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: Need unknown
Original Letting Date: 1/1/16
Current Letting Date: 1/31/2020
Construction Season: Spring 2020 - Fall 2020
Estimated Substantial Completion: Fall 2020



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

District Engineer: Duane Hill
Project Manager: Derek Fredrickson
Revised Date: 12/17/2018

PROJECT SUMMARY

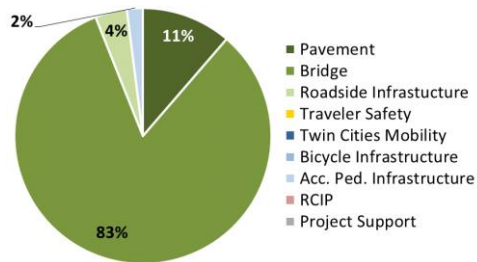
Hwy 61
Hwy 61 Silver Creek Crossing
Bridge 5648
State Project No. 3805-79



Primary Purpose

Performance-based Need: Pavement Condition and Bridge Condition

Investment Category



Project Description

The project is a realignment and bridge replacement at Silver Creek on Hwy 61. The project is about a mile long.

Recent Changes and Updates

The final geometric layout is being developed.

Project History

Discussions continue with the Minnesota Department of Natural Resources on trail needs under and across the new bridge. The construction season was updated to more accurately reflect actual month of start and complete. The scoping document was signed on March 30, 2016. The project includes building a new bridge over Silver Creek and realigning TH 61 to accommodate the new bridge placement. The existing structure is two 10' by 10' box culverts. Silver Creek is a trout stream and is one of the top three priorities for the DNR to have converted into a natural bottom. Bridge 5648 has deteriorated and needs to be replaced. The pavement in the project area has deteriorated and is in the need of preventative maintenance to restore ride quality, which is part of the statewide plan to replace or improve deficient bridges on state highways and also to improve ride and extend the useful life of the highway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 11/5/2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.7	\$ 4.6
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.9	\$ 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 was prepared in March 2016. The current estimate was completed in Aug. 2017. Both estimates include costs for new pavement and a new bridge.

Project Risks

Bridge and highway embankment costs are dependent on the presence of rock and muck. The Minnesota Department of Natural Resources requested a bike trail under the bridge and across the bridge. The funding from the DNR is a risk. If right of way acquisition is needed for the project, the cost to acquire the right of way is a risk.

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: 1/27/17
Current Letting Date: 1/31/2020
Construction Season: May 2020 - November 2020
Estimated Substantial Completion: Fall 2020

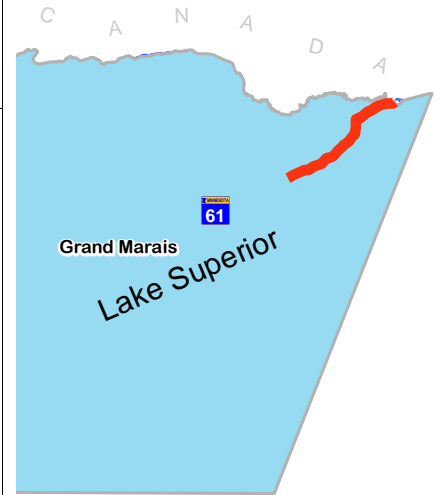


Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Derek Fredrickson
Revised Date: 12/17/2018

PROJECT SUMMARY

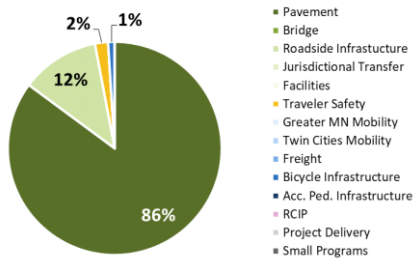
Hwy 61
Reservation Bay Rd to US/Canadian Border
State Project No. 1604-45



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

Pavement resurfacing, culvert replacement/repairs, guardrail replacement and turn lane construction on Hwy 61 between Reservation Bay Road and the US/Canada border. Other miscellaneous work include resurfacing of overlook parking areas and ADA upgrades in the Grand Portage Visitor Center. The project will require coordination with the Grand Portage Band and General Services Administration/US Customs.

Recent Changes and Updates

This is a new project.

Project History

The project is being scheduled as a fiscal year 2021 "ELLA" (early let, late award) so that construction work can begin in July 2020.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 12.8	\$ 12.6
Other Construction Elements:	\$ 1.1	\$ 1.1
Engineering:	\$ 2.2	\$ 2.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 16.1	\$ 16.1

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

Key Cost Estimate Assumptions

The baseline estimate was completed in March 2017. The current estimate was completed in Jan. 2018. Both estimates include bituminous resurfacing, hydraulics, roadside safety features and other road improvements.

Project Risks

Ongoing project coordination with the Grand Portage Band results in unanticipated work being requested that impacts cost and schedule. The General Services Administration/US Customs coordination results in unanticipated work as well. DNR or Grand Portage Band require more significant drainage structures at waterway crossings than what was scoped. Simple box culverts are not acceptable. Wetland permits encounter unanticipated US Army Corps of Engineers problems/delays. Additional right of way or easements are needed to construct bypasses so that deep culverts can be replaced or repaired while maintaining traffic on the highway. Northern long eared bats, a threatened and endangered species, impact the schedule for tree clearing.

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: 3/27/2020
Current Letting Date: 4/24/2020
Construction Season: 2020 and 2021
Estimated Substantial Completion: Fall 2021



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

District Engineer: Duane Hill
Project Manager: Thomas Prew

Revised Date: 12/17/2018

PROJECT SUMMARY

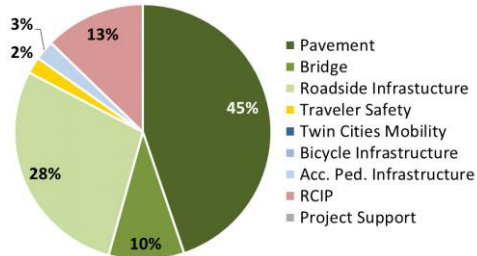
Hwy 61
Around Grand Marais
Bridge 8295, 8294
State Project No. 1602-50
[Hwy 61 Reconstruction Project in Cook County](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This is an urban/rural project. Project length is 11.23 miles. Grand Marais urban reconstruction includes box culvert replacement, pavement rehabilitation, lane reduction, accessibility improvements and traffic signal replacements. Project contains pavement rehabilitation north and south of Grand Marais.

Recent Changes and Updates

Geometric layout and municipal consent were approved in Feb. 2018. Consultant designer is on schedule to deliver a 60 percent complete plan set in Aug. 2018. District 1 continues to work with the Grand Marais community on landscaping preferences and construction staging/ traffic impacts anticipated with the project.

Project History

Layout is being developed to include a city trail from 8th Avenue West to the Gunflint Trail (8th Avenue E.). This project was programmed as a pavement rehabilitation. Grand Marais received a transportation alternatives program grant to extend the trail system. The trail will be incorporated into the state's plan.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.5	\$ 8.5
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 11.0	\$ 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 and current cost estimate were prepared in Feb. 2016 before the final scoping document was completed. The estimate includes costs for urban reconstruction, pavement rehabilitation, accessibility improvements and box culvert replacement.

Project Risks

Project risks include city and county costs, utility conflicts and environmental permits.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Pending approval
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: 7/27/2017
Original Letting Date: 12/21/2018
Current Letting Date: 5/17/19
Construction Season: Spring 2019 - Fall 2020
Estimated Substantial Completion: Fall 2020



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

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/17/2018

PROJECT SUMMARY

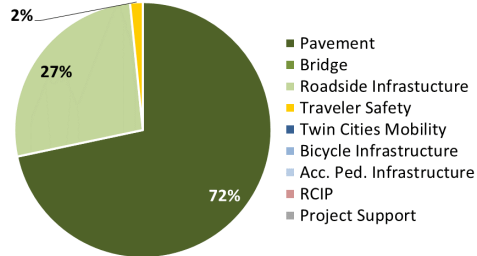
Hwy 65
Hwy 200 to Hwy 169
State Project No. 3111-30



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is almost 26 miles of bituminous pavement resurfacing from the Jct. of Hwy 200 in Jacobson to Hwy 169 in Pengilly.

Recent Changes and Updates

Since the project was developed as a flexible letting project, when the district selected the final letting date, the letting date was changed.

Project History

This project was programmed based on pavement needs. The project was developed as a flex project with a flexible letting. Plans are at 90 percent complete.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 7/1/2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 11.7	\$ 10.8
Other Construction Elements:	\$ 1.1	\$ 1.0
Engineering:	\$ 2.1	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 14.9	\$ 13.8

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 May 2014 and includes costs for pavement resurfacing. The current estimate was completed in Feb. 2016. The price difference was due to an anticipated decrease in bituminous cost.

Project Risks

Environmental permits.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 3/24/2016
Original Letting Date: 4/27/18
Current Letting Date: 1/25/19
Construction Season: Summer 2019 - Fall 2019
Estimated Substantial Completion: Fall 2019



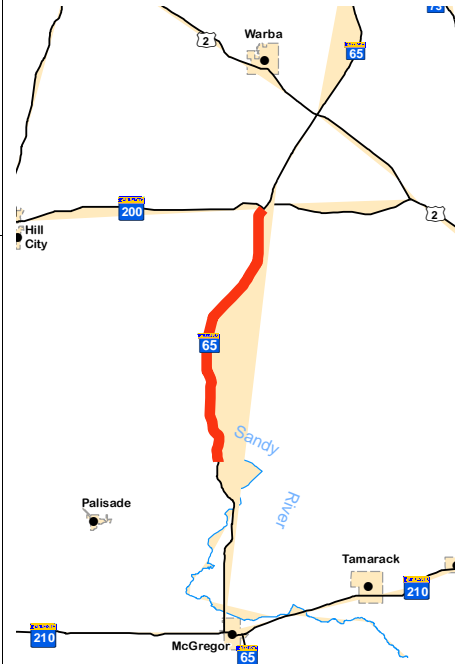
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Randy Costley

Revised Date: 12/17/2018

PROJECT SUMMARY

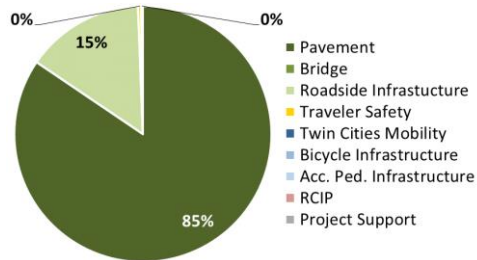
Hwy 65
South Sandy River to Hwy 200
State Project No. 0112-52



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is a bituminous pavement resurfacing of about 17 miles.

Recent Changes and Updates

The letting date was changed to Feb. 22, 2019 to better balance the overall program.

Project History

This project reconditions and resurfaces 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: 7/1/2015

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 5.7
Other Construction Elements:	\$ 0.6	\$ 0.5
Engineering:	\$ 1.3	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.7	\$ 7.4

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 Aug. 2015. The current cost estimate was prepared in Feb. of 2018. Both estimates includes costs for bituminous pavement resurfacing. The cost estimate was lowered due to lower prices for bituminous pavement.

Project Risks

Environmental permits for drainage improvements.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Need unknown
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: Pending approval
Original Letting Date: 1/1/18
Current Letting Date: 12/21/18
Construction Season: Spring 2019 - November 2019
Estimated Substantial Completion: Fall 2019



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

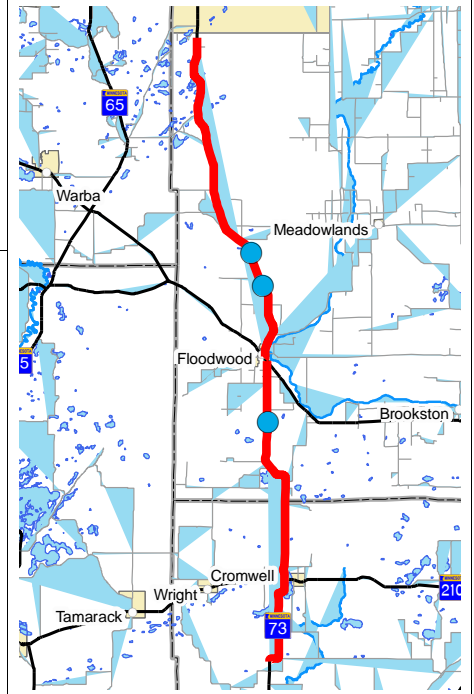
District Engineer: Duane Hill
Project Manager: Randy Costley

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 73

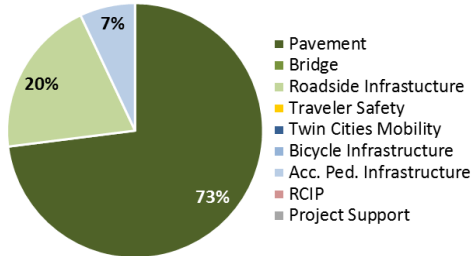
Various locations on Hwy 73 and Hwy 2 that includes Cromwell and Floodwood
State Project No. 6928-28



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

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

Recent Changes and Updates

The project was let to a contractor in July 2018 and construction is anticipated to start in late summer 2018 and continue through the 2019 construction season. All temporary property easements were acquired for the construction project.

Project History

The project design included narrowing the roadway section and eliminating on-street parking on the north half of Hwy 73 in Floodwood. Public outreach with Floodwood continues as part of project development. Temporary property easements will be required from residences as a result of sidewalk replacement. The easement acquisition process has started. The letting date changed from June 2018 to July 2018 to balance district letting schedules. District 1 staff coordinated with Floodwood to determine utility upgrades that would be finished with MnDOT's project. The letting date changed from FY 2018 to FY 2019 as a result of overall program needs. The project scoping was completed in Aug. 2015. 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	\$ 9.7
Other Construction Elements:	\$ 0.8	\$ 0.9
Engineering:	\$ 1.6	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 10.9	\$ 11.0

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 Jan 2014 before the final scoping report was completed. The current estimate was prepared in April 2016 and includes costs for pavement resurfacing and drainage improvements.

Project Risks

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

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: 01/01/2018
Current Letting Date: 7/27/2018
Construction Season: Summer 2018
Estimated Substantial Completion: 6/15 /2019



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

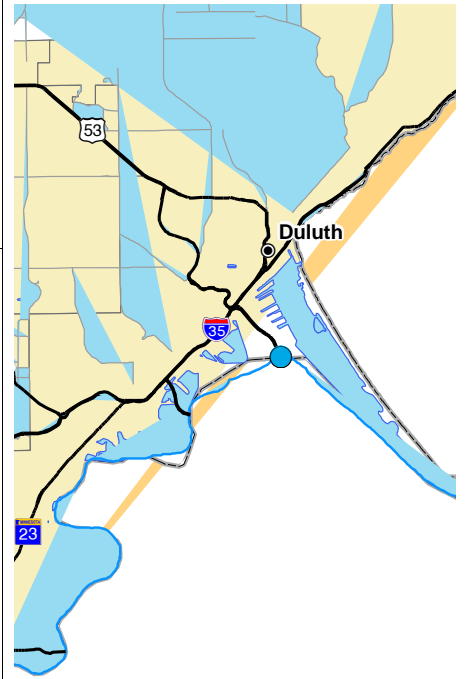
District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/17/2018

PROJECT SUMMARY

I-535

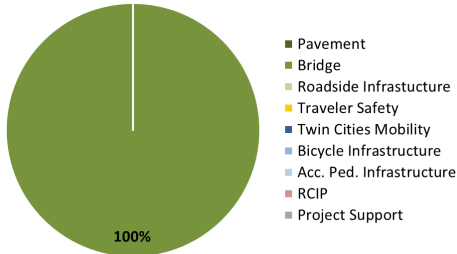
Blatnik Bridge over the St. Louis River between Duluth, MN and Superior, WI
Bridge 9030
State Project No. 6981-9030L



Primary Purpose

Performance-based Need: Bridge Condition.

Investment Category



Project Description

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

Recent Changes and Updates

No changes.

Project History

This bridge rehabilitation project is scheduled for construction years 2019 and 2020. The project was moved to FY 2020 for Wisconsin DOT funding/programming purposes. 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.6	\$ 9.1
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.6	\$ 11.1

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

Key Cost Estimate Assumptions

The baseline cost estimate was prepared in April 2015 prior to scoping. The estimate included costs for bridge painting. The current estimate was prepared in Feb 2016 after scoping was complete. 50 percent of the project cost will be paid for by WisDOT. The current estimate includes both the Wisconsin and Minnesota project cost.

Project Risks

The project will require cost sharing with the state of Wisconsin and their funding may not be available until 2020 or later. The bridge management plan being developed will result in a change to scope or schedule of this project. Fracture critical bridge inspections done prior to this project identify additional work that needs to be done to keep the bridge serviceable.

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: 12/20/2019
Construction Season: 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: 12/17/2018

PROJECT SUMMARY

Hwy 169

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

State Project No. 6934-116

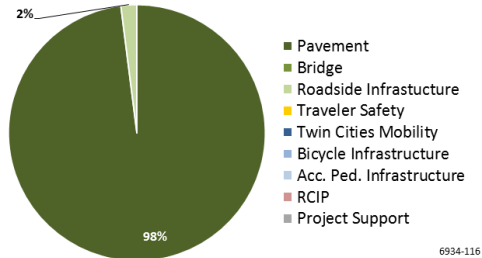
[Hwy 169 in Hibbing \(St. Louis County\)](#)

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

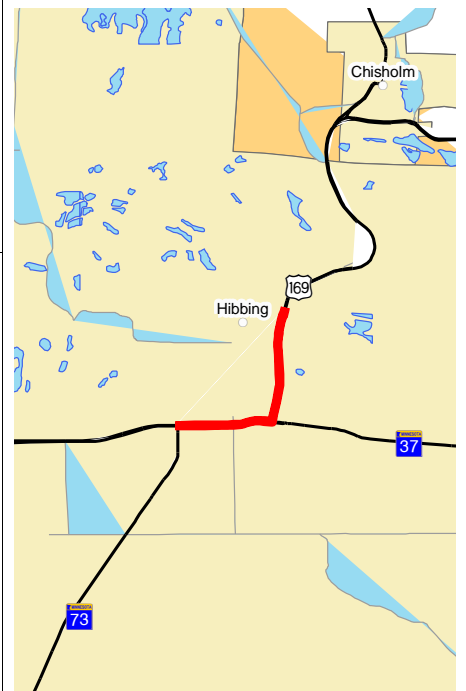
Investment Category



6934-116

Project Description

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



Recent Changes and Updates

Project was completed fall 2017.

Project History

Construction began in July 2017 and is scheduled to be completed in Oct. 2017. The project was programmed for construction in 2017 as part of the statewide managed program to improve pavement condition on the national highway system. The need for this project is driven by deteriorating pavement resulting in a rough ride, high maintenance costs and reduced load carrying capacity. The majority of the project area was last resurfaced in 2000. The 2015 pavement condition rating indicates the ride quality index is fair.

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	\$ 2.9
Other Construction Elements:	\$ 0.4	\$ 0.5
Engineering:	\$ 0.8	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 4.4

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

Key Cost Estimate Assumptions

The baseline estimate was prepared in June 2014. Work on some additional roadway segments within the project limits were added to the project. The current estimate is based on the actual bid letting amount and includes costs for pavement resurfacing and drainage improvements. The decreased estimate amount is due to lower than anticipated bituminous prices.

Project Risks

A minor risk exists with the possibility of encountering contaminated soils.

Schedule

Environmental Approval Date: 1/18/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 4/28/2016
Original Letting Date: 05/19/2017
Current Letting Date: 03/24/2017
Construction Season: 2017
Estimated Substantial Completion: October 2017



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

District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/17/2018

PROJECT SUMMARY

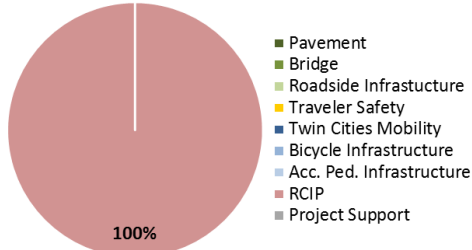
Hwy 169
County Road 15 to County Road 7
Bridge 31X09
State Project No. 3116-142
~~Hwy 169 Cross-Range Expressway~~

Substantially Complete

Primary Purpose

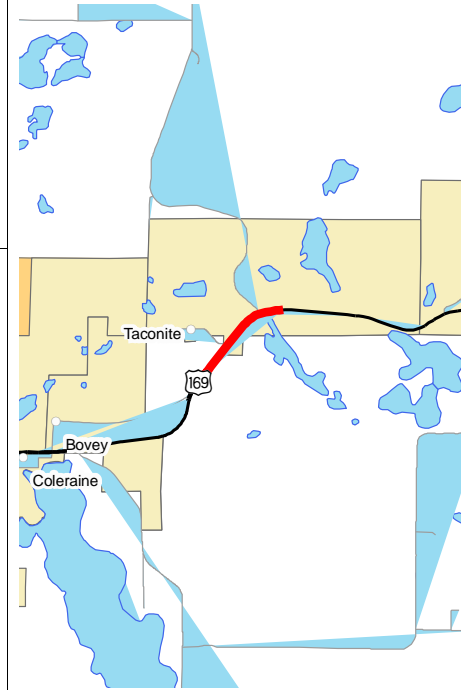
Performance-based Need: Regional & Community Improvement Priority

Investment Category



Project Description

This is a corridors of commerce project that is an expansion from two lanes to four lanes on Hwy 169 from county road 15 to county road 7.



Recent Changes and Updates

The project was not completed until June 2018. The contract was a working day contract that allowed for work to continue into 2018 if needed due to weather and actual field conditions.

Project History

This project was let in June 2016 and construction started in Sept. 2016. The construction is scheduled for completion in Oct. 2017. The re-evaluation of the environmental assessment was completed in July 2015. 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 corridors of commerce program. Project design began in late 2013 and is currently at the 60 percent 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	\$ 5.9
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 2.1	\$ 1.8
Right of Way:	\$ 0.5	\$ 0.5
Total:	\$ 12.3	\$ 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 cost estimate was prepared in Feb. 2014 and includes costs for constructing a four-lane roadway with bituminous pavement, drainage facilities and a bridge/box culvert. The current estimate is based off of actual costs from the first year substantially complete project report. The price decrease from the baseline estimate is due to lower than anticipated bituminous costs.

Project Risks

The project is completed.

Schedule

Environmental Approval Date: 7/16/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 10/23/2015
Construction Limits Established Date: 3/13/2015
Original Letting Date: 06/03/2016
Current Letting Date: 06/03/2016
Construction Season: 2016/2017
Estimated Substantial Completion: Summer 2017



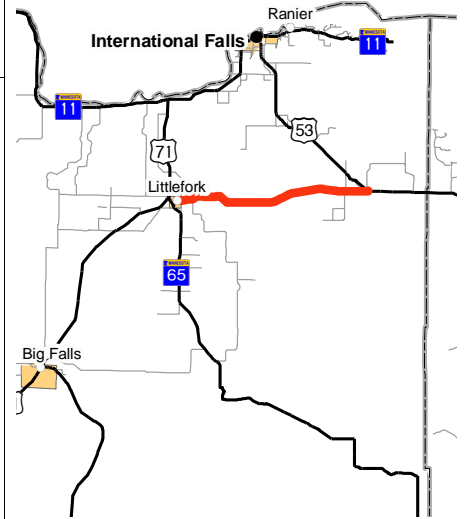
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Michael Kalnbach

Revised Date: 12/17/2018

PROJECT SUMMARY

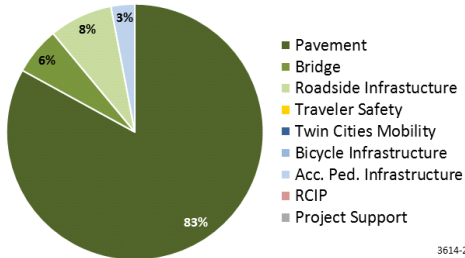
Hwy 217
Little Fork to Hwy 53
Bridge 9028A
State Project No. 3614-20
Substantially Complete



Primary Purpose

Performance-based Need: Pavement condition

Investment Category



3614-20

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. 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

Construction was completed Oct. 2016.

Project History

As noted in the key cost estimate assumptions, the baseline estimate was prepared during scoping. Since scoping, it was determined that a thinner pavement section could be utilized resulting in the lower current estimate. Little Fork will install 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 estimated at \$185,500. This is a pavement rehabilitation project slated for the 2016 fiscal year. It was 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	\$ 0.3
Engineering:	\$ 1.9	\$ 1.1
Right of Way:	\$ 0.2	\$ 0.3
Total:	\$ 11.6	\$ 6.5

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 Jan. 2016. The scope of the pavement repair was changed after the baseline estimate lowering cost. Much of the project work will now consist of a thinner pavement surface. The current estimate is based off of second year substantially complete costs that are verified.

Project Risks

No problems are anticipated.

Schedule

Environmental Approval Date: 12/16/2015
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

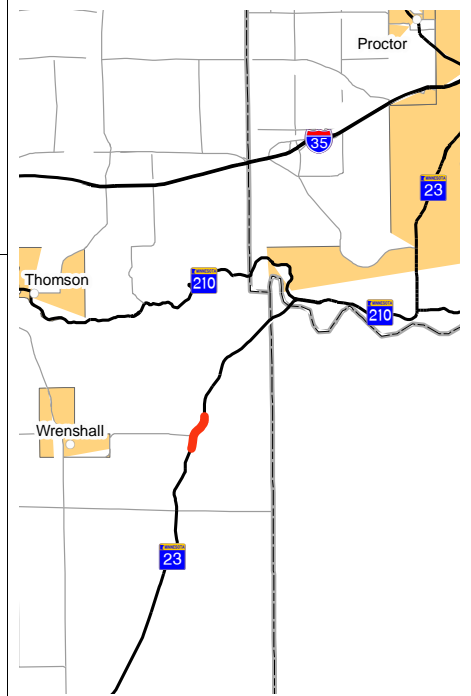
District Engineer: Duane Hill
Project Manager: Brian Larson

Revised Date: 12/17/2018

PROJECT SUMMARY

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

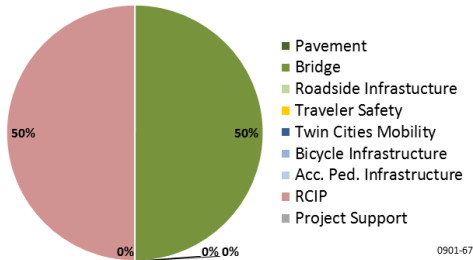
Substantially Complete



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

Project was completed in Nov. 2016

Project History

This project is in its second year of construction and is on schedule for a Nov. 2016 completion. This two-year project started in 2015. MnDOT needed to coordinate the development of this project with the BNSF railroad. 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 Aug. 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	\$ 3.1
Other Construction Elements:	\$ 0.2	\$ 0.3
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 Dec. 2014. The project cost was reduced from the baseline cost as a result of refining the roadway alignment and bridge design. The current estimate is based off of second year substantially complete costs that are verified.

Project Risks

The project is completed.

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: 2015/2016
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: 12/17/2018

PROJECT SUMMARY

Hwy 23
In Duluth, Becks Rd. to 84th Ave. West
Bridge 69091
State Project No. 6910-96

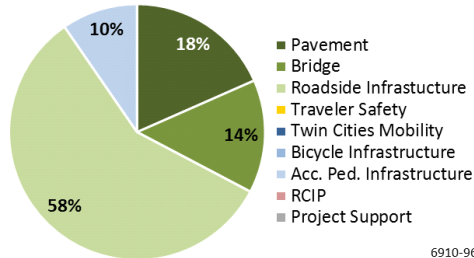
Substantially Complete



Primary Purpose

Performance-based Need: Pavement, Bridge and Roadside Infrastructure Condition

Investment Category



6910-96

Project Description

This is an urban/rural project in West Duluth on Hwy 23 from Becks Road to 84th Avenue West. The work includes pavement resurfacing, bridge construction over Knowlton Creek, drainage, safety, and sidewalk improvements.

Recent Changes and Updates

This project was substantially complete in spring 2017.

Project History

The letting of this project was delayed to complete design and acquire right of way. The delay to completing construction on SP 6910-89 required a later construction start to "Phase II." This project will require the whole construction season to achieve substantial completion. This project was let in spring 2016 and construction is on going. The bridge construction over Knowlton Creek is near completion. It was determined that the Munger Trail Bridge would be left as is. The culvert that goes under TH 23 and the Munger Trail was unable to be constructed with this project. It was added to SP 6910-103 in FY 2021. Project was previously included in SP 6910-89, but was divided to accommodate the construction of a bridge at Knowlton Creek. This project has just been developed. The pavement in this area is nearing the end of its remaining service life and without preventative maintenance the pavement will require major reconstruction. This project will 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	\$ 12.3
Other Construction Elements:	\$ 0.7	\$ 0.4
Engineering:	\$ 1.4	\$ 1.4
Right of Way:	\$ 0.8	\$ 0.3
Total:	\$ 11.5	\$ 14.4

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

Key Cost Estimate Assumptions

The baseline estimate was prepared in March 2014 and includes costs for bituminous milling and paving, bridge construction, drainage improvements, signal construction and ADA improvements. The project was let in April 2016. The current estimate is based off of second year substantially complete costs that are verified. This includes additional costs for bridge construction, slope repairs, sidewalk and some pavement reconstruction.

Project Risks

The project is complete. There are no remaining risks.

Schedule

Environmental Approval Date: 2/25/2015
Municipal Consent Approval Date: 8/27/2014
Geometric Layout Approval Date: 8/29/2014
Construction Limits Established Date: 4/1/2015
Original Letting Date: 02/26/2016
Current Letting Date: 4/22/2016
Construction Season: May 2016 - August 2017
Estimated Substantial Completion: Spring 2017



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

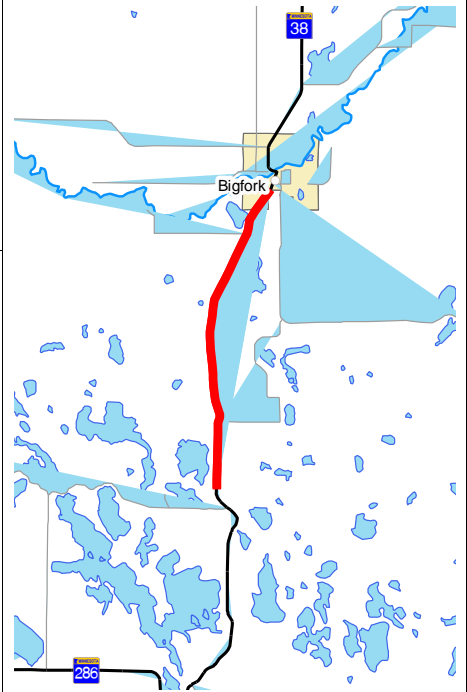
District Engineer: Duane Hill
Project Manager: Derek Fredrickson

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 38 & Hwy 286
Horseshoe Lake Rd to Bigfork and from Hwy 6 to Marcell
State Project No. 3108-76

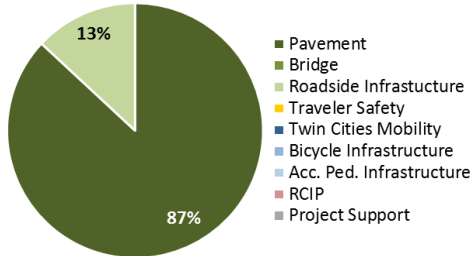
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

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 was constructed in summer 2017.

Project History

There are two segments of this project. 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. 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. The project is currently in the final design phase and is on schedule for letting in Feb. 2017.

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	\$ 2.0
Other Construction Elements:	\$ 0.3	\$ 0.5
Engineering:	\$ 0.7	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 4.9	\$ 2.9

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 in Feb. 2017. The current estimate is based off of first year substantially complete costs that are verified. The estimate includes costs for a bituminous mill and overlay on Hwy 38 and a bituminous mill and overlay on Hwy 286 with drainage improvements. The current cost estimate is lower than the base line estimate due to a lower than anticipated bituminous price and less of a need for subgrade repair.

Project Risks

The project pavement was completed in summer 2017. There are no remaining risks.

Schedule

Environmental Approval Date: 7/11/17
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: Summer 2017



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

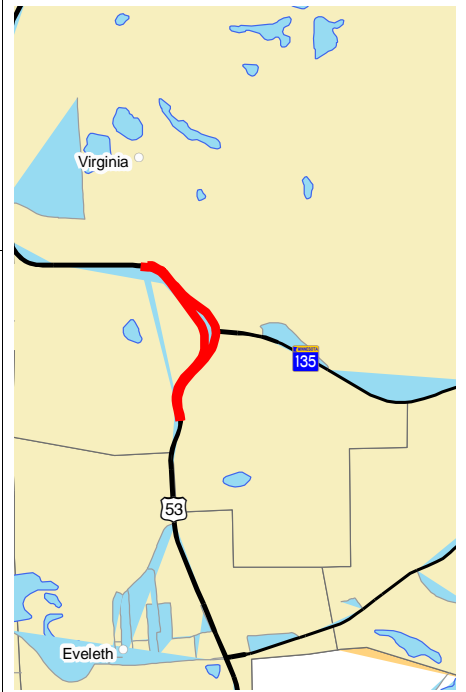
District Engineer: Duane Hill
Project Manager: Randy Costley

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 53
Between Eveleth and Virginia
Bridge 69129, 69130
State Project No. 6918-86

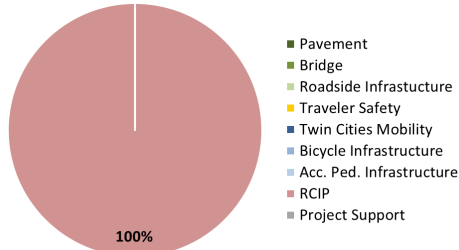
Substantially Complete



Primary Purpose

Performance-based Need: 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

The project is complete with the exception of minor work for a maintenance access road to bridge 69129. New Hwy 53 was opened to traffic on Sept. 16, 2017 and the easement area of old Hwy 53 was turned over to the landowner on Oct. 12, 2017, one month ahead of schedule.

Project History

The project is 93.5 percent complete. Once open, the existing highway infrastructure will be removed to make way for taconite mining. There will be final clean-up and minor work in spring 2018. The environmental impact statement and record of decision was completed in fall 2015. MnDOT negotiated an extension of the existing Hwy 53 until Nov. 15, 2017. The contractor was to construct alternative E2 around and across the Rouchleau Pit. Construction started Nov. 2, 2015. Traffic is scheduled to be on the new highway. Project completion is scheduled summer 2018. In 1960, US Steel granted MnDOT highway easement rights for Hwy 53. In 2010, the successor US Steel, United Taconite and RGGS Land and Minerals gave MnDOT notice that they were terminating easement rights. It expired 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	\$ 161.9
Other Construction Elements:	\$ 13.8	\$ 14.3
Engineering:	\$ 14.4	\$ 37.0
Right of Way:	\$ 0.0	\$ 17.1
Total:	\$ 88.2	\$ 230.3

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

Key Cost Estimate Assumptions

Current construction cost is projected to remain at \$162.4 million. This includes extra work required to complete the project within the project limits by MnDOT, Virginia, Virginia PUC and the Mesabi Trail. Major items include removal of bridges 69007 and 69008, unanticipated regulated waste cleanup, changes in city utilities and additional excavation and backfill of unsuitable soils. Total estimate after letting is \$244.8 million. This total includes all MnDOT costs for the above categories and construction cost for Virginia and VPUC utilities and relocation of the Mesabi Trail. 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. MnDOT is currently targeting a total project cost estimate of \$240 million based on what is known today.

Project Risks

All risks are retired.

Schedule

Environmental Approval Date: Fall 2015
Municipal Consent Approval Date: 4/14/2015
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: 12/17/2018

PROJECT SUMMARY

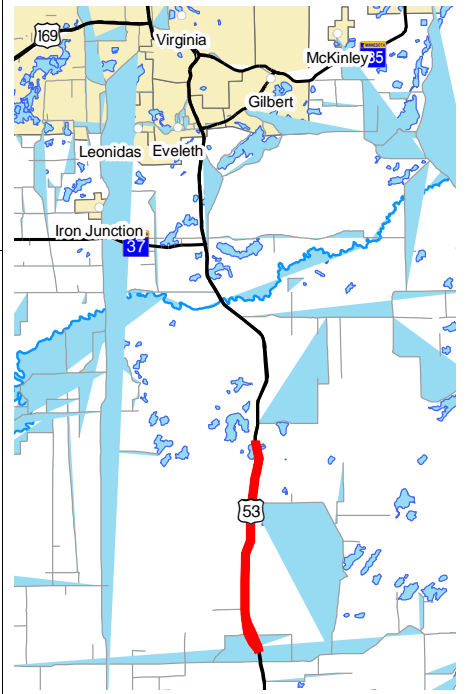
Hwy 53

Southbound from the Paleface River to Augusta Lake Rd.

Bridge 69022, 69071

State Project No. 6917-141

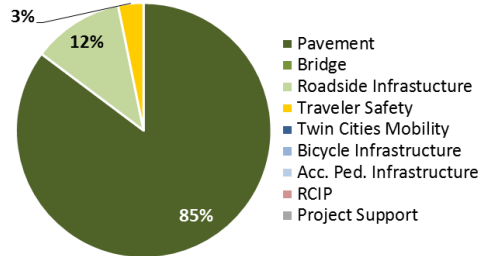
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is located on southbound Hwy 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 was constructed in summer 2016.

Project History

This segment of Hwy 53 was 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. The project design is completed and on schedule for letting in Dec. 2015.

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	\$ 2.2
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.5	\$ 0.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 3.1	\$ 2.6

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 Dec. 2015 and completed in summer 2016. The current estimate is based off of second year substantially complete costs that are verified. The price decrease from the baseline estimate is due to lower than anticipated bituminous costs.

Project Risks

The project is substantially complete. There are no remaining risks.

Schedule

Environmental Approval Date: 10/12/2016
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
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Randy Costley

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 53

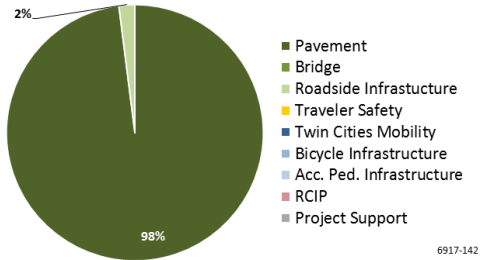
Central Lakes Road to the interchange with Hwy 37
State Project No. 6917-142

Substantially Complete

Primary Purpose

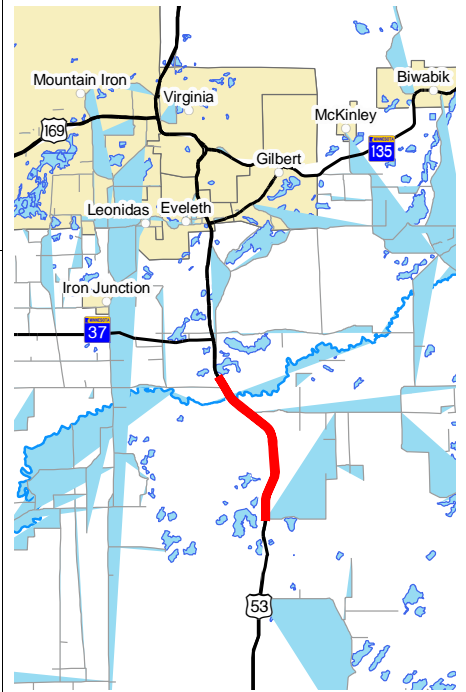
Performance-based Need: Pavement

Investment Category



Project Description

The project includes pavement rehabilitation work on northbound Hwy 53 from Central Lakes Road to the interchange with Hwy 37, and on southbound Hwy 53 from South Moon Lake Dr. to the interchange with Hwy 37.



Recent Changes and Updates

The project was constructed in summer 2016.

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. Due to rapidly deteriorating pavement condition, the project limits were increased, adding approximately 11 miles of pavement rehabilitation to the project and the letting date was moved from 4/28/17 to 7/22/16. The project design is complete, the project has been let and construction is scheduled to occur fall 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:	\$ 6.5	\$ 3.7
Other Construction Elements:	\$ 0.5	\$ 0.1
Engineering:	\$ 1.2	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.2	\$ 4.1

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

Key Cost Estimate Assumptions

The baseline estimate was prepared in Aug. 2013 and includes costs for pavement resurfacing. The project was let in July of 2016. The current estimate is based off of second rear substantially complete costs that are verified. The cost decrease is due to the removal of repair work at the Anchor Lake Rest Area.

Project Risks

The project is substantially complete. There are no remaining risks.

Schedule

Environmental Approval Date: 5/31/2016
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: 7/22/2016
Construction Season: Summer 2016 - Fall 2016
Estimated Substantial Completion: Summer 2016



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

District Engineer: Duane Hill
Project Manager: Randy Costley

Revised Date: 12/17/2018

PROJECT SUMMARY

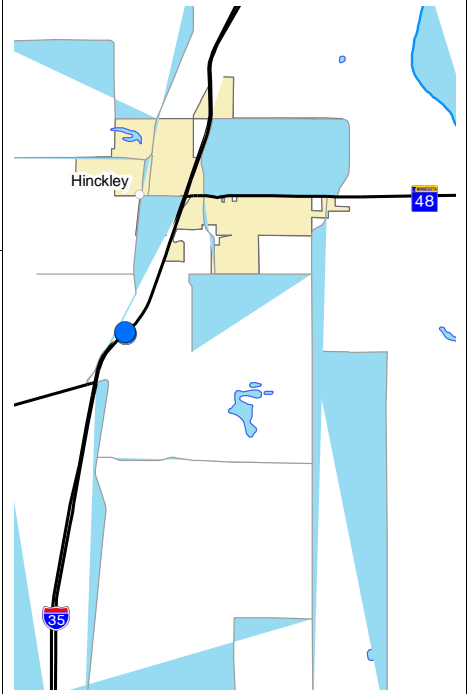
I-35

I-35 over the BNSF railroad south of Hwy 48

Bridge 9784, 9783

State Project No. 5880-186

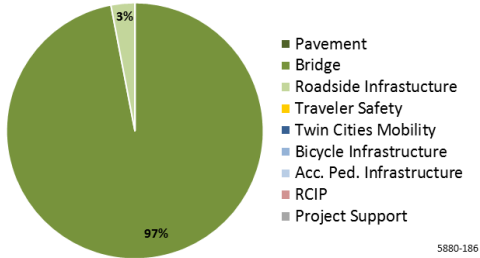
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



5880-186

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

Project was substantially completed in October 2016.

Project History

This project is tied to S.P. 5880-191, a concrete pavement project. Construction is underway with substantial completion in Oct. 2016. 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 under construction April-Oct. 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	\$ 3.1
Other Construction Elements:	\$ 0.4	\$ 0.2
Engineering:	\$ 1.1	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.2	\$ 3.8

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 Feb. 2014. The baseline estimate includes costs for bridge replacement, and approach grading. The current estimate is based off of second year substantially complete costs that are verified. The cost decrease was due to the grading portion of this job being moved to SP 5880-191.

Project Risks

The project is complete. There are no remaining risks.

Schedule

Environmental Approval Date: 6/18/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 7/29/2015
Construction Limits Established Date: 7/29/2015
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: 12/17/2018

PROJECT SUMMARY

I-35

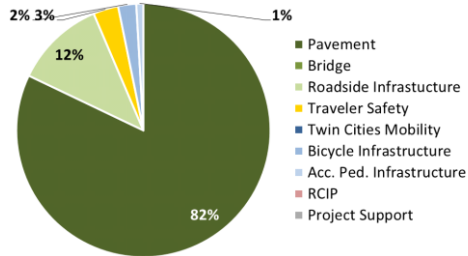
South of County Road 11 to 1 mile south of Hinckley
State Project No. 5880-191

Substantially Complete

Primary Purpose

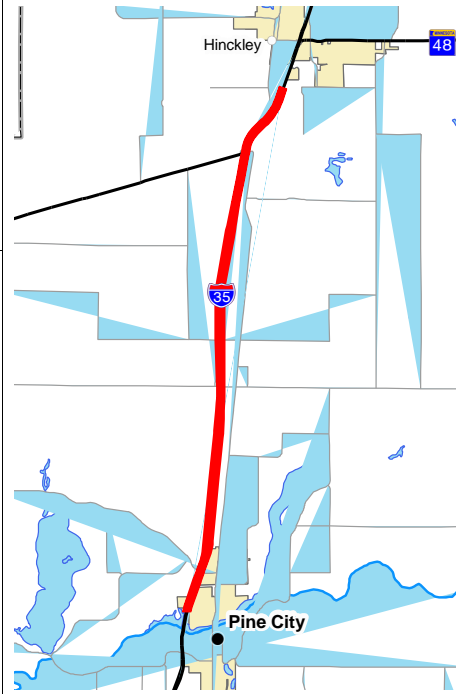
Performance-based Need: Pavement

Investment Category



Project Description

This project of almost 12 miles consists of a concrete overlay on I-35 from the Snake River at Pine to south of Hwy 48 at Hinckley.



Recent Changes and Updates

The project was substantially complete in Oct. 2016.

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	\$ 21.7
Other Construction Elements:	\$ 2.6	\$ 0.9
Engineering:	\$ 5.3	\$ 2.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 32.5	\$ 24.7

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 March 2015 and includes costs for concrete pavement resurfacing. The project was let in Jan. 2016. A decrease in the required pavement thickness resulted in a lower cost for the current estimate. The current estimate is based off of second year substantially complete costs that are verified.

Project Risks

The project is complete. There are no remaining risks.

Schedule

Environmental Approval Date: 12/22/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 8/13/2015
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: 12/17/2018

PROJECT SUMMARY

I-35

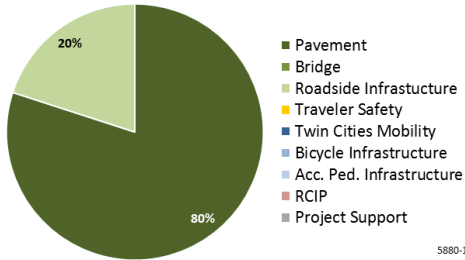
North of Pine County Rd. 33 to south of the Carlton County line
State Project No. 5880-180

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

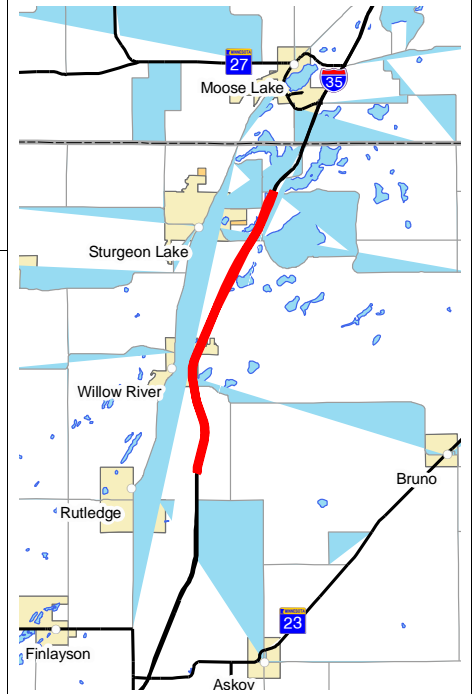
Investment Category



5880-180

Project Description

The project consists of a bituminous reclamation for 9 miles on I-35 from just north of Pine county road 33 to south of the Carlton county line in the Sturgeon Lake/Willow River area.



Recent Changes and Updates

The project was completed in Aug. 2017.

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	\$ 11.9
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 1.0	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 6.5	\$ 13.7

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

Key Cost Estimate Assumptions

This job was let in Dec. 2016. The current estimate is based off of first year substantially complete costs that are verified. The estimate includes costs for bituminous reclamation and drainage repair. The cost increase from the base estimate is due to the addition of the southbound lane into the project.

Project Risks

There are currently no outstanding risks on this project.

Schedule

Environmental Approval Date: 10/10/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 05/27/2016
Original Letting Date: 01/01/2012
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



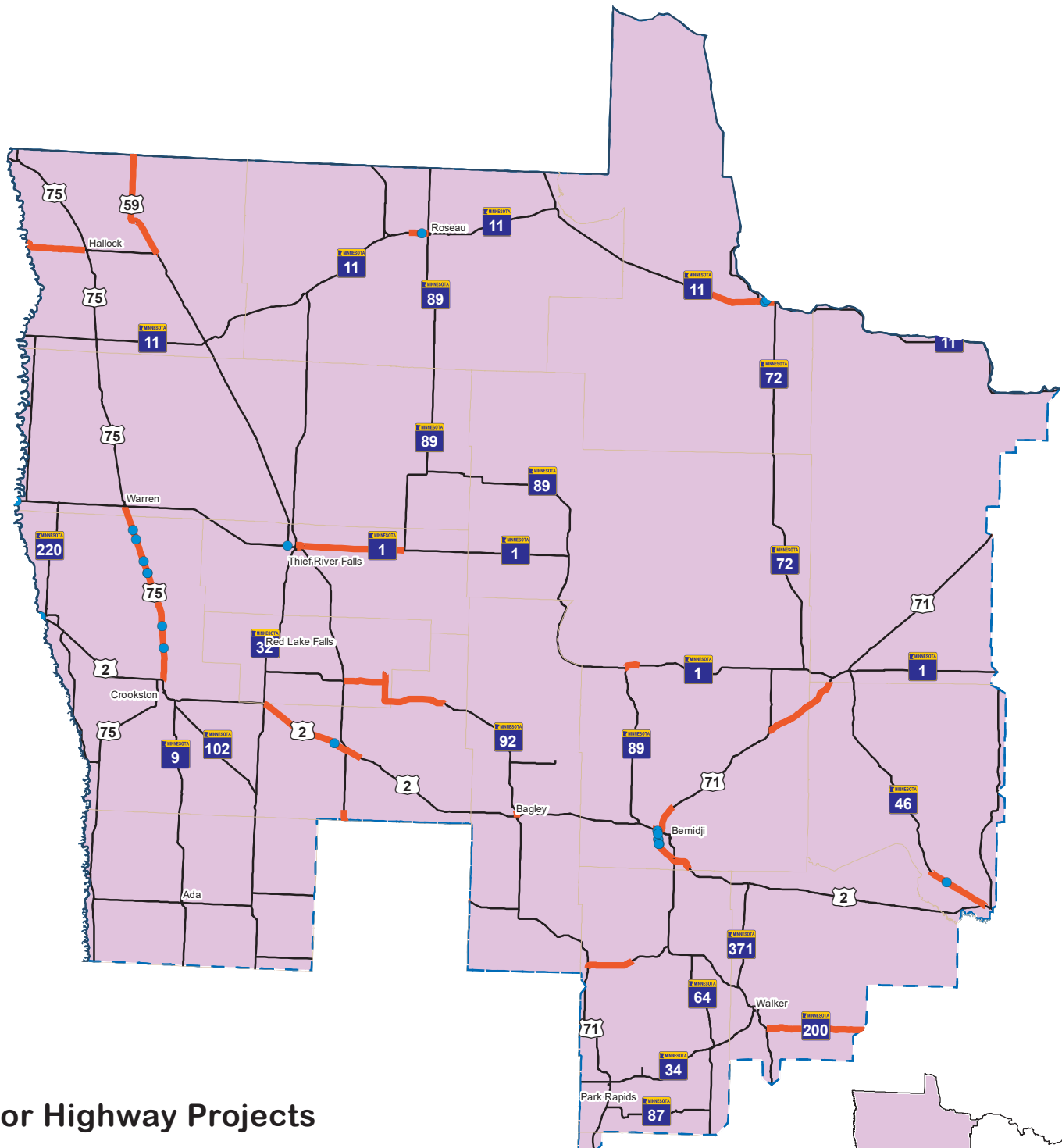
Minnesota Department of Transportation
District 1
1123 Mesaba Ave
(218) 725-2700

District Engineer: Duane Hill
Project Manager: Roberta Dwyer

Revised Date: 12/17/2018

Major Highway Projects 2018

D2-BEMIDJI



Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- - - Construction District

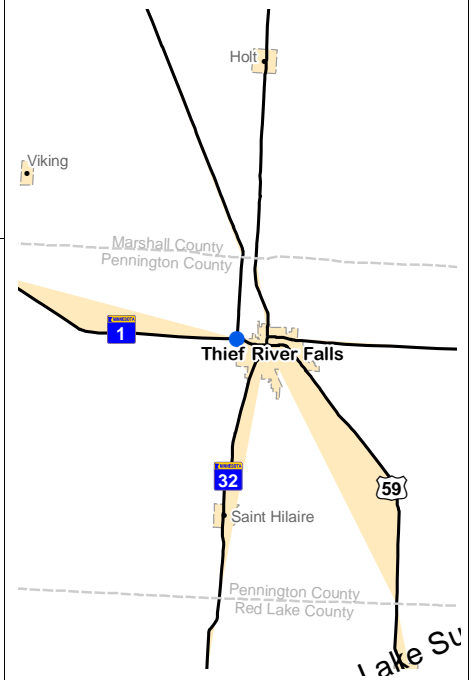
District 2 Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 1	5701-31	Intersection of Hwy 1 and Hwy 59, west of CSAH 16 to Kinney Ave	B 2	119
Hwy 1	5702-47	From Thief River Falls to MN 219	B 3	120
Hwy 1	0404-38	From Hwy 89 to 2.2 miles east of Hwy 89	B 4	121
Hwy 2	6004-24	In Erskine	B 5	122
Hwy 2	6004-26	From Hwy 32 to the west end of Erskine, eastbound lanes	B 6	123
Hwy 2	6018-02	Kennedy Bridge over the Red River in East Grand Forks	B 7	124
Hwy 2	6001-61	From East Grand Forks to Fisher, Westbound	B 8	125
Hwy 200	1106-15M	From Walker to Hwy 84	B 9	126
Hwy 72	3905-09	In Baudette over the Rainy River	B 10	127
Hwy 75	6011-29	From Hwy 2 to Polk Hwy 19	B 11	128
Hwy 92	1507-66	In Bagley	B 12	129
Hwy 11	6802-27	From CSAH 15 to Roseau	B 13	130
Hwy 11	3901-41	Over 7 miles west of Baudette on Hwy 11 to Baudette	B 14	131
Hwy 175	3515-16	North Dakota Border to Hallock	B 15	132
Hwy 2	0406-60	Bemidji Bypass	B 16	133
Hwy 59	3505-19	From Hwy 175 to the Canadian border	B 17	134
Hwy 71	2906-18	From south of Hwy 200 to southern limits of Lake George	B 18	135
Hwy 75	6011-24	From north of Hwy 2 to south of Hwy 1 in Warren	B 19	136
Hwy 46	3109-41M	From Hwy 2 to Itasca Hwy 39	B 20	137
Hwy 71	0410-50	From Hwy 197 to 5 miles North of Bemidji	B 21	138
Hwy 71	0411-17	From Hwy 72 in Blackduck to 100 feet north of Itasca/Koochiching Co. Line	B 22	139

PROJECT SUMMARY

Hwy 1

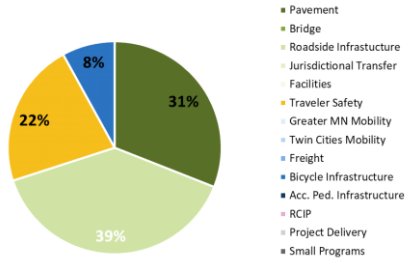
Intersection of Hwy 1 and Hwy 59, west of CSAH 16 to Kinney Ave.
State Project No. 5701-31



Primary Purpose

Performance-based Need: Interregional
Corridor Mobility

Investment Category



Project Description

The project consists of reconstructing MN 1 from west of CSAH 16 to Kinney Avenue. Improvements to MN 1 include curb & gutter, roundabouts, frontage roads and a multi-use trail.

Recent Changes and Updates

The west limits of this project were extended to coordinate with the Thief River Falls Flood Diversion project, received preliminary approval from the city of Thief River Falls on the geometric layout, which includes three roundabouts at CSAH 16, Barzen Ave, and Brooks Ave.

Project History

MN 1 is a minor arterial route serving Digi-Key Electronics and Arctic Cat, two main employers in Thief River Falls. Due to increased development along the corridor, the highway functions more like an urban section. MN 1 has experienced 10 crashes in the last three years, double the statewide average. Regional attractions like the fairgrounds and the arena warrant the addition of a pedestrian/bicycle connection. There is very poor drainage throughout this area.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2020

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.0	\$ 3.0
Other Construction Elements:	\$ 1.9	\$ 1.9
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.1	\$ 0.1
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

Other Construct Elements includes local cost shares from the City of Thief River Falls and Pennington County.

Project Risks

There is a railroad crossing owned by Minnesota Northern between Kinney Ave and Brooks Ave on MN 1. The cost for the rail crossing is part of the other construction elements category contingency.

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: 02/28/2020
Current Letting Date: 02/28/2020
Construction Season: 2020
Estimated Substantial Completion: Nov-2020



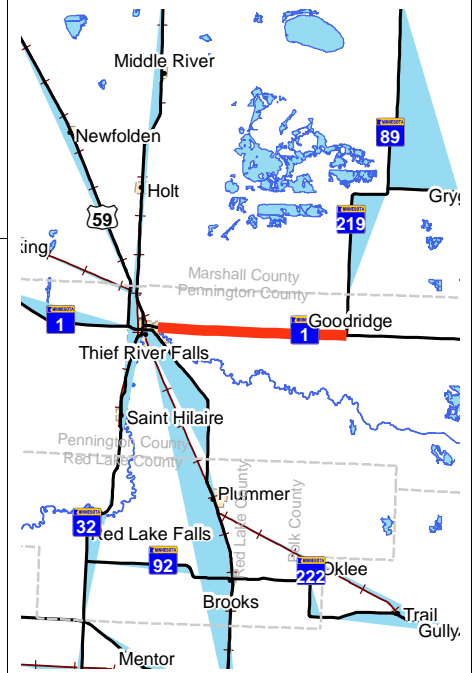
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Joe McKinnon

Revised Date: 12/17/2018

PROJECT SUMMARY

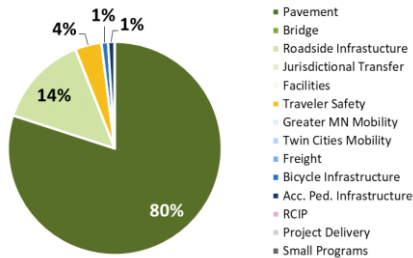
Hwy 1
Thief River Falls to MN 219
State Project No. 5702-47



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of reclaiming 15.9 miles of pavement, replacing one centerline and 16 entrance culverts.

Recent Changes and Updates

Project is under development.

Project History

Pavement surface ride quality index on Hwy 1 is projected to drop below acceptable conditions by 2022. Pavement surface gets extremely rough through the winter. Centerline and entrance culverts are in poor condition. Project was scoped in March 2017.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.4	\$ 6.4
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.0	\$ 0.0
Right of Way:	\$ 1.1	\$ 1.1
Total:	\$ 7.8	\$ 7.8

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 developed based on 2015 historical cost data and uses an inflation factor tied to the midpoint of the 2021 construction season.

Project Risks

No risks at this time.

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: 03/27/2020
Current Letting Date: 03/27/2020
Construction Season: 2020
Estimated Substantial Completion: Sep-2020



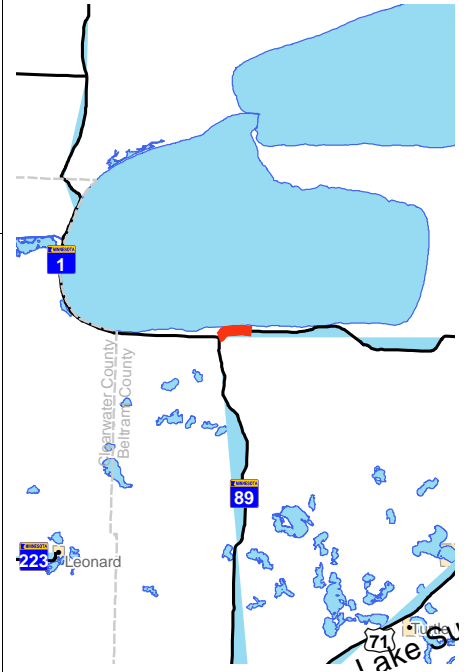
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Stephen Frisco

Revised Date: 12/17/2018

PROJECT SUMMARY

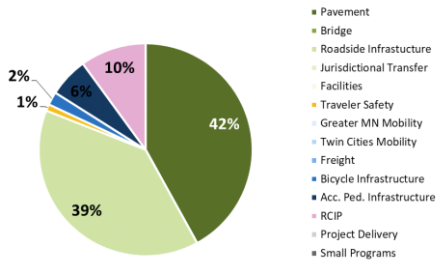
Hwy 1
Hwy 89 to 2.2 miles east of Hwy 89
State Project No. 0404-38



Primary Purpose

Performance-based Need: Roadside
Infrastructure Condition

Investment Category



Project Description

The project will consist of a urban reconstruct in Red Lake and replacement of twin 72" centerline culverts with a box culvert at Pike Creek. MN 1 will be reconstructed as an urban section with curb and gutter, storm sewer, sidewalk and a multi-use trail.

Recent Changes and Updates

The letting date is an authorization date for transfer of funds from the state to the Red Lake Indian Reservation. Red Lake Indian Reservation is leading the project.

Project History

MN 1 is the primary east-west corridor through the Red Lake Nation. The highway is a minor arterial receiving approximately 5,000 vehicles per day. The proposed section is located within the city limits of Red Lake and serves the Red Lake Elementary School, Red Lake High School, Red Lake Nation College, and Red Lake Public Safety Facility. The purpose of the project is to improve pedestrian and bicycle accessibility, to improve drainage, and to provide a smooth riding surface for the traveling public. Red Lake Tribal Roads will lead the project including survey, design and construction of the project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.2	\$ 4.9
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.9	\$ 0.9
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

There is a contingency of \$500,000 for contaminated materials. Red Lake received \$130,000 in TAP funds to construct a 0.5 mile multi-use trail along MN 1.

Project Risks

Pedestrian and bike facilities have the potential of being built off the permitted easement.

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: 12/15/2018
Current Letting Date: 12/15/2018
Construction Season: 2019
Estimated Substantial Completion: Nov-19



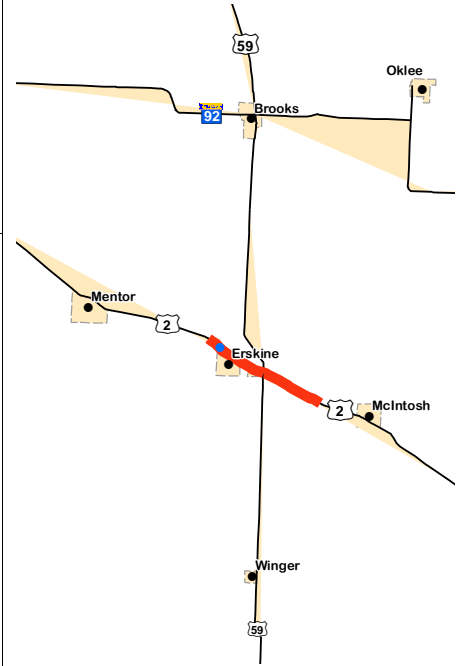
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Jeremy Hadrava

Revised Date: 12/17/2018

PROJECT SUMMARY

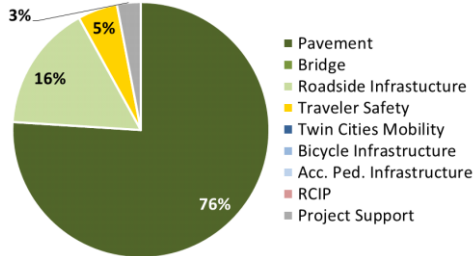
Hwy 2
In Erskine
Bridge 60006, 60007
State Project No. 6004-24
[Hwy 2 Reconstruction Project, Erskine](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of replacing 5.5 miles of concrete pavement, replacing curb and gutter, replacing or repairing failing drainage infrastructure, constructing an auxiliary lane at the railroad crossing and rehabilitating two bridges.

Recent Changes and Updates

Project was let and awarded as a design-build contract. Construction will begin in the fall 2018.

Project History

The pavement surface ride quality on US 2 and US 59 ramps are projected to drop below acceptable levels by 2018. Culverts and storm sewers along the corridor are over 40 years old. There were several rear-end crashes at the railroad crossing because trucks are required to stop before crossing the tracks on a high speed multilane highway. The bridge at the west end of the project has separated joints causing voids underneath the pavement. Project was advanced to 2018, Bridge 91262 rehabilitation was removed from this project and included in SP 6003-34. Pavement improvements at the Erskine weigh station and rehabilitation of Bridges 60006 & 60007 (Hwy 59 Overpass) were added.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.4	\$ 12.3
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.7	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.5	\$ 14.4

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

Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2015 historical cost data and uses an inflation factor tied to the midpoint of the construction season. The rehabilitation of Bridges 60006 & 60007 (Hwy 59 overpass) and pavement improvements at the Erskine weigh station was added to this project resulting in an increase of the current estimate. Current construction letting amount is based on bid amount.

Project Risks

The weigh station and rest area adjacent to project will be impacted by construction staging. Local traffic and businesses may be disrupted during construction.

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: 04/18/2018
Construction Season: 2018/2019
Estimated Substantial Completion: Nov-19



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

District Engineer: JT Anderson
Project Manager: Jim Bittmann

Revised Date: 12/17/2018

PROJECT SUMMARY

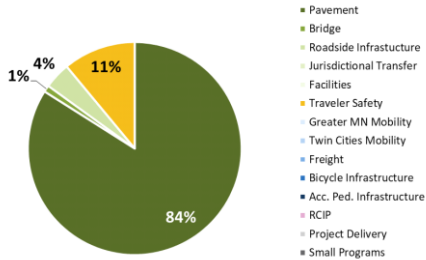
Hwy 2

Hwy 32 to the west end of Erskine, eastbound lanes
State Project No. 6004-26

Primary Purpose

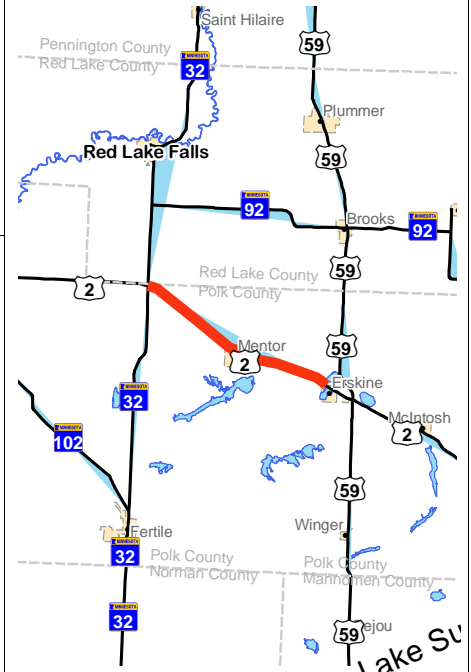
Performance-based Need: Pavement

Investment Category



Project Description

The project consists of a concrete pavement replacement on US 2 eastbound. The project will include culvert replacements and new edge drains. The project also has proposed turn lane construction, extensions and median removals. The project will include safety improvements to the intersection of US 2 and MN 32 which is a sustained crash location.



Recent Changes and Updates

This is a new project being added to the 2019-2022 STIP.

Project History

This project takes place in the western half of District 2 where the topography is flat and predominately surrounded by farmland with floodplains located nearby but not within the project limits (Red River Valley). This project is on the eastbound lanes of US 2 which extends through Marcoux, Mentor and the west limits of Erskine. Located within these limits is the Western Prairie Fringed Orchid which is protected. Crossover locations are still to be determined.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: In the 2019-2022 draft STIP for FY 2021

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 24.5	\$ 24.5
Other Construction Elements:	\$ 1.2	\$ 1.2
Engineering:	\$ 4.7	\$ 4.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 30.4	\$ 30.4

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

Key Cost Estimate Assumptions

This project is being added to the STIP. The cost estimate was done using 2016 prices, inflated to the midpoint of the 2020 construction season.

Project Risks

Project cannot be completed under traffic, so will need to be crossed over to the westbound lane.

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: 09/25/2020
Current Letting Date: 09/25/2020
Construction Season: 2021
Estimated Substantial Completion: Nov-21



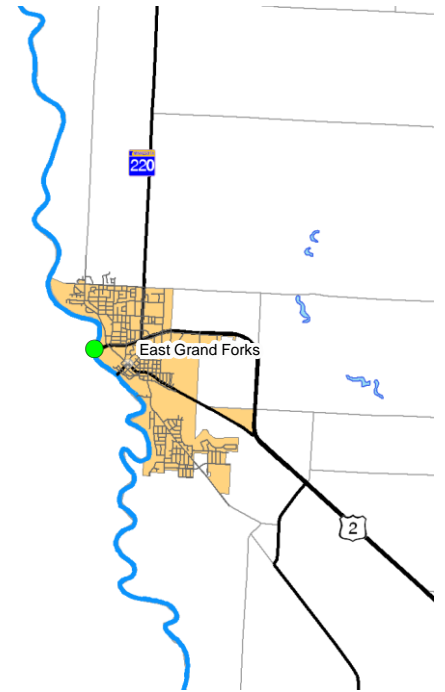
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Laura Hadrava

Revised Date: 12/17/2018

PROJECT SUMMARY

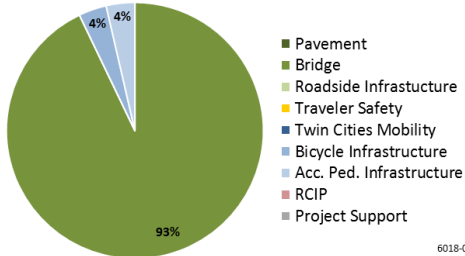
Hwy 2
Kennedy Bridge over the Red River in East Grand Forks
Bridge 9090
State Project No. 6018-02
[Hwy 2 Kennedy Bridge, East Grand Forks](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



6018-02

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

Pier was replaced, bridge deck is complete, currently painting the bridge. Painting is likely to be finished in the 2019 construction season.

Project History

A planning study was completed in early 2014, and determined that a bridge rehabilitation project was 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.

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	\$ 7.9
Other Construction Elements:	\$ 0.0	\$ 8.8
Engineering:	\$ 2.5	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 27.5	\$ 17.6

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

Key Cost Estimate Assumptions

Other Construction Elements represents North Dakota's cost share. Cost savings can be attributed to reducing the scope from a reconstruct to a rehabilitation. The current estimate is the construction letting amount.

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: 9/9/2016
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: 12/02/2016
Construction Season: 2017, 2018, & 2019
Estimated Substantial Completion: Jun-19



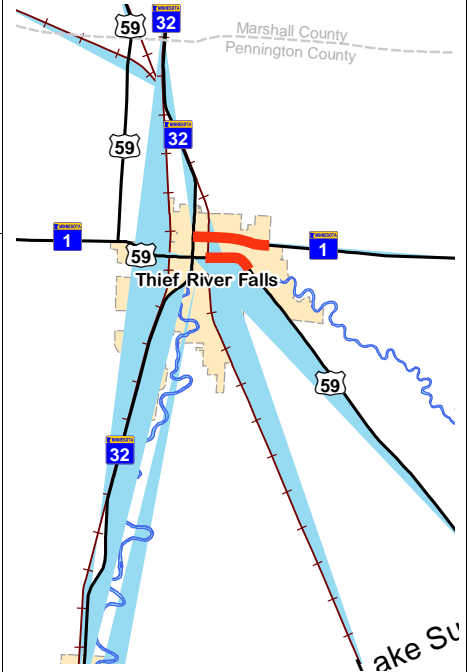
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Joe McKinnon

Revised Date: 12/17/2018

PROJECT SUMMARY

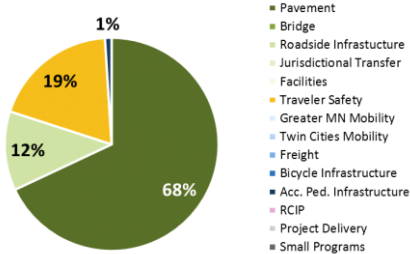
Hwy 2
East Grand Forks to Fisher, Westbound
State Project No. 6001-61



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of resurfacing 15.1 miles of pavement, replacing or repairing failing drainage infrastructure and constructing and extending turn lanes.

Recent Changes and Updates

Project limits were shortened. The west limits were originally just east of the intersection with MN 220, but now they are at 7th Ave NE because a concrete rehabilitation project was done in 2013 up to 7th Ave NE, so that area is already in good shape. Road Weather Information System (RWIS) and weigh-in motion infrastructure was added to the project.

Project History

Pavement surface ride quality index on US 2 is projected to drop below acceptable level by 2020. Centerline culverts are identified to be in poor condition. Project was first scoped in May 2017.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 10.8	\$ 10.8
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.0	\$ 1.8
Right of Way:	\$ 1.8	\$ 0.0
Total:	\$ 13.1	\$ 13.1

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

Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2015 historical cost data and uses an inflation factor tied to the midpoint of the 2021 construction season.

Project Risks

American Crystal Sugar factory is adjacent to the project and has high truck traffic in the fall. There is currently a planning study at the intersection of US 2 and US 2B which may result in an intersection improvement included with this project.

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: 2021
Current Letting Date: 2021
Construction Season: 2021
Estimated Substantial Completion: Nov-21



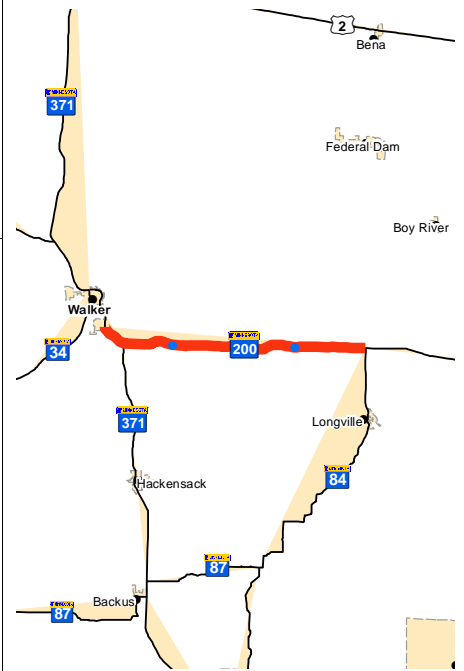
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Nancy Graham

Revised Date: 12/17/2018

PROJECT SUMMARY

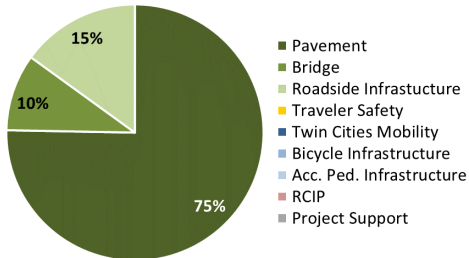
Hwy 200
Walker to Hwy 84
Bridge 8136, &, 8533
State Project No. 1106-15M



Primary Purpose

Performance-based need: Pavement Condition

Investment Category



Project Description

The project consists of resurfacing 15.5 miles of pavement, 3.3 miles of shoulder widening, reconstructing two box culvert bridges, replacing 13 culverts, paving shoulders and constructing 14 turning lanes.

Recent Changes and Updates

The project scope was expanded on the first 3.3 miles to include shoulder widening. Shoulder widening will improve safety for motor vehicles, bicyclists and pedestrians. With that upscope, more survey and environmental review were needed which led to a delay in the project.

Project History

The project received additional Highway Safety Improvement Program funds to pave the shoulders an additional 2 feet. The purpose of the project is to extend the useful service life of the pavement, to provide a smooth riding surface for the traveling public, to provide a structurally sound and reliable bridge crossing on TH 200 over Bag Creek and Cedar Creek, to perpetuate existing roadside infrastructure, to improve traffic safety, reduces crashes along the corridor and to improve the accommodations for bicycles and pedestrians.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.1	\$ 10.6
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.7	\$ 12.2

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 developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the construction season. The cost increase is attributed to the shoulder widening on the first 3.3 miles of the project.

Project Risks

The project is lengthy and there may be local and recreational traffic impacts. Road conditions may degrade and increase project duration or cost. The project requires additional coordination with the Leech Lake Band of Ojibwe and Chippewa National Forest.

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: 10/26/2018
Current Letting Date: 11/20/2020
Construction Season: 2021
Estimated Substantial Completion: Sep-21



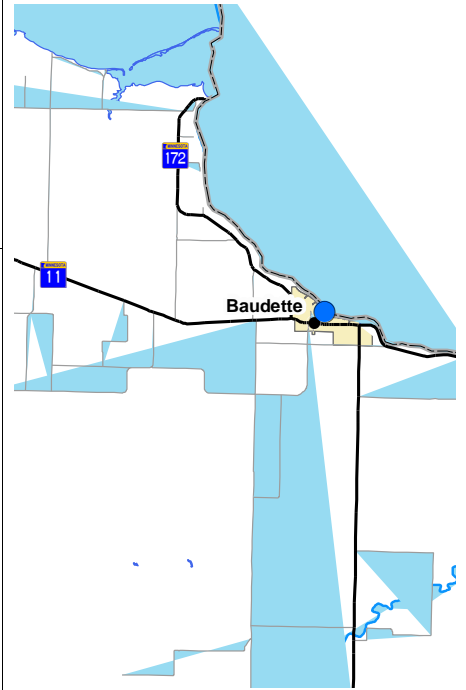
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Stephen Frisco

Revised Date: 12/17/2018

PROJECT SUMMARY

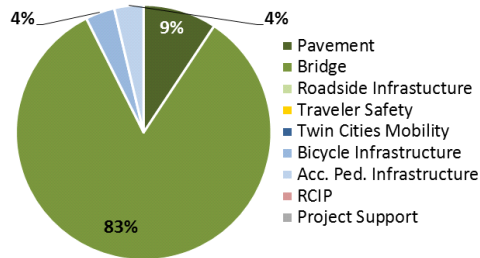
Hwy 72
In Baudette over the Rainy River
Bridge 9412
State Project No. 3905-09



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 was let and awarded and construction started June 2018.

Project History

The project is in the final design phase. The district investigated different procurement methods for contracting final design and construction. In early 2014, MnDOT and the Ontario Ministry of Transportation discussed the preliminary design of a bridge replacement. In July 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. The project uses a design-bid-build procurement method.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 15.5	\$ 19.6
Other Construction Elements:	\$ 20.0	\$ 20.0
Engineering:	\$ 4.5	\$ 4.5
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 40.3	\$ 44.4

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

Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2012 historical cost data and uses a standard inflation factor. Other Construction Elements include Canada's cost. The current estimate construction letting cost is half of the awarded bid amount for the project, with Canada paying for the other half. The overall cost of the project increased by approximately 10%. This increase can be attributed to assumptions in the original estimate, changes to the foundation design and administrative costs managing an international project.

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: Not needed
Construction Limits Established Date: Pending approval
Original Letting Date: 11/17/2017
Current Letting Date: 04/20/2018
Construction Season: 2018, 2019, & 2020
Estimated Substantial Completion: Nov-20



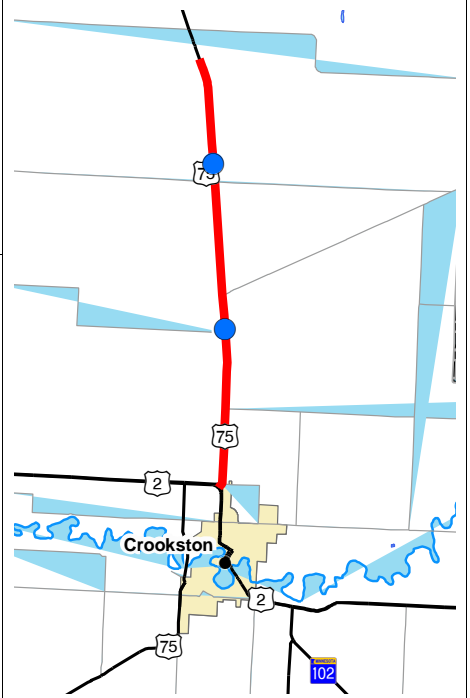
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Joe McKinnon

Revised Date: 12/17/2018

PROJECT SUMMARY

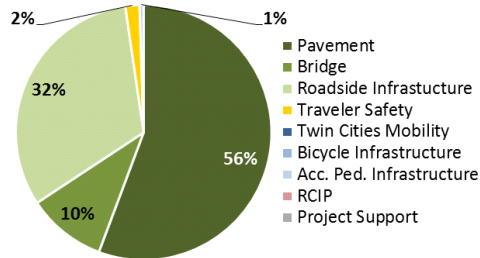
Hwy 75
Hwy 2 to Polk Hwy 19
Bridge 8391, 8392
State Project No. 6011-29



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of resurfacing 12 miles of highway, replacing two box culvert bridges, replacing 29 failing culverts and constructing a new storm sewer system and pedestrian ramps in Euclid

Recent Changes and Updates

The project is currently under construction.

Project History

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 and gutter in Euclid do not drain properly. Sidewalks in Euclid do not meet the ADA standards. The project's purpose is to improve the ride and surface condition, provide structurally sound bridge crossings, to perpetuate existing drainage infrastructure, to improve the accessibility of Euclid's sidewalks and to improve drainage in Euclid. The pavement fix was changed and a section of mill and overlay on Hwy 1 in Oslo was added.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.6	\$ 5.7
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.9	\$ 7.0

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 developed based on 2013 historical cost data and uses an inflation factor to the midpoint of construction. The inflation factor was updated in 2016 resulting in a minor reduction in the cost estimate. The pavement fix was changed and a section of mill and overlay on Hwy 1 was added, which resulted in an increase of the current estimate. Current estimate construction letting is accurate to the bid amount.

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: 1/9/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 8/18/2016
Original Letting Date: 02/23/2018
Current Letting Date: 10/27/2017
Construction Season: 2018
Estimated Substantial Completion: Nov-18



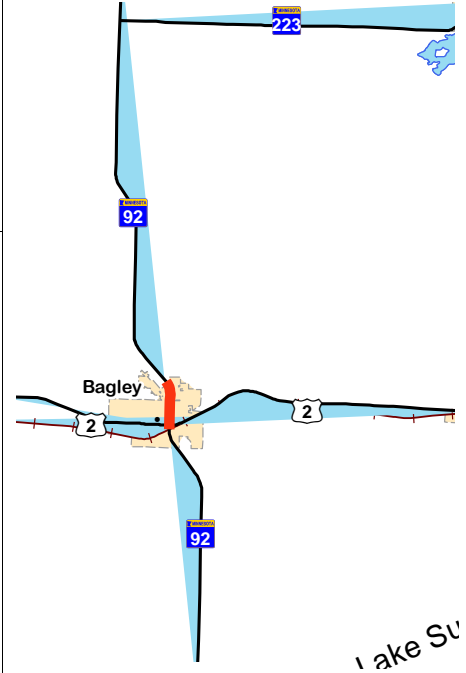
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Ray Gust

Revised Date: 12/17/2018

PROJECT SUMMARY

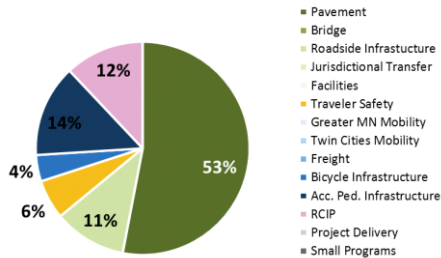
Hwy 92
In Bagley
State Project No. 1507-66
[Hwy 92 in Bagley](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of replacing 1.1 miles of pavement, replacing curb and gutter, replacing or repairing failing drainage infrastructure, replacing sidewalk and pedestrian ramps, constructing a multi-use path, replacing a traffic signal and lighting, and constructing a turn lane.

Recent Changes and Updates

The project is currently under construction.

Project History

The pavement ride quality index is projected to be in poor condition by 2014. The storm sewer system is in poor condition and is below capacity. The existing sidewalks are not in compliance with the Americans with Disabilities Act of 1990. The corridor lacks pedestrian and bicycle facilities to Lomond Park and Bagley High School. Sanitary sewer and water main utilities (City of Bagley) are in poor condition. The existing lighting system lacks continuity. Reclamation of pavement was extended to the north limits of the project. It was also determined that additional storm sewer was in need of replacement and the limits of peat excavation was extended.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.3	\$ 5.3
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.1	\$ 0.1
Right of Way:	\$ 0.6	\$ 0.6
Total:	\$ 4.4	\$ 6.5

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

Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2014 historical cost data and uses an inflation factor tied to the midpoint of the 2018 construction season. Inflation factor was updated in 2017, pavement reclaim was extended and additional storm sewer resulted in an increase in the cost estimate. Current estimate uses bid amount for construction letting.

Project Risks

Local traffic and businesses may be disrupted by the length, complexity and urban setting of the project.

Schedule

Environmental Approval Date: 6/7/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 01/26/2018
Current Letting Date: 01/26/2018
Construction Season: 2018
Estimated Substantial Completion: Nov-18



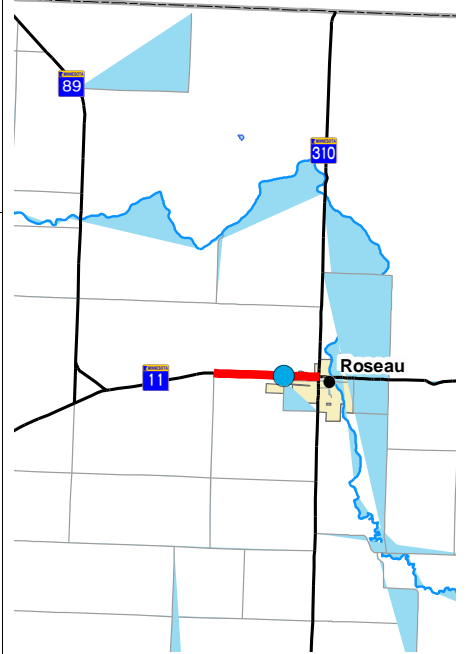
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Jeremy Hadrava

Revised Date: 12/17/2018

PROJECT SUMMARY

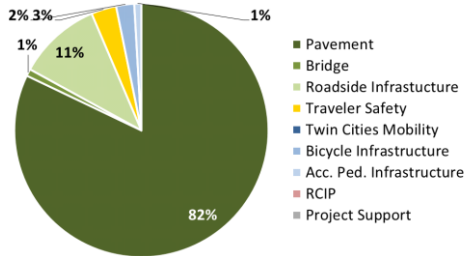
Hwy 11
CSAH 15 to Roseau
Bridge 68X06
State Project No. 6802-27
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

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

Recent Changes and Updates

Project History

The project is substantially complete. Additional sidewalk and storm sewer upgrades were needed to improve accessibility and drainage within Roseau. 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. Readdressed some turf establishment and drainage issues near the frontage road in Roseau in 2016.

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	\$ 0.3
Engineering:	\$ 0.5	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 3.3	\$ 5.0

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 developed based on 2012 historical cost data and uses an inflation factor applied to the midpoint of the construction season. The Current Estimate is based on actual costs. The significant cost increase can be attributed to scope changes identified in the project history.

Project Risks

No remaining risks.

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: 01/30/2015
Current Letting Date: 01/30/2015
Construction Season: 2015 & 2016
Estimated Substantial Completion: Oct-16



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

District Engineer: JT Anderson
Project Manager: Shawn Groven

Revised Date: 12/17/2018

PROJECT SUMMARY

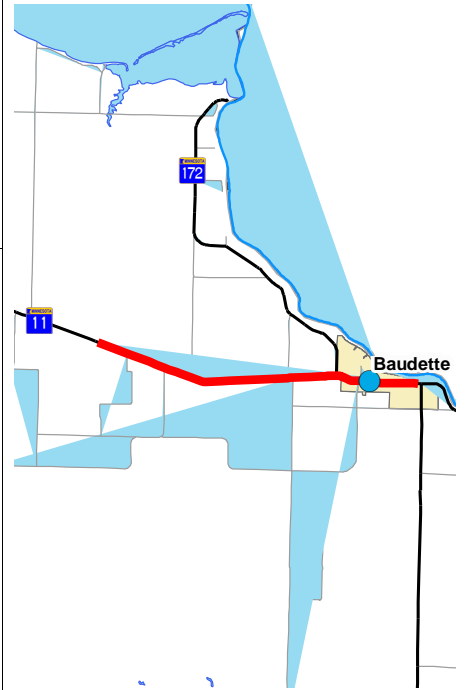
Hwy 11

Over 7 miles west of Baudette on Hwy 11 to Baudette

Bridge 39007

State Project No. 3901-41

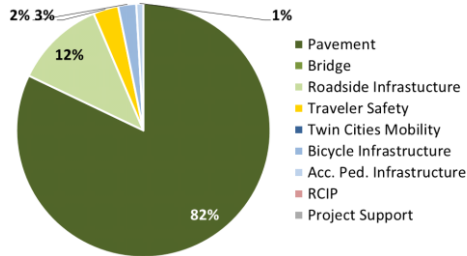
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

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

Recent Changes and Updates

Project History

Project was let and awarded. 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, and to include the rehabilitation of a bridge over the Baudette River. Expanding the scope provides efficiencies and constrains traffic impacts to one construction season. 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. Culverts are in poor condition and intersections lack turning lanes.

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	\$ 8.9
Other Construction Elements:	\$ 0.1	\$ 0.5
Engineering:	\$ 0.5	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.3
Total:	\$ 3.8	\$ 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 developed based on 2013 historical cost data and uses an inflation factor applied to the midpoint of the construction season. The significant cost increase can be attributed to scope changes identified in the project history.

Project Risks

Local traffic and businesses may be disrupted by the length, complexity and urban setting of the project

Schedule

Environmental Approval Date: 11/25/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 1/13/2015
Original Letting Date: 03/27/2015
Current Letting Date: 04/22/2016
Construction Season: 2016
Estimated Substantial Completion: Oct-16



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

District Engineer: JT Anderson
Project Manager: Joe McKinnon

Revised Date: 12/17/2018

PROJECT SUMMARY

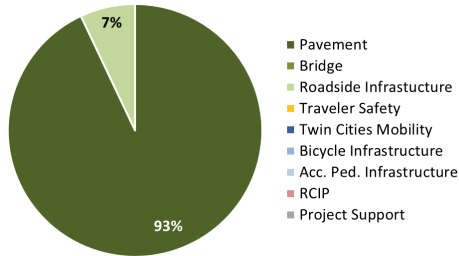
Hwy 175
North Dakota Border to Hallock
State Project No. 3515-16

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of resurfacing 9.7 miles of pavement, reconstructing overflow areas with grade raise restrictions and replacing 34 entrance culverts.



Recent Changes and Updates

The project is substantially complete.

Project History

The project was advanced to the 2017 construction season, which allowed the pavement fix to be downscoped to a thin overlay resulting in a significant cost decrease. 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. Project was let and

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.6	\$ 2.5
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.8	\$ 0.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.6	\$ 2.8

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. Inflation factor, construction year and pavement fix changes were updated in 2016 resulting in a reduction in the cost estimate. The current estimate is the construction letting amount.

Project Risks

The project is lengthy and there may be local and agricultural traffic impacts. The highway is prone to seasonal flooding in the spring.

Schedule

Environmental Approval Date: 6/24/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 6/24/2016
Original Letting Date: 04/27/2018
Current Letting Date: 04/28/2017
Construction Season: 2017
Estimated Substantial Completion: Nov-17



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

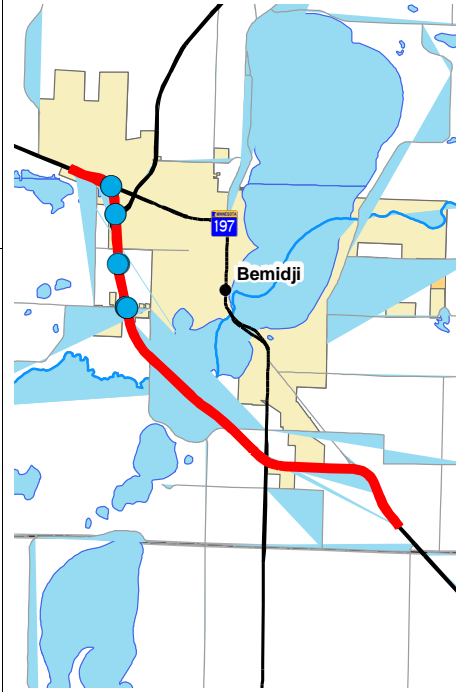
District Engineer: JT Anderson
Project Manager: Ray Gust

Revised Date: 12/17/2018

PROJECT SUMMARY

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

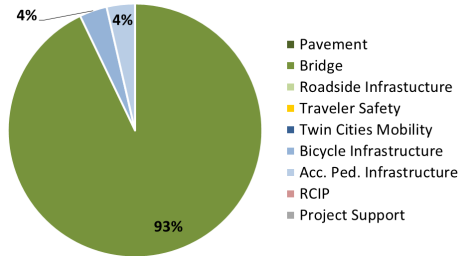
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

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

Recent Changes and Updates

Project History

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 along with constraining traffic impacts to one construction season. Accelerating the pavement resurfacing allows for a thinner, less costly resurfacing. Six of the bridges are over 30 years old and require rehabilitation to extend their useful lives. One of the bridges 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	\$ 5.4
Other Construction Elements:	\$ 0.2	\$ 0.4
Engineering:	\$ 0.6	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.1	\$ 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 developed based on 2014 historical cost data and uses an inflation factor based on the midpoint of the construction season. Inflation factor and scope changes identified in the project history were updated in 2015 resulting in a significant increase in the cost estimate. The current estimate is the construction letting amount.

Project Risks

The project is lengthy and may cause local traffic problems.

Schedule

Environmental Approval Date: 10/6/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 08/26/2016
Current Letting Date: 10/28/2016
Construction Season: 2017
Estimated Substantial Completion: Nov-17



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

District Engineer: JT Anderson
Project Manager: Deb Bauer

Revised Date: 12/17/2018

PROJECT SUMMARY

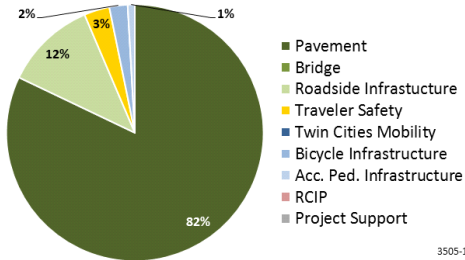
Hwy 59
Hwy 175 to the Canadian border
Bridge 35X10
State Project No. 3505-19

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

Investment Category



3505-19

Project Description

The project resurfaces 18 miles of highway, replaces failing culverts and a storm sewer in Lancaster.



Recent Changes and Updates

Project History

This segment of roadway was in need of pavement improvement. The project's purpose is to improve the ride and surface condition, increase pavement strength and extend the life of the pavement. Project was substantially complete in September 2016.

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	\$ 3.4
Other Construction Elements:	\$ 0.3	\$ 0.2
Engineering:	\$ 0.8	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.4	\$ 3.9

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 developed based on 2012 historical cost data and uses an inflation factor tied to the midpoint of the construction season. The Current Estimate is based on actual costs. Savings can be attributed to better than expected bituminous prices.

Project Risks

No remaining risks

Schedule

Environmental Approval Date: 9/10/2015
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: Sep-16



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

District Engineer: JT Anderson
Project Manager: Ray Gust

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 71

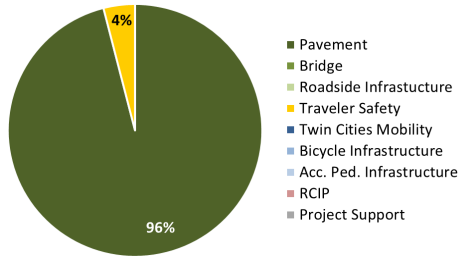
South of Hwy 200 to southern limits of Lake George
State Project No. 2906-18

Substantially Complete

Primary Purpose

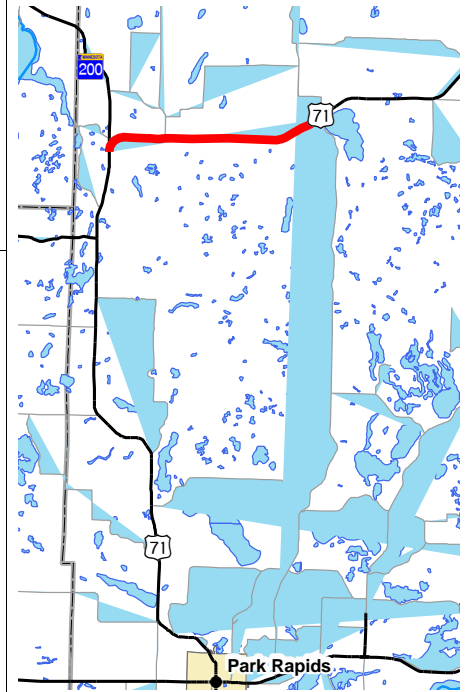
Performance-based Need: Pavement

Investment Category



Project Description

The project consists of reclaiming 7.5 miles of pavement, constructing four new right turn lanes, widening one bypass lane and lighting at the Hwy 200 intersection.



Recent Changes and Updates

The project is substantially complete.

Project History

Project was advanced to 2017 construction season due to a significant drop in pavement conditions. 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.2	\$ 2.3
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.2	\$ 2.7

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 2014 historical cost data and uses an inflation factor tied to the midpoint of the construction season. Inflation factor and construction year was updated in 2016 resulting in a reduction in the cost estimate. The current estimate is the construction letting amount.

Project Risks

The project is lengthy and there may be local and recreational traffic impacts. Road conditions may degrade and increase project duration or cost.

Schedule

Environmental Approval Date: 10/07/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 02/23/2018
Current Letting Date: 03/02/2017
Construction Season: 2017
Estimated Substantial Completion: Nov-17



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

District Engineer: JT Anderson
Project Manager: Stephen Frisco

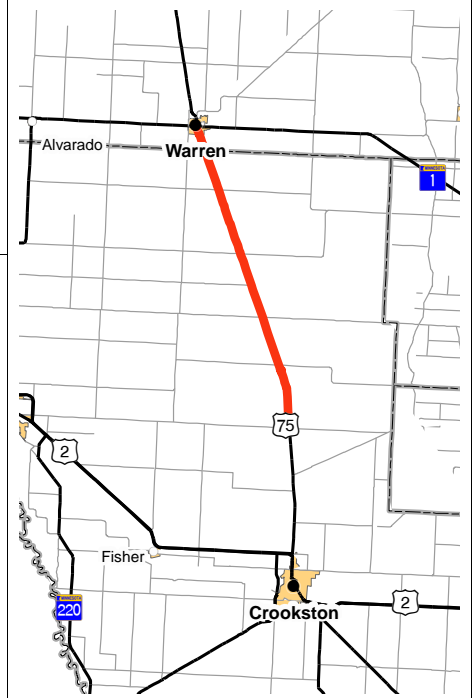
Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 75

North of Hwy 2 to south of Hwy 1 in Warren
Bridge 3958, 8393, 8394, 3959, 4463, &, 6631
State Project No. 6011-24

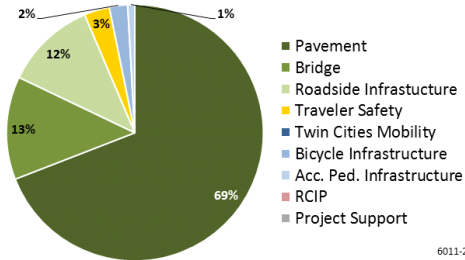
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



6011-24

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

Project History

Shoulder paving south of Warren was added to the project to address bicycle needs identified by the community. Replacement of the bridge and four culverts were 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. 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	\$ 4.6
Other Construction Elements:	\$ 0.4	\$ 0.1
Engineering:	\$ 1.2	\$ 0.4
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 7.4	\$ 5.2

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 developed based on 2013 historical cost data and uses a standard inflation factor. The Current Estimate is based on actual costs. Bid savings can be attributed to better than expected bituminous prices.

Project Risks

The project may cause delays and problems for local and agricultural traffic.

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: July 2016



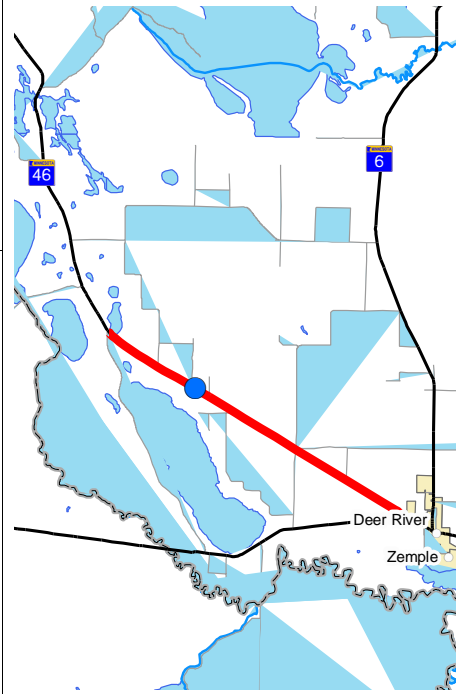
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Rachel Miller

Revised Date: 12/17/2018

PROJECT SUMMARY

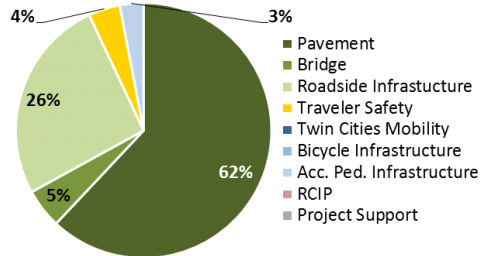
Hwy 46
Hwy 2 to Itasca Hwy 39
Bridge 5623
State Project No. 3109-41M
[Hwy 46 in Deer River](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of reclaiming 10.1 miles of pavement, replacing one box culvert bridge, replacing 53 failing culverts, constructing four turn lanes, constructing a truck pull off area and replacing signs.

Recent Changes and Updates

The project is currently under construction. The detour was in place longer than expected due to wet conditions for the installation of the box culvert. The letting date was changed to accommodate environmental issues with bat and fish exclusion dates.

Project History

The pavement improvement was upgraded to a reclaim on the northern section of the highway in 2016 due to worse than expected pavement conditions. A new entrance and right turn lane was constructed on Hwy 46 by the White Oak Casino. The pavement improvement was upgraded to a reclaim on the entire length of the project with Chapter 3 funds.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.2	\$ 4.1
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.8	\$ 0.9
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 Baseline 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 affect shoulder access and project costs.

Schedule

Environmental Approval Date: 2/23/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 10/24/2016
Original Letting Date: 03/23/2018
Current Letting Date: 01/26/2018
Construction Season: 2018
Estimated Substantial Completion: Nov-18



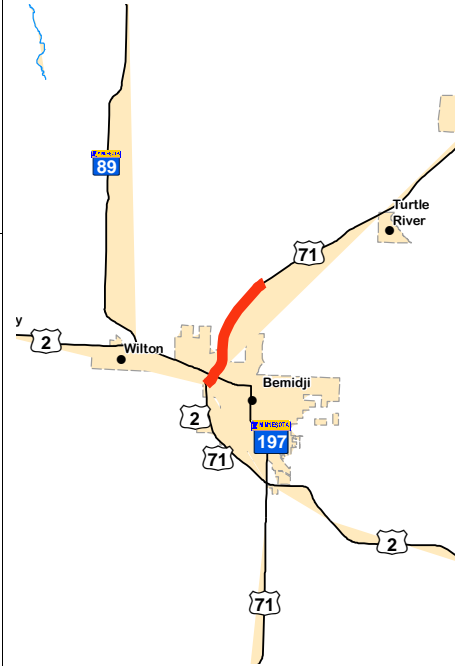
Minnesota Department of Transportation
District 2
3920 Highway 2 West
(218) 755-6500

District Engineer: JT Anderson
Project Manager: Rachel Miller

Revised Date: 12/17/2018

PROJECT SUMMARY

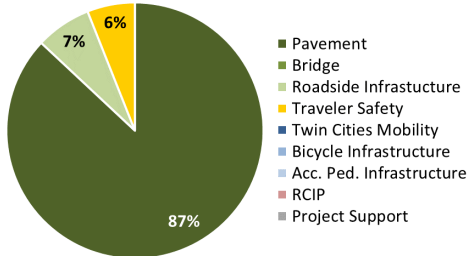
Hwy 71
Hwy 197 to 5 miles North of Bemidji
State Project No. 0410-50



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of 10 miles of bituminous reclamation, improving the Anne Street intersection, painting two signal systems, construction of four turn lanes and replacement of 11 median drains.

Recent Changes and Updates

Likely scope change at Anne Street. Project was delayed from 2020 to 2022 to provide additional time for developing an improvement at Anne Street intersection.

Project History

This is a new project added to the 2017-2020 STIP. The project was scoped and a baseline estimate was prepared. The pavement on Hwy 71 is predicted to drop below acceptable levels by 2022. The project will extend the useful service life of the pavement and provide a smooth riding surface.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.6	\$ 6.0
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.9	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.2
Total:	\$ 5.7	\$ 8.1

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

Key Cost Estimate Assumptions

The Baseline Estimate was developed based on 2015 historical cost data and uses an inflation factor to the midpoint of the year of construction. Increase in cost is associated with traffic safety improvements at Anne Street intersection.

Project Risks

High volume corridor. Critical connection to hospital and for commuters north of Bemidji. Beltrami County is proposing to reclaim an alternative route (CSAH 15) in the same construction year.

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: 04/26/2019
Current Letting Date: 03/25/2022
Construction Season: 2022
Estimated Substantial Completion: Nov-22



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

District Engineer: JT Anderson
Project Manager: Joe McKinnon

Revised Date: 12/17/2018

PROJECT SUMMARY

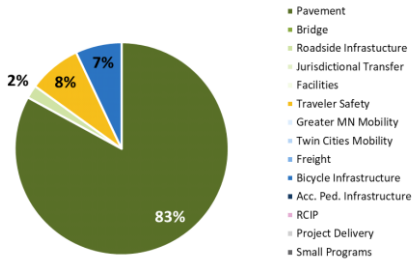
Hwy 71

Hwy 72 in Blackduck to 100 feet north of Itasca/Koochiching Co. Line
State Project No. 0411-17

Primary Purpose

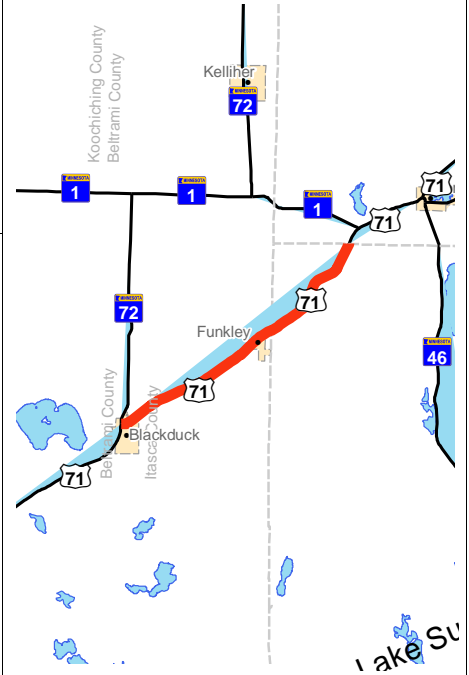
Performance-based Need: Pavement

Investment Category



Project Description

The project would consist of a 2" mill, 8" reclaim and 4.5" bituminous overlay on TH 71 from TH 72 to Itasca/Koochiching County line (R.P. 336.96 to R.P. 349.71). Shoulders would be paved to a minimum width of 5' along the entire corridor. The project would include one new right turn lane and one bypass lane. Existing sidewalks and trails would be reconstructed to meet ADA requirements.



Recent Changes and Updates

The project no longer includes a right turn lane at 4th Street or a bypass lane at CSAH 41.

Project History

The pavement ride quality index is projected to be poor by 2019. Key intersections along the corridor lack turning and bypass lanes. The abutting sidewalks and trails are not in compliance with the Americans with Disabilities Act of 1990. The corridor lacks a consistent paved shoulder to serve bicycle users. No bridge work is necessary at this time.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
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

Includes \$2.4 million funded by ATP-1.

Project Risks

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: 01/25/2019
Current Letting Date: 11/16/2018
Construction Season: 2019
Estimated Substantial Completion: Jul-19



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

District Engineer: JT Anderson
Project Manager: Stephen Frisco

Revised Date: 12/17/2018



-

District 3 Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 210	1806-76	Brainerd to Ironton	C 2	142
Hwy 25	8604-42	from the Junction of US 12 to 0.2 miles north of 10th St in Buffalo	C 3	143
Hwy 371B	1814-06	Washington Street to Joseph Street in Brainerd	C 4	144
Hwy 4	7301-38	Kandiyohi/Stearns Co line to I-94 and Kandiyohi/Stearns Co line to Paynesville	C 5	145
Hwy 47	3304-27	Ogilvie to Isle	C 6	146
Hwy 55	8606-60	Annandale to Buffalo	C 7	147
Hwy 55	8607-63	Buffalo to Rockford	C 8	148
Hwy 55	8606-63	Brown Ave to 0.25 miles east of Annandale Blvd in Annandale	C 9	149
Hwy 6	1802-53/53S	North of Orlander Road to south of Emily and north of Emily to Outing	C 10	150
Hwy 6	3106-24	Cass-Itasca County line to US 2 west of Cohasset	C 11	151
I-94	8680-173	Monticello to Clearwater	C 12	152
Hwy 71	7318-39	Belgrade to Sauk Centre	C 13	153
I-94	7380-239	Stearns County Hwy 75 to bridge over Sauk River	C 14	154
Hwy 27	4904-45	Little Falls	C 15	155
Hwy 95	3006-41	From W of Cambridge to Cambridge	C 16	156
Hwy 10	8001-40	End of 4-Lane west of Wadena easterly to Oink Joint Rd	C 17	157
Hwy 10	7102-135N/135	Xenia Avenue to 4th Street in Elk River	C 18	158
Hwy 10	7102-127	Bridge over Lake Orono in Elk River	C 19	159
Hwy 12	8601-62N/62P	Howard Lake to Montrose	C 20	160
Hwy 210	1807-29N/29P	In Ironton and Crosby	C 21	161
Hwy 371	1809-93	South of 50th Avenue Southwest to College Road in Baxter	C 22	162
Hwy 371	1118-21	Backus to Hackensack	C 23	163
Hwy 169	4812-86	Mille Lacs County Hwy 11 to Rum River Rest Area	C 24	164
Hwy 238	7323-12/12S	Albany to Upsala	C 25	165
Hwy 10	7102-133	Clear Lake to Big Lake	C 26	166
Hwy 24	7108-23	Bridge over Mississippi River in Clearwater	C 27	167
Hwy 25	8605-49	7th Street to Catlin Street in Buffalo	C 28	168
Hwy 25	0508-13/4910-2	Foley to south of Genola	C 29	169
Hwy 371	1810-92	Nisswa to Jenkins	C 30	170
Hwy 65	3003-47N/47P	Anoka/Isanti County line to end of 4-lane road north of Cambridge	C 31	171
Hwy 15	7303-50	TH 55 in Kimball to 66th Ave in St. Augusta	C 32	172

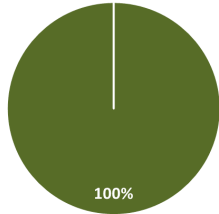
PROJECT SUMMARY

Hwy 210
Brainerd to Ironton
State Project No. 1806-76
[Hwy 210 - Brainerd to Ironton](#)

Primary Purpose

Performance-based Need: Pavement

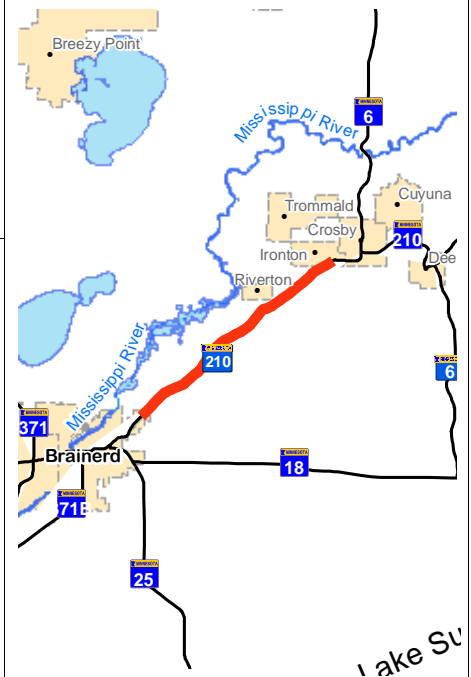
Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

This project is a stabilized full depth reclamation of MN210 from the end of 4-lane to the east of Brainerd; and from the east of Pine Shores Rd. to a bit west of 7th Ave. in Ironton.



Recent Changes and Updates

Project History

New project inserted in the Fall of 2017 to improve ride quality and extend the useful service life of pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.9	\$ 6.9
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
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 estimate is based on estimated quantities and average bid prices for similar projects.

Project Risks

A project risk is the amount of traffic that will use the detour or will try to drive through the project. Hard closure to the roadway can't happen due to the local access needed along the route. A risk associated with the detour will be installation of a temporary roundabout to control the increased traffic.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 9/4/18
Original Letting Date: 4/26/2019
Current Letting Date: 4/26/2019
Construction Season: 2019
Estimated Substantial Completion: 10/2019



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Luke Wehsele

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 25

The Junction of US 12 to 0.2 miles north of 10th St in Buffalo

Bridge 97490

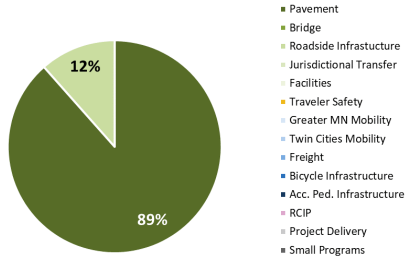
State Project No. 8604-42

[Hwy 25 - Buffalo to Montrose](#)

Primary Purpose

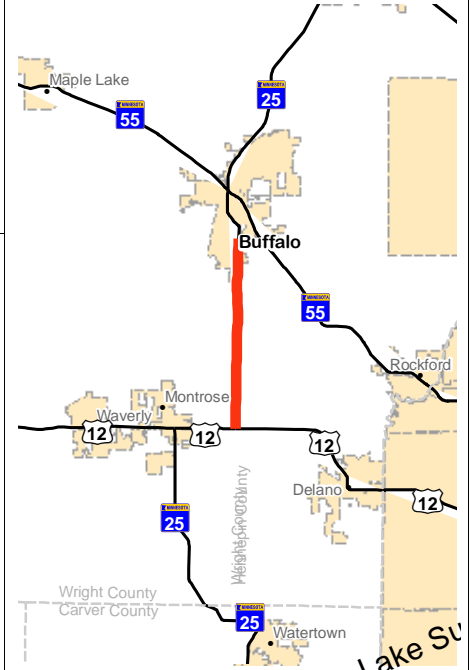
Performance-based Need: Pavement

Investment Category



Project Description

The project consists of a full depth reclamation on TH 25 from the junction of US 12 to just north of 10th St. in Buffalo. It includes hydraulic repairs and guardrail upgrades. The construction will be detoured.



Recent Changes and Updates

Project design is nearing completion and turn in.

Project History

Project was originally scheduled to be a mill and overlay. It has since been upscaled to a full depth reclamation and includes several pipe replacements and two box culvert replacements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP:

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.2	\$ 5.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.0	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 4.2	\$ 7.0

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 cost estimate created during design. Estimate increase is due to upsampling from a mill and overlay to a full depth reclamation and adding pipe replacements.

Project Risks

There are no known risks at this time.

Schedule

Environmental Approval Date: 11/06/2018
 Municipal Consent Approval Date: Not needed
 Geometric Layout Approval Date: Not needed
 Construction Limits Established Date: 11/17/2017
 Original Letting Date: 1/25/2019
 Current Letting Date: 1/25/2019
 Construction Season: 2019
 Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation
 District 3
 7694 Industrial Boulevard
 (218) 828-5700

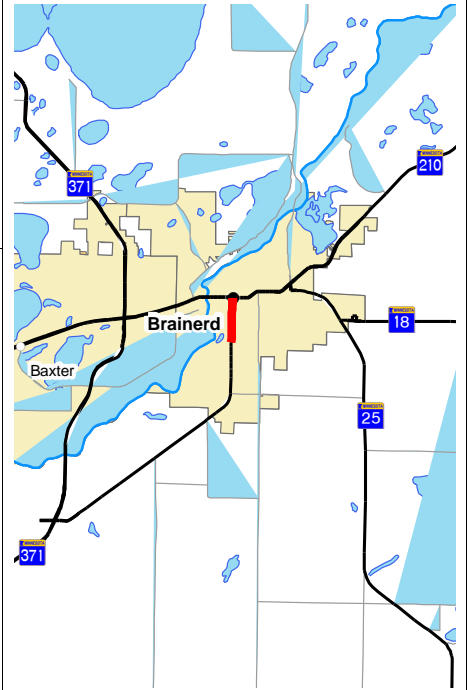
District Engineer: Dan Anderson
Project Manager: Russell Fellbaum

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 371B

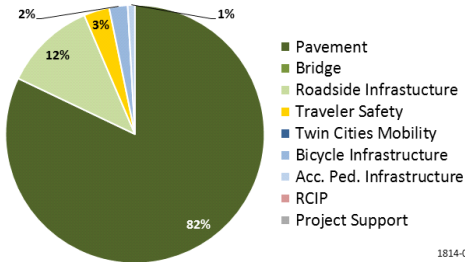
Washington Street to Joseph Street in Brainerd
State Project No. 1814-06



Primary Purpose

Performance-based Need: Pavement

Investment Category



1814-06

Project Description

The project consists of road reconstruction in Brainerd, including bicycle and pedestrian accommodations and curb and gutter, from Hwy 210 (Washington St.) to Joseph St. MnDOT partnered with the city to extend the trail from Joseph St. to Buffalo Hills Lane.

Recent Changes and Updates

Municipal consent from the city was obtained. The project is being authorized for letting and construction.

Project History

The project was selected to replace deteriorated pavement and city utilities. The City of Brainerd provided the preferred alternative. Geometric Layout has been submitted for approval. This project was delayed one fiscal year from 2017 to 2018 to advance a Hwy 25 project (SP 0508-13) so that it could be tied to other work planned on Hwy 25 for 2017. The district is currently developing proposals to address pedestrian concerns and minimize right of way impacts. The current cost estimate includes cost for right of way.

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:	\$ 0.1	\$ 0.3
Total:	\$ 9.1	\$ 9.3

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 based on estimated quantities and average bid prices for similar projects.

Project Risks

Risks associated with accommodating pedestrian accessibility needs were under the design alternatives being considered. The city wanted to install a signal at Willow St., which could result in a delay of municipal consent for the project, but was

Schedule

Environmental Approval Date: 6/15/2016
Municipal Consent Approval Date: 12/7/2016
Geometric Layout Approval Date: 12/8/2016
Construction Limits Established Date: 4/1/2016
Original Letting Date: 2/26/2016
Current Letting Date: 9/22/2017
Construction Season: 2017 - 2018
Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

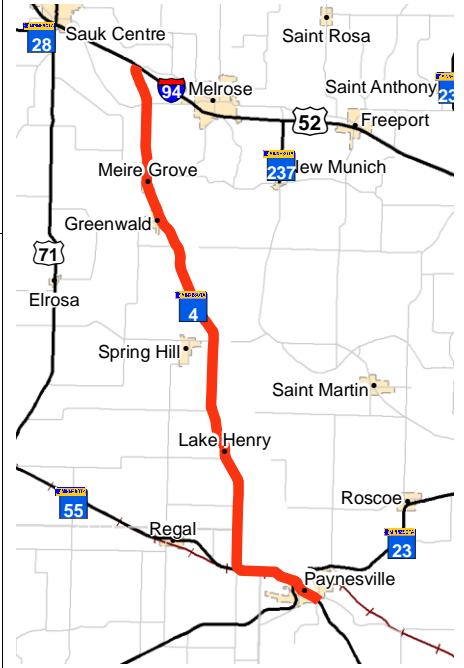
District Engineer: Dan Anderson
Project Manager: Jim Hallgren

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 4

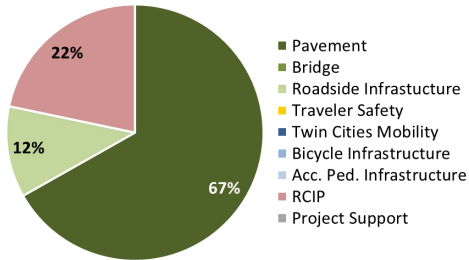
Kandiyohi/Stearns Co line to I-94 and Kandiyohi/Stearns Co line to Paynesville
State Project No. 7301-38



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of a full depth reclamation on TH 4 from TH 55 to I-94 with hydraulic repairs and guardrail upgrades. The construction will be detoured.

Recent Changes and Updates

90% plans will be completed soon.

Project History

The project was selected to address deteriorating pavement. TH 4 was last resurfaced in 1996 and TH 55 was last resurfaced in 1997. Both corridors are due for resurfacing and minor hydraulic repairs. SP 7301-38 originally included both TH 4 and TH 55. Now TH 4 and TH 55 are separated into their own projects. SP 7301-38 is only TH 4 now. TH 4 was upscooped from a mill and overlay to a full depth reclamation with pipe replacements included.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.7	\$ 7.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.8	\$ 8.7

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 estimated quantities and average bid prices for similar projects. The current estimate increased because of the project upscoop from a mill and overlay to a full depth reclamation and additional pipe replacements.

Project Risks

There are no known risks at this time.

Schedule

Environmental Approval Date: 10/17/2018
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 4/26/2019
Current Letting Date: 4/26/2019
Construction Season: 2019
Estimated Substantial Completion: Summer 2019



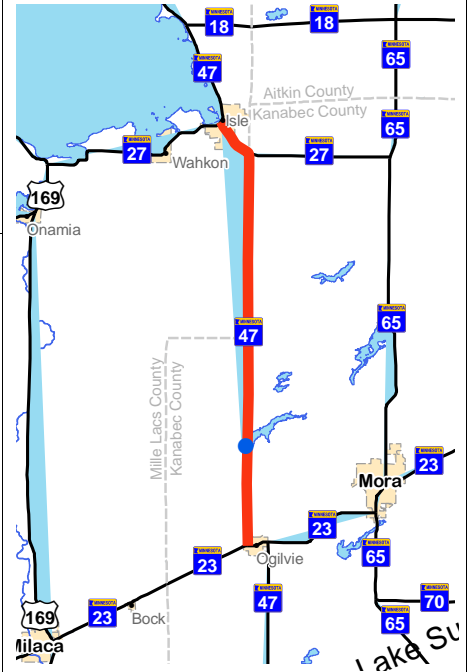
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Russell Fellbaum

Revised Date: 12/17/2018

PROJECT SUMMARY

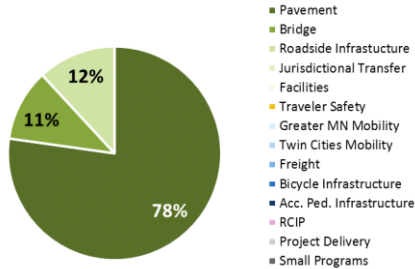
Hwy 47
Ogilvie to Isle
Bridge 6828, and, 6465
State Project No. 3304-27



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project resurfaces the roadway and shoulders on MN Hwy 47 from MN Hwy 23 in Ogilvie to MN Hwy 27 in Isle. It includes replacement of Bridge #6828 over a stream approximately 5 miles north of Ogilvie and also replacement of the Bridge #6465 over Little Ann River 9.7 miles north of Ogilvie.

Recent Changes and Updates

This is a new project.

Project History

The project was selected to address deteriorating pavement conditions and low sufficiency rating of bridge structure within the project limits. This was upgraded to a reclaim project in the fall of 2017 with new bonding money.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.1	\$ 12.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 2.1
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 7.1	\$ 14.8

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 estimated quantities and average bid prices for similar projects. Increased cost was from change from a mill and overlay to a reclaim project. This also resulted in adding a separate bridge project to this project and replacing more culverts.

Project Risks

No significant risks are anticipated.

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: 5/17/2019
Current Letting Date: 1/31/2020
Construction Season: 2020
Estimated Substantial Completion: 10/2020



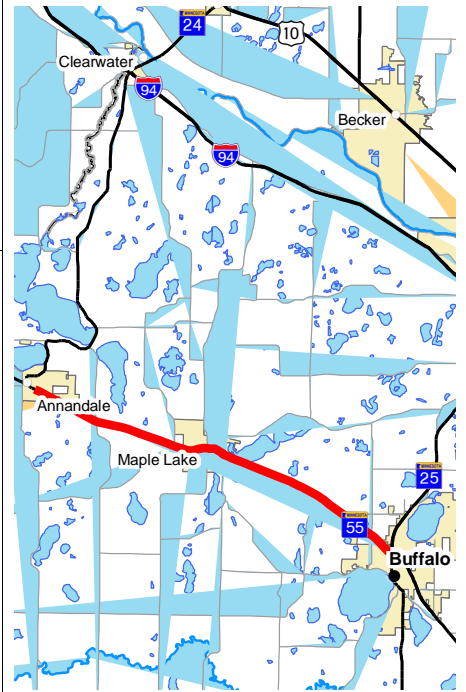
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Luke Wehsele

Revised Date: 12/17/2018

PROJECT SUMMARY

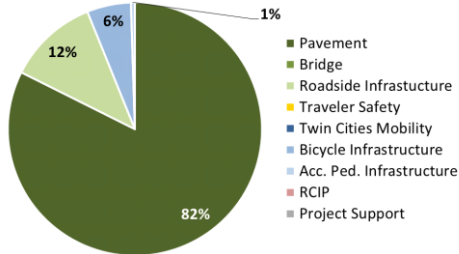
Hwy 55
Annandale to Buffalo
Bridge NA
State Project No. 8606-60
[Hwy 55 - Annandale to Buffalo](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a full depth reclamation from Poplar Ave. in Annandale to the Hwy 25 junction in Buffalo, and includes paving the shoulders, updating guardrails and hydraulic repairs. Also widening in Maple Lake for a center left turn lane. Construction will be detoured in stages.

Recent Changes and Updates

Final comments and changes are being addressed. Plans on schedule to be completed on time.

Project History

The project was selected to address deteriorating pavement. There was a minor letting date change due to a correction in the letting schedule. The project was upscooped from a mill and overlay to a full depth reclamation. A center left turn lane was added to the plans in Maple Lake to address crash history and safety concerns.

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	\$ 10.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 2.2
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 6.7	\$ 13.1

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

Key Cost Estimate Assumptions

The baseline estimate used estimated quantities and average bid prices. The current estimate is based on the cost estimate developed with the plan statement of estimated quantities. The cost increase is due to the upscoop from a mill and overlay to a full depth reclamation and additional pipe replacements added.

Project Risks

There are no known risks at this time.

Schedule

Environmental Approval Date: 08/30/2018
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Need unknown
Original Letting Date: 10/19/2018
Current Letting Date: 12/18/2018
Construction Season: 2019
Estimated Substantial Completion: 2019



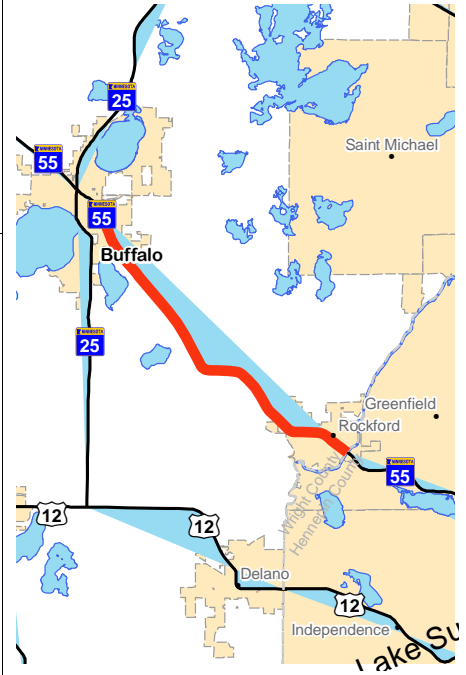
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Russell Fellbaum

Revised Date: 12/17/2018

PROJECT SUMMARY

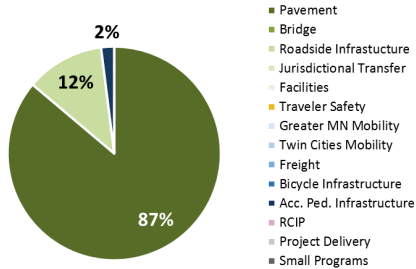
Hwy 55
Buffalo to Rockford
State Project No. 8607-63



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project consists of a full depth reclamation from Buffalo to west of Rockford with the remainder of the project in Rockford being a mill and overlay. Pipe replacements, cattle pass removals and guardrail upgrades are included. Construction will be detoured.

Recent Changes and Updates

Construction was completed in July and Aug. 2018.

Project History

The project was selected to address deteriorating pavement conditions. Originally scheduled for mill and overlay, this project was upscoped to a full depth reclamation from Buffalo to west of Rockford with the remainder of the project staying a mill and overlay. Hydraulic and guardrail improvements will also be addressed. The scope of work for this project was modified to a more substantial, longer-term improvement with additional bond funding provided by the 2017 Legislature.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013 & 2017 (Upscoped)

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 5.4
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.5	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.8	\$ 6.8

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 actual bid price.

Project Risks

There are no known risks at this time.

Schedule

Environmental Approval Date: 01/09/2018
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 6/26/2017
Original Letting Date: 4/27/2018
Current Letting Date: 4/27/2018
Construction Season: 2018
Estimated Substantial Completion: 2018



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

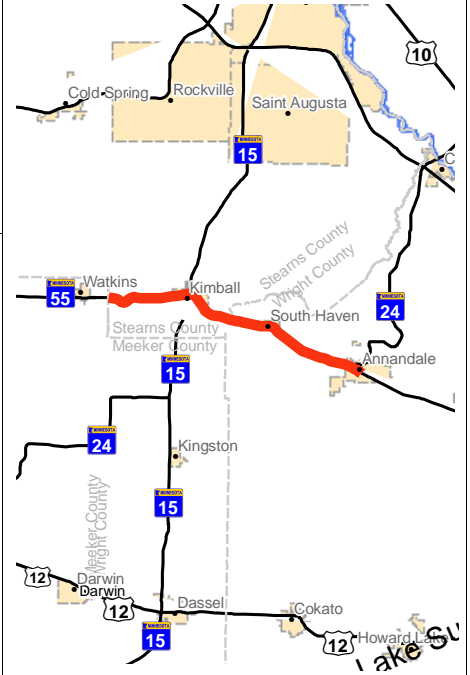
District Engineer: Dan Anderson
Project Manager: Russell Fellbaum

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 55

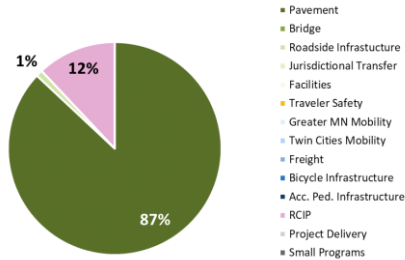
Brown Ave to 0.25 miles east of Annandale Blvd in Annandale
State Project No. 8606-63



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project provides for the resurfacing and Americans with Disabilities Act updates on Hwy 55 in Annandale. Coordination is being done with Annandale to include the update of their utilities under TH 55 along with possible turn lane adjustments for areas of concern.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.0	\$ 6.0
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.8	\$ 7.8

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

Recent Changes and Updates

The rural portion of the original planned project was pulled out of this project and became its own project. This project now only consists of the urban Annandale portion. Limits were extended to the east to allow for Annandale's requested improvements. The project delivery date and limits changed due to the request of the Annandale. They would like time to plan and address some of the city's needs with the project. The project has been moved to fiscal year 2022 due to funding needs in the district. The original funds for 8606-63 in fiscal year 2021 are being used for I-94.

Project History

The project was selected to address deteriorating pavement conditions along with hydraulic and guardrail improvements. It was then moved from fall 2020 construction to summer 2021 as requested by Annandale to allow them time to incorporate some of their fixes with the project. Project moved from FY 2021 to 2022 due to fund balancing in the district.

Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

Project Risks

Risks include coordinating the timing of the project with Annandale's needs.

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: 7/24/2020
Current Letting Date: FY 2022
Construction Season: 2022
Estimated Substantial Completion: 2022



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Russell Fellbaum

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 6

North of Orlander Road to south of Emily and north of Emily to Outing
State Project No. 1802-53/53S

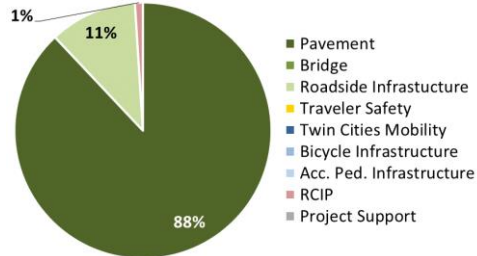
[Hwy 6 - Emily to Outing](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project provides resurfacing from just north of Orlander Road, which is north of Crosby, to Bridge #11005 in Outing. The project excludes a road segment in Emily.

Recent Changes and Updates

Low oil prices in 2017 resulted in low bid prices. The district updated the construction cost estimates in the program to reflect the lower overall projected bituminous prices. This resulted in a lower estimated cost for this project.

Project History

The project was selected to address deteriorating pavement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.8	\$ 4.1
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 5.3

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 estimated quantities and average bid prices for similar projects.

Project Risks

No significant risks are anticipated.

Schedule

Environmental Approval Date: Pending
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 5/4/18
Original Letting Date: 1/25/2019
Current Letting Date: 1/25/2019
Construction Season: 2019
Estimated Substantial Completion: 9/2019



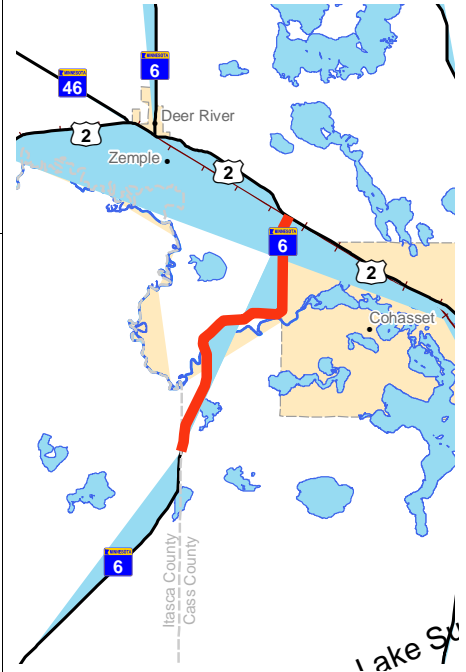
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Luke Wehseler

Revised Date: 12/17/2018

PROJECT SUMMARY

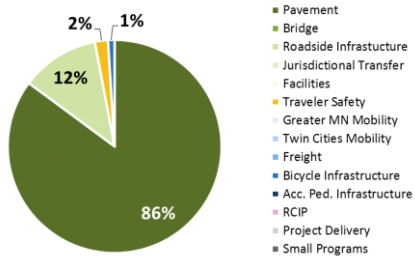
Hwy 6
Cass-Itasca County line to US 2 west of Cohasset
State Project No. 3106-24



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project provides for the repair and replacement of the pavement on MN Hwy 6 from the Cass/Itasca County line to US Hwy 2 west of Cohasset. It also includes paving of the existing shoulder area.

Recent Changes and Updates

This is a new project.

Project History

This project was selected to address deteriorating pavement conditions and to provide paved shoulders to improve safety and accommodate different mixes of traffic.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.5	\$ 5.9
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.5	\$ 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 is based on estimated quantities and average bid prices for similar projects. Decrease in the estimate resulted from scoping the project. It was determined this road was not a candidate for shoulder widening or had other significant problems that would increase the project cost.

Project Risks

No significant risks are anticipated.

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: 2/26/2021
Current Letting Date: 2/26/2021
Construction Season: 2021
Estimated Substantial Completion: 10/2021



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Luke Wehsele

Revised Date: 12/17/2018

PROJECT SUMMARY

I-94

Monticello to Clearwater

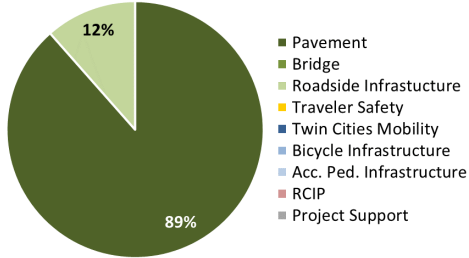
State Project No. 8680-173

[I-94 Central Minnesota](#)

Primary Purpose

Performance-based Need: Pavement Condition, Maintenance of Traffic during Construction

Investment Category



Recent Changes and Updates

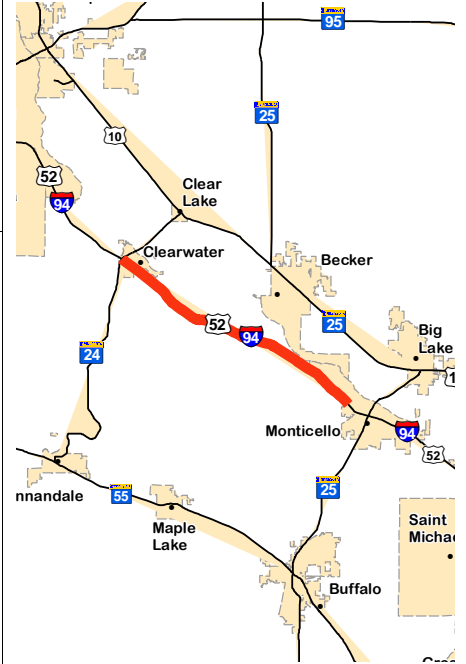
A new cost estimate was prepared to account for increased costs for managing traffic. Four lanes of traffic need to be maintained during construction to prevent long back-ups on I-94 that would impede the movement of people and goods, especially during higher volume commute and recreational peaks.

Project History

The project was programmed to address deteriorating pavement. Project development staff were not available so a consultant was hired to develop the layout, environmental document and maintenance of traffic staging.

Project Description

The project reconstructs I-94 from Hwy 25 I Monticello to Hwy 24 in Clearwater.



Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 38.1	\$ 85.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.2	\$ 11.1
Right of Way:	\$ 0.0	\$ 0.2
Total:	\$ 41.3	\$ 96.3

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

Key Cost Estimate Assumptions

The baseline estimate was for an unbonded concrete overlay. The baseline estimate did not include any costs associated with maintenance of traffic. Further analysis showed minimal difference between the costs for temporary widening and removal.

Project Risks

A potential risk involves a box culvert replacement at Silver Creek.

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: 6/21/2019
Current Letting Date: 05/22/2019
Construction Season: 2019/2021
Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/17/2018

PROJECT SUMMARY

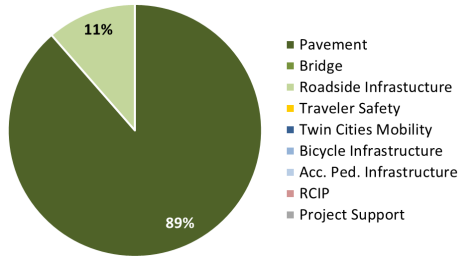
Hwy 71
Belgrade to Sauk Centre
State Project No. 7318-39

Substantially Complete

Primary Purpose

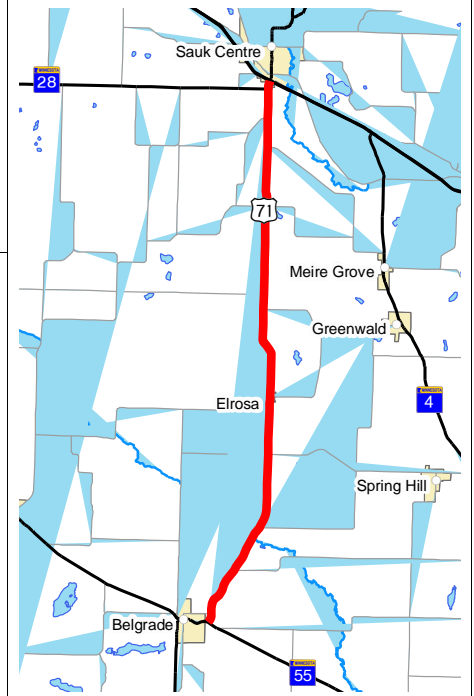
Performance-based Need: Pavement

Investment Category



Project Description

The project is for resurfacing from the east junction at Hwy 55 in Belgrade to I-94 in Sauk Centre.



Recent Changes and Updates

Construction is complete on this project. Actual letting and construction costs were lower than what was originally programmed due to favorable bid prices.

Project History

The project was selected 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. The decision was made to remove the urban segment of this project through 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 was delayed to FY 2017 while the rural segment was identified as SP 7318-39. This project was completed in August 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:	\$ 6.2	\$ 6.7
Other Construction Elements:	\$ 0.0	\$ 0.8
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.7
Total:	\$ 7.4	\$ 9.4

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

Key Cost Estimate Assumptions

The baseline estimate is based on actual estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

Project Risks

No project risks remain.

Schedule

Environmental Approval Date: 12/4/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 12/18/2015
Current Letting Date: 3/18/2016
Construction Season: 2016
Estimated Substantial Completion: August 2016



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/17/2018

PROJECT SUMMARY

I-94

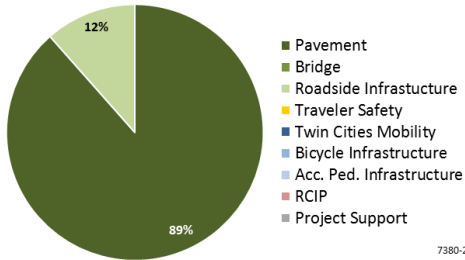
Stearns County Hwy 75 to bridge over Sauk River
State Project No. 7380-239

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

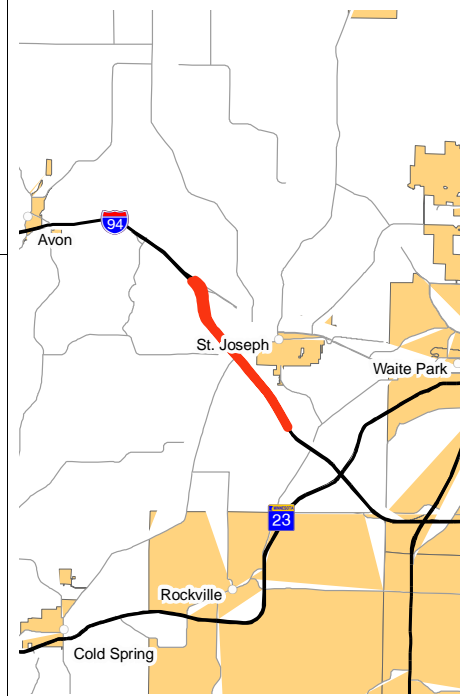
Investment Category



7380-239

Project Description

This project is concrete overlay from Stearns County Hwy 75 west of St. Joseph to the west end of the bridge over Sauk River. The project also includes road resurfacing from Stearns County Rd 159 at Collegeville to Stearns County Hwy 75.



Recent Changes and Updates

Construction of this project is complete.

Project History

The project was originally selected 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 funds (under the National Highway Performance Program) to pursue a longer term pavement fix in the unbonded concrete overlay section. This project was combined with SP 7380-223 in 2014. This project was expanded to include an adjacent section of I-94, which was set for the same year (7380-223), resulting in an increase to the original baseline estimate. Combining the projects will result in better bid prices, better construction staging and more efficient construction administration. Actual award was \$2.9 million less than the current estimate shown in last year's report.

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	\$ 12.6
Other Construction Elements:	\$ 0.0	\$ 0.9
Engineering:	\$ 2.0	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.0	\$ 14.6

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. The estimate increased to account for the change in type of repair work to include an unbonded concrete overlay. The current estimate is based on actual bid amount.

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: 4/6/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: 8/18/2015
Original Letting Date: 2/26/2016
Current Letting Date: 2/26/2016
Construction Season: 2016
Estimated Substantial Completion: Fall 2016



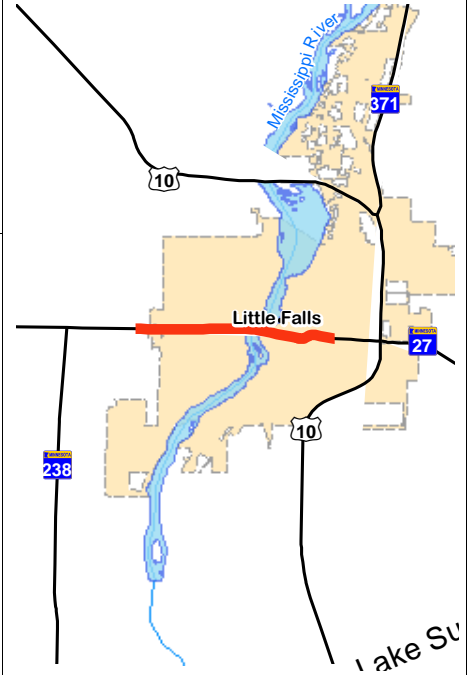
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Eric Schiller

Revised Date: 12/17/2018

PROJECT SUMMARY

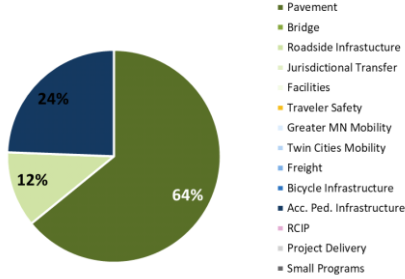
Hwy 27
Little Falls
State Project No. 4904-45
[Hwy 27 in Little Falls](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of reconstruction from 6th Street West to 2nd Street East. Within this segment is Bridge 5907. It will be restriped to accommodate bike lanes within this area. Bike lanes will be added from Lindbergh Drive to Wood Street. The project segment just west of 15th Street West to 6th Street West and 2nd Street East to 9th Street East will be a reconditioning project. The pavement will be removed and be paved back with minimal grading.

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:	\$ 3.8	\$ 5.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.3	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 3.8	\$ 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 was based on scoping level costs of similar projects without City costs included. The current estimate is a 90 percent detailed estimate with includes City utility work and costs to address contaminated materials.

Project Risks

Contaminated materials are present which poses a risk. The project is also located at the core Little Falls Business District which traffic control and staging becomes risky.

Schedule

Environmental Approval Date: 8/28/18
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 9/26/17
Original Letting Date: 1/25/2019
Current Letting Date: 1/25/2019
Construction Season: 2019
Estimated Substantial Completion: Fall 2019



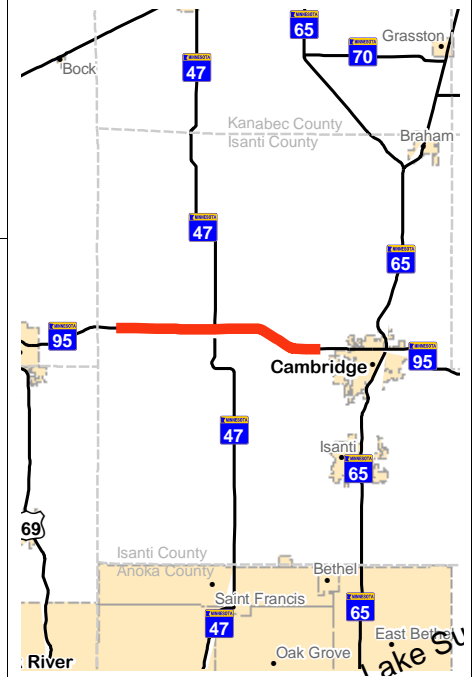
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Luke Wehsele

Revised Date: 12/17/2018

PROJECT SUMMARY

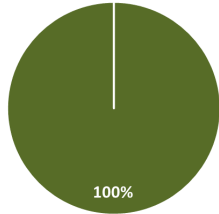
Hwy 95
W. of Cambridge to Cambridge
State Project No. 3006-41



Primary Purpose

Performance-based Need: Pavement

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

The project is a full depth reclamation for MN 95 from Isanti County 15 to the western limits of Cambridge. It includes a roundabout at TH 47 and a left turn lane reconstruction at CR 10.

Recent Changes and Updates

New project.

Project History

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2021

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.8	\$ 6.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.0	\$ 8.0

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

Key Cost Estimate Assumptions

The baseline estimate includes construction of the roundabout.

Project Risks

If there isn't enough time to acquire right of way, the roundabout will have to be a separate project. Consultant selection in time to get layout and construction limits to maintain schedule.

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: 1/29/2021
Current Letting Date: 1/29/2021
Construction Season: 2021
Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

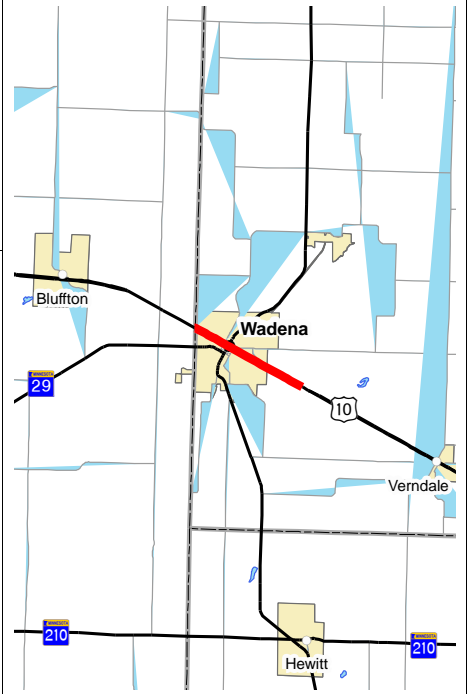
District Engineer: Dan Anderson
Project Manager: Matt Indihar

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 10

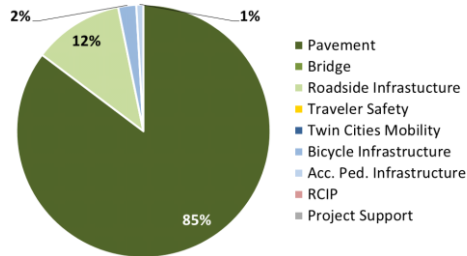
End of 4-Lane west of Wadena easterly to Oink Joint Rd
State Project No. 8001-40



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project resurfaces the rural segments of Hwy 10 east and west of Wadena and reconstructs the urban section from 3rd St NW to 2nd St NE within the city limits of Wadena. Work includes replacement of curb, gutter, sidewalks, traffic signals and railroad signal upgrades.

Recent Changes and Updates

This project was delayed one year due to complications in obtaining environmental clearance for right of way needed from the railroad.

Project History

Several pavement rehabilitation projects were 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. Funding for this project is provided jointly by District 3 and District 4. The geometric layout was approved. The project received municipal consent. The environmental document was approved. Road plans are nearly complete. Right of way acquisition will be complete by letting.

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	\$ 10.4
Other Construction Elements:	\$ 0.0	\$ 3.3
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 5.0	\$ 5.0
Total:	\$ 16.5	\$ 20.6

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

Key Cost Estimate Assumptions

The baseline estimate was based on estimated quantities and average bid prices. Project includes work in District 4. Significant city utility work is noted under other construction elements. Contamination clean-up added to the baseline cost.

Project Risks

The lack of detour routes may complicate the replacement of storm sewer.

Schedule

Environmental Approval Date: 9/8/2016
Municipal Consent Approval Date: 1/12/2016
Geometric Layout Approval Date: 11/16/2015
Construction Limits Established Date: Pending approval
Original Letting Date: 12/15/2017
Current Letting Date: 02/22/2019
Construction Season: 2019
Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/17/2018

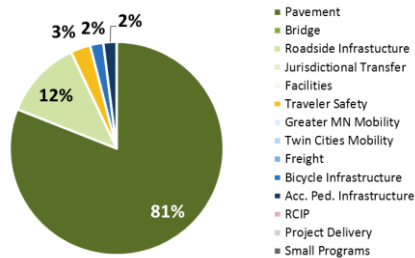
PROJECT SUMMARY

Hwy 10
Xenia Avenue to 4th Street in Elk River
State Project No. 7102-135N/135P

Primary Purpose

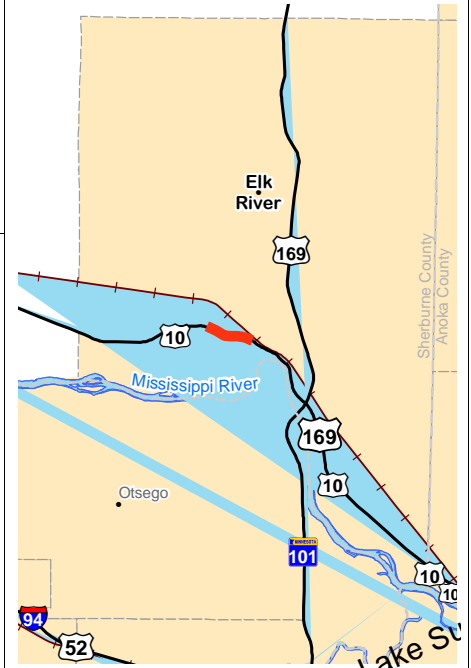
Performance-based Need: Pavement

Investment Category



Project Description

This project is a reconstruction of the eastbound and westbound lanes of US Hwy 10 from Xenia Avenue to 4th Street NW in Elk River. It includes construction of separated paved multi-use bicycle-pedestrian trail to parallel highway and connect to existing trail. The Oxford Ave. and Norfolk Ave. access to Hwy 10 will be eliminated.



Recent Changes and Updates

Preliminary layout being developed.
East limits of the project were extended from Norfolk Ave. to 4th Street NW to accommodate the closure of Norfolk's access to Hwy 10.

Project History

Requires reconstruction to address grading, pavement, curb and gutter and storm sewer issues. District is coordinating with Elk River to address the multi-use bicycle-pedestrian trail and Sherburne County to address possible intersection improvements at US 10 and County Road 1.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.8	\$ 8.8
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.8	\$ 1.8
Right of Way:	\$ 0.5	\$ 0.5
Total:	\$ 12.0	\$ 12.0

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 estimated quantities and average bid prices for similar projects.

Project Risks

A potential risk is in costs due to maintenance of traffic during construction.

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: 12/18/2020
Current Letting Date: 12/18/2020
Construction Season: 2021
Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

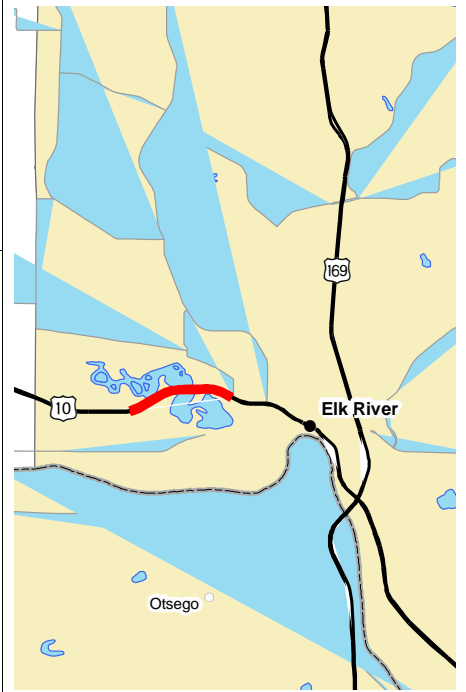
District Engineer: Dan Anderson
Project Manager: Russell Fellbaum

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 10
Bridge over Lake Orono in Elk River
Bridge 5955
State Project No. 7102-127

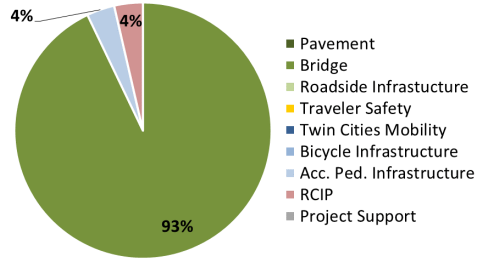
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project replaces the bridge on US 10 over the Elk River (Lake Orono) in Elk River. Planned work also includes the reconstruction of the highway from Joplin Street to Xenia Avenue.

Recent Changes and Updates

This project has been let and is presently under construction. The project was let for \$9.8 million, which was less than the \$13.2 million previous estimated construction cost. Savings were the result of lower than anticipated bituminous prices by the contractor.

Project History

This bridge is District 3's last structurally deficient bridge. Addressing these deficiencies will require full replacement of the bridge. The project cost has been adjusted due to bridge approach work and highway realignment associated with the replacement of the bridge. \$10 million in state bonding is provided to this project. The city of Elk River recently was awarded funding for bike trail improvements to be coordinated with this project. The project was advanced from FY 2018 to FY 2017 due to the availability of state bond proceeds.

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	\$ 9.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.0	\$ 2.0
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 12.1	\$ 10.8

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

Key Cost Estimate Assumptions

The baseline estimate and current estimate values are based on estimated quantities of average bid prices. Additional concrete pavement replacement was added, which is reflected in the current estimate.

Project Risks

If the project disrupts traffic along the travel corridor, the district may have to take steps to improve traffic flow. Timely utility relocations are needed to avoid impacts to the schedule.

Schedule

Environmental Approval Date: 1/19/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/3/2015
Construction Limits Established Date: 2016
Original Letting Date: 2/25/2017
Current Letting Date: 5/19/2017
Construction Season: 2017 & 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: 12/17/2018

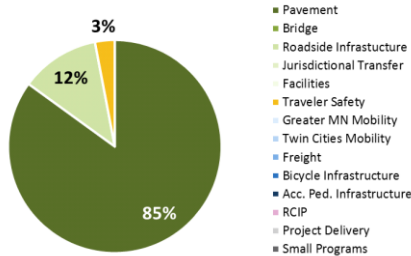
PROJECT SUMMARY

Hwy 12
Howard Lake to Montrose
State Project No. 8601-62N/62P

Primary Purpose

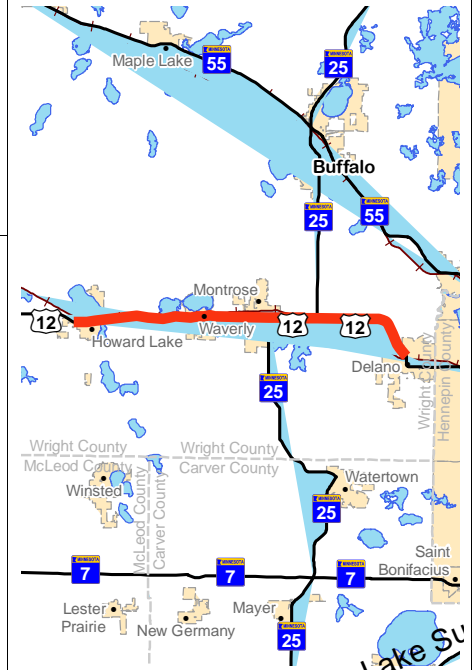
Performance-based Need: Pavement

Investment Category



Project Description

This project resurfaces the roadway and shoulders on US Hwy 12 from 13th Avenue in Howard Lake to Zephyr Avenue in Montrose. Upgrades to pedestrian facilities in Howard Lake, Waverly and Montrose are also planned.



Recent Changes and Updates

This is a new project.

Project History

The project was selected to address deteriorating pavement and provide for accessible pedestrian facilities within the communities.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.7	\$ 7.7
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 0.1	\$ 0.1
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

The estimate is based on estimated quantities and average bid prices for similar projects.

Project Risks

No significant risks are anticipated.

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: 1/22/2021
Current Letting Date: 1/29/2021
Construction Season: 2021
Estimated Substantial Completion:



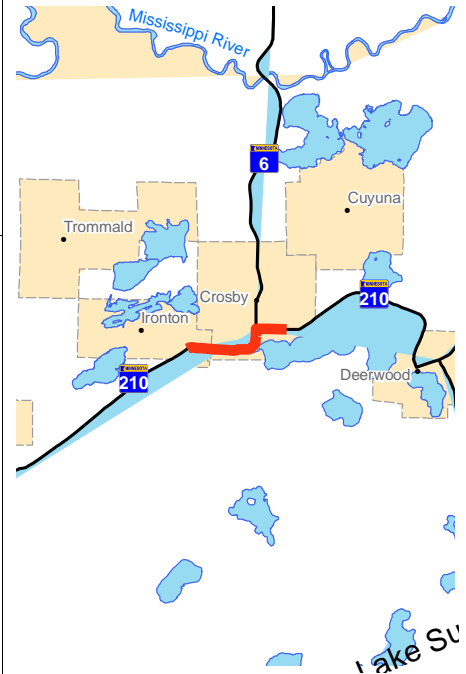
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Claudia Dumont

Revised Date: 12/17/2018

PROJECT SUMMARY

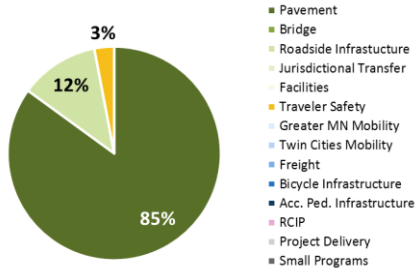
Hwy 210
In Ironton and Crosby
Bridge NA
State Project No. 1807-29N/29P



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is an urban reconstruction from 2nd Street southwest to east of 3rd Avenue northeast in Crosby with bituminous resurfacing from west of 7th Avenue in Ironton to 2nd Street southwest in Crosby, including replacement of sidewalks.

Recent Changes and Updates

Currently coordinating with Crosby and Ironton and working on finalizing layout development and right of way construction limits activities.

Project History

The pavement has not been rehabilitated since it was reconstructed under S.P.1806-57 for Ironton and 1806-58 for Crosby in 1989. The pavement is deteriorating and is in need of resurfacing to maintain an acceptable ride quality on this section of roadway. The need for the reconstruction portion of the project is not the typical roadway need, but rather is related to adjusting curb lines to meet the requirements of the American Disabilities Act on the existing sidewalk facilities. The project was selected to address deteriorating pavement and accessibility needs on the pedestrian infrastructure in Crosby and Ironton.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.6	\$ 6.6

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

Key Cost Estimate Assumptions

The estimate is based on estimated quantities and average bid prices for similar projects.

Project Risks

No significant risks are anticipated.

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: 10/23/2020
Current Letting Date: 10/23/2020
Construction Season: 2021
Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

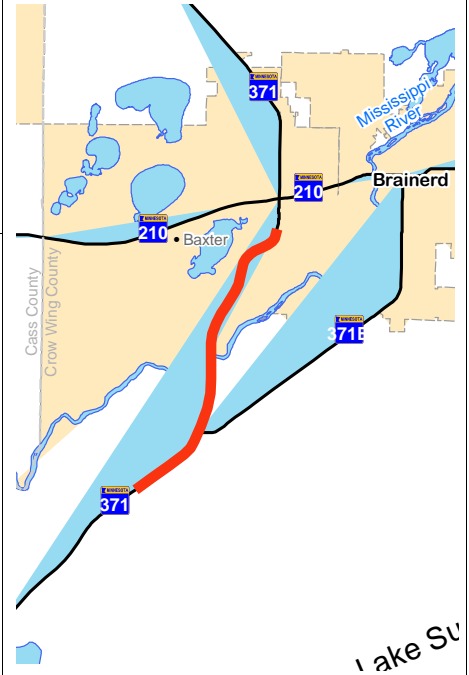
District Engineer: Dan Anderson
Project Manager: Eric Schiller

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 371

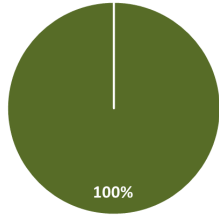
South of 50th Avenue Southwest to College Road in Baxter
State Project No. 1809-93



Primary Purpose

Performance-based Need: Pavement

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

This project provides for a longer term replacement and resurfacing of the pavement in both the northbound and southbound lanes of MN Hwy 371 from 50th Avenue Southwest near the Safari Zoo north to College Road in Baxter.

Recent Changes and Updates

This project was advanced from 2024 in District 3's 10-year Capital Highway Investment Plan with bond funding. New funding made it possible to pursue a longer term fix to more adequately address pavement needs along this section of roadway.

Project History

The project was selected to address deteriorating pavement conditions.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.0	\$ 4.2
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.6	\$ 0.4
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 estimate is based on estimated quantities and average bid prices for similar projects.

Project Risks

No significant risks are anticipated.

Schedule

Environmental Approval Date: 10/19/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 5/18/2018
Current Letting Date: 5/18/2018
Construction Season: 2018
Estimated Substantial Completion: Fall 2018



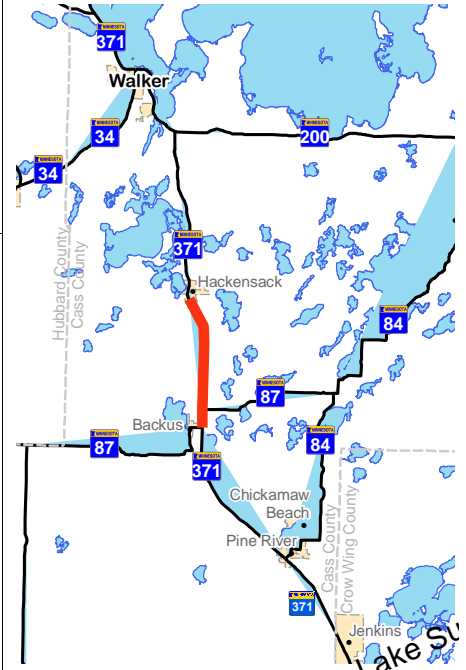
Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

District Engineer: Dan Anderson
Project Manager: Matt Indihar

Revised Date: 12/17/2018

PROJECT SUMMARY

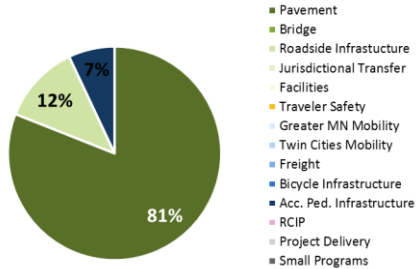
Hwy 371
Backus to Hackensack
State Project No. 1118-21



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project provides for a longer term repair and replacement of the pavement on MN Hwy 317 from MN 87 in Backus to Cass County Hwy 40 in Hackensack.

Recent Changes and Updates

This is a new project that was advanced from year 2021 of District 3's 10-year Capital Highway Investment Plan with help from Chapter 3 funding. New funding made it possible to not only advance this project but pursue a longer term fix to more adequately address pavement needs along this section of roadway.

Project History

The project was selected to address deteriorating pavement conditions.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.6	\$ 3.6
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.4	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.2	\$ 4.2

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 estimated quantities and average bid prices for similar projects.

Project Risks

No significant risks are anticipated.

Schedule

Environmental Approval Date: 2/15/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 5/18/2018
Current Letting Date: 5/18/2018
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: Matt Indihar

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 169

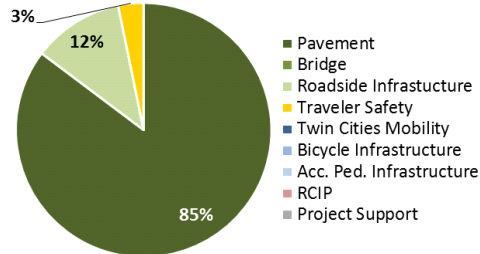
Mille Lacs County Hwy 11 to Rum River Rest Area
State Project No. 4812-86

Substantially Complete

Primary Purpose

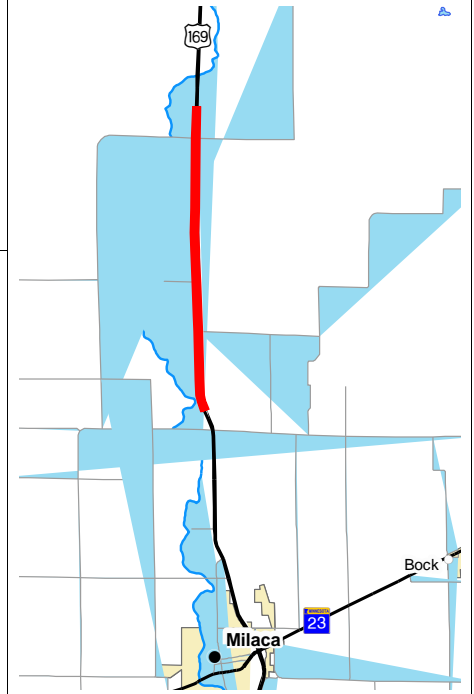
Performance-based Need: Pavement
Condition & District Safety Plan

Investment Category



Project Description

This project involves the reconstruction of the northbound lane, including turn lane extensions, on Hwy 169 north of Milaca, from Mille Lacs County Hwy 11/190th St. to the Rum River Rest Area.



Recent Changes and Updates

Construction of this project is complete. Unsuitable materials in the soil were discovered during construction requiring additional excavation and replacement of the embankments necessary to properly construct the roadway.

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. The award was higher than the engineer's estimate. Federal Highway Safety Improvement Program safety funds for the turn lane extension were removed. Turn lane work was funded with National Highway Performance Program funds, which is the same source used for the reconstruction work.

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	\$ 8.1
Other Construction Elements:	\$ 0.0	\$ 3.0
Engineering:	\$ 1.4	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.6	\$ 12.1

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

Key Cost Estimate Assumptions

The baseline estimate used estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

Project Risks

No significant risks are anticipated.

Schedule

Environmental Approval Date: Completed
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: 8/11/2014
Original Letting Date: 3/27/2015
Current Letting Date: 6/26/2015
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: 12/17/2018

PROJECT SUMMARY

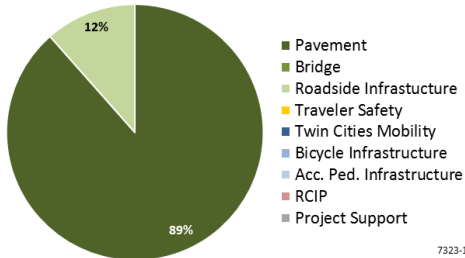
Hwy 238
Albany to Upsala
State Project No. 7323-12/12S

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

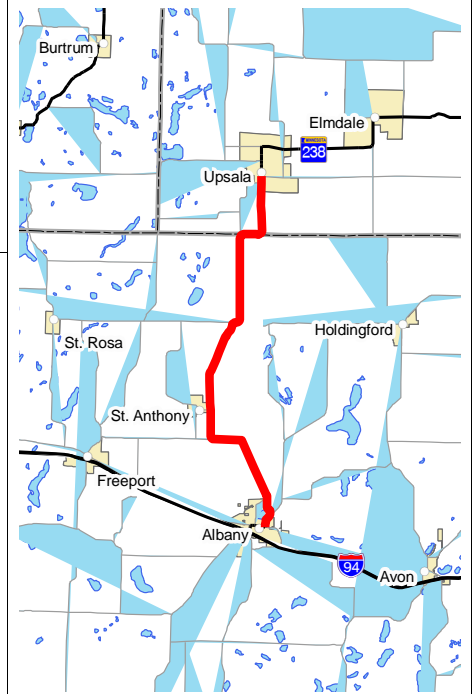
Investment Category



7323-11

Project Description

This is a pavement project from Albany to Upsala, which includes widening the road.



Recent Changes and Updates

Construction was completed in fall 2017. The award amount of \$3.6 million is less than the original baseline estimate due to low bituminous prices and revised project limits.

Project History

The project was selected to address deteriorated pavement. A layout is not required for rural resurfacing, nor are construction limits. This project was modified, removing an urban segment in Albany from the original project and changing the project number (from SP 7323-11 to SP 7323-12). The former project (SP 7323-11) is being retained with the Albany urban portion, which will be completed in 2018 following completion of this project. The cost estimate was updated to reflect splitting the project into two phases. Previously, the scope and project cost were modified to add shoulder improvements for improved 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:	\$ 7.2	\$ 3.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.4	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.6	\$ 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. The current estimate is based on actual bid price and letting.

Project Risks

Schedule

Environmental Approval Date: Completed
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
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: 12/17/2018

PROJECT SUMMARY

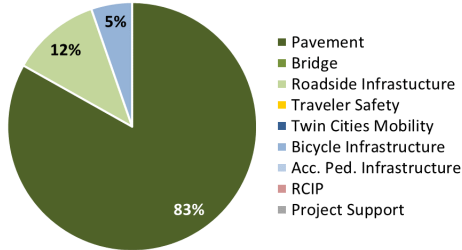
Hwy 10
Clear Lake to Big Lake
State Project No. 7102-133

Substantially Complete

Primary Purpose

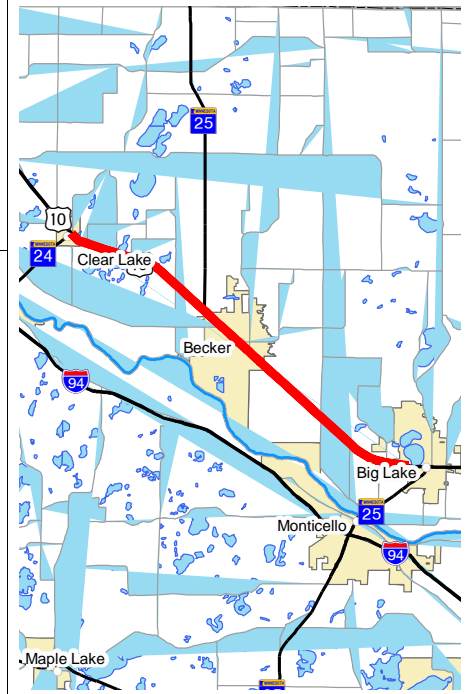
Performance-based Need: Pavement

Investment Category



Project Description

The project is to repair the pavement with a full depth reclamation of the eastbound direction of the 4-lane expressway between Clear Lake and Big Lake. A reduced conflict intersection will be constructed to improve safety at Sherburne Co. Hwy 23 in Becker with the project.



Recent Changes and Updates

This project was originally scoped and programmed as a resurfacing project. Due to low bid prices by contractors in 2017, the district was able to apply the savings to pursue a longer-term fix. The new scope calls for reclaiming and replacing of the pavement resulting in an increased project cost.

Project History

This project was selected to address deteriorating pavement. District coordinated with City of Becker and Sherburne County to address safety concerns and review design alternatives for the Sherburne Co. Hwy 23 intersection. Proposed improvements involve a revision of the intersection to be reflected in the design plans.

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	\$ 9.4
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.1	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.8	\$ 11.3

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 based on estimated quantities and average bid prices.

Project Risks

There will be a 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: 6/14/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/26/2016
Construction Limits Established Date: 11/11/16
Original Letting Date: 11/16/2018
Current Letting Date: 3/23/2018
Construction Season: 2018
Estimated Substantial Completion: 2018



Minnesota Department of Transportation
District 3
7694 Industrial Boulevard
(218) 828-5700

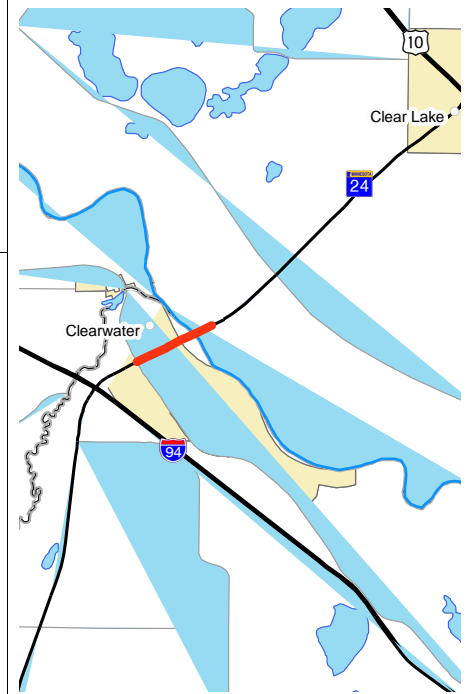
District Engineer: Dan Anderson
Project Manager: Eric Schiller

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 24
Bridge over Mississippi River in Clearwater
Bridge 6557
State Project No. 7108-23

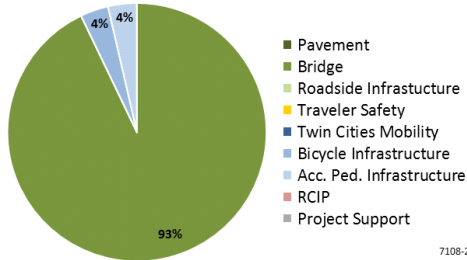
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



7108-23

Project Description

The project replaces the bridge over the Mississippi River at Clearwater.

Recent Changes and Updates

Construction of the new bridge is completed and the new bridge is open to traffic. Right of way estimates were considerably less than anticipated as it only included demolition of two buildings. The demolition and removal of the old bridge along with other minor work was completed in 2018.

Project History

The bridge deck and girders required replacement. The decision was made to construct a new bridge parallel to the existing structure to minimize traffic impacts. The project was let in May 2015. The bid amount was considerably lower than the engineer's estimate due to a generous construction schedule. The extra funding available due to the lower bid/award was shifted to other construction projects. Demolition of the existing bridge was completed in 2018.

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

The baseline estimate is based on estimated quantities and average bid prices for similar projects. The current estimate is based on the actual bid amount.

Project Risks

Schedule

Environmental Approval Date: 12/22/2014
Municipal Consent Approval Date: 9/15/14
Geometric Layout Approval Date: 5/5/2014
Construction Limits Established Date: 9/15/2014
Original Letting Date: 5/15/2015
Current Letting Date: 5/15/2015
Construction Season: 2015 - 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: 12/17/2018

PROJECT SUMMARY

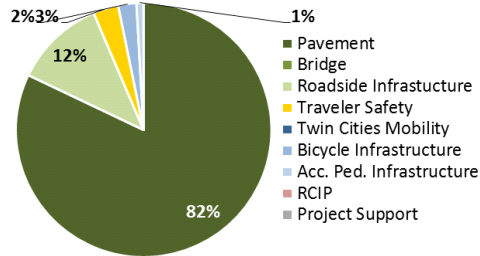
Hwy 25
7th Street to Catlin Street in Buffalo
State Project No. 8605-49

Substantially Complete

Primary Purpose

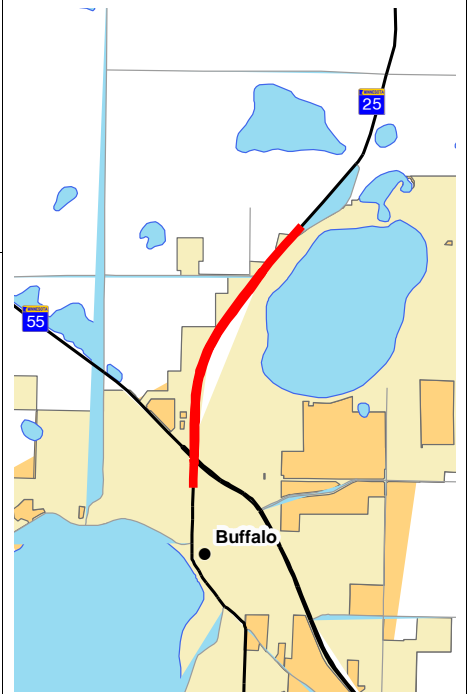
Performance-based Need: Pavement Condition and Safety Improvements

Investment Category



Project Description

This project reconstructed Hwy 25 from Hwy 55 to Catlin St. in Buffalo. The project included traffic signal upgrades and widening to accommodate four lanes.



Recent Changes and Updates

Project was completed in 2016

Project History

Funding for the project was previously delayed one fiscal year to accommodate changes to the construction program. 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.

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	\$ 6.7
Other Construction Elements:	\$ 0.0	\$ 0.5
Engineering:	\$ 1.9	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.9	\$ 7.5

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 based on estimated quantities and average bid prices. The current estimate is based on actual bid prices and letting of this project, which includes estimated local costs totaling \$1.2 million.

Project Risks

Schedule

Environmental Approval Date: 8/24/2015
Municipal Consent Approval Date: 4/20/2015
Geometric Layout Approval Date: 8/20/2013
Construction Limits Established Date: 9/8/2014
Original Letting Date: 3/28/2014
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: 12/17/2018

PROJECT SUMMARY

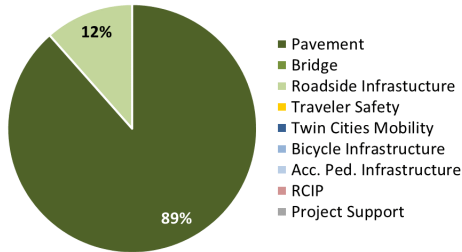
Hwy 25
Foley to south of Genola
State Project No. 0508-13/4910-29

Substantially Complete

Primary Purpose

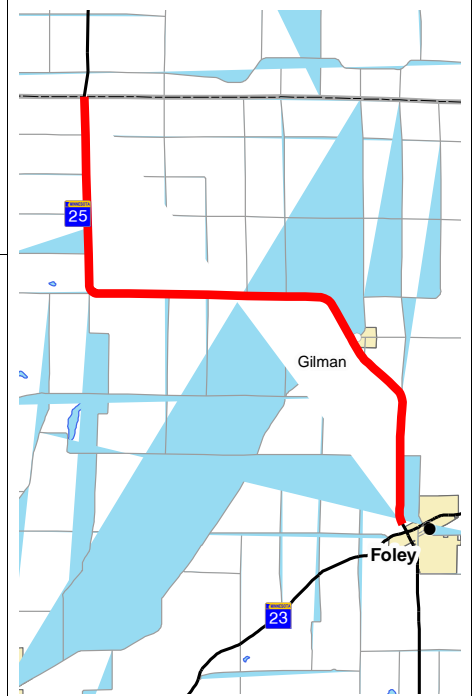
Performance-based Need: Pavement

Investment Category



Project Description

The current project combined two resurfacing projects from Foley to the Benton/Morrison County line and from the Benton/Morrison County line to south of Genola. The project includes accessibility, hydraulic and safety improvements in addition to the pavement rehabilitation.



Recent Changes and Updates

The project was let for \$5.2 million considerably less than the \$9.5 million that was previously the current estimated construction cost. Existing shoulder width allowed for paving the shoulder and the roadway in a single pass, allowing for much higher production rates. This, in part, resulted in favorable bid results for the project. Overall, the district has been seeing favorable bid results on bituminous. The roadway will be open to traffic in fall 2017.

Project History

Deteriorating pavement condition requires resurfacing of this segment. This project was advanced one fiscal year due to savings in the program. A new cost estimate was prepared using updated bid prices for this kind of work. Letting date was moved up to allow for earlier construction. The project was advanced one fiscal year and tied to another mill and overlay project on MN Hwy 25 (SP 4910-29). The project is of similar work type and adjoins SP 4910-29. Costs reflect both projects in the current estimate.

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	\$ 5.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.9	\$ 7.1

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 construction cost per mile of similar projects, adjusted for inflation.

Project Risks

No significant risks are anticipated.

Schedule

Environmental Approval Date: 9/13/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 4/6/2015
Construction Limits Established Date: 1/15/2016
Original Letting Date: 10/27/2017
Current Letting Date: 5/19/2017
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: Eric Schiller

Revised Date: 12/17/2018

PROJECT SUMMARY

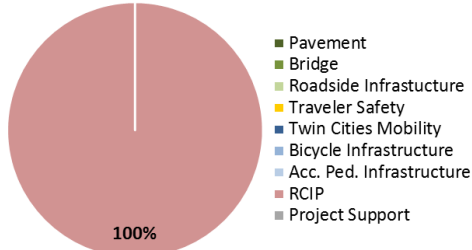
Hwy 371
Nisswa to Jenkins
State Project No. 1810-92

Substantially Complete

Primary Purpose

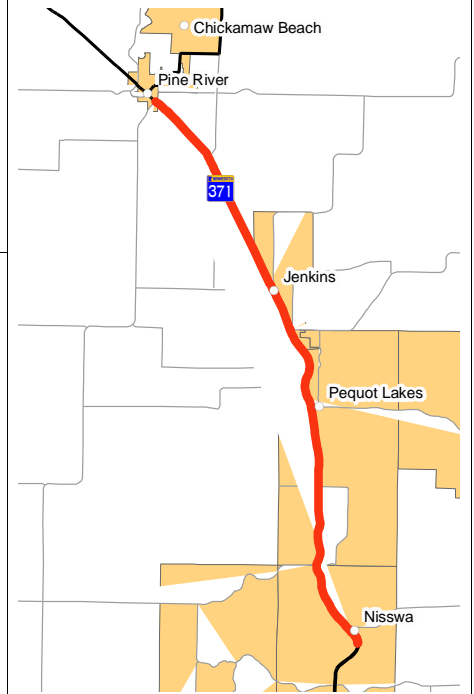
Performance-based Need: Regional & Community Improvement Priority

Investment Category



Project Description

This project is for 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 Hwy 16 in Jenkins. Work includes the replacement of Cullen Brook Bridge (BR # 18X06) and construction of a new interchange at Crow Wing County Hwy 11.



Recent Changes and Updates

Construction of this project is complete and the roadway is open to traffic. The actual bid price for this project was less than the previous estimated construction cost of \$58 million due to low bituminous prices combined with innovative project design and construction techniques.

Project History

The project was let with the best value bidder. It was originally funded as a MnDOT Major Regional & Community Improvement Priority commitment. In 2014, the project was advanced to 2016 through the Corridors of Commerce program, with funding made possible by cost savings and other efficiencies at MnDOT. The district completed construction in 2017. The project was identified as a design-build contract. 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. Municipal consent was received in Jenkins on March 2015. A re-evaluation of the environmental document was completed on June 16, 2015.

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 Pequot Lake's wastewater spray field mitigation plan could delay construction of this project if it is not completed before Aug. 1, 2016. Other potential areas of concern are in traffic control and managing congestion during construction.

Schedule

Environmental Approval Date: 10/21/2010
Municipal Consent Approval Date: 2/16/2011
Geometric Layout Approval Date: 10/19/2010
Construction Limits Established Date: 12/15/2014
Original Letting Date: 7/24/2009
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: 12/17/2018

PROJECT SUMMARY

Hwy 65

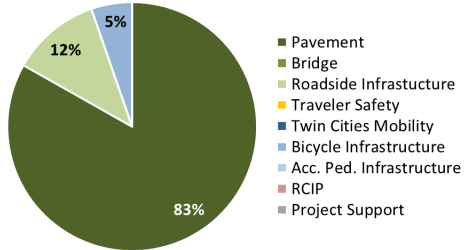
Anoka/Isanti County line to end of 4-lane road north of Cambridge
State Project No. 3003-47N/47P

Substantially Complete

Primary Purpose

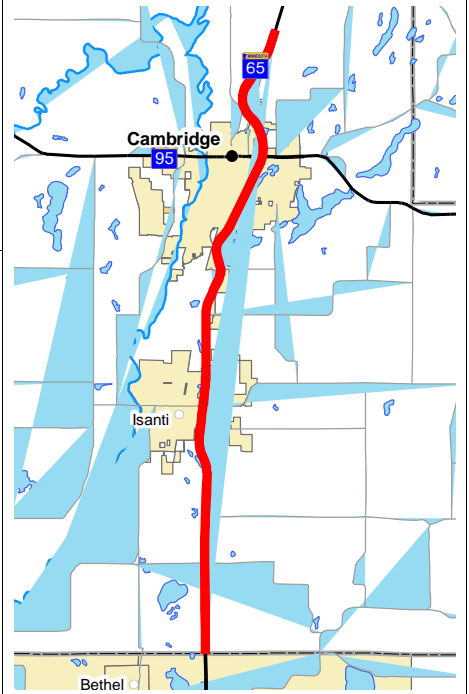
Performance-based Need: Pavement

Investment Category



Project Description

The project provides for road rehabilitation and resurfacing on segments covering 14.3 miles from the Anoka/Isanti county line to north of Cambridge. It includes resurfacing of segments from the county line to south of the Cambridge bypass and a concrete overlay on a segment from north of County Highway 19 to the end of the 4-lane stretch north of Cambridge.



Recent Changes and Updates

This project was advanced from FY 2019 to FY 2018 with a combination of savings and changes to the district's construction program. The project was let for \$10.8 million. This was less than the \$12.8 million that was previously the current estimated construction cost. Completion of this project is expected in fall 2017.

Project History

The project was selected to address deteriorating pavement. It includes placement of a white-topping concrete overlay on top of the existing asphalt, instead of just asphalt, to improve the useful life of the pavement. A new cost estimate was prepared using updated bid prices for typical work and to account for inflation.

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	\$ 10.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.3	\$ 2.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 14.0	\$ 13.4

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

Key Cost Estimate Assumptions

The baseline estimate is based on actual estimated quantities and average bid prices. The current estimate is based on actual bid and letting.

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: 3/1/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 8/15/16
Original Letting Date: 6/29/2018
Current Letting Date: 4/28/2017
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: Eric Schiller

Revised Date: 12/17/2018

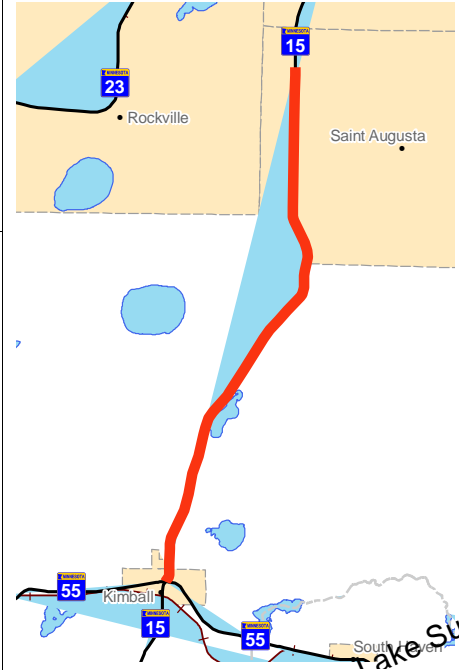
PROJECT SUMMARY

Hwy 15

TH 55 in Kimball to 66th Ave in St. Augusta

State Project No. 7303-50

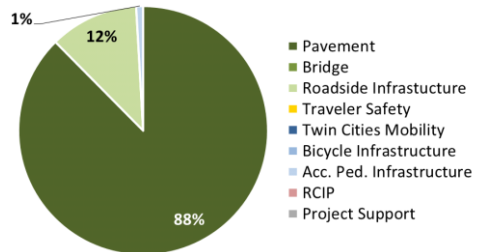
[Hwy 15 - Kimball to St. Augusta](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project consists of pavement repair with a full depth reclamation and includes hydraulic repairs from the junction of MN Hwy 55 in Kimball to 66th Avenue in St. Augusta. Construction will be detoured.

Recent Changes and Updates

The construction limits for this project originally extended south to the CP railroad tracks in Kimball. The limits were modified to allow time to work with the community in addressing its sidewalk and accessibility needs along Hwy 55. A new project has been added into year 2020 of the District's construction program that accomplishes the work within the urban area of Kimball. The splitting of this project and upscope to full depth reclamation resulted in an adjustment in the current estimate.

Project History

The project was selected to address deteriorating pavement.

The project was upscaled from a mill and overlay to a full depth reclamation with significant pipe replacements. A detour will be used with the upscaled scale of the project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.2	\$ 8.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.2	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.4	\$ 10.3

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 estimated quantities and average bid prices for similar projects. Cost estimate increase due to upscope from mill and overlay to full depth reclamation and added pipe replacements.

Project Risks

There are no known risks at this time.

Schedule

Environmental Approval Date: 7/13/2018
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 2/6/2018
Original Letting Date: 2/28/2020
Current Letting Date: 12/18/2018
Construction Season: 2019
Estimated Substantial Completion: 2019



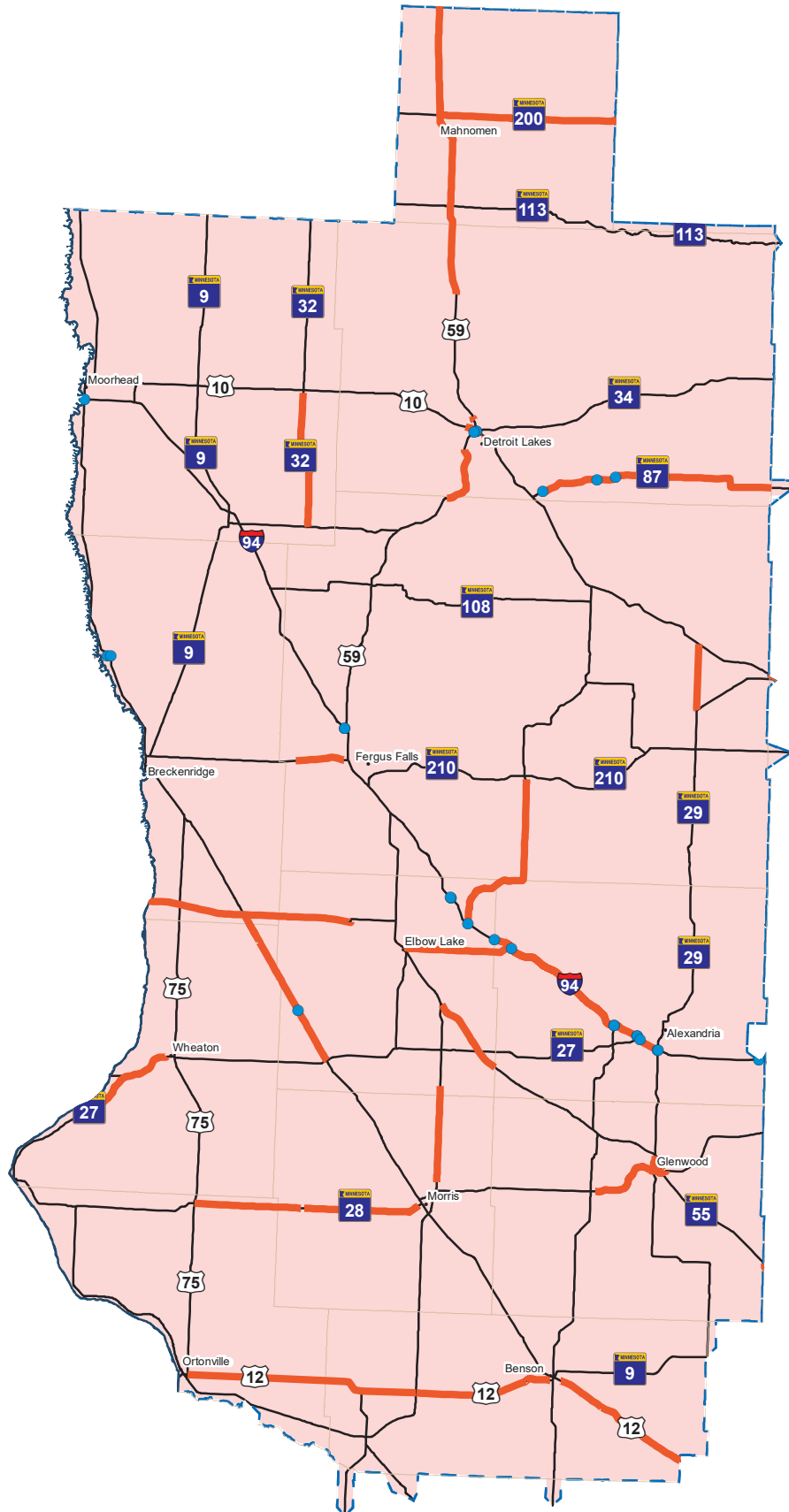
Minnesota Department of Transportation
District 3
1000 Hwy 10 W
(218) 846-3600

District Engineer: Dan Anderson
Project Manager: Russell Fellbaum

Revised Date: 12/17/2018

Major Highway Projects 2018

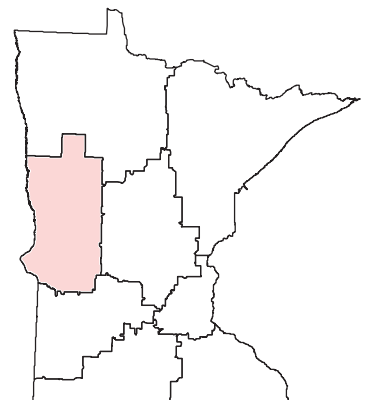
D4-DETROIT LAKES



Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- - - Construction District

mn DEPARTMENT OF
TRANSPORTATION



District 4 Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 12	0603-16	Hwy 75 in Ortonville to Hwy 59	D 2	175
Hwy 210	5601-33	1.8 miles East of Wilkin County Line to 0.4 miles West of I-94	D 3	176
Hwy 27	7802-33	On Hwy 27 from CSAH 6 to Wheaton and on Hwy 75 from Dumont to the Mustinka River bridge	D 4	177
Hwy 28	6103-32	Hwy 28, Hwy 29, Hwy 104 - Glenwood	D 5	178
Hwy 28	7503-38	From west of 4th Street in Chokio to Lyndale Ave. in Morris	D 6	179
Hwy 28	6103-34	Starbuck to Glenwood	D 7	180
Hwy 55	8404-47	State Line to Wendell	D 8	181
Hwy 55	2609-36	Barrett to South County Line	D 9	182
Hwy 59	4404-13	South of the Buffalo River Bridge to Winger	D 10	183
Hwy 78	5619-11	I-94 to Battle Lake	D 11	184
Hwy 87	0306-31	Frazee to East Becker County Line	D 12	185
I-94	2180-115	TH 114 to TH 29	D 13	186
I-94	2680-44	On I-94, 0.4 miles east of Grant County Line to Jct MN 79 on I-94 WB	D 14	187
I-94	2180-109	At various locations on I-94 from Fergus Falls to Osakis	D 15	188
Hwy 10	0301-60	Detroit Lakes	D 16	189
Hwy 10	0301-63	Jct. TH 59 to Summit Ave. in Detroit Lakes	D 17	190
Hwy 106	5622-16	From US 10 to MN 29 in Deer Creek	D 18	191
Hwy 12	7604-22	Hwy 59 to City of Benson	D 19	192
Hwy 12	7605-89	Benson to Kerkhoven	D 20	193
Hwy 200	4402-19	Hwy 59 to east Mahnomen County line	D 21	194
Hwy 28	0606-11	Hwy 75 to Chokio	D 22	195
Hwy 29	2102-58	50th Avenue in Alexandria to County Road 28	D 23	196
Hwy 32	1402-19	Hwy 34 to Hwy 10	D 24	197
Hwy 59	7506-17	From the junction of Hwy 28 to the north of the Stevens County line	D 25	198
Hwy 59	0304-37	North of CSAH 20 to south of Willow Street	D 26	199
Hwy 75	8408-44	Near Kent	D 27	200
Hwy 79	2613-18	Elbow Lake to Hwy 94	D 28	201
Hwy 9	2601-19	Herman to Hwy 55	D 29	202
I-94	1406-66	I-94 and Hwy 75 interchange	D 30	203

PROJECT SUMMARY

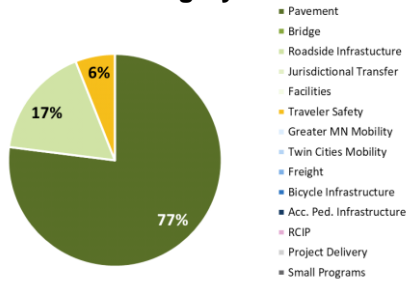
Hwy 12
Hwy 75 in Ortonville to Hwy 59
Bridge 794, 1060, 1121, 76012
State Project No. 0603-16



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project on TH 12 from US 75 in Ortonville to US 59 reclaims pavement, widens shoulders, creates snow sloping, replaces three bridges and improves one bridge.

Recent Changes and Updates

Project was selected to receive additional funding to reclaim pavement, widen shoulders and address snow traps throughout the corridor. The letting date has been revised to 3/26/2021.

Project History

Project is being considered for an upslope to include shoulder widening and snow sloping throughout corridor. Also, pavement fix would be modified to a reclaim. The project scoping document was completed in April 2016. Areas are being reviewed for possible snow trap mitigation.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.5	\$ 21.0
Other Construction Elements:	\$ 0.8	\$ 1.9
Engineering:	\$ 1.6	\$ 4.0
Right of Way:	\$ 0.1	\$ 1.1
Total:	\$ 11.0	\$ 28.0

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 on Jan. 19, 2018, inflated to year of construction. Pavement width will be widened with this project, which will result in the gravel shoulders being paved. This resulted in an increase to the cost of the project. The fix was changed to a reclaim which increased the cost.

Project Risks

Possible contamination at the NW quadrant of Hwy 12 and Hwy 59, superelevation of the curve at the east end of the project and possible additional drainage work.

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: 11/22/2019
Current Letting Date: 03/26/2021
Construction Season: 2021
Estimated Substantial Completion: Oct-21



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/17/2018

PROJECT SUMMARY

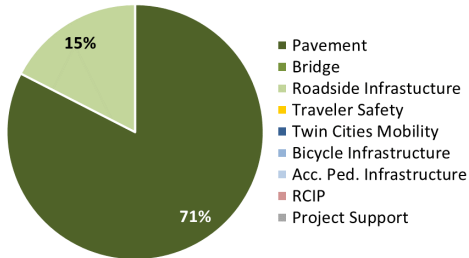
Hwy 210

1.8 miles East of Wilkin County Line to 0.4 miles West of I-94
State Project No. 5601-33

Primary Purpose

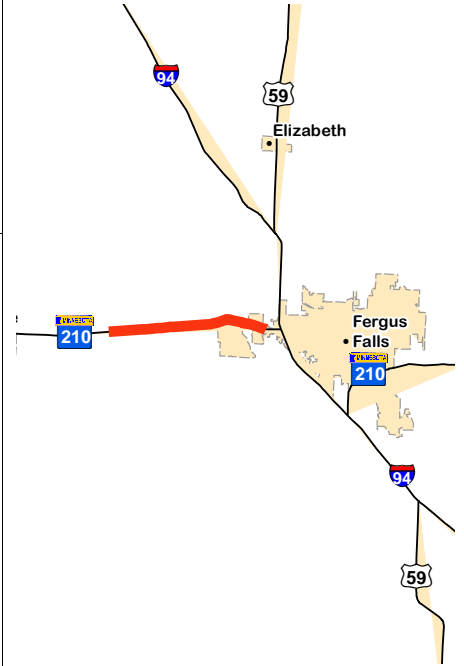
Performance-based Need: Pavement

Investment Category



Project Description

This project is a roadway reconstruction with minor profile/alignment change, left turn lanes, lighting and ditching for snow storage. The turn lane and guardrail lengths may be extended for a recent increase in speed limit.



Recent Changes and Updates

Project was upscoped to a concrete reconstruction. The letting date was moved back to Feb. 2020 to accommodate this change. The upscope includes left turn lanes at county road 116 and the grain elevator facility. Lighting is proposed at the left turn lane locations. The upscoped project is planned to also include minor alignment/profile changes. Snow fence was removed from the project to be reviewed in context of the entire corridor.

Project History

This project addresses higher than normal maintenance patching, three times per year compared to once every five years. The original project scoping was completed Dec. 2015. Blowing and drifting snow control measures benefit/cost study was completed where it was determined to be cost effective. Letting date was advanced due to poor pavement condition.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.4	\$ 7.5
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 0.9	\$ 1.6
Right of Way:	\$ 1.0	\$ 0.7
Total:	\$ 6.8	\$ 10.4

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

Key Cost Estimate Assumptions

Estimate completed in 2018 using inflation rate of 10 percent for construction year 2020. New fix for the project of concrete pavement has increased the cost. Turn lanes were also added to the project resulting in additional cost.

Project Risks

Converting six additional bypass lanes to left turn lanes. Risk for relocation of road closure gate was retired. Gate will remain in its present location. Risk for paving local roads to the railroad was retired. Some of the roads will be paved to the railroad based on input from the road authorities.

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: 11/22/2019
Current Letting Date: 02/28/2020
Construction Season: 2020
Estimated Substantial Completion: November 2020



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

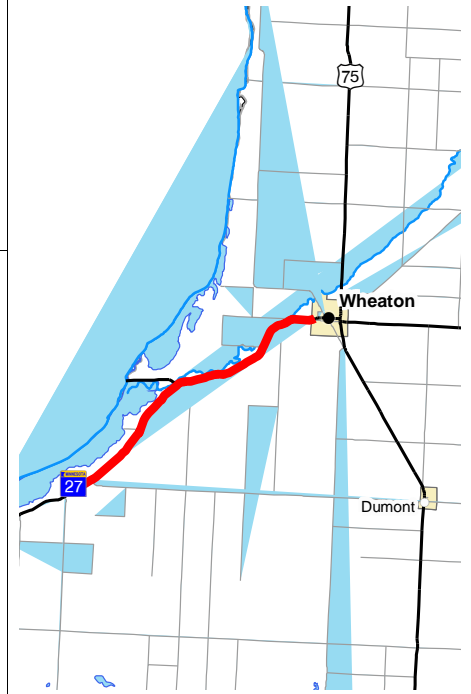
District Engineer: Jody Martinson
Project Manager: Lori Vanderhider

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 27

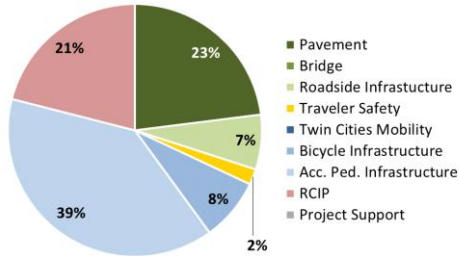
CSAH 6 to Wheaton and on Hwy 75 from Dumont to the Mustinka River bridge
State Project No. 7802-33



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

Pavement will be rehabilitated for 10.2 miles on Hwy 27 from CSAH 6 to western limits of Wheaton and 7.1 miles on Hwy 75 from Dumont to south limits of Wheaton.

Recent Changes and Updates

Box culvert bridges were removed from project due to complexity of design, right of way and environmental impacts. TH 75 limits were changed to south limits of Wheaton. Remaining sections of TH 75 will be included in 7802-35 (2019) and 7806-29 (2020). Project is being constructed fall 2018.

Project History

This project was upscoped from a mill and overlay to a cold inplace recycle on rural portions of TH 75/TH 27. Also included are centerline culverts and box culvert bridges on TH 27. The urban portion on TH 27 and TH 75 will now be included in the SP 7802-35 to be constructed in 2019. This project was also advanced on letting from 12-2018 to 4-2018 to be constructed in summer 2018 as an early let, late award.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.4	\$ 6.1
Other Construction Elements:	\$ 0.5	\$ 0.7
Engineering:	\$ 0.9	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 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 reflects low bid amount for the project.

Project Risks

No right of way acquisition will be allowed with this upscoped, advanced project. Environmental documents that include all hydraulic impacts need to be completed before letting date. New estimate increased because it includes work on Hwy 75 that was previously a separate project (SP 7805-33). Project estimate increased because it is now a cold inplace recycle with additional hydraulic work. The project has advanced a construction season.

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: 1/25/2019
Current Letting Date: 04/27/2018
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: 12/17/2018

PROJECT SUMMARY

Hwy 28

Hwy 28, Hwy 29, Hwy 104 - Glenwood

State Project No. 6103-32

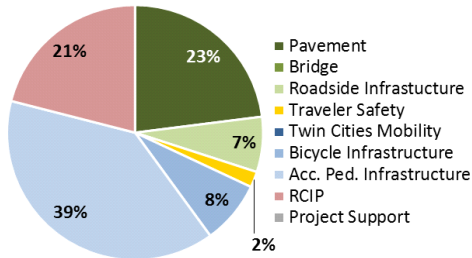
[Hwys 28, 29, 104 in Glenwood](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

4 miles of bituminous rehabilitation on Hwy 28, Hwy 29 and Hwy 104 in Glenwood. The project also includes: ADA pedestrian ramps, sidewalk, signal system, six blocks of complete streets improvements and a realignment to address a flooding issue on Hwy 28 near the fairgrounds. Complete Streets is an approach to road planning and design that considers and balances the needs of all transportation users. In Glenwood this includes improvements and facilities for bicycles and pedestrians.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.3	\$ 9.3
Other Construction Elements:	\$ 0.5	\$ 0.7
Engineering:	\$ 1.4	\$ 2.0
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 9.2	\$ 12.1

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

Recent Changes and Updates

Final design plans were completed. Letting date is moved back to Dec. 15, 2017. The project is being constructed in 2018.

Project History

This project includes ADA, complete streets, bituminous overlay and hydraulic flooding issues that need to be resolved. The complete streets portion of the project was approved, which includes improvements and facilities for bicycles and pedestrians. Hydraulic flooding issue mitigation design was approved. The predesign contract is complete. The final design contract is initiated. A project that was awarded transportation alternatives program funding will be constructed in conjunction with this project. Municipal consent and the geometric layout for the project have been approved. Twelve blocks of complete streets improvements will be done in Glenwood.

Key Cost Estimate Assumptions

The current estimate reflects a low bid amount for the project.

Project Risks

City participation costs, ADA, sidewalk, and access control. Cooperative agreement needs to be processed and signed. A limited use permit needs to be processed and signed. Detour agreements need to be processed and signed. Contractor needs to be proactive in order to build the project in one construction season. Glenwood's complete streets participation involves \$1 million. Glenwood's participation for grade raise to solve flooding issues involves \$100,000. The grade raise by the fairgrounds has increased the cost of the project.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: 6/29/2016
Geometric Layout Approval Date: 7/19/2016
Construction Limits Established Date: 6/3/2016
Original Letting Date: 02/16/2018
Current Letting Date: 11/17/2017
Construction Season: 2018
Estimated Substantial Completion: Oct-18



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/17/2018

PROJECT SUMMARY

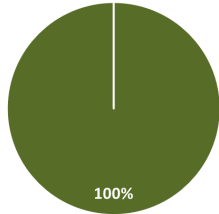
HWY 28

Just west of 4th St. W. in Chokio to Lyndale Ave. in Morris
Bridge 1745, 8118, 1744
State Project No. 7503-38

Primary Purpose

Performance-based Need: Pavement

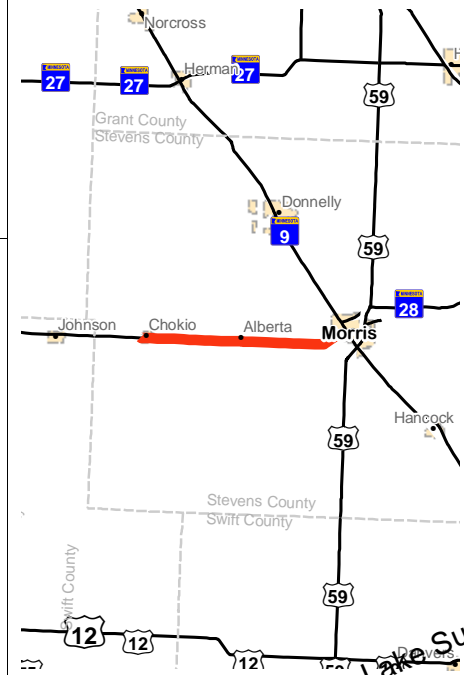
Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

The project consists of a mill and overlay and replacing three box culvert bridges 1745, 8118 and 1744 on MN28 from just west of 4th St. West in Chokio to Lyndale Ave in Morris.



Recent Changes and Updates

This project was originally a flex project from FY 2022 to 2020. Originally a mill and overlay project, it was selected to receive further funding for replacing three box culverts 1745, 8118 and 1744 in FY 2020.

Project History

The project was identified as a flex project. The project has always been a 3"mill and 4 1/2" overlay to address the deteriorating surface. Box culverts that ended in the clear zone were to be protected with guard rail or extended if possible. Once it was determined the box culverts could not be extended and guardrail would create blowing and drifting conditions, the district requested further funds to replace the culverts. Once money was allocated the districts decided to fund the project in FY 2020 and remove its flex status. The letting was originally in Oct. 2019, but was moved to balance the districts letting schedule.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: Not Yet

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 4.8	\$ 4.8
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.5	\$ 6.5

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

Key Cost Estimate Assumptions

The scoping estimate, dated Jan. 19, 2018, applied a 10 percent inflation rate to the 2018 cost estimates to adjust for the 2020 construction year.

Project Risks

The project risks include adding guardrail at two locations, a possible snow fence near Spooner and a possible addition of two lights at the railroad crossing.

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: 10/25/2019
Current Letting Date: 11/22/2019
Construction Season: 2020
Estimated Substantial Completion: Oct 2020



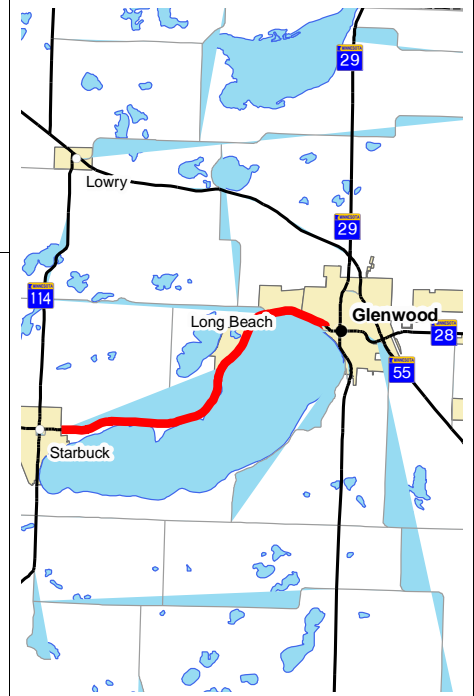
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Justin Knopf

Revised Date: 12/17/2018

PROJECT SUMMARY

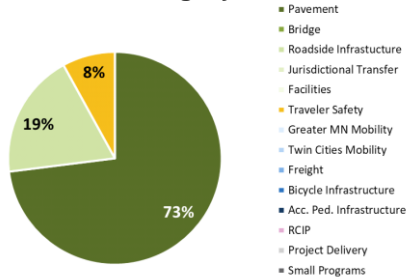
Hwy 28
Starbuck to Glenwood
State Project No. 6103-34



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of 8 miles of bituminous milling, reclamation and surfacing. Project also includes turn lane construction, hydraulic work and shoulder widening on Hwy 28.

Recent Changes and Updates

The typical section of SP 6103-32 will be continued to the west until Golf Course Road where the center left turn lanes are being constructed before widening shoulders to 8 feet. There is a concern for high water tables and bad soils within the profile exiting Glenwood going west up over the hill. The district is working with Minnewaska Township to turn back Silver Beach Road.

Project History

This project includes bituminous milling, roadway reclamation, bituminous surfacing, shoulder widening and center left turn lane construction. Multiple locations along the project include off take ditches and centerline culverts that need to be reviewed to correct hydraulic issues if possible. A bypass lane was added at CSAH 24. A hydraulic design is required on the north side of TH 28 at Silver Beach road to redirect runoff during large rain events to reduce flooding on Silver Beach Road.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.8	\$ 5.1
Other Construction Elements:	\$ 1.4	\$ 1.1
Engineering:	\$ 1.4	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.6	\$ 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 cost estimate was done in 2018 and inflated to 2019. Using an estimated lower inflation rate and the retirement of project contingency account for the reduction in the current estimate.

Project Risks

Project risks include environmental approval, right of way acquisition and a detour agreement. Hydraulic risks are accounted for in the cost estimate. The right of way acquisition will be necessary depending on the hydraulic design on the north side of TH 28 near Silver Beach Road. High water tables and bad soils west of Glenwood present a risk for construction.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Approved
Construction Limits Established Date: Approved
Original Letting Date: 2020
Current Letting Date: 2/22/2019
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: Justin Knopf

Revised Date: 12/17/2018

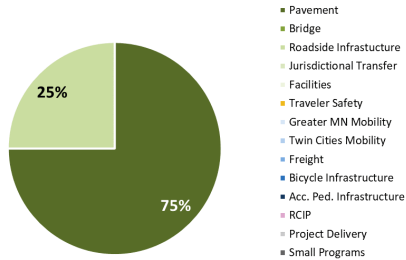
PROJECT SUMMARY

Hwy 55
State Line to Wendell
Bridge 6385, 8806, 8874, 8807
State Project No. 8404-47

Primary Purpose

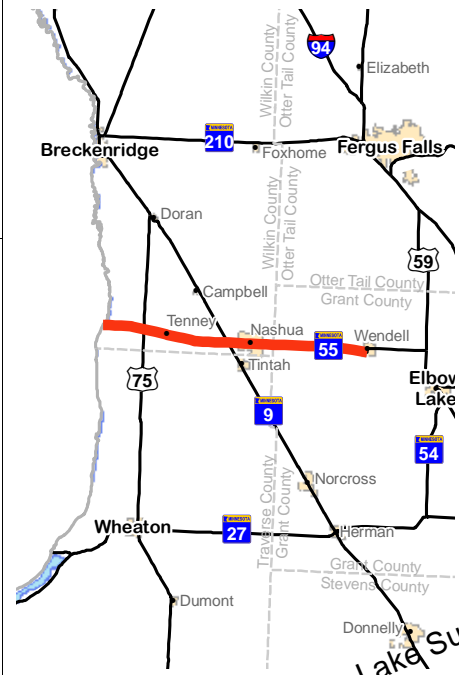
Performance-based Need: Pavement

Investment Category



Project Description

This project consists of pavement replacement utilizing cold in place recycling and replacing box culvert bridges 6385, 8806, 8874 and 8807 on TH 55 from the Minnesota/North Dakota state line to the junction of CSAH 11 in Wendell.



Recent Changes and Updates

This is a new project funded in 2017.

Project History

The project scoping document was signed on 4/25/2018.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: N/A

	Baseline Est.	Current Est.
Construction Letting:	\$ 9.6	\$ 9.6
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 12.6	\$ 12.6

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

Key Cost Estimate Assumptions

The scoping estimate, dated April 11, 2018, applied a 15 percent inflation rate to the 2018 cost estimates to adjust for the 2021 construction year.

Project Risks

There will be possible turn lanes added. There may be additional unknown drainage costs with this project.

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: 01/29/2021
Current Letting Date: 01/29/2021
Construction Season: 2021
Estimated Substantial Completion: October 2021



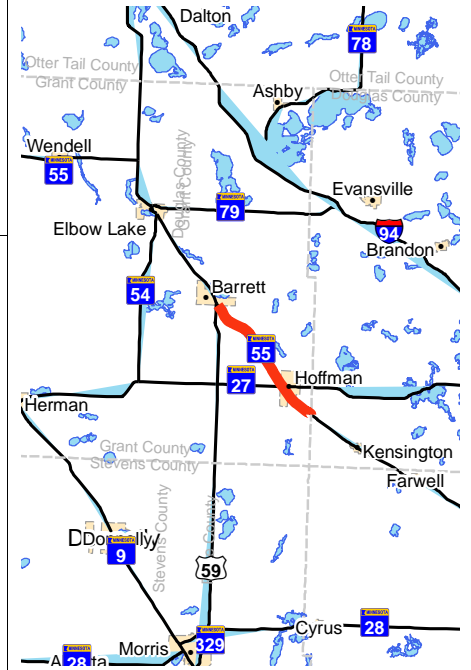
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/17/2018

PROJECT SUMMARY

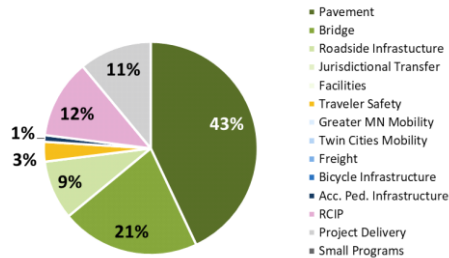
Hwy 55
Barrett to South County Line
Bridge 26X02
State Project No. 2609-36



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a resurfacing project involving the grading and reclamation of the roadway on MN 55 from Grant Ave. in Barrett to the Douglas/Grant county line. This project also includes replacing bridge 5480 with a new box culvert bridge 62X02 over the Pomme De Terre River.

Recent Changes and Updates

This project is a reclaim with a bridge replacement.

Project History

Project was developed to address declining pavement and bridge condition. Projects are being timed together to minimize disruption to the traveling public.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.0	\$ 5.1
Other Construction Elements:	\$ 1.2	\$ 0.5
Engineering:	\$ 1.2	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.4	\$ 6.7

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

Key Cost Estimate Assumptions

The scoping estimate, dated Feb. 26, 2018, applied a 6 percent inflation rate to the 2018 cost estimates to adjust for the 2019 construction year. This is a lower inflation rate than originally assumed due to the advancement of the letting date. Cost estimate is assuming a reclaim and the replacement of a bridge with a triple box culvert over the Pomme De Terre River. In addition, the estimate includes some anticipated pipe replacement work. A detailed bridge estimate is not yet available, so the estimate assumes average cost per square foot from similar bridge projects. The project letting date was advanced due to additional funding that became available.

Project Risks

Uncertain funds from Grant County for work on CSAH to a new elevator is a risk. Risks for asbestos abatement, guardrail and hydraulic work exist.

Schedule

Environmental Approval Date: Need unknown
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 9/1/2017
Original Letting Date: 03-20-2020
Current Letting Date: 03/22/2019
Construction Season: July 2019-November 2019
Estimated Substantial Completion: November 2019



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

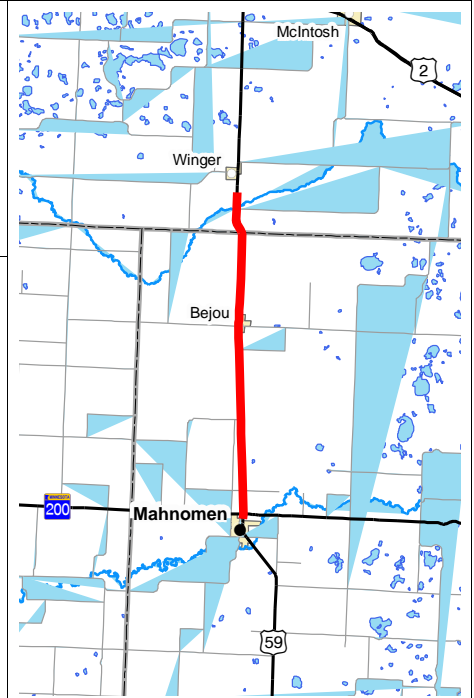
District Engineer: Jody Martinson
Project Manager: Katy Reiersen

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 59

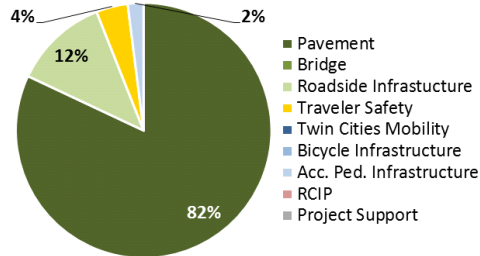
South of the Buffalo River Bridge to Winger
State Project No. 4404-13, 0305-34, &, 6008-15



Primary Purpose

Performance-based Need: Pavement

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 edge line rumble strips will be installed. ADA work in Ogema will be done. One mile of continuous center left turn lane will be constructed in Mahanomen along with a trail from Washington Ave. to the Shooting Star Casino entrance.

Recent Changes and Updates

Construction is complete

Project History

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. 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 percent complete. One mile of continuous left turn lane was added in Mahanomen along with a half mile of trail to accommodate pedestrians. Design is 100 percent complete.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.7	\$ 9.8
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 1.0	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 6.2	\$ 11.8

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

Key Cost Estimate Assumptions

The current estimate reflects low bid amount for the project. The increase in the cost is due to combining two projects into one. SP 4404-13 and SP 0305-34 were combined. Also, one mile of continuous left turn lane was added in Mahanomen along with a half mile of trail to accommodate pedestrians.

Project Risks

All permits are obtained.

Schedule

Environmental Approval Date: 7/15/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/25/2016
Construction Limits Established Date: 1/20/2016
Original Letting Date: 02/16/2018
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: October 2017



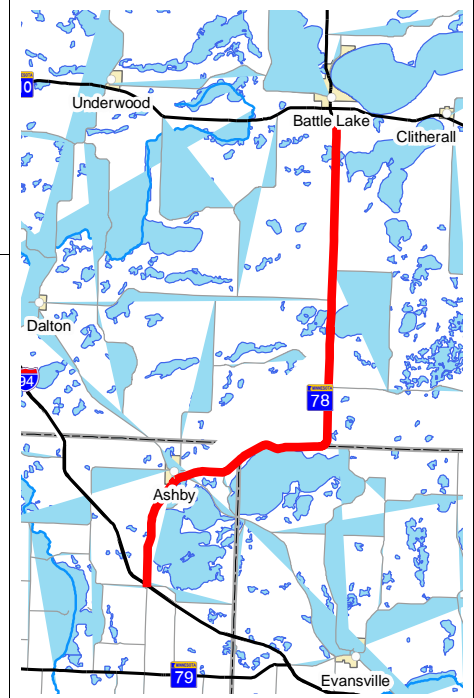
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Shiloh Wahl

Revised Date: 12/17/2018

PROJECT SUMMARY

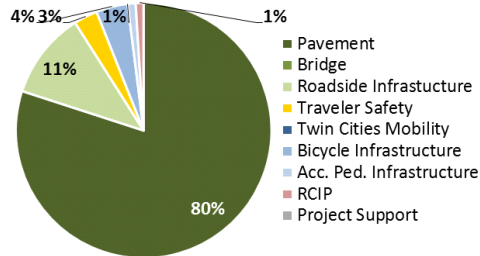
Hwy 78
I-94 to Battle Lake
State Project No. 5619-11



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

Mill and overlay project on Hwy 78 from I-94 to Battle Lake.

Recent Changes and Updates

Construction is complete.

Project History

This project was designed to correct deteriorating road surface. Scoping document approved February 2014. Coordinating with Battle Lake and Ashby on a possible trail between the two communities. Working on right of way process and starting design of project.

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	\$ 3.9
Other Construction Elements:	\$ 0.9	\$ 0.7
Engineering:	\$ 1.4	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.7	\$ 5.7

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

Key Cost Estimate Assumptions

The current estimate reflects low bid amount for the project. The baseline estimate had a higher inflation rate than was realized in the actual let amount. The bid price for bituminous was low. These factors account for the lower bid price.

Project Risks

No major risks noted.

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: Oct-18



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Tom Lundberg

Revised Date: 12/17/2018

PROJECT SUMMARY

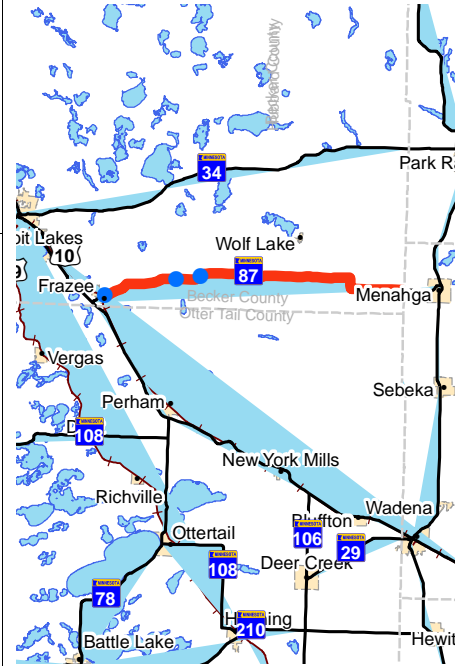
Hwy 87

Frazee to East Becker County Line

Bridge 6674, 8700, 8690

State Project No. 0306-31

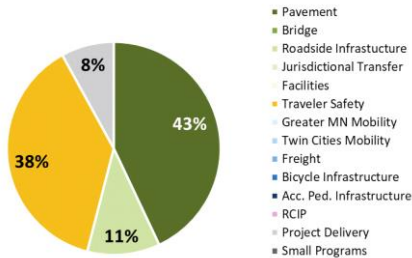
[Hwy 87 - Frazee to Becker/Wadena County Line](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is for 27.2 miles of road surfacing, 12.7 miles of reclaim and shoulder widening included from Frazee to Evergreen, from Evergreen to East Becker County Line, 14.5 miles is a cold in place recycle. Project includes numerous centerline, side pipes and cattle pass structures and box culvert bridge replacements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 12.7	\$ 16.6
Other Construction Elements:	\$ 0.8	\$ 1.5
Engineering:	\$ 2.7	\$ 3.2
Right of Way:	\$ 0.0	\$ 0.3
Total:	\$ 16.2	\$ 21.6

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

Recent Changes and Updates

The project is now a road resurface project broken into two fixes. Frazee to Evergreen includes reclaim with shoulder widening. Evergreen to East County Line includes cold in place recycle. Box culvert bridge replacements in the first segment is still included. This project is now consultant designed. Project letting was advanced.

Project History

Project was a mill/overlay with shoulder widening and box culvert bridges from Frazee to Evergreen.

Key Cost Estimate Assumptions

The scoping estimate, dated Jan. 19, 2018, was applied with a 15 percent inflation rate to the 2018 cost estimates to adjust for the 2021 construction year. Shoulder widening was added to the job and the fix was changed to a reclaim and cold in place recycle which increased the cost.

Project Risks

Construction staging, detour length, wetland environmental impacts, box culvert bridge environmental impacts. Narrow shoulders and hydraulic improvements increased the cost.

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: 3-26-2021
Current Letting Date: 12-18-2020
Construction Season: 2021
Estimated Substantial Completion: Oct-21



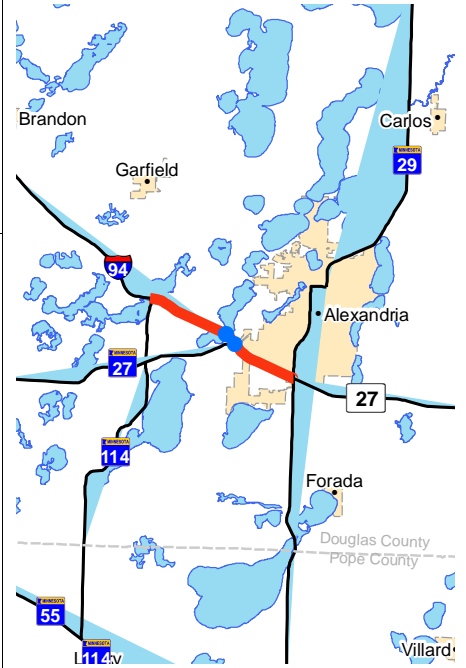
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/17/2018

PROJECT SUMMARY

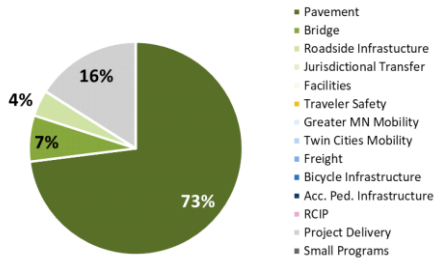
I 94
TH 114 to TH 29
Bridge 21805, 21806, &, 21825
State Project No. 2180-115



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is an unbonded concrete overlay with ADA improvements on I-94 EB, from just east of TH 114 to just west of TH 29.

Recent Changes and Updates

There are sidewalk improvements to Lake Latoka Rest Area included with this project.

Project History

This project was initiated because intense annual maintenance was required. The scoping report completed was approved July 5, 2017. This project was originally proposed as a 2023 project, but was moved up to 2019.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.2	\$ 5.8
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.0	\$ 7.6

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 a scoping estimate dated Jan. 19, 2018, and was inflated to the 2019 letting. The current estimate is lower than the baseline estimate because a lower inflation rate was used on the current estimate.

Project Risks

May need to include Lake Latoka Rest Area improvements with this project. Material cost escalation is possible. Hydraulic needs may change.

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: 01/25/2019
Current Letting Date: 01/25/2019
Construction Season: 2019
Estimated Substantial Completion: Oct-19



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

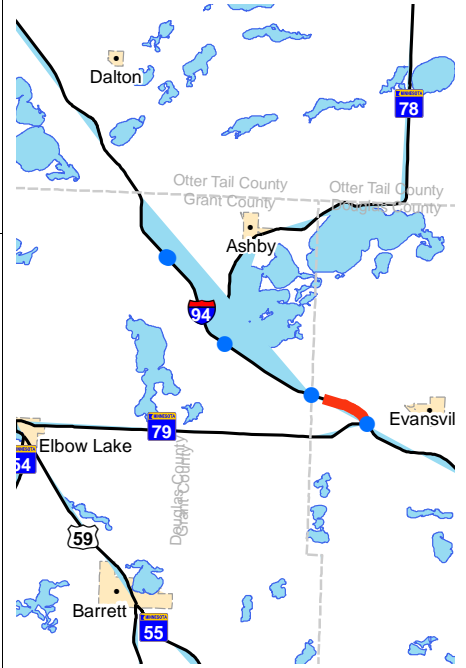
District Engineer: Jody Martinson
Project Manager: Nathan Bausman

Revised Date: 12/17/2018

PROJECT SUMMARY

I94

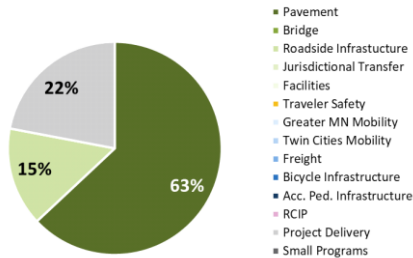
0.4 miles east of Grant County Line to Jct MN 79 on I-94 WB
Bridge 26801, 26802, 26803, 21802, 26X01
State Project No. 2680-44



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a 11.7 mile unbonded concrete overlay from 0.4 miles east of Grant County Line to junction of MN 79 on WB I-94. The project also includes hydraulic and guardrail upgrades at all bridges and culverts as necessary.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.6	\$ 11.0
Other Construction Elements:	\$ 0.7	\$ 1.0
Engineering:	\$ 1.7	\$ 2.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.0	\$ 14.1

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

Recent Changes and Updates

Recently changed from a concrete pavement rehabilitation project to an unbonded overlay. This project area was repaired in 2003, but after a field review by the concrete office and district 4 materials office it was determined another repair could be done and the pavement would still be good for another 15 years. After review and further funding the project was moved up in the program as an ELLA and rescope to include an unbonded overlay of the entire project limits.

Project History

The project upscoped from a pavement rehabilitation to an unbonded overlay with further funding where a new letting date was selected as 3/27/20.

Key Cost Estimate Assumptions

The baseline cost estimate is a scoping estimate from 2018 inflated to 2021. The fix was changed to an unbonded concrete overlay that increased the cost of the project.

Project Risks

Hydraulic review will be done closer to project start date. Shoulders need repair. Guardrails need to be reviewed for adherence to current safety standards.

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: 10-23-2020
Current Letting Date: 3-27-2020
Construction Season: Summer of 2020
Estimated Substantial Completion: Oct 2020



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

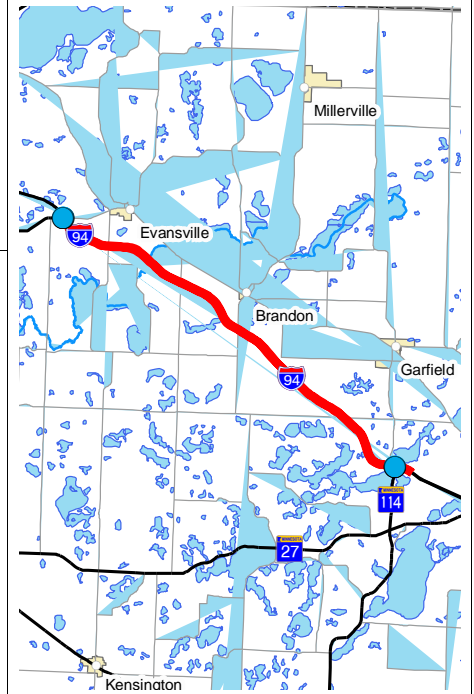
District Engineer: Jody Martinson
Project Manager: Justin Knopf

Revised Date: 12/17/2018

PROJECT SUMMARY

I-94

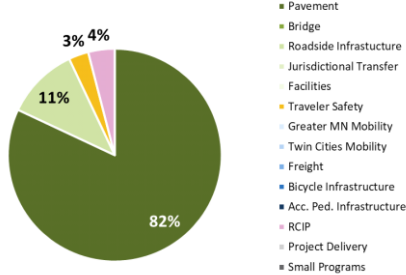
At various locations on I-94 from Fergus Falls to Osakis
 Bridge 21801, 21802, 21803, 21804, 21809, 21810, 21812, 9691, 9692, 21821
 State Project No. 2180-109, 2180-108, 5680-138



Primary Purpose

Performance-based Need: Pavement and Bridge Condition

Investment Category



Project Description

Replace the bridge decks on bridges over I-94 at County Road 88 near Fergus Falls, Highway 79 near Evansville, and Highway 114 near Alexandria. Also replace the bridge deck on Highway 27 over Interstate 94 near Osakis. Provide new concrete pavement surface in east bound and west bound directions from Highway 114 to 79.

Recent Changes and Updates

For project segment SP 2180-109 construction is nearing completion for fall of 2018. For project segment SP 5680-13 and SP 2180-108 construction is complete.

Project History

Combining these six projects into one will limit the impact to the traveling public to two construction seasons. The bridge decks and concrete paving projects were originally to be completed in six separate contracts over multiple years. The seven bridges were in three different areas, Fergus Falls, Evansville and Osakis. The project split into three separate projects, two bridges near Fergus Falls, one bridge near Osakis and the four bridges near Evansville with a concrete overlay on both EB and WB I-94 between the bridge locations. The bridges near Fergus Falls were completed in 2016. The bridge near Osakis will be let fall 2016 with construction in 2017. The other four bridges and concrete overlay plans are 95 percent complete and are waiting for funding. A reduced impact to the traveling public is still expected by combining the four bridges and concrete overlay as one project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 11-01-2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 42.0	\$ 26.4
Other Construction Elements:	\$ 2.5	\$ 2.9
Engineering:	\$ 3.8	\$ 5.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 48.3	\$ 35.2

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

Key Cost Estimate Assumptions

The job is being constructed. The current estimate reflects low bid amounts for the three projects. Combining the work into three projects resulted in low bids for the work.

Project Risks

There was a reduction of impact to the cable median guardrail in the area of the concrete overlay. This may be difficult as the guardrail is close to the pavement and limits the contractor's working area. The major portion of the work (four bridges and the concrete overlay) is not funded. Delaying the funding will impact the estimate due to inflation.

Schedule

Environmental Approval Date: 6/15/2016
 Municipal Consent Approval Date: Not needed
 Geometric Layout Approval Date: Not needed
 Construction Limits Established Date: Not needed
 Original Letting Date: 3/16/2016
 Current Letting Date: 3/16/2016
 Construction Season: May 2017 - October 2018
 Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation
 District 4
 1000 Hwy 10 W
 (218) 846-3600
District Engineer: Jody Martinson
Project Manager: Chris Roy
Revised Date: 12/17/2018

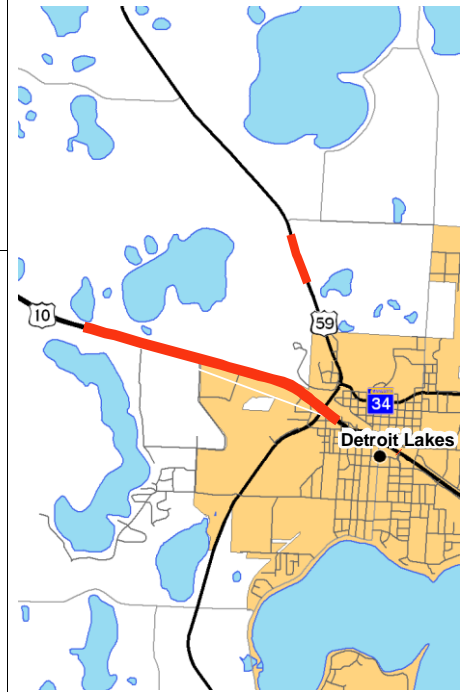
PROJECT SUMMARY

Hwy 10
Detroit Lakes
Bridge 03001

State Project No. 0301-60

[Hwy 10/Hwy 59 & Frontage Road Reconstruction](#)

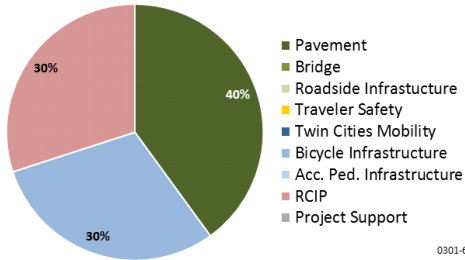
Substantially Complete



Primary Purpose

Performance-based Need: Regional & Community Improvement Priority and Pavement Condition

Investment Category



0301-60

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 was constructed, as well as a city street running under the bridge. From the city street, a frontage road and trail system were constructed along both Hwy 59 and Hwy 10. Pavement was rehabilitated between Hwy 59 and Hwy 10 with ADA improvements, signals and lighting.

Recent Changes and Updates

Project was substantially complete in the fall of 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. The project is under construction with substantial completion in fall 2015. Clean up of swamp area on frontage road will be done in 2016. Project is complete short of final punch list items. Turn back of the constructed frontage roads to Detroit Lakes has begun. The contractor is doing corrective work on substandard pavement at no cost to state in fall 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:	\$ 14.0	\$ 14.3
Other Construction Elements:	\$ 0.7	\$ 0.3
Engineering:	\$ 2.8	\$ 2.9
Right of Way:	\$ 0.0	\$ 1.4
Total:	\$ 17.4	\$ 18.9

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 and the city project on Thomas Avenue will be bituminous. This project is substantially complete. The current estimate reflects final total project cost estimate numbers.

Project Risks

Project is complete.

Schedule

Environmental Approval Date: 5/21/2013
Municipal Consent Approval Date: 7/9/2013
Geometric Layout Approval Date: 05/31/2013
Construction Limits Established Date: 8/1/2013
Original Letting Date: 01/23/2015
Current Letting Date: 02/27/2015
Construction Season: May 2015 - November 2015
Estimated Substantial Completion: Nov-16



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Tom Lundberg

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 10
Jct. TH 59 to Summit Ave. in Detroit Lakes
Bridge 03011, 03004
State Project No. 0301-63

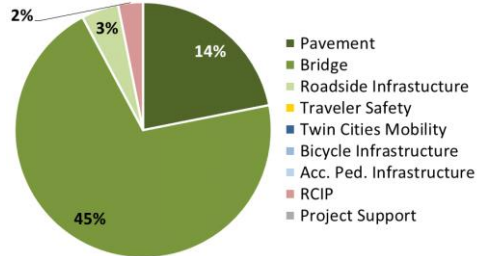
Substantially Complete



Primary Purpose

Performance-based Need: Pavement and Bridge Condition

Investment Category



Project Description

Mill of existing bituminous and place back concrete pavement. Replace bridges with new bridge.

Recent Changes and Updates

Construction is complete

Project History

This project was programmed to correct poor pavement and match up similar concrete sections on either side. Final design will be completed fall 2016.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 0.9	\$ 4.8
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.3	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 1.5	\$ 5.9

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers.

Project Risks

Complex staging and compressed timeline could affect bid costs. Bridge work over active rail line. Public patience with another long construction project in the area. Finishing concrete paving before the end of the construction season. The project was changed from a bridge overlay to a bridge replacement and extended to Summit Ave. with 7 inches of concrete, complex staging, which increased the cost.

Schedule

Environmental Approval Date: 8/10/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 2/24/2017
Current Letting Date: 1/27/2017
Construction Season: 2017
Estimated Substantial Completion: November 2017



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Tom Lundberg

Revised Date: 12/17/2018

PROJECT SUMMARY

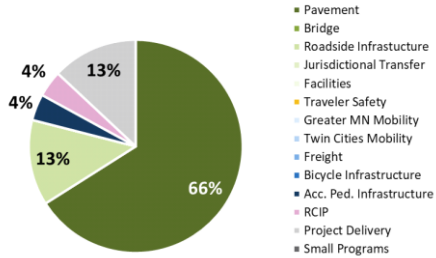
Hwy 106
From US 10 to MN 29 in Deer Creek
State Project No. 5622-16

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

On MN 106 from US 10 to MN 29 in Deer Creek, grading, cold in place recycle, turn lanes, shoulder widening, pedestrian ramps and sidewalks.



Recent Changes and Updates

Project was let on May 18, 2018. Project will be complete by the end of Sept. 2018.

Project History

The project has been upscoped to cold in place recycling pavement fix, added shoulder widening and 1.5 miles of regrading. Originally, this project was scoped for a 3" mill/fill with turn lanes being added at CSAH 52. Also, ADA improvements were included in the Deer Creek.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 6.4	\$ 4.8
Other Construction Elements:	\$ 0.6	\$ 0.5
Engineering:	\$ 1.4	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.4	\$ 6.4

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The baseline estimate had a higher inflation rate than was realized in the actual let amount. The bid price for bituminous was low.

Project Risks

The project is being constructed.

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: 5/18/2018
Construction Season: May 2018 - October 2018
Estimated Substantial Completion: Sept - 2018



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/17/2018

PROJECT SUMMARY

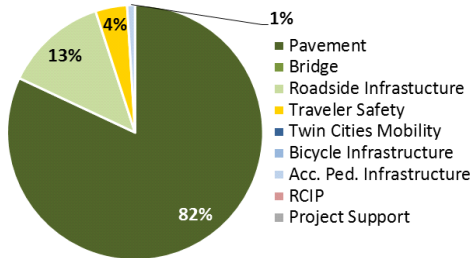
Hwy 12
Hwy 59 to City of Benson
State Project No. 7604-22

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

15 mile pavement rehabilitation project from Hwy 59 to Benson. The project also includes shoulder work, side culverts, snow drift control and end posts on bridge 76001.



Recent Changes and Updates

The project was constructed in summer 2017.
The project is substantially complete.

Project History

The existing 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. This project was moved to an earlier letting date. Ditch grading for snow drift control will be done with this project. A living snow fence will be implemented as a standalone project in spring 2018.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.7	\$ 4.4
Other Construction Elements:	\$ 0.7	\$ 0.1
Engineering:	\$ 1.1	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 7.5	\$ 4.9

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The bid price for bituminous was low, which accounted for the lower final cost and the earlier letting date, which reduced the inflation of the cost.

Project Risks

The project was constructed in summer 2017. All risks retired.

Schedule

Environmental Approval Date: 6/20/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 8/15/2015
Original Letting Date: 02/23/2018
Current Letting Date: 03/24/2017
Construction Season: 2017
Estimated Substantial Completion: Oct-17



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/17/2018

PROJECT SUMMARY

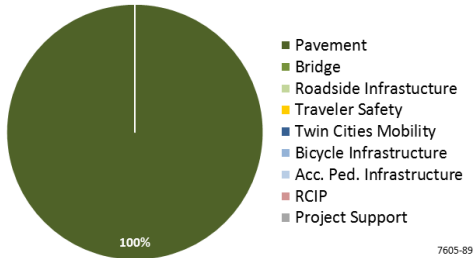
Hwy 12
Benson to Kerkhoven
State Project No. 7605-89

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

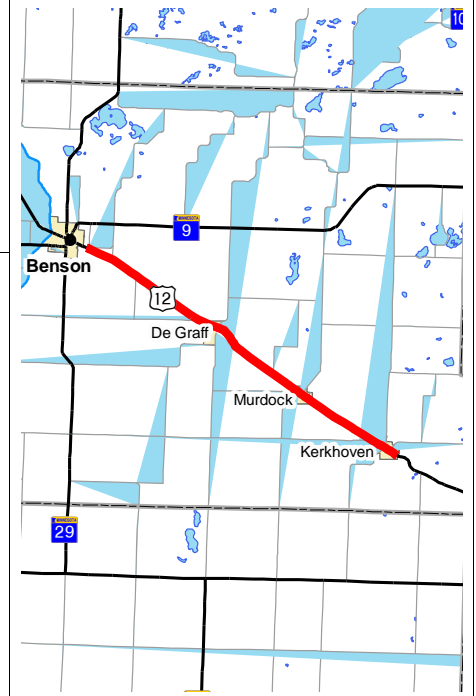
Investment Category



7605-89

Project Description

This project is a 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

Construction complete in October 2016.

Project History

Final scoping approval in Feb. 2013. Scoping report complete. Scheduled field walk to evaluate ADA needs. Resurface Hwy 12 from Benson to Kerkhoven to restore ride quality. ADA needs identified and are included in design. Failing culverts, non-compliant sidewalks and pedestrian ramps in DeGraff, Murdock and Kerkhoven were identified. Projects were let April 22, 2016 as an ELLA. Scheduled to be complete by Oct. 1, 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:	\$ 5.4	\$ 3.2
Other Construction Elements:	\$ 0.5	\$ 0.2
Engineering:	\$ 1.0	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 6.9	\$ 4.0

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The bid price for bituminous was low and the project was let at an earlier date, which resulted in a lower cost.

Project Risks

Subgrade issue, which may include poor soils under the pavement, and a low area in Murdock. ADA in DeGraff, Murdock and Kerkhoven considerations.

Schedule

Environmental Approval Date: Not needed
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 8/15/2015
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: 12/17/2018

PROJECT SUMMARY

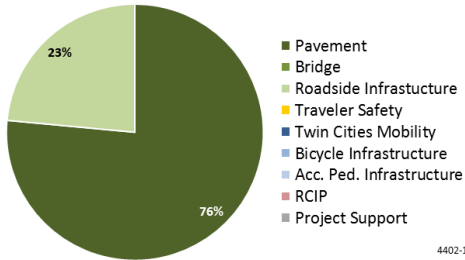
Hwy 200
Hwy 59 to east Mahnomen County line
State Project No. 4402-19

Substantially Complete

Primary Purpose

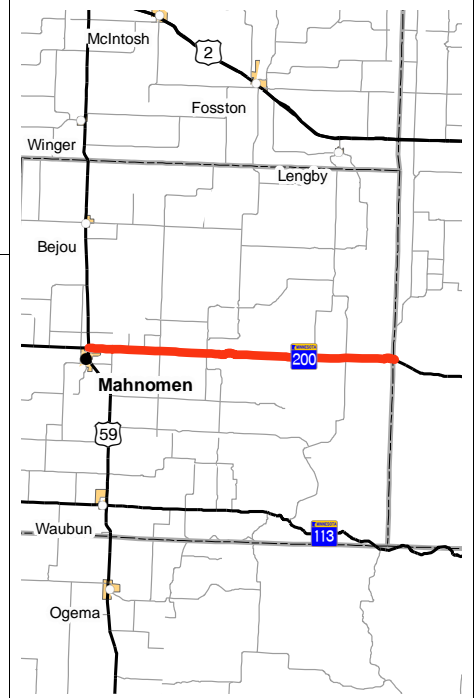
Performance-based Need: Pavement

Investment Category



Project Description

This is a 20 mile project from Hwy 59 in Mahnomen to the Mahnomen/Clearwater county line. Pavement will be rehabilitated, centerline culverts will be replaced, flood-prone areas regraded, guardrail replaced and edge rumbles replaced.



Recent Changes and Updates

The project was completed in 2016.

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. 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.

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	\$ 3.3
Other Construction Elements:	\$ 0.4	\$ 0.7
Engineering:	\$ 1.2	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.8	\$ 4.4

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The bid price for bituminous was low.

Project Risks

The project was completed in 2016. Risks retired.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 6/8/2014
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: 12/17/2018

PROJECT SUMMARY

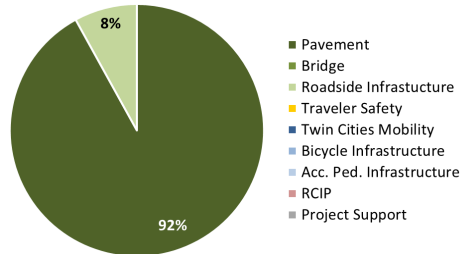
Hwy 28
Hwy 75 to Chokio
State Project No. 0606-11

Substantially Complete

Primary Purpose

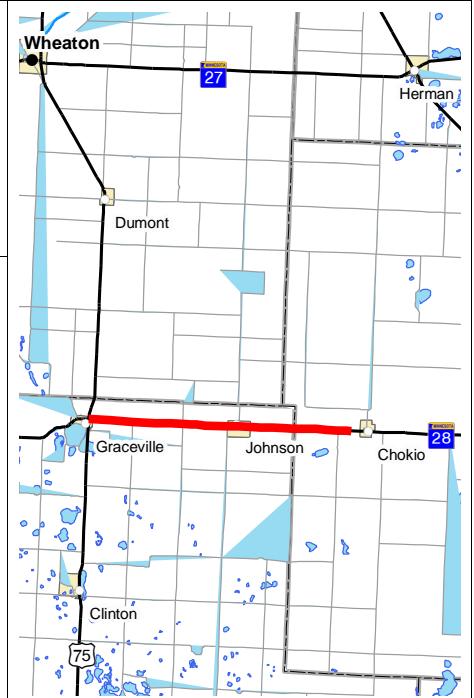
Performance-based Need: Pavement

Investment Category



Project Description

This is a milling, paving and hydraulic improvement project 12 miles from Hwy 75 in Graceville to Chokio.



Recent Changes and Updates

The project was completed in summer 2018.

Project History

This project includes bituminous resurfacing. In place bituminous needs resurfacing. The previously reported 4 inches of standing water at one location on Hwy 28 was not confirmed according to MnDOT Maintenance personnel so it was removed as a risk from the estimate.

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	\$ 2.6
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.7	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.7	\$ 3.6

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The baseline estimate had a higher inflation rate than was realized in the actual let amount. The bid price for bituminous was low.

Project Risks

All risks were retired.
Aggregate shoulder depth was increased from 1.5 inches to 2 inches. Bituminous costs decreased due to market condition.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 6/20/2016
Original Letting Date: 3/22/2018
Current Letting Date: 3/23/2018
Construction Season: 2018
Estimated Substantial Completion: June 2018



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 29

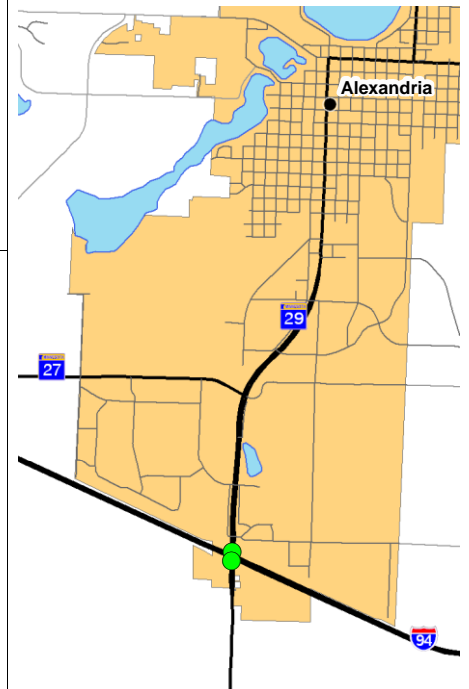
50th Avenue in Alexandria to County Road 28

Bridge 21813, 21814

State Project No. 2102-58

I-94/Hwy 29 interchange Area Project

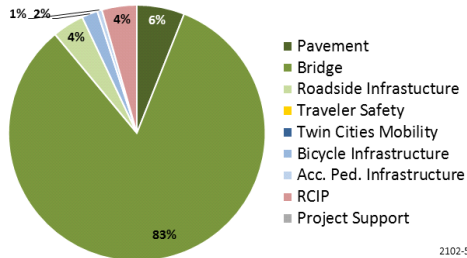
Substantially Complete



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.

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	\$ 1.4
Engineering:	\$ 3.0	\$ 2.3
Right of Way:	\$ 0.1	\$ 2.0
Total:	\$ 20.5	\$ 20.6

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers.

Project Risks

The project is substantially complete and all risks retired.

Recent Changes and Updates

Project is complete.

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. Two-span steel girder structure with tall abutments. Design plans are 50 percent complete. Traffic and noise studies are complete. Public meeting in Oct. 2012. 90 percent of the project plans were completed in Aug. 2014. Construction started July 2015 and set to finish fall of 2016. Working on protection of utility line with Magellan Pipeline, which may carry over into 2017. Majority of work was completed summer 2016. Some minor cleanup work is being completed in 2017.

Schedule

Environmental Approval Date: Not needed
Municipal Consent Approval Date: 05/28/2013
Geometric Layout Approval Date: 9/6/2013
Construction Limits Established Date: 9/6/2013
Original Letting Date: 01/22/2016
Current Letting Date: 02/27/2015
Construction Season: 2015/2016
Estimated Substantial Completion: Nov-16



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Bradley Cegla

Revised Date: 12/17/2018

PROJECT SUMMARY

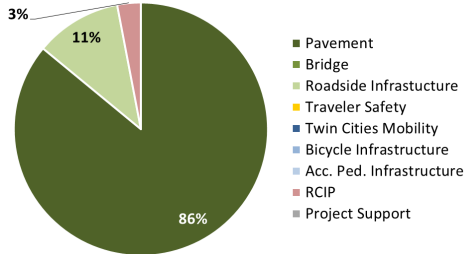
Hwy 32
Hwy 34 to Hwy 10
State Project No. 1402-19

Substantially Complete

Primary Purpose

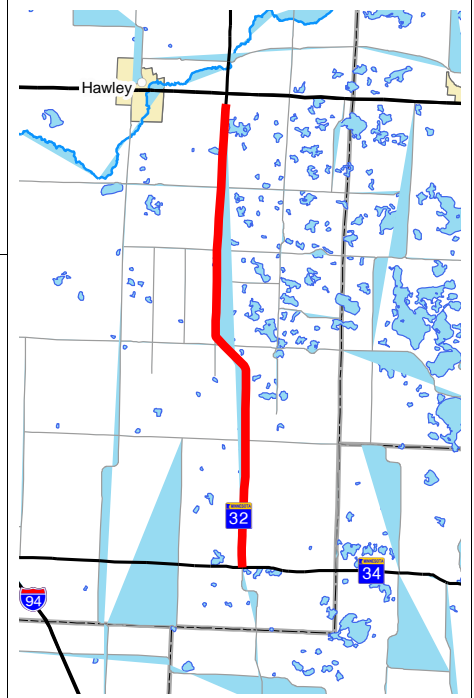
Performance-based Need: Pavement

Investment Category



Project Description

A 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 lined.



Recent Changes and Updates

The project was constructed in summer 2017.
Project is substantially complete.

Project History

Pavement needs resurfacing and various center line pipes need to be replaced or lined. Project is being designed, limits established and the right of way acquisition process is beginning. The pipes have been inspected and some will be lined rather than 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:	\$ 4.5	\$ 2.6
Other Construction Elements:	\$ 0.6	\$ 0.2
Engineering:	\$ 0.9	\$ 0.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.0	\$ 3.0

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. Bituminous prices were lower due to market conditions, which resulted in a lower bid. The baseline estimate had a higher inflation rate than the actual let amount. Lining of some of the pipes rather than replacing them also reduced the cost of the project.

Project Risks

Risks retired.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 8/26/2016
Original Letting Date: 3/24/2017
Current Letting Date: 03/24/2017
Construction Season: 2017
Estimated Substantial Completion: Oct-17



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 59

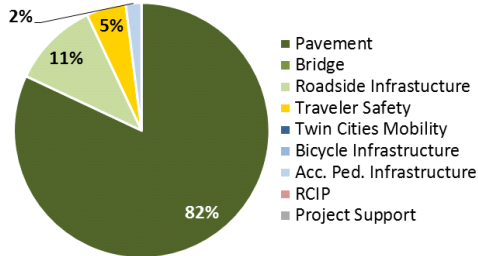
The Jct. of Hwy 28 to the N. of the Stevens County line
State Project No. 7506-17

Substantially Complete

Primary Purpose

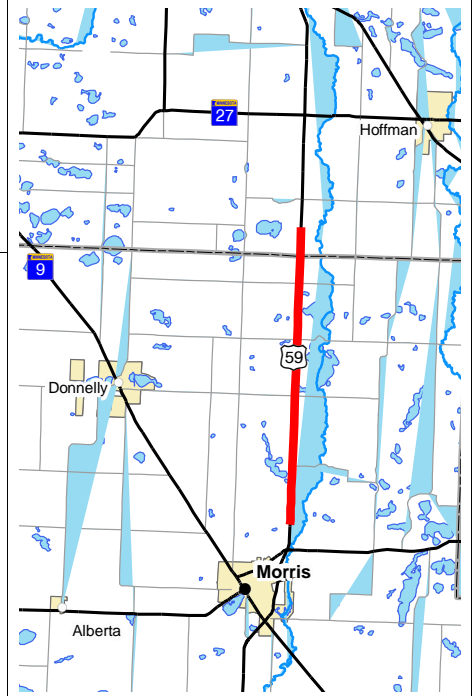
Performance-based Need: Pavement

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

This project was completed fall 2016.

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 fix. The letting was advanced from 2018 to 2016. Project designs are almost done. Testing found contaminated material at the Hwy 28/59 intersection. Project is set to be complete fall 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	\$ 5.3
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.2	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 8.1	\$ 6.6

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The bid price for bituminous was low and the project was let at an earlier date, which resulted in less inflation and a lower cost.

Project Risks

The concrete overlays are a new process and problems may be encountered after completion.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 4/30/2015
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

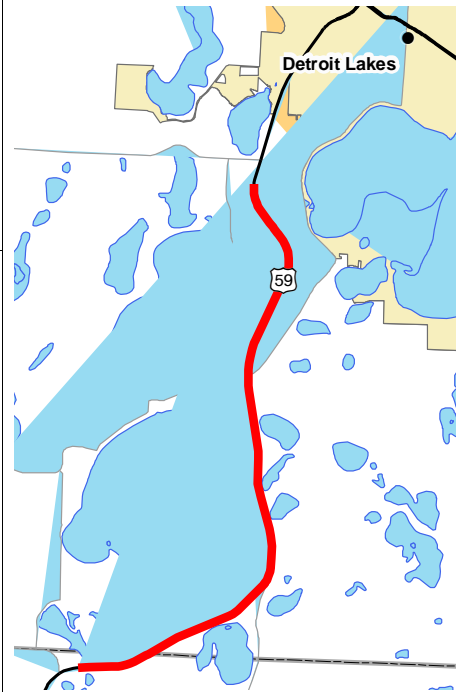
District Engineer: Jody Martinson
Project Manager: Brad Cegla

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 59
North of CSAH 20 to south of Willow Street
State Project No. 0304-37
[Hwy 59 south of Detroit Lakes](#)

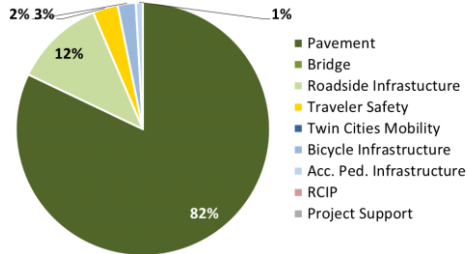
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

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

Project was let on May 18, 2018. It will be substantially complete by the end of Sept. 2018.

Project History

The project has been selected for an upslope from a mill and overlay to a reclaim in 2018. The project was needed as a result of low ride quality and above average crash history. Yearly spending for patching and crack filling will grow if project is not completed. Working on geometric layout and other pre-design activities. Letting date revised from 2020 to 2018 construction. The geometric layout is complete and construction limits established.

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	\$ 4.3
Other Construction Elements:	\$ 0.3	\$ 0.4
Engineering:	\$ 0.7	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.7	\$ 5.7

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers.

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: 12/22/2015
Construction Limits Established Date: 12/22/2015
Original Letting Date: 9/21/2018
Current Letting Date: 5/18/2018
Construction Season: May 2018 - October 2018
Estimated Substantial Completion: Sept-2018



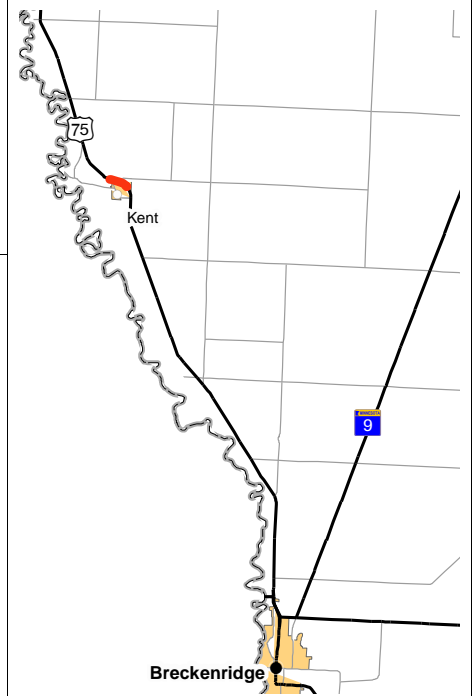
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/17/2018

PROJECT SUMMARY

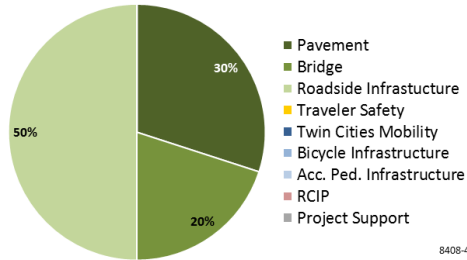
Hwy 75
Near Kent
Bridge 5185, 5186
State Project No. 8408-44
Hwy 75 Resurfacing
Substantially Complete



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 completed in 2016.

Project History

Bridge 5186 is in poor condition and needs replaced. Annual flooding due to spring melt and large rain events caused Hwy 75 to be detoured. This project will address safety and mobility issues caused by flooding. Letting moved from 2016 to 2015. The current estimate increased due to longer bridge lengths for both bridges and turn back costs for a portion of the existing Hwy 75. Environmental issues are being addressed, including ponding, which also 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	\$ 0.8
Engineering:	\$ 1.5	\$ 1.8
Right of Way:	\$ 0.7	\$ 0.9
Total:	\$ 10.4	\$ 13.2

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

Key Cost Estimate Assumptions

Construction completion on time and within budget. This project is substantially complete. The current estimate reflects final total project cost estimate numbers.

Project Risks

Risks retired.

Schedule

Environmental Approval Date: 11/5/2014
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-16



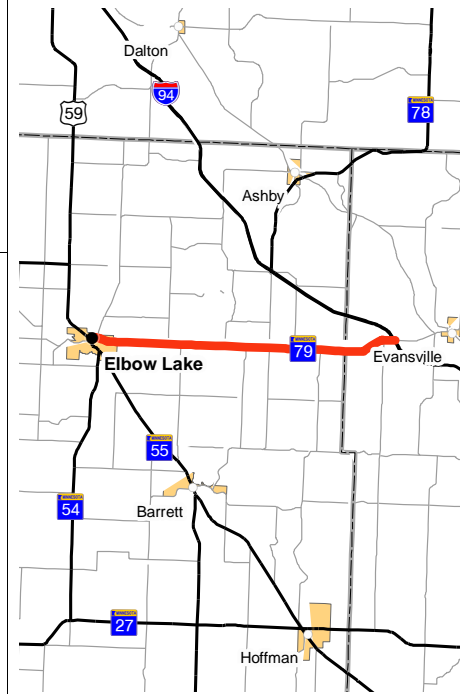
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Thomas Pace

Revised Date: 12/17/2018

PROJECT SUMMARY

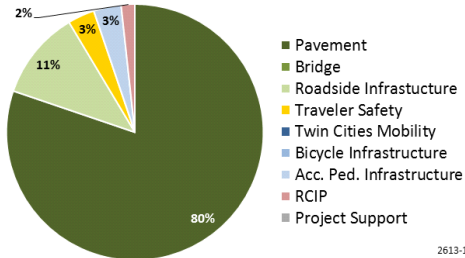
Hwy 79
Elbow Lake to Hwy 94
Bridge 21801, 21802
State Project No. 2613-18
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



2613-18

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.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.5	\$ 3.3
Other Construction Elements:	\$ 0.5	\$ 0.7
Engineering:	\$ 0.9	\$ 0.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.9	\$ 4.3

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 western limit was extended to include a section of Hwy 59. ADA work will be included in the project. Elbow Lake street lighting may be added to the project. The county could include a bike trail, which would add environmental impacts and possibly effect timing. Utilities will handle hydraulics prior to the project start date. Paving was added on TH 55 in the City of Elbow Lake and later removed along with work on Hwy 59 and a portion of TH 79 due to accessibility work needed in Elbow Lake. Construction of this project was completed June 2016.

Key Cost Estimate Assumptions

Job was constructed. This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The baseline estimate had a higher inflation rate than was realized in the actual let amount.

Project Risks

Risks retired.

Schedule

Environmental Approval Date: 12/3/2014
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 7/29/2015
Original Letting Date: 03/28/2016
Current Letting Date: 11/20/2015
Construction Season: 2016
Estimated Substantial Completion: June -16



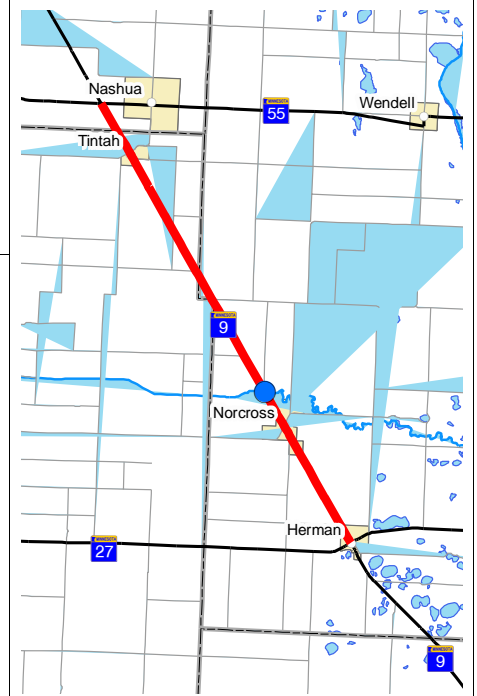
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Lori Vanderhider

Revised Date: 12/17/2018

PROJECT SUMMARY

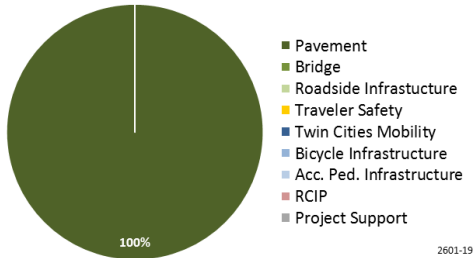
Hwy 9
Herman to Hwy 55
Bridge 6686
State Project No. 2601-19
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

Resurface 18.5 miles between Herman and the junction of Hwy 55 with 3-inch mill and 3-inch inlay. Updated work at bridge location. 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

The project is complete.

Project History

Construction completed in June 2017. Final scoping approval was Feb. 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. 100 percent of the plans will be complete in Dec. 2015. Added sidewalk replacement in Herman. Project has been submitted for letting on Sept. 23, 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:	\$ 4.2	\$ 3.9
Other Construction Elements:	\$ 0.5	\$ 0.1
Engineering:	\$ 0.8	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.5	\$ 4.4

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

Key Cost Estimate Assumptions

This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The baseline estimate had a higher inflation rate than the actual let amount.

Project Risks

Contaminated soils was a risk 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 could be ready to let early.

Schedule

Environmental Approval Date: Not needed
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 5/15/2015
Original Letting Date: 02/26/2016
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: June 2017



Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Brian Bausman

Revised Date: 12/17/2018

PROJECT SUMMARY

I-94

I-94 and Hwy 75 interchange

Bridge 14813, 14814, 14X11, 14X12

State Project No. 1406-66

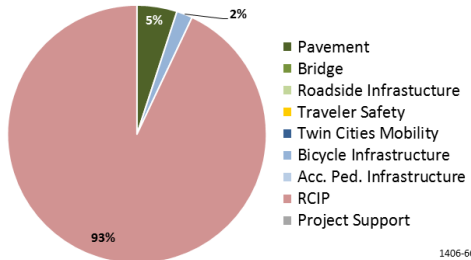
I-94/Hwy 75 Interchange Reconstruction

Substantially Complete

Primary Purpose

Performance-based Need: Regional & Community Improvement Priority

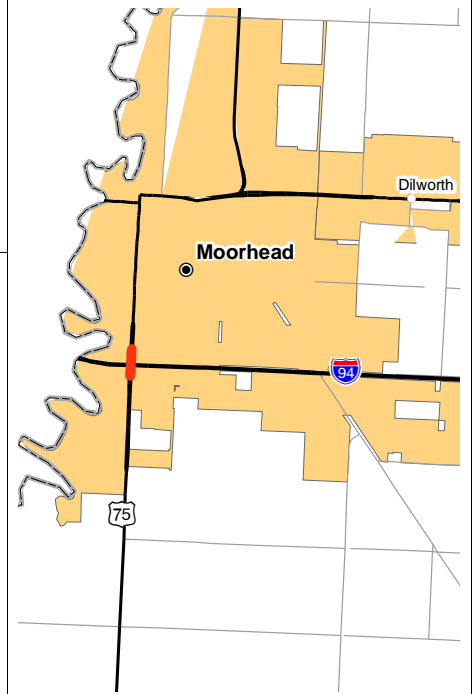
Investment Category



1406-66

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

Project is complete.

Project History

Final design was complete in July 2015 and is pending federal approval for letting. The southerly project limits were shortened from 40th Ave. to 35th Ave., which eliminates the new signal at 37th Ave. A cooperative agreement is pending with the Moorhead for signals, lighting and a multiuse trail. A utility agreement is pending due to relocations within interstate right of way. The letting was moved to Sept. 2015. Municipal consent was needed for signal replacements at 37th, 30th and 24th Ave. The new interchange is a lower cost option compared to the original plan. This project was the preferred alternative of the Hwy 75 corridor transportation study. The project was let on Sept. 25, 2015, but the low bid was rejected because it did not meet disadvantaged business enterprise goals. The project was re-let on Jan. 29, 2016. The bid amount was nearly \$2 million over the engineers estimate, but it was awarded and approved. Construction began in April 2016 and is currently behind schedule. Large liquidated damages are anticipated. Currently working with contractor to adjust staging to open soon.

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	\$ 13.6
Other Construction Elements:	\$ 1.2	\$ 1.0
Engineering:	\$ 3.0	\$ 2.9
Right of Way:	\$ 0.2	\$ 0.0
Total:	\$ 19.4	\$ 17.5

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

Key Cost Estimate Assumptions

Job was constructed in 2016. This project is substantially complete. The current estimate reflects final total project cost estimate numbers. The baseline estimate is higher than the current estimate because the new interchange is a lower cost option compared to the original plan and the southerly project limits were shortened from 40th Ave. to 35th Ave., which eliminated the new signal at 37th Ave.

Project Risks

Constructing under traffic may increase costs. Staging was developed to expedite construction.

Schedule

Environmental Approval Date: 8/3/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 10/23/2015
Construction Limits Established Date: 10/23/2015
Original Letting Date: 6/24/2016
Current Letting Date: 1/29/2016
Construction Season: May - October 2016
Estimated Substantial Completion: Oct-16



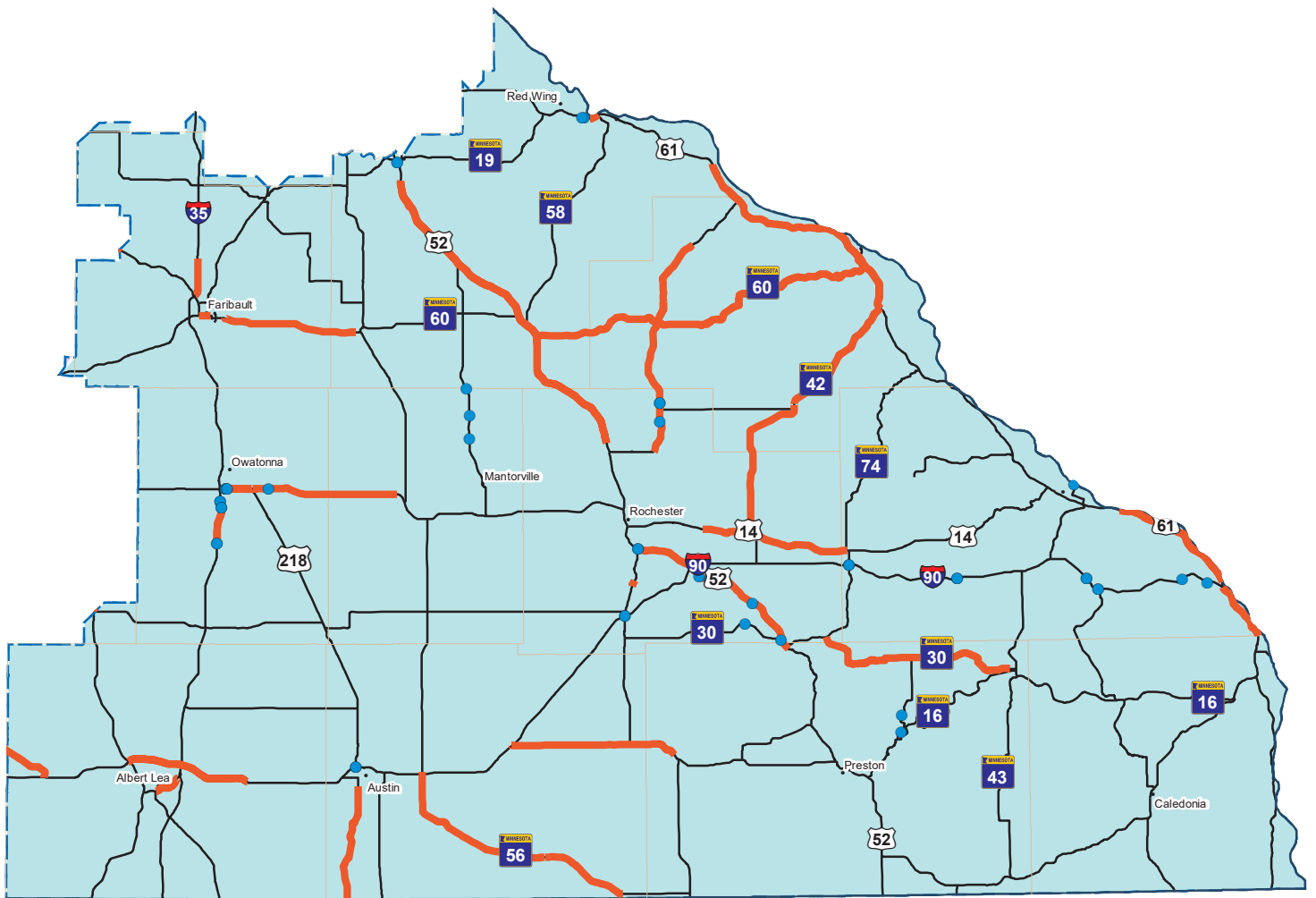
Minnesota Department of Transportation
District 4
1000 Hwy 10 W
(218) 846-3600

District Engineer: Jody Martinson
Project Manager: Seth Yliniemi

Revised Date: 12/17/2018

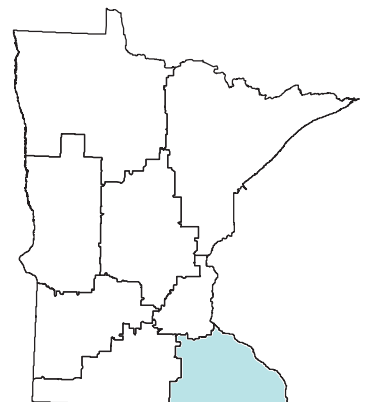
Major Highway Projects 2018

D6-ROCHESTER



Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- - - Construction District



District 6 Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 52	2506-83	US 52 from S. Jct. of MN 60 to 2.2 MI S MN 19 in Goodhue County.	E 2	206
I-90	8580-172	I-90 Bridge Repairs On Bridge No. 85818, 85823, 85824, 85829, 85830, 85841, 85842, 85843, 85844, 85845, 85846	E 3	207
I-90	8580-174	EB over TWP 231 EB over TWP 231	E 4	208
MN 30	5505-27	Redeck Bridge 9009 over the North Branch of the Root River, and Replace Bridge 9008 over Mill Creek, N jct. TH 52.	E 5	209
MN 30	2305-29	From Hwy 74 to the western city limits of Rushford.	E 6	210
MN 60	6607-50	Faribault from Hwy 21 to Central Ave	E 7	211
US 218	5009-34	Hwy 218 Over I 90	E 8	212
MN 58	2510-50	From 650' SW of US 52 to 610' NE of US 52	E 9	213
I-35	7480-126	6 bridges on I-35 and 4 bridges on Hwy 14	E 10	214
I-90	8580-167	Both westbound and eastbound lanes of I-90 in Winona County	E 11	215
Hwy 105	5007-34	Hwy 105 from Iowa state line to Bridge 5971	E 12	216
Hwy 16	5003-17	Hwy 16 from I-90 to Tracy Road Spring Valley	E 13	217
Hwy 52	5507-64	Hwy 52 from I-90 (Marion) to Chatfield	E 14	218
Hwy 52	5507-69	Hwy 63 to just south of I-90	E 15	219
Hwy 56	5005-64	Hwy 56 from eastern city line of LeRoy to Maple St. in Taopi	E 16	220
Hwy 57	2007-41	South of the intersection of CSAH 22 and TH 57 (Bridge # 6861) to south of the intersection of 520th Street and TH 57 (Bridge # 6862) in Dodge County	E 17	221
Hwy 60	7903-54	Hwy 63 in Zumbro Falls to Hwy 61 in Wabasha	E 18	222
Hwy 60	7902-25	0.30 mi east of TH52 to 0.02 miles west of TH63	E 19	223
Hwy 61	7906-97	Hwy 61, in Lake City from West Elm Street to Central Point Road	E 20	224
Hwy 61	8504-79	I-90 to Hwy 15 in Homer	E 21	225
Hwy 61	7906-96	Hwy 42 to just north of Lake City limits	E 22	226
Hwy 63	5509-84	Hwy 63, Over I 90	E 23	227
Hwy 63	2515-21	Hwy 63 bridge over the Mississippi river and Hwy 61	E 24	228
Hwy 63 and Hwy 60	7908-35	Hwy 63 from Hwy 60 to CR 78 and Hwy 60 in Zumbro Falls	E 25	229
Hwy 65	2405-32	Hwy 65 NB and SB from Newton Ave to I-35 Ramps in Albert Lea, MN	E 26	230
I-35	6680-113	I 35 SB Lanes from 0.1 mi N Hwy 21 to 0.1 mi N CSAH 9	E 27	231
I-90	2482-74	I-90 WB Lanes from Hwy13 to Hwy 46 (Petran)	E 28	232
Hwy 14	5503-45	Hwy 14 from Chester to St Charles	E 29	233
Hwy 250	2319-16	Bridges on Hwy 250 in Lanesboro	E 30	234
Hwy 52	5507-63	Hwy 52 over Hwy 63	E 31	235
Hwy 52	2506-75	Rochester to Cannon Falls	E 32	236
Hwy 52	2506-79	Hwy 52 bridges over Little Cannon River	E 33	237
Hwy 56	5005-62	Hwy 56 from Maple St. in Taopi to Hwy 46 in Mower County	E 34	238
Hwy 60	6607-49	Faribault to Kenyon	E 35	239
Hwy 61	2514-122	Hwy 61 from Potter St. to Old West Main St	E 36	240
Hwy 63	5510-84	Hwy 63. CSAH 33 to 0.3 mi W of Hwy 60	E 37	241
Hwy 63	5509-80	County Road 16 interchange	E 38	242
I-35	7480-124	Straight River Rest Area NB	E 39	243
I-90	8580-149	Mississippi River Bridges - Dresbach	E 40	244
Hwy 42	7901-52	Hwy 42 from 0.35 mi N of Hwy 247 to Hwy 61	E 41	245
Hwy 43	8503-46	Winona Bridge over Mississippi River	E 42	246

PROJECT SUMMARY

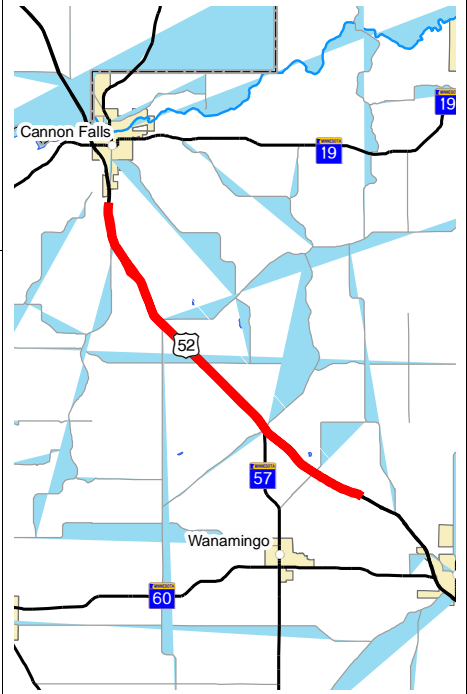
Hwy 52

S. Jct. of MN 60 to 2.2 MI. S. MN 19 in Goodhue County.

Bridge 9414, 9483, 9659, 9660, 9662, 91048

State Project No. 2506-83

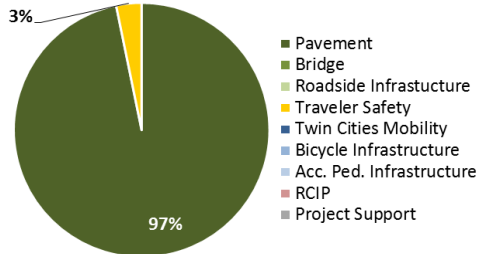
[Hwy 52 Southbound Improvements Project](#)



Primary Purpose

Performance-based Need: Pavement Condition and Bridge Condition

Investment Category



Project Description

Hwy 52 southbound will be reconstructed with a 35-year design life. The project will also include culvert replacements and replacing bridges 9414, 9483, 9659, 9660, 9662 and 91048. Intersection safety improvements and access improvements will be within the project limits.

Recent Changes and Updates

In 2018 the project was rescope with a primary purpose to replace the SB US 52 mainline pavement. Additional needs include replacing bridges 9414, 9483, 9659, 9660, 9662 and 91048. Plus providing safety improvement measures to reduce crash potential corridor-wide. Vertical curve correction will also be investigated under this project. The project will be delivered via design-build delivery method.

Project History

The existing pavement consists of a 20-foot concrete pavement overlaid with variable depth bituminous surfacing. Significant longitudinal cracking and deterioration is evident along the project length, primarily caused by the underlying narrow concrete pavement structure originally placed in 1920s. The roadway section has been subsequently widened and overlaid with bituminous pavement. However, due to the asymmetric widening (resulting in centerline shift) and performance of the widened sections, the roadway continues to demonstrate significant cracking and deterioration in the wheel paths.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.7	\$ 56.6
Other Construction Elements:	\$ 0.4	\$ 3.3
Engineering:	\$ 0.8	\$ 10.9
Right of Way:	\$ 0.0	\$ 2.9
Total:	\$ 6.9	\$ 74.7

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

Key Cost Estimate Assumptions

Current estimate reflects from a revised scoping report signed August 2018.

Base estimate was for a preservation project not the revised scope to reconstruct SB TH52, which increased the estimated cost significantly.

Project Risks

Project risks for costs and schedule delays include acceptance of project and cost participation by affected municipalities, coordination with utilities for relocations with accordance to freeway accommodation and unknown final pavement selection.

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: 10/27/2017
Current Letting Date: 1/22/2021
Construction Season: 2021 - 2023
Estimated Substantial Completion: 11/2023



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Jai Kalsy

Revised Date: 12/17/2018

PROJECT SUMMARY

I 90

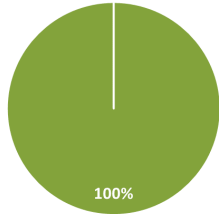
I-90 Bridge Repairs On Bridge No. 85818, 85823, 85824, 85829, 85830, 85841, 85842, 85843, 85844, 85845, 85846

Bridge 85817, 85818, 85823, 85824, 85829, 85830, 85842, 85843, 85844, 85845, 85846

Primary Purpose

Performance-based Need: Bridge Condition

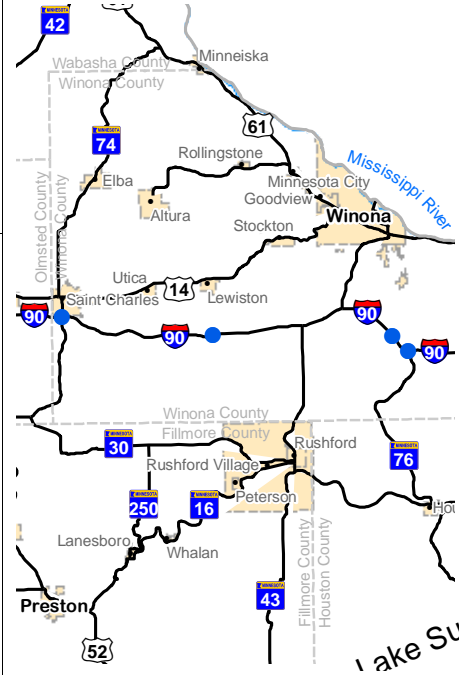
Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

This project is rehabbing 12 bridges on I-90 from MN 74 in St. Charles to CSAH 7 in Nodine.



Recent Changes and Updates

Project is currently being scoped.

Project History

The project started as a district set-a-side and is incorporating needs identified from the MnDOT Bridge Office.

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	\$ 5.2
Other Construction Elements:	\$ 0.4	\$ 0.4
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 reflects the scoping estimate.

Project Risks

The 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: 12/18/2018
Current Letting Date: 12/18/2018
Construction Season: 2019
Estimated Substantial Completion: 11/2019



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Aaron Breyfogle

Revised Date: 12/17/2018

PROJECT SUMMARY

I 90

Bridge 85814 and 85816 Eastbound over Twp 231

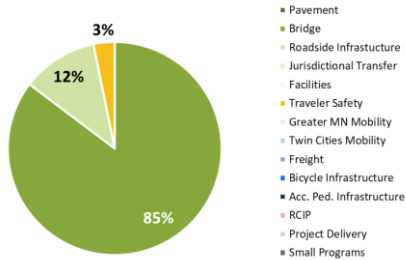
Bridge 85814, 85816

State Project No. 8580-174

Primary Purpose

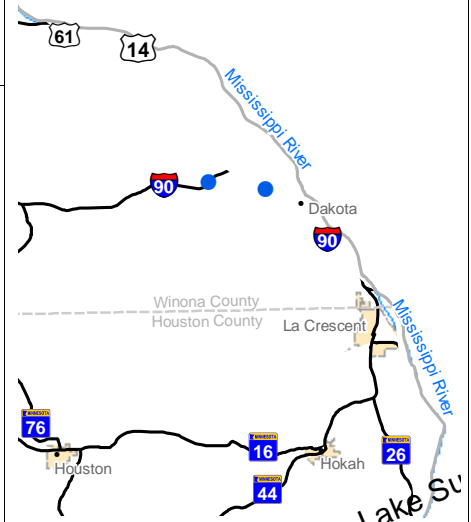
Performance-based Need: Bridge Condition

Investment Category



Project Description

This project replaces bridges 85814 and 85816.



Recent Changes and Updates

The project is currently being scoped.

Project History

These bridges were part of list of bridges identified for preventative maintenance. As the bridges were being researched it was determined rehabilitation costs were comparable to replacement. The bridges were then planned for replacement as part of the scoping process.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
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 reflects the scoping estimate.

Project Risks

The 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: 3/27/2020
Current Letting Date: 3/27/2020
Construction Season: 2020
Estimated Substantial Completion: 11/2020



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Aaron Breyfogle

Revised Date: 12/17/2018

PROJECT SUMMARY

MN 30

Bridge 9009 over the North Branch of the Root River and Bridge 9008 over Mill Creek

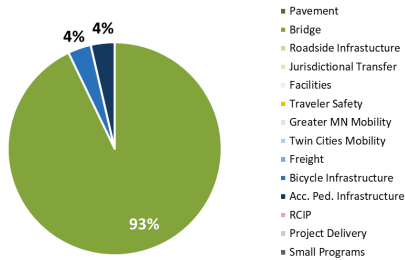
Bridge 9008, 9009

State Project No. 5505-27

Primary Purpose

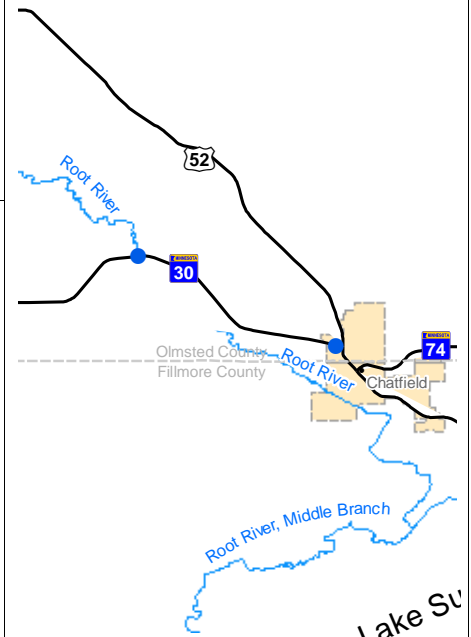
Performance-based Need: Bridge Condition

Investment Category



Project Description

This project is on Hwy 30, redecking bridge 9009 over the North Branch of the Root River, 4.0 miles west of the north jct. of Hwy 52 and replaces bridge 9008 over Mill Creek, just west of north jct. Hwy 52.



Recent Changes and Updates

Project History

Bridge 9008 over Mill Creek was constructed in 1956, and needs replacement. The bridge is rated fair to poor with a substandard bridge railing. There are many signs of physical deterioration of the bridge structure outlined in the bridge inspection report where replacement of the bridge is recommended. Bridge 9009 over the North Branch of the Root River was constructed in 1956. It is in need of repair. The existing bridge has a rating of fair to poor, approach panels having noticeable settlement, substructure spalling and cracking and the bearings not functioning appropriately. The project is needed to address these deficiencies.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.5	\$ 3.5
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.4	\$ 4.4

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

Key Cost Estimate Assumptions

The baseline estimate is from a scoping report signed in 2016.

Project Risks

Coordination with the city for inclusion of additional features on the bridge is a risk.

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: 1/24/2020
Current Letting Date: 1/24/2020
Construction Season: 2020
Estimated Substantial Completion: 11/2020



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Aaron Breyfogle

Revised Date: 12/17/2018

PROJECT SUMMARY

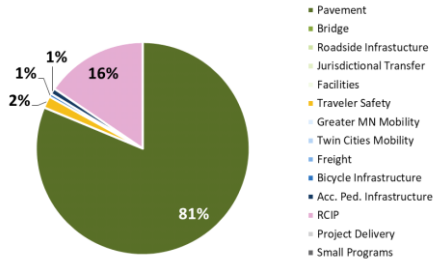
MN 30

Hwy 74 to the western city limits of Rushford
State Project No. 2305-29

Primary Purpose

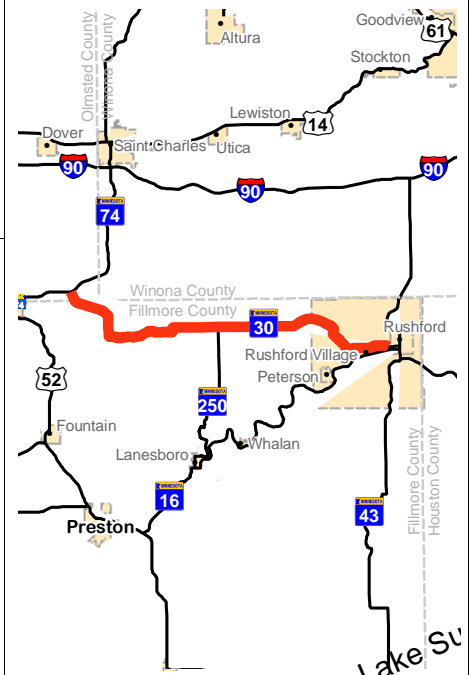
Performance-based Need: Pavement

Investment Category



Project Description

Bituminous overlay from Hwy 74 to the western city limits of Rushford.



Recent Changes and Updates

This project was advanced in the STIP and project limits revised.

Project History

TH 30 is a 2-lane undivided, rural highway between the cities of Rushford and Chatfield. The majority of the roadway from the junction of TH74 supports a higher than expected average daily traffic for a rural road. The ride quality was rated as fair, but has decreased quickly to a rating of poor. Some culverts will be replaced. All other culverts were lined in 2017. No right of way will be required. A short term detour will occur for culvert replacements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.0	\$ 5.0
Other Construction Elements:	\$ 0.4	\$ 0.4
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 baseline estimate is based on a scoping report finalized in 2018.

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: 3/22/2019
Current Letting Date: 3/22/2019
Construction Season: 2019
Estimated Substantial Completion: 11/2019



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Richard Augustin

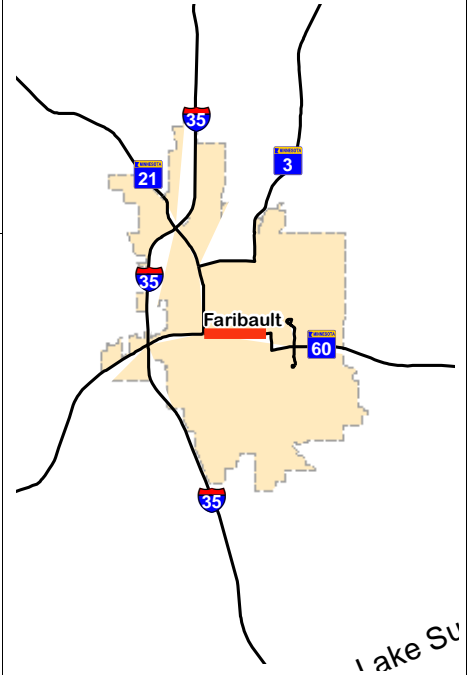
Revised Date: 12/17/2018

PROJECT SUMMARY

MN 60

Faribault from Hwy 21 to Central Ave.

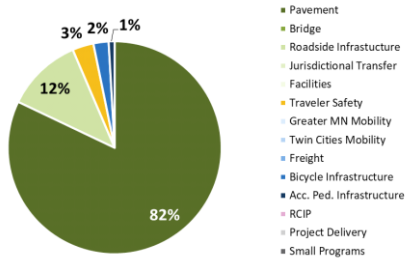
State Project No. 6607-50



Primary Purpose

Performance-based Need: Pavement Condition

Investment Category



Project Description

Hwy 60 from Central Ave to the CP rail crossing will be reconstructed. A mill and overlay of Hwy 60 from the rail crossing to Hwy 21 will also be completed. Other project improvements include city sewer and water upgrades, signals, ADA improvements and lighting.

Recent Changes and Updates

This project is be led and let by the local agency.

Project History

The city and MnDOT agreed to terms of project in the letter of intent to upscope project to reconstruction with city serving as lead agency.

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:	\$ 3.9	\$ 6.4
Other Construction Elements:	\$ 0.4	\$ 2.0
Engineering:	\$ 0.8	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 5.2	\$ 9.5

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

Key Cost Estimate Assumptions

The MnDOT share is capped at \$6.37 million for this locally led/let project. The city is responsible for costs above this amount.

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: 12/15/2018
Current Letting Date: 12/15/2018
Construction Season: 2019
Estimated Substantial Completion: 11/2019



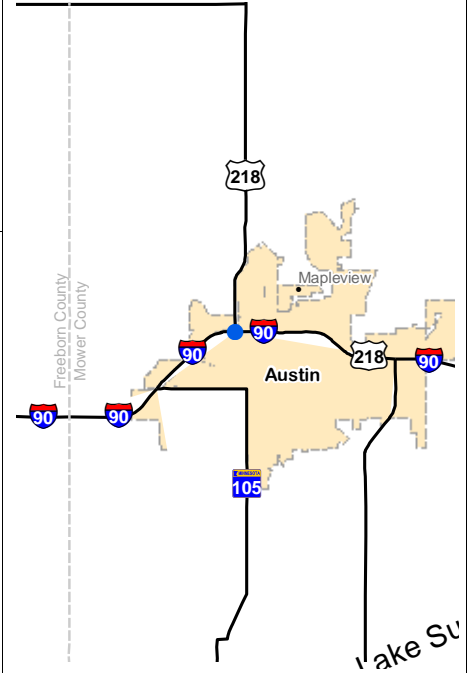
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Jai Kalsy

Revised Date: 12/17/2018

PROJECT SUMMARY

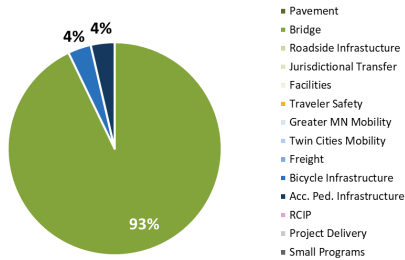
US 218
Hwy 218 Over I 90
Bridge 50803, 50804
State Project No. 5009-34



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

At the west junction of Hwy 218 bridges 50803 and 50804 will be replaced with a new bridge.

Recent Changes and Updates

Project was scoped for bridge replacement as opposed to rehab.

Project History

Project was initially a rehab project and was up-scoped to a bridge replacement after additional condition issues were discovered during the most recent bridge safety inspection including expansion joint deterioration, deterioration at the ends of multiple prestressed beams and pier cap deterioration at piers 1 and 3 (under joints). The existing bridges were built in 1966 and have significant condition issues. The southbound bridge (50803) is also considered functionally obsolete. In addition, the bridges were identified by Austin as a priority for replacement during the corridor study conducted for I-90 through the city.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.5	\$ 8.5
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.6	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 11.0	\$ 11.0

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

Key Cost Estimate Assumptions

The baseline estimate is based on a scoping report signed in 2018. The estimate is considering the replacement of both bridges with a single structure, constructing a multi-use trail on the east side of the bridge and a sidewalk on the west side and constructing a bridge half at a time using staged construction.

Project Risks

Concerns about additional staging/traffic control costs including signal work and temporary pavement. Concerns about mainline pavement handling traffic shift under lane closure to construct pier resulting in additional pavement costs.

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: 1/29/2021
Current Letting Date: 1/29/2021
Construction Season: 2021
Estimated Substantial Completion: 11/2021



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

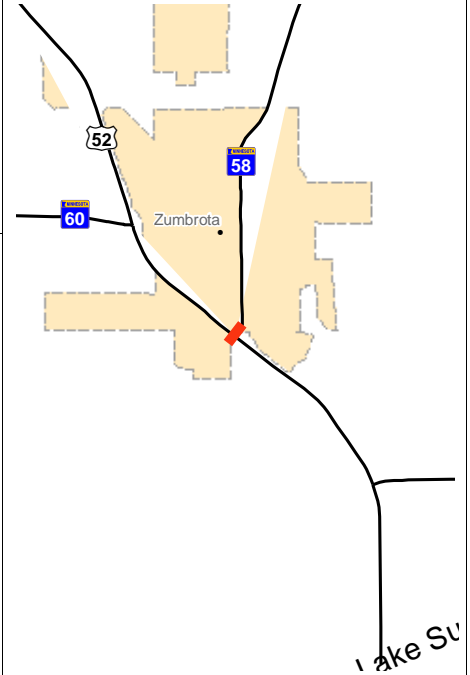
District Engineer: Mark Schoenfelder
Project Manager: Mark Harle

Revised Date: 12/17/2018

PROJECT SUMMARY

MN 58
650' SW of US 52 to 610' NE of US 52
Bridge 25037
State Project No. 2510-50

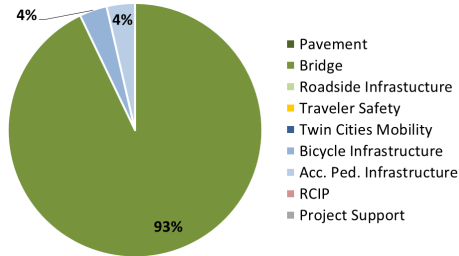
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project consists of grading, bituminous surfacing, adding roundabouts, ADA improvements, lighting and replacing a bridge over TH 52 along Hwy 58 in Zumbrota.

Recent Changes and Updates

Project is complete.

Project History

The project was originally scoped for a replacement of the bridge in its current location. During the design process and local coordination the project evolved based on new needs and construction staging to maintain access. Changes include building the new bridge off-line and with a round-about termini. This allowed access to be maintained for the majority of the construction process.

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	\$ 5.6
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.8	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 5.9	\$ 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 off of a scoping report while the current estimate reflects construction letting costs. The current letting cost is reflective of changes during the design process and local coordination. This includes changes from the original scope to build the new bridge off-line and with round-about termini. This change allowed access to be maintained for the majority of the construction process.

Project Risks

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: 1/27/2017
Current Letting Date: 1/27/2017
Construction Season: 2017
Estimated Substantial Completion: 5/2018



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Jai Kalsy

Revised Date: 12/17/2018

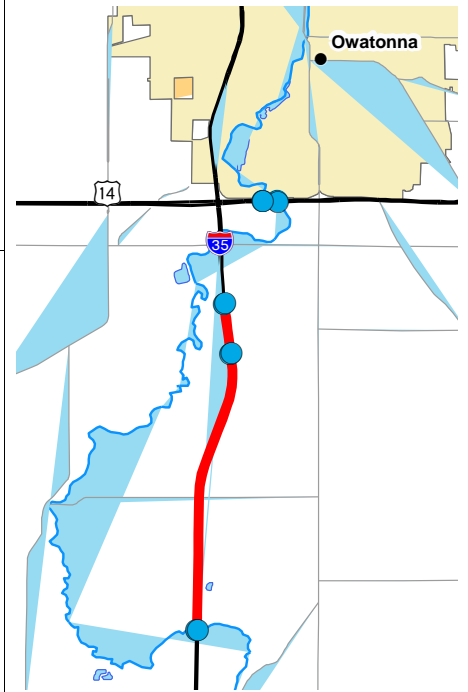
PROJECT SUMMARY

I-35

6 bridges on I-35 and 4 bridges on Hwy 14

Bridge 74807, 74808, 74823, 74824, 74804, 74803, 74001, 74002, 74003, 74004

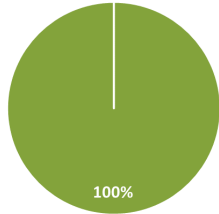
State Project No. 7480-126



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

This project will be a design-build for replacement of six 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.

Recent Changes and Updates

Substantial completion is expected in Fall 2018.

Project History

This project is being funded with additional state appropriation money. The project was initially funded at \$30M to reconstruct all 10 bridges. The price for 9 bridges came in at \$29.6M. The district identified a tenth bridge to include for a cost of a little over \$3 million, which will be funded with district money.

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	\$ 29.6
Other Construction Elements:	\$ 1.9	\$ 4.0
Engineering:	\$ 4.3	\$ 4.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 33.5	\$ 37.9

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

Key Cost Estimate Assumptions

The baseline estimate assumed steel bridges on I-35 and Hwy 14 over the Union Pacific Railroad. The cost of these bridges may decrease if the portal opening can be reduced and the design optimized. The assumptions also included reconstructing Hwy 14 between the Union Pacific Railroad, the Straight River and approximately 250 feet of approach work at all of the other bridges.

Project Risks

There is a medium risk of delay with getting design approval with Union Pacific Railroad.

Schedule

Environmental Approval Date: 8/1/2010
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 12/2015
Construction Limits Established Date: 10/2015
Original Letting Date: 04/08/2016
Current Letting Date: 3/16/2016
Construction Season: 2016 - 2018
Estimated Substantial Completion: 11/2018



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

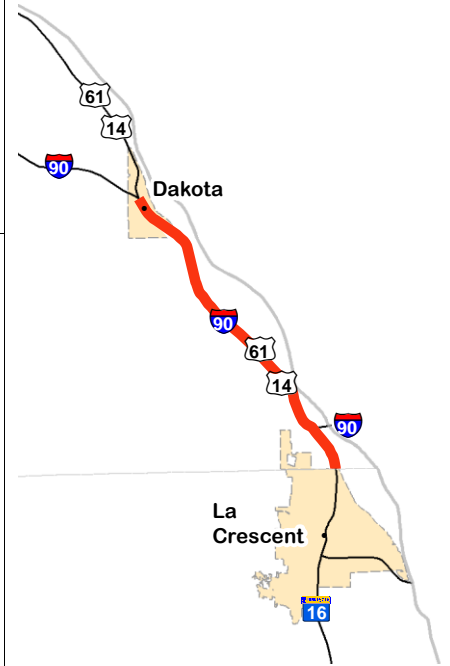
District Engineer: Mark Schoenfelder
Project Manager: Tory Thompson

Revised Date: 12/17/2018

PROJECT SUMMARY

I-90

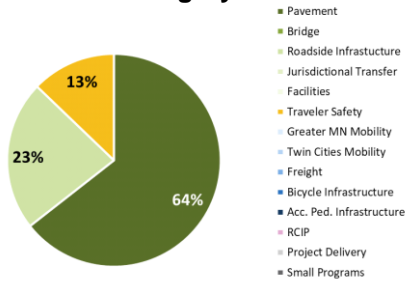
Both westbound and eastbound lanes of I-90 in Winona County
State Project No. 8580-167



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay of both westbound and eastbound lanes on I-90 in Winona County. It involves various segments in each direction of I-90, including where it runs together with Hwy 61. The overall project length is 5.9 miles.

Recent Changes and Updates

Final hydraulics recommendations will be made in 2016, which will affect the project cost estimate.

Project History

This is a 4-lane interstate highway with reasonably high traffic volumes and a 70 mph speed limit. 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: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.2	\$ 4.0
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.5	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.0	\$ 4.8

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

Key Cost Estimate Assumptions

The Baseline and Current Estimates are scoping level cost estimates only. Final hydraulics recommendations in the final pavement determination will be paid during project development, which could affect the overall project cost. Bituminous cost increases could also affect the overall project estimate.

Project Risks

If the final project cost estimate comes in high, then the project could be pushed out into a future letting date if funds are not available to cover the estimate.

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: 10/18/2019
Current Letting Date: 10/18/2019
Construction Season: 2020
Estimated Substantial Completion: 11/2020



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

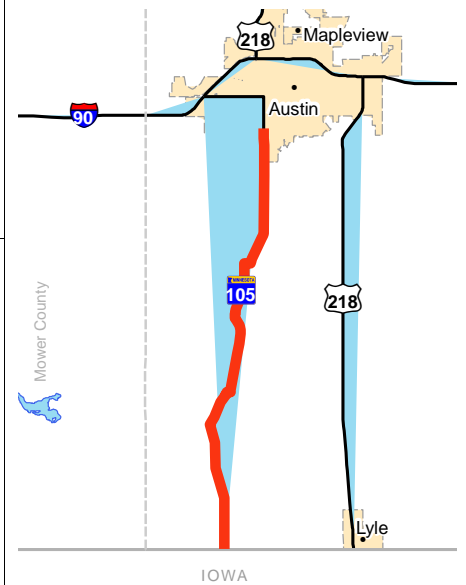
District Engineer: Mark Schoenfelder
Project Manager: Aaron Breyfogle

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 105

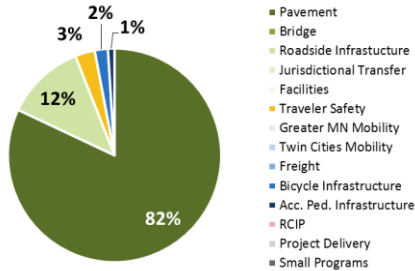
Hwy 105 from Iowa state line to Bridge 5971
State Project No. 5007-34



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

Hwy 105 from Iowa state line to Bridge 5971 will receive a bituminous mill and overlay. Additionally in Austin, pedestrian facilities will be improved to meet ADA standards.

Recent Changes and Updates

This project was advanced in the STIP during spring 2017 as a FY21 ELLA with scoping to be completed in FY2018.

Project History

The purpose of this project is to extend pavement service life and provide a safer roadway. TH 105 is a 2-lane undivided, rural highway between Austin and the Minnesota-Iowa border. The roadway supports a higher than average daily traffic count than is expected on the rural portion. The urban segment has a higher than expected crash rate. The ride quality was fair but the rating has deteriorated quickly and is now rate at poor.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.5	\$ 4.5
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.1	\$ 0.1
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 is based off of a June 2018 estimate from a final scoping document.

Project Risks

Competitive bid may be higher or lower than expected.

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: 12/20/2019
Current Letting Date: 12/20/2019
Construction Season: 2020
Estimated Substantial Completion: 10/2020



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

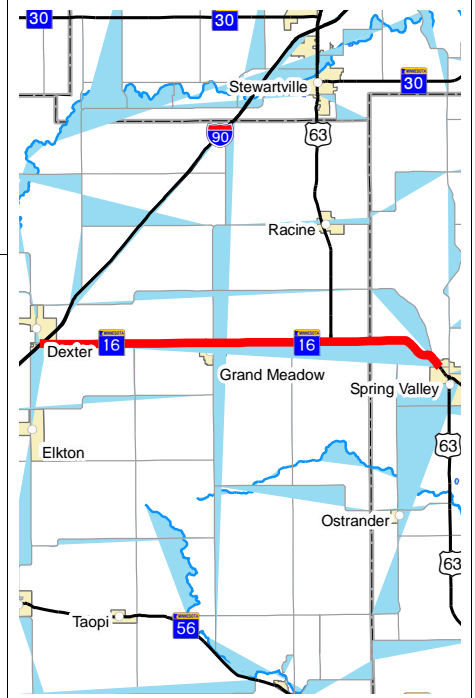
District Engineer: Mark Schoenfelder
Project Manager: Richard Augustin

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 16

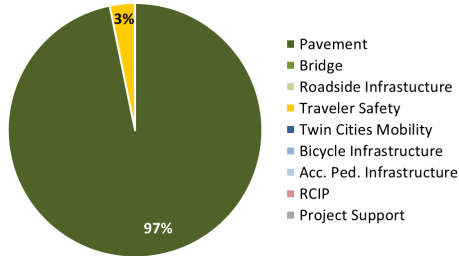
Hwy 16 from I-90 to Tracy Road Spring Valley
State Project No. 5003-17



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a 16-mile mill and overlay from I-90 to Spring Valley. It includes replacing bridge 6045, 6046 and 6047.

Recent Changes and Updates

The project letting maybe delayed to accommodate the right of way acquisition process.

Project History

In 2017 this project had three box culvert bridges added to the scope. The scope baseline estimate was also updated to reflect lower bituminous unit prices than assumed when originally scoped. Therefore there was only a moderate increase in the current estimate from the baseline estimate. This segment of Hwy 16 is a 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.0	\$ 7.5
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 0.9	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.5
Total:	\$ 8.5	\$ 10.1

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 July 15, 2016 and adjusted based on inflation and addition of the bridges added to the project. Right of way is an assumption based on parcels being affected and average minimum damage acquisition costs. This cost will be updated when acres affected are evaluated for current land prices.

Project Risks

Competitive bids may be higher or lower than expected. Additional box culverts may require a public interest finding to keep the project on schedule for letting.

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: 1/25/2019
Current Letting Date: 1/25/2019
Construction Season: 2019
Estimated Substantial Completion: 11/2019



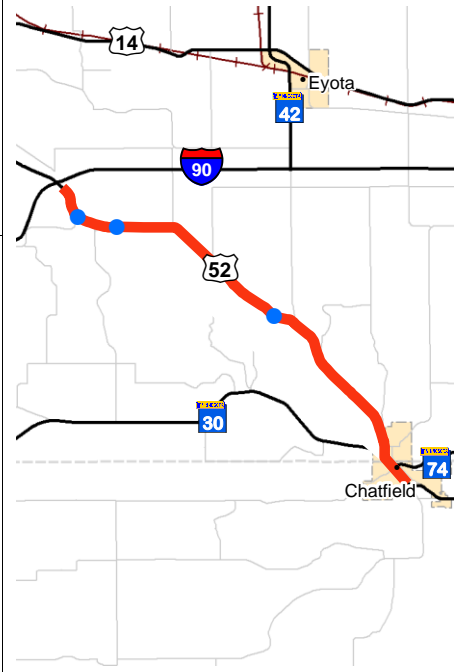
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

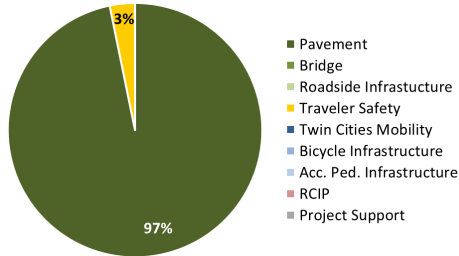
Hwy 52
Hwy 52 from I-90 (Marion) to Chatfield
Bridge 6124, 8182, 8183
State Project No. 5507-64
[Hwy 52 - Marion to Chatfield Project](#)



Primary Purpose

Performance-based Need: Pavement

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 I-90 through Chatfield. Additionally the signal at TH52 and TH30 will be replaced. A cooperative agreement is planned with Olmsted County to include paving of 200 ft. of CR 136 to reduce aggregate washing from the county road into TH52 ditches.

Recent Changes and Updates

Project letting changed to March 2019 to accommodate the right of way acquisition process plus additional work items added to the project. Additional work item included paving and grading 250 ft. of Olmsted County Road 136 plus coordinating with Chatfield for city lighting.

Project History

This project will preserve the existing roadway structure, extend pavement life and improve ride quality. The project changed from a regrade to a mill and overlay based on district priorities and funding issues. The project includes bridge replacements originally part of SP 5507-65. This project is also associated with SP 2311-31.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
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	\$ 12.6

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

Key Cost Estimate Assumptions

Current estimate was updated to reflect current inflation factors. The additional items added to the project plus right of way costs increased the current estimate.

Project Risks

The competitive bid may be higher or lower than expected. Completing work in one construction season due to late letting.

Schedule

Environmental Approval Date: Need unknown
Municipal Consent Approval Date: Need unknown
Geometric Layout Approval Date: 8/29/2017
Construction Limits Established Date: 6/7/2015
Original Letting Date: 10/26/2018
Current Letting Date: 3/22/2019
Construction Season: 2019
Estimated Substantial Completion: 11/2019



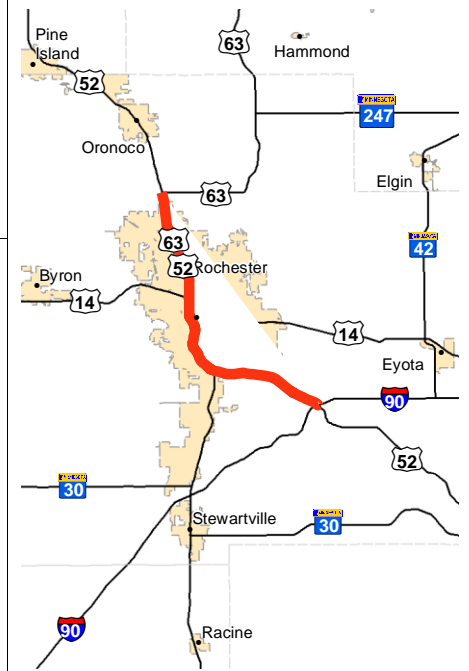
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

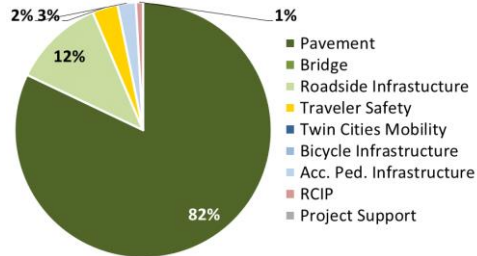
Hwy 52
Hwy 63 to just south of I-90
State Project No. 5507-69
[Hwy 52 Rochester Resurfacing Project](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is an 11.8 mile bituminous overlay of Hwy 52 from Hwy 63 to I-90 in Olmsted County. Other work will include overlay of ramps at CSAH 1 and CSAH 11 and hydraulic improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.4	\$ 6.2
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.2	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.1	\$ 8.0

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

Recent Changes and Updates

Project was let in April 2018. Pier strut work was added at the I90 bridges over TH52 to bring guardrail up to standard. Construction is expected to be complete by October 2018.

Project History

In 2017 the project was advanced into March 2018 as an ELLA. The pavement along Hwy 52 from Hwy 63 to I-90 is starting to show signs of deterioration and has seen accelerating deterioration in recent years. This segment of Hwy 52 is a 4-lane divided, rural expressway. The ride quality index has dropped in both directions from 2010 to 2015. Potholes are starting to develop at the transverse joints in the concrete from damage caused by freezing and thawing, which creates maintenance and safety issues.

Key Cost Estimate Assumptions

Current estimate reflects awarded contract costs.

Project Risks

If the final project cost estimate comes in high, the project could be pushed out into a future letting date if funds are not available to cover 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: 11/22/2019
Current Letting Date: 3/23/2018
Construction Season: 2018
Estimated Substantial Completion: 10/2018



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

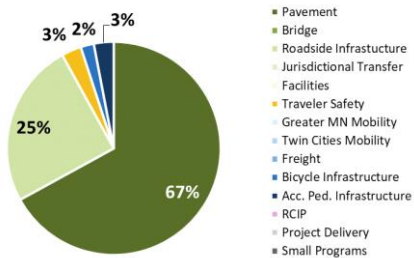
Hwy 56

Hwy 56 from eastern city line of LeRoy to Maple St. in Taopi
State Project No. 5005-64

Primary Purpose

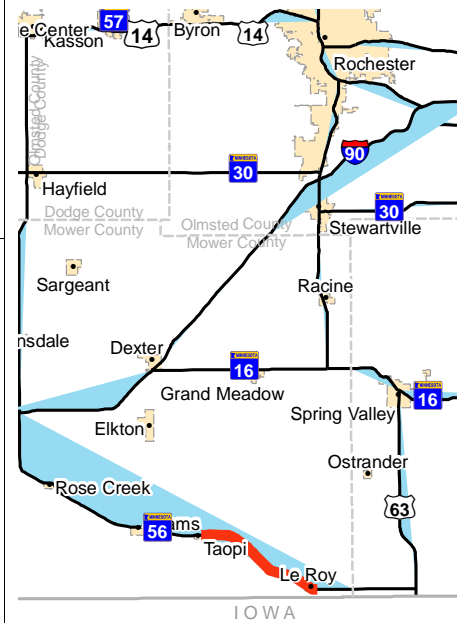
Performance-based Need: Pavement

Investment Category



Project Description

This project is a bituminous mill and overlay on Hwy 56 from the eastern city line of LeRoy to Maple St. in Taopi.



Recent Changes and Updates

This project may be amended and split into two projects. The portion of TH 56 within LeRoy could be reconstructed depending on funding availability in 2022 or later. The rural segment would maintain the current design delivery

Project History

This 2-lane segment of TH 56 is showing signs of deterioration. The purpose of this project is to preserve the existing roadway structure, extend pavement life and improve ride quality. Additionally, ADA facility upgrades in LeRoy will be included with this project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.2	\$ 4.2
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.1	\$ 0.1
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

The baseline project costs are from the project scoping report dated April 10, 2017. The current estimate has not been updated because it is possible that the project may be amended.

Project Risks

Competitive bid may be higher or lower than expected.

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: 1/23/2020
Current Letting Date: 10/25/2019
Construction Season: 2020
Estimated Substantial Completion: 10/2020



Minnesota Department of Transportation
District 6
2900 48th Street NW
507) 286-7500

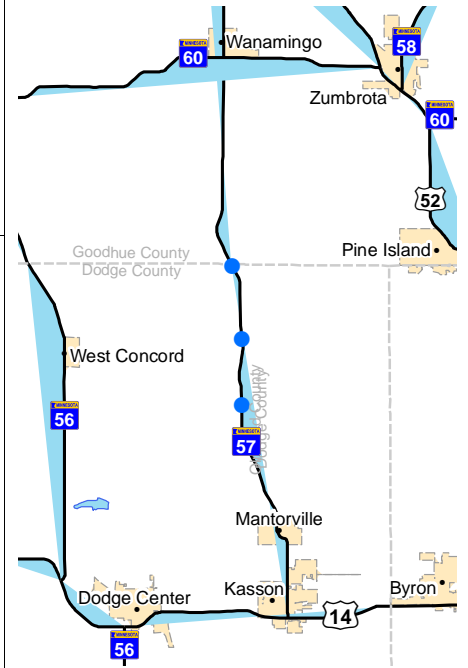
District Engineer: Mark Schoenfelder
Project Manager: Paul Zager

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 57

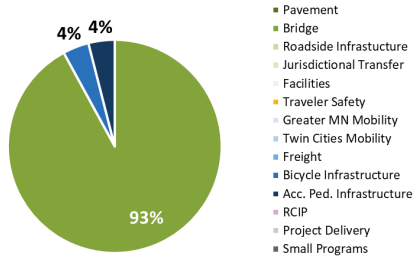
Just south of the intersection of CSAH 22 and TH 57 (Bridge #6861) to just south of the intersection of 520th St. and TH 57 (Bridge #6862) in Dodge County
Bridge 6861, 6862, 6867



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project replaces bridges on Hwy 57 north of Mantorville over the North Branch of the middle fork of Zumbro River, over Milliken Creek and over the middle fork of the Zumbro River.

Recent Changes and Updates

In April 2017, bridges 6861 and 6867 were added to the project due to their conditions and proximity of the first bridge.

Project History

The purpose of the project was originally to replace bridge 6862, but then bridge 6861 and 6867 were added after inspection reports recommended replacing. The primary need for this project is to provide structurally sound bridges that will cross over Milliken Creek, the Middle Fork of the Zumbro River and over the North Branch Middle Fork of the Zumbro River on TH 57 in Dodge County. These bridges were all built at or near the same time and are showing signs of physical deterioration. Additionally the bridges do not meet current design standards and the bridge railings are substandard.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 1.2	\$ 5.3
Other Construction Elements:	\$ 0.5	\$ 0.3
Engineering:	\$ 0.3	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 1.5	\$ 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 is based on a scoping report finalized in 2015. The current estimate is based on a 30 percent total project cost estimate.

Project Risks

No significant risks are anticipated A competitive bid may be higher or lower than expected.

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: 1/27/2017
Current Letting Date: 12/18/2018
Construction Season: 2019
Estimated Substantial Completion: 11/2019



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Mark Harle

Revised Date: 12/17/2018

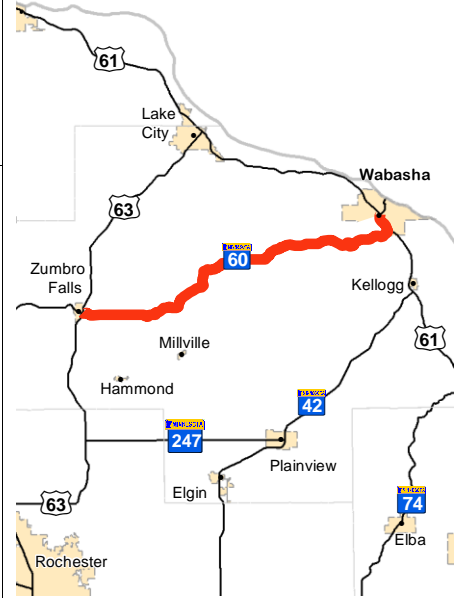
PROJECT SUMMARY

Hwy 60

Hwy 63 in Zumbro Falls to Hwy 61 in Wabasha

State Project No. 7903-54

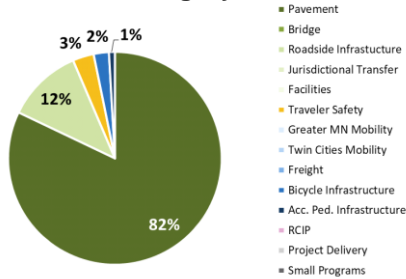
[Hwy 60 Resurfacing Project](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is a 24.2 mile bituminous overlay of Hwy 60 from Hwy 63 to Hwy 61 in Wabasha County. Other work includes culvert improvement and replacements, guardrail improvements and installation of rural lighting at CSAH 2 and CSAH 4.

Recent Changes and Updates

The project letting was moved to March 2019. Hydraulics recommendations were updated and removed the need for right of way acquisition.

Project History

In 2017 this project will extend pavement service life and provide a safer roadway. The project was advanced to Feb. 22, 2019 letting. Within the project limits, Hwy 60 is a 2-lane undivided, rural highway. The pavement along Hwy 60 is showing signs of deterioration. A majority of Hwy 60 has a ride quality index of fair but the roadway segment of this project has a remaining service life of 0-3 years due to condition and age. There are also sections of roadway that have safety concerns, especially within the areas of CSAH 2 and CSAH 4. These sections need safety improvements as indicated in the highway safety plan. The plan also noted 13 curves as high risk.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 10.9	\$ 9.4
Other Construction Elements:	\$ 0.9	\$ 0.5
Engineering:	\$ 2.0	\$ 2.0
Right of Way:	\$ 0.1	\$ 0.2
Total:	\$ 13.9	\$ 12.1

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

Key Cost Estimate Assumptions

Project costs are from the project scoping report from April 14, 2016, and adjusted for inflation and lower assumed bit unit price. The current cost reflects revised construction costs due to change in amount of hydraulic improvements required with the project, ADA work being completed with SP7908-35, and adjustments for assumed bit unit price and inflation factor due to the project being advanced one construction season.

Project Risks

If the final project cost estimate comes in high then the project could be pushed out into a future letting date if funds are not available to cover the estimate. Timeline to determine right of way impacts was reduced and may require a public interest finding to meet the new letting.

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: 10/26/2019
Current Letting Date: 02/22/2019
Construction Season: 2019
Estimated Substantial Completion: 10/2019



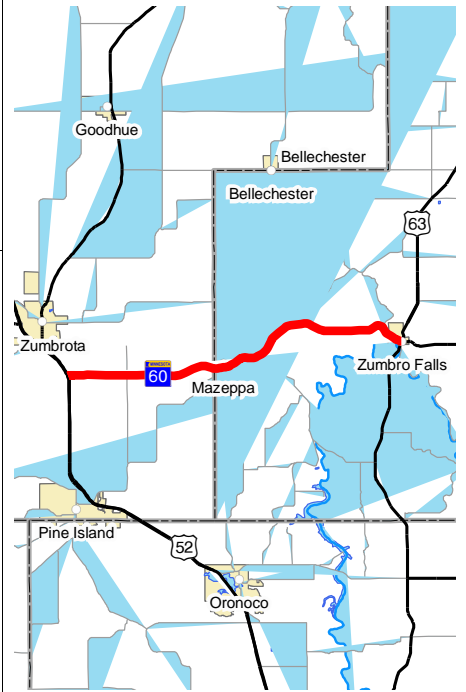
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

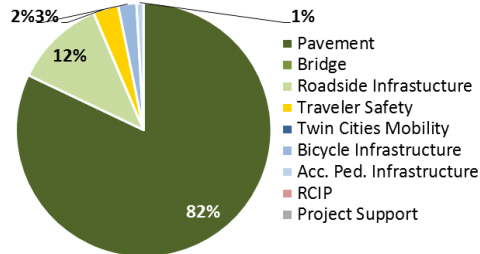
Hwy 60
Just east of TH52 to just west of TH63
Bridge 8676, 8841, 8890
State Project No. 7902-25



Primary Purpose

Performance-based Need: Pavement
Condition and Bridge Condition

Investment Category



Project Description

The project consists of a 12.1 mile bituminous mill and overlay, hydraulic improvements and ADA improvements from Hwy 52 to Appledale Drive in Zumbro Falls. Additionally within Zumbro Falls, Hwy 63 will be reconstructed and the city will be replacing sanitary sewer. Bridges 8676, 8841 and 8890 also be replaced.

Recent Changes and Updates

Project scoping is completed.

Project History

This project will restore ride quality, extend the pavement service life and provide safer travel for all modes of transportation. The pavement in the project limits is showing signs of deterioration. The ride quality is expected to be poor in 2022. TH6 within Zumbro Falls has non-compliant ADA facilities and sanitary sewers from the 1920s that needs replacement. Additionally the storm sewer is not designed to meet current standards. ADA facilities within Mazeppa do not meet current ADA standards. Bridge 8841 and 8890 are concrete box culverts built in 1954. Both culverts are exhibiting deterioration and are considered poor requiring increase maintenance time and cost to maintain. Bridge 8676 is also exhibiting the same issues built in 1948 and is included in the bridge replacement work.

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:	\$ 9.6	\$ 9.6
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.8	\$ 1.8
Right of Way:	\$ 0.2	\$ 0.2
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 baseline estimate is based on a scoping report finalized in June 2018.

Project Risks

Competitive bid may be higher or lower than expected.

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: 11/17/2017
Current Letting Date: 10/21/2021
Construction Season: 2022
Estimated Substantial Completion: 11/2022



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

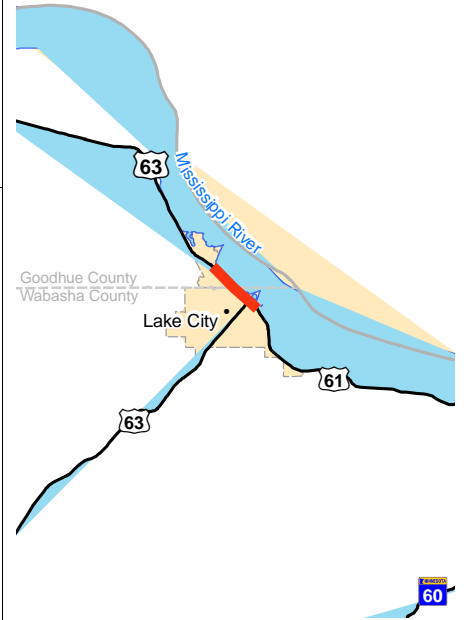
District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 61

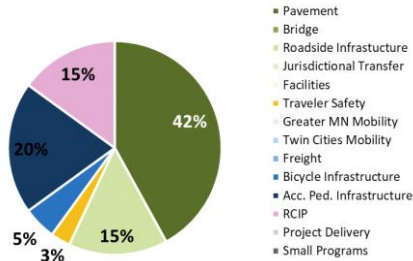
In Lake City from West Elm Street to Central Point Road
State Project No. 7906-97



Primary Purpose

Performance-based Needs: Pavement
Condition & Safety

Investment Category



Project Description

Reconstruction of TH 61 in Lake City from W. Elm St. to Central Point Road, converting from a 4-lane to 3-lane roadway. Pedestrian facilities will be improved to current ADA standards. A continuous sidewalk will be constructed on the west side and a multiuse trail on the east side of TH 61 along the lake from Jewel/Park Avenue to Central Point Road. The traffic signals at TH 61/63 and TH 61/Marion Street will be replaced. Two or three rectangular rapid flashing beacons will be installed to improve pedestrian crossing safety.

Recent Changes and Updates

An agreement was reached with the city that will have the city leading the design and project development process. MnDOT will let award and administer the contract.

Project History

This section was originally planned to be part of the mill and overlay project from TH 42 to 1 mile north of Lake City. The city decided in the winter of 2016-2017 to convert this 4-lane undivided section to a 3-lane section, with one through lane in each direction and a continuous two-way left turn lane. It was decided to do a complete reconstruction to address all needs, including mobility, pavement condition and traffic/pedestrian/bicycle safety.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.7	\$ 9.9
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.9	\$ 12.1

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

Key Cost Estimate Assumptions

The cost estimate includes this agency's portion only. It is based on a conceptual pavement section. Drilling and further analysis is needed to determine the final pavement section. It has been determined that TH 61 will be bituminous, however the final pavement section could affect the cost estimate if it is substantially different than what was originally assumed. It is assumed that the city will acquire all necessary right of way, however the amount needed should be minor and needed for pedestrian facility improvements.

Project Risks

A significant amount of controversy within the city developed when deciding whether or not to leave TH 61 as a 4-lane or to convert it to a 3-lane. Public communication will be essential throughout project development. There is a risk for impacting contaminated soils during excavation. Environmental investigations will be needed early on to identify risks. The city originally wanted to include construction of peninsulas into the Mississippi River to help with water quality along this section. However, due to environmental concerns from the DNR and Corps of Engineers this work was removed from this project. The city is still pursuing this work separately.

Schedule

Environmental Approval Date: Need unknown
Municipal Consent Approval Date: Need unknown
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: Need unknown
Original Letting Date: 11/22/2019
Current Letting Date: 11/22/2019
Construction Season: 2020
Estimated Substantial Completion: 11/2020



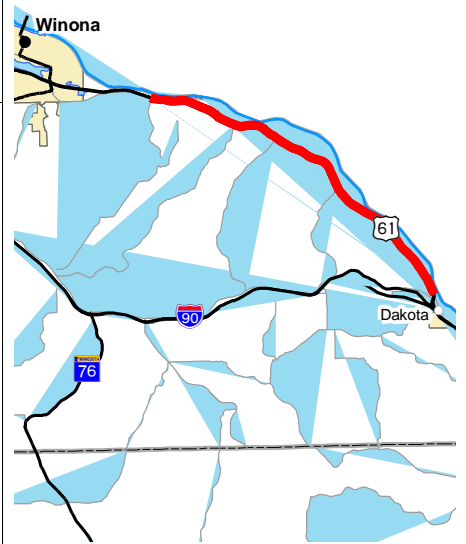
Minnesota Department of Transportation
District 6
2900 48th Street NW
507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Aaron Breyfogle

Revised Date: 12/17/2018

PROJECT SUMMARY

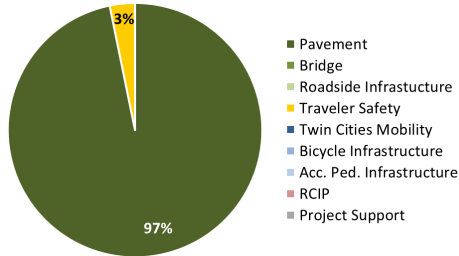
Hwy 61
I-90 to Hwy 15 in Homer
State Project No. 8504-79
[Hwy 61 Resurfacing Winona County Project](#)



Primary Purpose

Performance-based Need: Pavement

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

Right of way needs were unknown until recently. It was determined that no new right of way will be needed. There were guardrail and slope erosion areas that needed to be addressed along the frontage roads, which were recently added to the project. Hydraulic improvement recommendations are now final and the decision was made that no replacement culverts are needed.

Project History

This segment of Hwy 61 is a 4-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	\$ 10.8
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 1.6	\$ 1.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 15.0	\$ 13.4

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

Key Cost Estimate Assumptions

The Baseline Estimate was from the project cost estimates in the scoping document dated April 27, 2015. Due to inflationary changes, the estimate was recently reduced because of lower material costs expected. Competitive materials costs were assumed, due to the large size of this project. The assumed bit unit price was lowered from what was used at scoping and the contingency factor was also lowered due to the advanced project design.

Project Risks

Competitive bid may be higher or lower than expected. 3.1 miles of frontage roads are currently owned by MnDOT. Coordination with SP 8580-167, which is a mi and overlay on I-90, will be necessary. However, no major effects are anticipated.

Schedule

Environmental Approval Date: Not needed
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: Need unknown
Original Letting Date: 12/21/2018
Current Letting Date: 12/21/2018
Construction Season: 2019
Estimated Substantial Completion: 11/2019



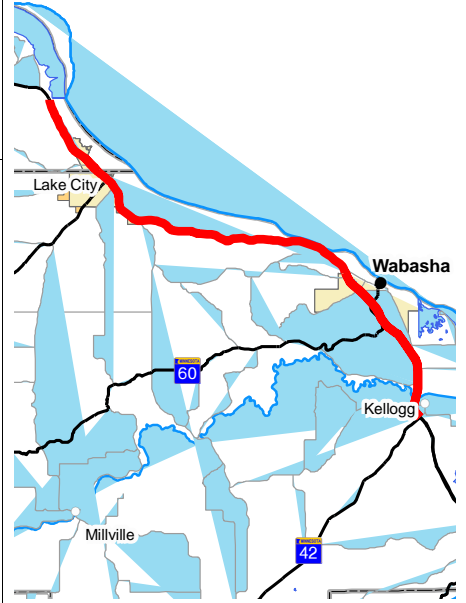
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Chad Hanson

Revised Date: 12/17/2018

PROJECT SUMMARY

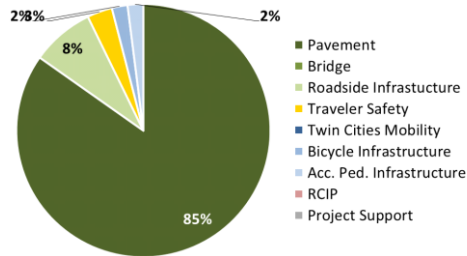
Hwy 61
Hwy 42 to just north of Lake City limits
State Project No. 7906-96
[Hwy 61 Resurfacing](#)



Primary Purpose

Performance-based Need: Pavement

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, except 1.7 miles of Hwy 61 within the city limits of Lake City. The portion within the city limits will be designed by the city and will be a complete reconstruct. The project also includes construction of a 3/4 intersection and two reduced conflict intersections also called J-turns near Wabasha.

Recent Changes and Updates

The Traffic Section submitted a project for safety funding for the construction of a 3/4 intersection and two RCI intersections near Wabasha. This work was added to this mill and overlay project. Lake City will be converting a portion of TH 61 to a 3-lane section within the city limits in 2020. That section from West Elm Street to Central Point Rd. is not included. The city will lead the design and MnDOT will let the project and do the contract administration for the reconstruction. Nearly all of the guardrail (12 miles) will need to be replaced to bring it up to current safety standards, which was not in the original scope. The letting date was adjusted from Oct. to Dec. 2018 to allow additional project development time resulting from the expanded project scope.

Project History

There is a need for improved pavement, shoulder, ride quality and extended pavement life. This includes rehabilitation and replacement of deficient storm sewers, culverts, and other low cost safety improvements where reconstruction of curb ramps, sidewalks, crosswalks, and median improvements are needed 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	\$ 14.6
Other Construction Elements:	\$ 1.5	\$ 1.0
Engineering:	\$ 1.2	\$ 2.4
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 14.2	\$ 18.1

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

Key Cost Estimate Assumptions

Several changes within the last year had significant impacts on the cost estimate, however the total estimate hasn't changed dramatically. The changes include The portion within Lake City that will be reconstructed in 2020 was removed from this mill and overlay project. Approximately 12 miles of guardrail replacement were added to this project, which were not in the original scope. A 3/4 intersection and two reduced conflict intersections were added to the project.

Project Risks

There is a significant amount of hydraulics improvements that will be included. The final recommendations are still incomplete, however some of the work will be extremely challenging due to access on the steep slope and near the railroad. Coordination is ongoing with the Rail Office. A railroad agreement will be needed and will address the access issues. The slope also poses many challenges, since there are retaining walls, flumes, etc. that may be affected.

Schedule

Environmental Approval Date: Need unknown
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 7/24/2017
Construction Limits Established Date: 3/22/2017
Original Letting Date: 10/19/2018
Current Letting Date: 12/22/2018
Construction Season: 2019
Estimated Substantial Completion: 11/2019



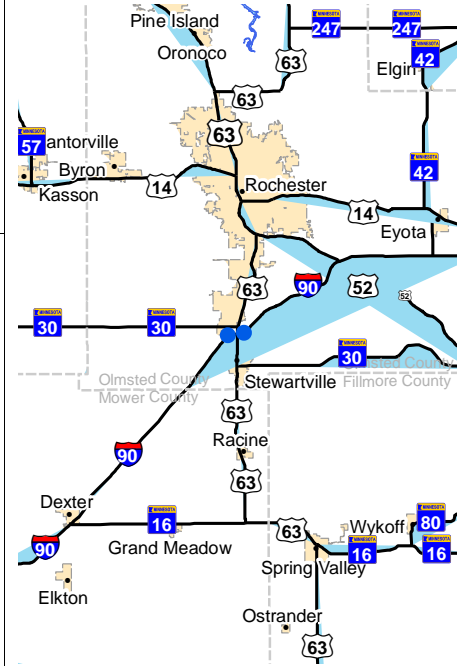
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Chad Hanson

Revised Date: 12/17/2018

PROJECT SUMMARY

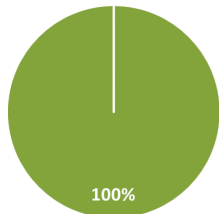
Hwy 63
Hwy 63, Over I 90
Bridge 9890, 9889
State Project No. 5509-84
[Hwy 63 and I-90 Interchange Improvements Project](#)



Primary Purpose

Performance-based Need: Pavement & Roadside Infrastructure & Bridge Condition

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

The purpose of the I-90/TH 63 interchange Project is to improve the two TH 63 bridges over I-90, correct geometric deficiencies associated with the existing interchange and improve traffic operations at the ramp terminal intersections.

Recent Changes and Updates

Project is being designed by a consultant except for the bridges, which are being designed by MnDOT.

Project History

The project had originally entered the scope as a bridge replacement project. Due to safety and operational concerns a pre-scoping study was initiated to study the interchange. Due to change in funding the project was moved from original letting into the CHIP in FY25. Due to costs savings and changing program needs, funding was available and the project advanced back into the STIP.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 14.9	\$ 12.4
Other Construction Elements:	\$ 1.1	\$ 0.6
Engineering:	\$ 2.6	\$ 2.4
Right of Way:	\$ TBD	\$ 0.1
Total:	\$ 18.6	\$ 15.4

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 based on the final scoping report signed May 2018, and data from the pre-scoping study. Costs reflect current construction cost data and a reduced contingency factor. The baseline estimate is a pre-scoping level cost estimate only and was based on high-level assumptions for quantities based on the proposed work and high contingency factor for project risks.

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: 1/25/2019
Current Letting Date: 1/24/2020
Construction Season: April 2020 - October 2021
Estimated Substantial Completion: 10/2021



Minnesota Department of Transportation
District 6
2900 48th Street NW
507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Jai Kalsy

Revised Date: 12/17/2018

PROJECT SUMMARY

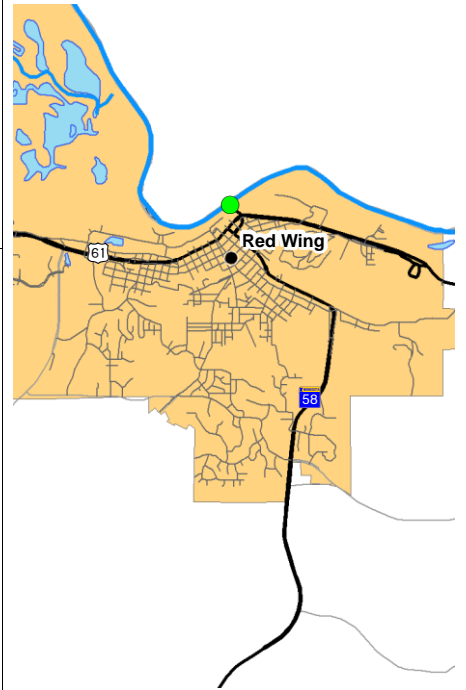
Hwy 63

Hwy 63 bridge over the Mississippi river and Hwy 61

Bridge 9040, 9103

State Project No. 2515-21

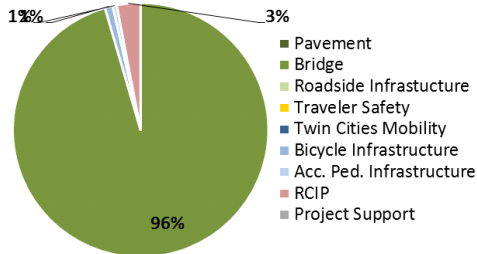
[Red Wing Bridge Project](#)



Primary Purpose

Performance-based Need: Bridge Condition & Traffic Mobility Deficiencies

Investment Category



Project Description

The recommended alternative for this project is to replace both the Hwy 63 bridge over the Mississippi River and the Hwy 63 bridge over Hwy 61 in Red Wing.

Recent Changes and Updates

The project was let on March 8, 2017. Bids were competitive and significantly lower than the engineer's estimate. Construction began in spring 2017.

Project History

Bridge 9040 is fracture critical and was put on the Chapter 152 Bridge list in 2008. Bridge 9103 is on the National Register. The original primary needs were to provide structurally sound crossings of the Mississippi River and Hwy 61, but after a traffic analysis, it determined that mobility in Red Wing should also be addressed. The recommended approach in Red Wing is the buttonhook design creating a new signalized intersection with Hwy 61 and Hwy 63. A jughandle design will be constructed on the Wisconsin approach. A steel box girder structure over the Mississippi River was selected as the recommended bridge type. A two-lane structure will only be constructed to meet immediate needs of capacity while preserving the right of way for a future four-lane when it is warranted. The letting date was moved from Feb. 24, 2017 to March 8, 2017 to allow for a six-week advertise period due to the size of the 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:	\$ 80.0	\$ 46.2
Other Construction Elements:	\$ 8.0	\$ 2.8
Engineering:	\$ 10.0	\$ 9.3
Right of Way:	\$ 2.0	\$ 3.0
Total:	\$ 100.0	\$ 61.3

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 assumed project costs for all agencies (Minnesota and Wisconsin), but the current estimate is the letting cost and includes the Minnesota portion only. Cost overruns and/or supplemental agreements could increase costs above the current estimate for other construction elements. All right of way is acquired.

Project Risks

There is contamination on the Minnesota approach. Extensive drilling and environmental investigations were completed and estimates were made for the total volume of contaminated material impacted by construction. However, the exact amount will likely be different and will not be known until construction is underway. There are poor soils on the Wisconsin approach, which require muck excavation and a surcharge. The total volume to be excavated was estimated, however if the poor soils are more extensive than anticipated the cost may increase. Coordination with CP occurred over the last couple of years in preparation for the project. Outages are unlikely and unique designs are proposed for launching span one over the railroad tracks. This has never been done in Minnesota.

Schedule

Environmental Approval Date: 4/21/16
Municipal Consent Approval Date: 11/23/15
Geometric Layout Approval Date: 2015
Construction Limits Established Date: 7/7/2015
Original Letting Date: 11/01/2017
Current Letting Date: 3/8/2017
Construction Season: 2017 - 2020
Estimated Substantial Completion: 08/2020



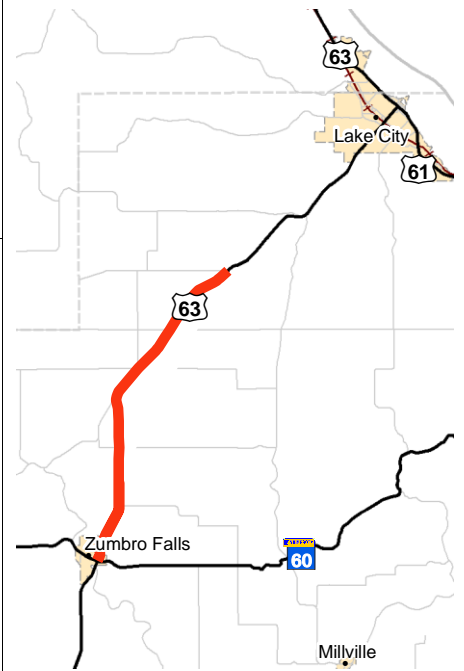
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Chad Hanson

Revised Date: 12/17/2018

PROJECT SUMMARY

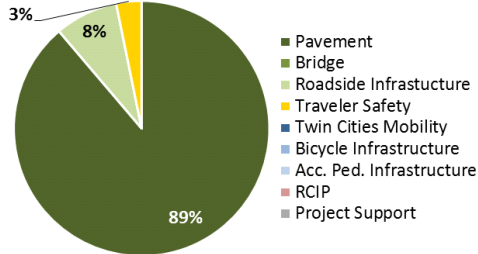
Hwy 63 and Hwy 60
Hwy 63 from Hwy 60 to CR 78 and Hwy 60 in Zumbro Falls
State Project No. 7908-35
[Hwy 63 North Bituminous Resurfacing Project](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a bituminous mill and overlay on Hwy 63 from Hwy 60 to CR 78.

Recent Changes and Updates

Construction was completed in October 2018.

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. Project limits previously were from 75th Street in Olmsted County to Wabasha County Road 78. In 2015, the limit was changed to begin at the intersection of Hwy 60 in Zumbro Falls but still end at CR78. This project will no longer include reconstruction of TH60 in Zumbro Falls. The TH60 work will now be included with a FY22 project, SP7902-25.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.6	\$ 4.0
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 1.7	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.2
Total:	\$ 10.3	\$ 5.2

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

Key Cost Estimate Assumptions

The current estimate reflects the original project limits being modified. (See history for detailed explanation). The estimate is also updated to reflect revised inflation and lower bituminous price per ton.

Project Risks

If the final project cost estimate comes in high then the project could be pushed out into a future letting date if funds are not available to cover the estimate. Public interest findings may be needed to keep Feb. 2018 letting.

Schedule

Environmental Approval Date: 07/06/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 9/1/2017
Original Letting Date: 1/1/2018
Current Letting Date: 2/23/2018
Construction Season: 2018
Estimated Substantial Completion: 10/2018



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 65

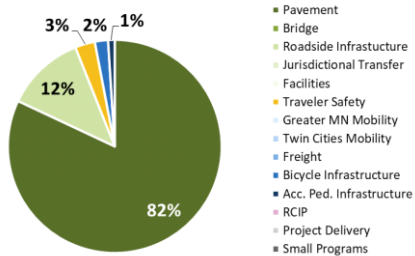
Hwy 65 NB and SB from Newton Ave to I-35 Ramps in Albert Lea
State Project No. 2405-32



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is for Hwy 65 NB and SB from Newton Ave to the I-35 Ramps in Albert Lea. It will include a bituminous mill and overlay, upgrade ramps and sidewalks to meet ADA standards, storm sewer repairs and replace the signal at the intersection of Garfield and TH65.

Recent Changes and Updates

The project will be delivered by a consultant. Consultant will complete right of way acquisition, preliminary and final design and environmental documentation for the district.

Project History

TH 65 within the project limits is a 4-lane divided urban and rural, principal arterial highway. Pavement is in poor condition and within the project limits is deteriorating rapidly. The pavement is in need of a fix due to pavement condition and age. Additionally many of the pedestrian ramps and sidewalks have poor cross-slopes, horizontal and vertical discrepancies, non-compliant landings or poor pavement. This makes it more difficult for non-motorized users to travel pedestrian facilities along TH65. Also the 39-year old signal at Garfield Avenue and TH65 has become increasingly costly to repair as it is beyond the average signal life of 25 years of service.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.1	\$ 4.1
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.1	\$ 0.1
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

Baseline estimate based on scoping report finalized in 2017.

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: 11/20/2020
Current Letting Date: 11/20/2020
Construction Season: 2021
Estimated Substantial Completion: 11/2021



Minnesota Department of Transportation
District 6
2900 48th Street NW
507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

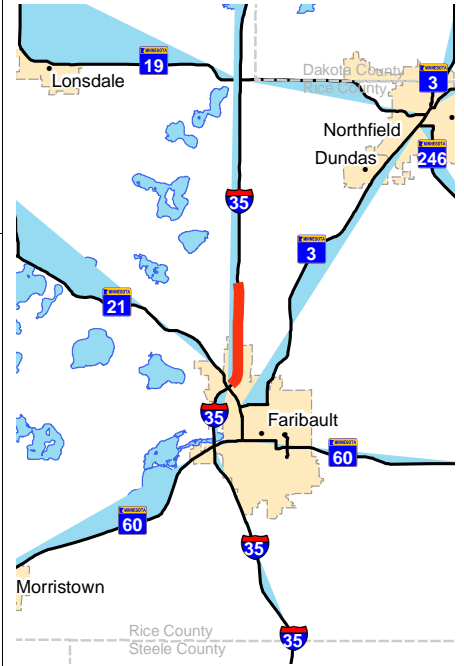
I-35

I 35 SB Lanes from 0.1 mi N Hwy 21 to 0.1 mi N CSAH 9

Bridge 66817

State Project No. 6680-113

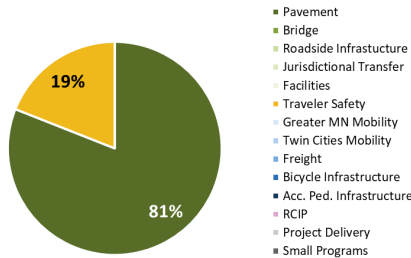
[I-35 Concrete Overlay Project](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

Southbound I-35 from south of Hwy 21 to north of Rice County Road 9 will receive an unbonded concrete overlay. Additionally ramp improvements from southbound I-35 to Hwy 21 will be completed. Other work with the project include culvert improvements and signing revisions.

Recent Changes and Updates

The project is currently under construction.

Project History

Purpose of the project is to improve ride quality and service life on I-35 and improve safety of TH 21 exit movement southbound. Project is located near Faribault north of the Hwy 21 interchange. The original project was a mill and overlay of I-35. A second project was merged with it to lengthen the I-35 deceleration lane onto TH 21 southbound. Then the project was advanced 2 years. The project was up scoped to an unbonded overlay. Questions about the exit loop arose so the geometry at the top of the loop was added. The project was extended south. Then the exit loop was extended to a full regrade. Finally with the geometric layout bridge rail revisions are being added.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 1.8	\$ 6.8
Other Construction Elements:	\$ 0.2	\$ 0.5
Engineering:	\$ 0.4	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 2.4	\$ 8.7

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 construction close out costs to date. The current estimate increased from the baseline estimate because of additional items being added to the project. The estimate was based on other similarly sized unbonded overlay projects within the district. There was a right of way acquisition assumed with major utility relocation. The original estimate was based on the initial mill and overlay cost estimate (7-16-15). The current estimate is from scoping amendment #2 (8-23-17).

Project Risks

Total costs for "other construction items" is expected to increase as project incentives have not been paid.

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: 11/16/2018
Current Letting Date: 4/27/2018
Construction Season: 2018
Estimated Substantial Completion: 10/2018



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Paul Zager

Revised Date: 12/17/2018

PROJECT SUMMARY

I-90

I-90 WB Lanes from Hwy13 to Hwy 46 (Petran)

Bridge 9727

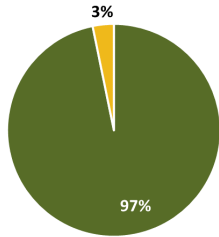
State Project No. 2482-74

[I-90 Westbound Concrete Overlay Project](#)

Primary Purpose

Performance-based Need: Pavement
Condition and Bridge Condition

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

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 an unbonded concrete overlay. The project also includes guardrail replacements, culvert repairs and improvements and re-decking of bridge 9727.



Recent Changes and Updates

This project is being upscoped to an unbonded concrete overlay and will include re-decking bridge 9727. This project was delayed and moved from a 2018 project to a 2019 project.

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	\$ 17.2
Other Construction Elements:	\$ 0.3	\$ 0.8
Engineering:	\$ 0.7	\$ 2.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.9	\$ 20.8

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

Key Cost Estimate Assumptions

Current estimate updated in August 2018 to reflect actual letting cost.

Project Risks

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: 5/18/2018
Construction Season: 2018 - 2019
Estimated Substantial Completion: 11/2019



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

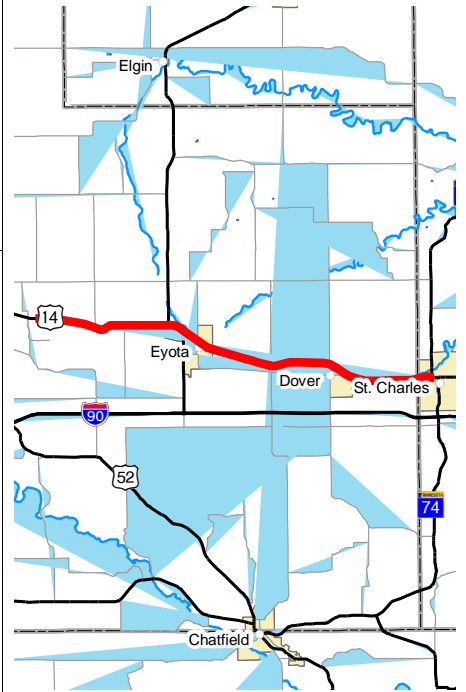
District Engineer: Mark Schoenfelder
Project Manager: Jai Kalsy

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 14
Hwy 14 from Chester to St. Charles
State Project No. 5503-45

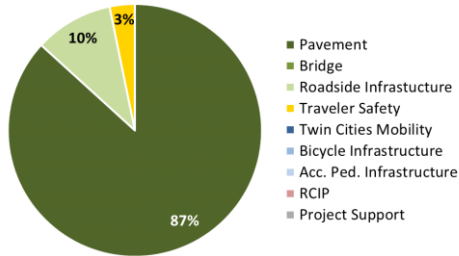
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

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

Project is complete.

Project History

Project completed in Oct. 2016. 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	\$ 4.9
Other Construction Elements:	\$ 0.5	\$ 0.1
Engineering:	\$ 0.9	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.9	\$ 5.4

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

Key Cost Estimate Assumptions

The baseline cost estimate is from the project scoping report of April 18, 2014 and based on a FY18 letting. The construction letting estimate for current estimate is based on the district's engineer's estimate for letting. Winning bid was \$4.9 million for construction at letting. Competitive materials costs were assumed in developing the engineer's estimate for this project. The assumed bit unit price was higher than that of the winning bid. Also the baseline estimate had a high contingency factor and was reflective of assumed hydraulic needs, which were reduced as the project developed.

Project Risks

No outstanding risks on this project.

Schedule

Environmental Approval Date: 04/29/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: Need unknown
Original Letting Date: 11/17/2017
Current Letting Date: 12/18/2015
Construction Season: 2016
Estimated Substantial Completion: 10/2016



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

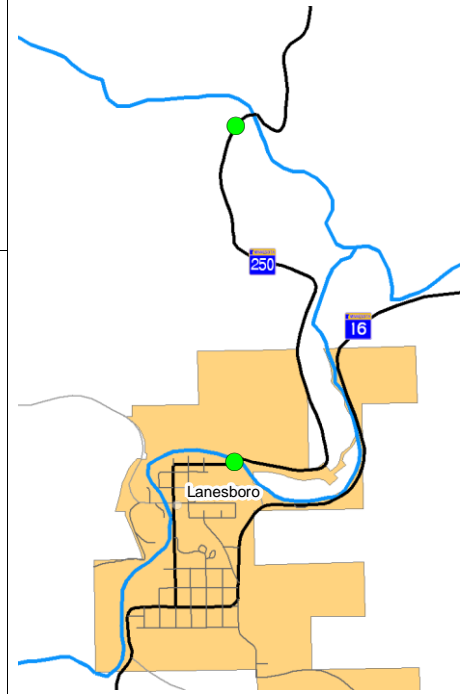
District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 250
Bridges on Hwy 250 in Lanesboro
Bridge 6975, 6977
State Project No. 2319-16

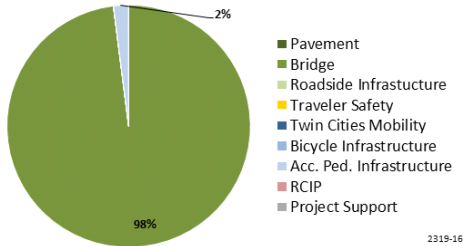
Substantially Complete



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 project is complete.

Project History

Bridge 6975 was built in 1931 and bridge 6977 was built in 1924. Both structures are classified as functionally obsolete. Original project included a significant amount of regrading of TH250. As the project was advanced in design, the amount of roadway needing regrading with the bridges was reduced.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	Baseline Est.	Current Est.
Construction Letting:	\$ 9.0	\$ 3.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.7	\$ 1.3
Right of Way:	\$ 0.3	\$ 0.2
Total:	\$ 11.0	\$ 5.3

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. The current estimate reflects reduction in the amount of roadway regrading assumed with the original project scope.

Project Risks

The risks have been removed or mitigated.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: 8/3/15
Geometric Layout Approval Date: 5/14/2015
Construction Limits Established Date: 5/14/2015
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: Mark Schoenfelder
Project Manager: Kjersti Anderson

Revised Date: 12/17/2018

PROJECT SUMMARY

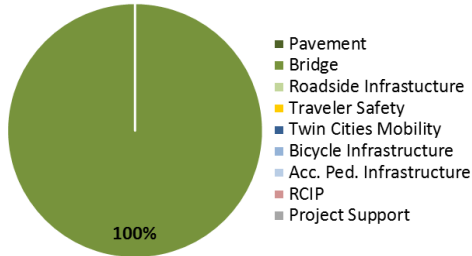
Hwy 52
Hwy 52 over Hwy 63
Bridge 55009, 55010
State Project No. 5507-63

Substantially Complete

Primary Purpose

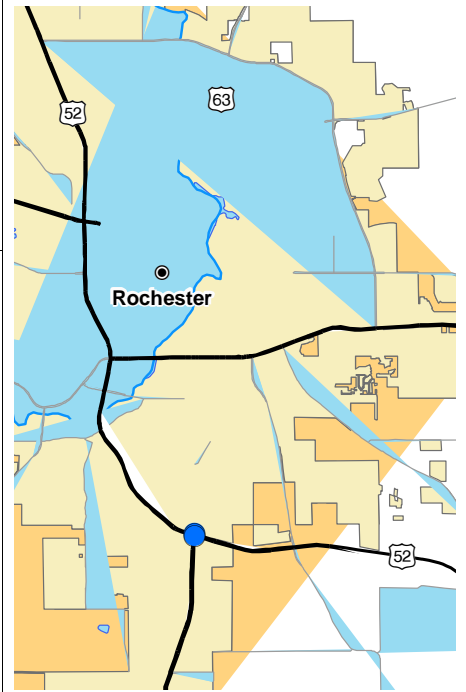
Performance-based Need: Bridge Condition

Investment Category



Project Description

This project will replace 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 complete.

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	\$ 4.5
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 0.7	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.9	\$ 5.0

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/square foot. Current estimate reflects construction letting costs.

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: 11/2016



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Richard Augustin

Revised Date: 12/17/2018

PROJECT SUMMARY

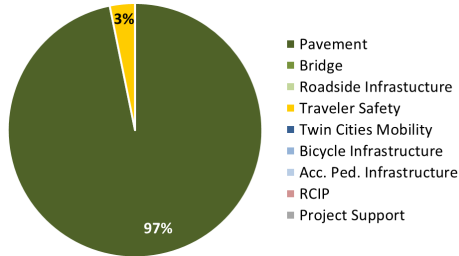
Hwy 52
Rochester to Cannon Falls
State Project No. 2506-75

Substantially Complete

Primary Purpose

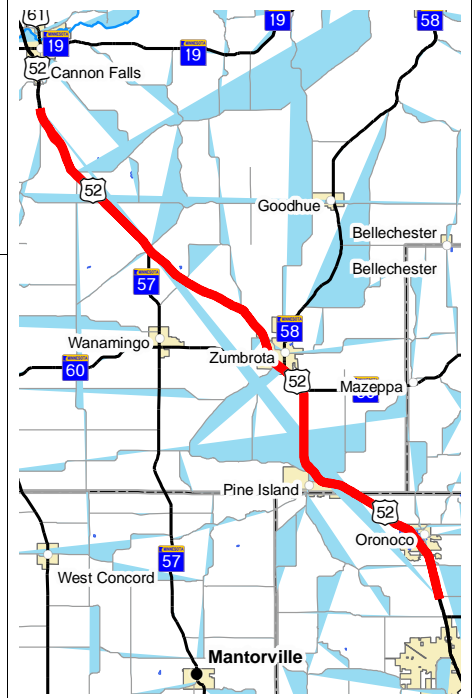
Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay of 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. Additionally Highway Safety Improvement Program funding was received in 2016 to install high tension cable median barrier from Oronoco to Zumbrota.



Recent Changes and Updates

This project is complete.

Project History

In 2008, the Ride Quality Index was below average 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	\$ 7.3
Other Construction Elements:	\$ 0.6	\$ 0.4
Engineering:	\$ 1.4	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.4	\$ 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 reflects the awarded bid price for construction. Bid prices for bituminous were much lower than the engineers estimate accounting for the difference in the estimates.

Project Risks

No outstanding risks.

Schedule

Environmental Approval Date: 7/18/2016
Municipal Consent Approval Date: Need unknown
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: Need unknown
Original Letting Date: 10/28/2016
Current Letting Date: 10/28/2016
Construction Season: 2017
Estimated Substantial Completion: 7/2017



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

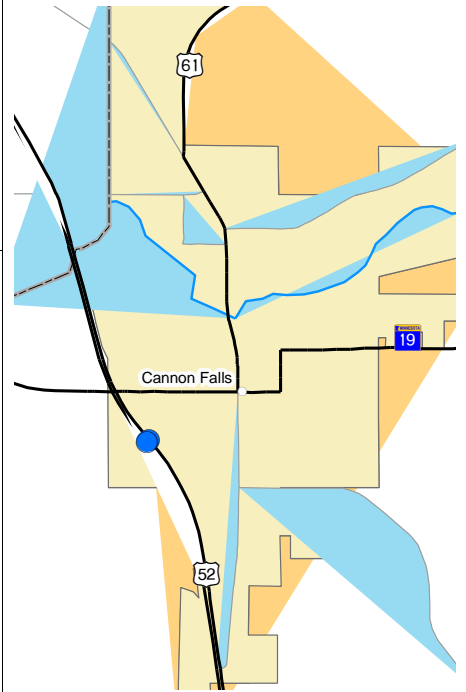
District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 52
Hwy 52 bridges over Little Cannon River
Bridge 9485, 9486
State Project No. 2506-79

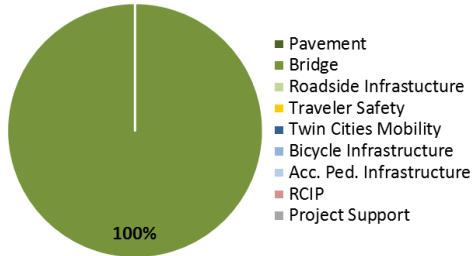
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

The project replaces two bridges 9485 and 9486, over the Little Cannon River on Hwy 52.

Recent Changes and Updates

This project is complete.

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	\$ 3.5
Other Construction Elements:	\$ 0.2	\$ 0.1
Engineering:	\$ 1.0	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.4	\$ 4.2

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 lower than the baseline estimate and reflects changes made during design as opposed to scoping assumptions. The bridges were designed with larger beams allowing for single span bridges and fewer beams and raising roadway profiles was kept to a minimum so there were fewer grading and pavement replacements.

Project Risks

No significant risks are anticipated.

Schedule

Environmental Approval Date: 12/15/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 02/08/2016
Construction Limits Established Date: 2/8/2016
Original Letting Date: 02/01/2018
Current Letting Date: 2/24/2017
Construction Season: 2017
Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: **Mark Schoenfelder**
Project Manager: **Kjersti Anderson**

Revised Date: 12/17/2018

PROJECT SUMMARY

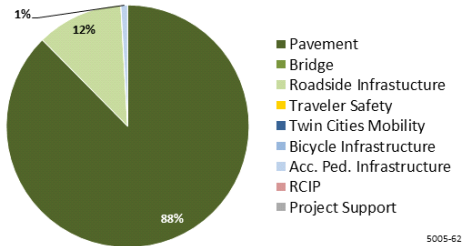
Hwy 56
Maple St. in Taopi to Hwy 46 in Mower County
State Project No. 5005-62

Substantially Complete

Primary Purpose

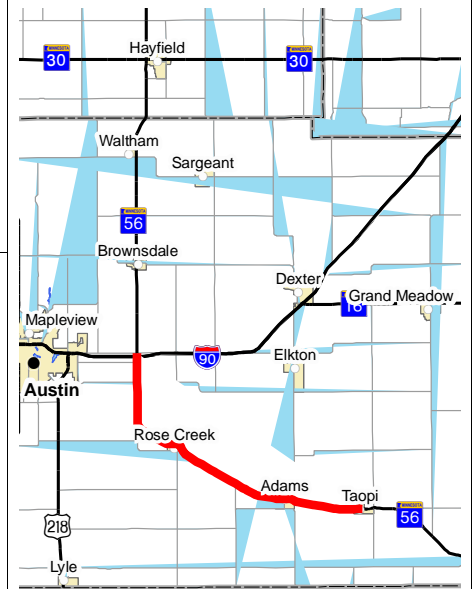
Performance-based Need: Pavement

Investment Category



Project Description

This is a bituminous mill and overlay project on Hwy 56 in Taopi to Hwy 46. Included in this project is a regrade in Adams. This regrade includes new sanitary, water main, storm sewer, lighting and landscaping.



Recent Changes and Updates

The project is complete.

Project History

This project will preserve existing roadway structure, extend pavement life and improve ride quality. 2017: Project prioritization factors delayed this project for several years. This project was originally proposed to be let in 2013. One major change was the conversion from an ELLA to a 'non-ELLA' project. (A million dollars was added to the project). There was a letting change from the original Dec. 18, 2015, to Nov. 18, 2016. Another major change was the removal of the rural culvert replacements which resulted in a budget change from \$6.831 million to \$6.214 million (removal of \$617,000). We then had a letting change in June from Nov. 18, 2016 to Jan. 27, 2017. One last major change was the decision to regrade adding what was previously estimated as an additional roughly \$120,000. There was a letting change in Aug. from Jan. 27, 2017 to March 24, 2017.

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	\$ 5.3
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 1.0	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.0	\$ 6.4

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

Key Cost Estimate Assumptions

Project letting cost was \$5.25 million and is reflected as the current estimate. Current estimate is less than baseline estimate due to competitive materials costs assumed in developing the engineer's estimate for this project. The assumed bit unit price was higher than that of the winning bid. Also the baseline estimate had a high contingency factor due to assumed risks at scoping. Contingency factor was reduced as the project developed and risks were mitigated.

Project Risks

No significant risks are anticipated.

Schedule

Environmental Approval Date: 11/1/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/8/2016
Construction Limits Established Date: 5/7/2015
Original Letting Date: 01/25/2013
Current Letting Date: 03/24/2017
Construction Season: 2017
Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

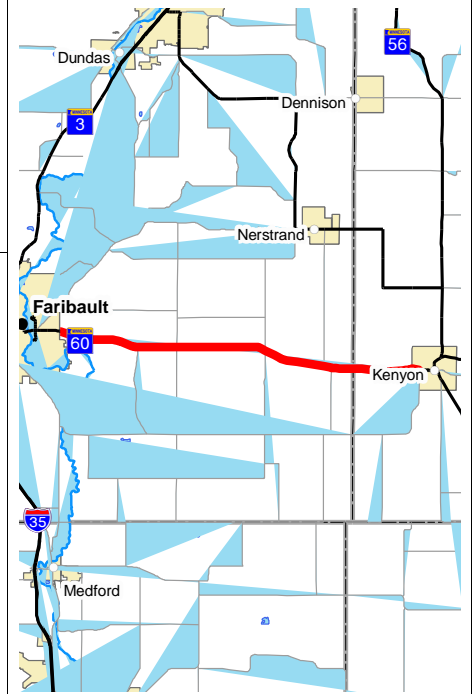
District Engineer: Mark Schoenfelder
Project Manager: Kyle Lake

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 60
Faribault to Kenyon
State Project No. 6607-49

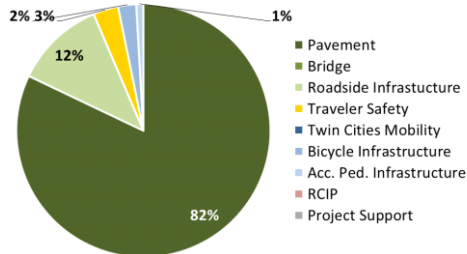
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

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 is complete.

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	\$ 3.1
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.9	\$ 4.4

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

Key Cost Estimate Assumptions

The baseline cost estimate is from the project scoping report of July 16, 2015. The current estimate is reflective of engineers' estimate. It is lower than baseline due to assumed competitive materials costs at scoping and the project being let one construction season sooner than when scoped. Additionally, the baseline estimate had a contingency factor due to assumed risks at scoping. Contingency factor was reduced as the project developed and risks were mitigated.

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: 12/21/2018
Current Letting Date: 4/28/2017
Construction Season: 2017
Estimated Substantial Completion: 11/2017



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

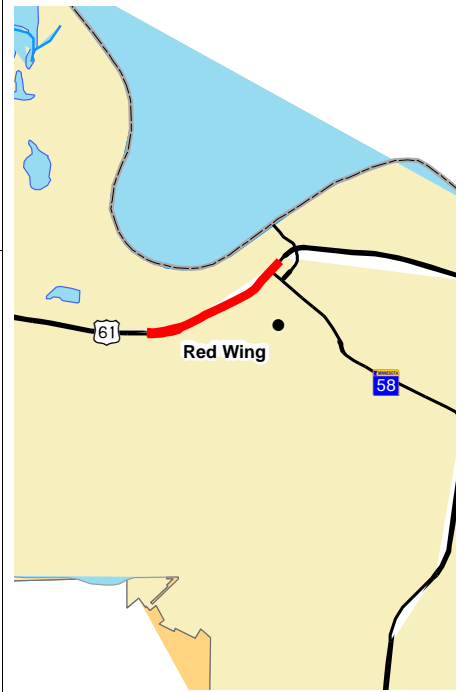
District Engineer: Mark Schoenfelder
Project Manager: David Tsang

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 61
Potter St. to Old West Main St
State Project No. 2514-122

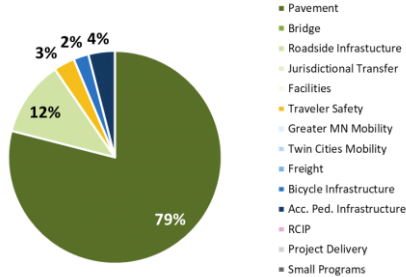
Substantially Complete



Primary Purpose

Performance-based Need: Pavement
Condition & District Safety Plan

Investment Category



Project Description

This project is a reconstruction of Hwy 61 in Red Wing from Potter Street to Old West Main Street. This includes the replacement of city utilities, signal replacement at Old West Main Street and pedestrian and accessibility improvements.

Recent Changes and Updates

This project was let in 2015 and construction is complete.

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 funding and was selected to turn this project into a complete reconstruction.

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	\$ 4.2
Other Construction Elements:	\$ 0.3	\$ 1.9
Engineering:	\$ 1.4	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.5	\$ 6.6

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

Key Cost Estimate Assumptions

Bids came in in excess of \$1 million higher than the original estimate. MnDOT participation was capped, per the cooperative agreement, and the city understood that they were responsible for any costs overages. Due to the higher bid prices, MnDOT agreed to add \$500,000 to their original agreement amount. Current estimate reflex MnDOT's construction costs and does not include the other agency's contribution.

Project Risks

This project is complete and all risks have been retired.

Schedule

Environmental Approval Date: Not needed
Municipal Consent Approval Date: 06/07/2015
Geometric Layout Approval Date: 2014
Construction Limits Established Date: 6/7/2015
Original Letting Date: 2/1/2014
Current Letting Date: 2/15/2015
Construction Season: 2015/2016
Estimated Substantial Completion: 8/2016



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

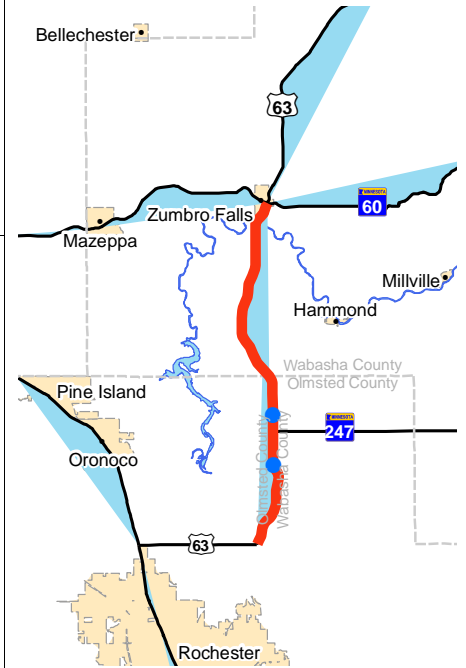
District Engineer: Mark Schoenfelder
Project Manager: Chad Hanson

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 63
CSAH 33 to 0.3 Mi. W of Hwy 60
Bridge 8313, 8831
State Project No. 5510-84
[Hwy 63 Resurfacing Project](#)

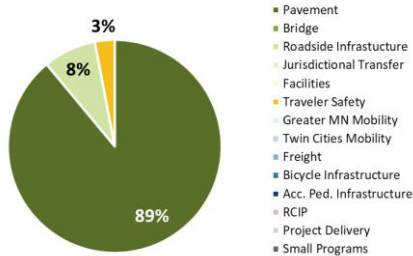
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project on Hwy 63 from CSAH 33 to Hwy 60 consists of a concrete overlay and the replacement of two bridges over a stream.

Recent Changes and Updates

Project was completed in August 2018.

Project History

In 2017, project limits previously were from 75th Street in Olmsted County to Wabasha County Road 78 and programmed as a bituminous mill and overlay. In 2016, the limit was changed to begin at 75th Street and end at Hwy 60 in Zumbro Falls and replace two box culvert bridges. 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: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.9	\$ 6.8
Other Construction Elements:	\$ 0.6	\$ 0.2
Engineering:	\$ 1.4	\$ 1.4
Right of Way:	\$ 0.2	\$ 0.1
Total:	\$ 9.1	\$ 8.5

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 the base-line cost estimate for this project. Right of way is an assumption based on parcels being affected and average minimum damage acquisition costs. This cost will be updated when acres affected are evaluated for current land prices. Current estimate reflects construction close-out costs to date.

Project Risks

Total cost for other construction items is expected to increase as project incentives have not been paid.

Schedule

Environmental Approval Date: 7/6/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 9/1/2016
Original Letting Date: 1/26/2018
Current Letting Date: 2/23/2018
Construction Season: June - August 2018
Estimated Substantial Completion: 8/2018



Minnesota Department of Transportation
District 6
2900 48th Street NW
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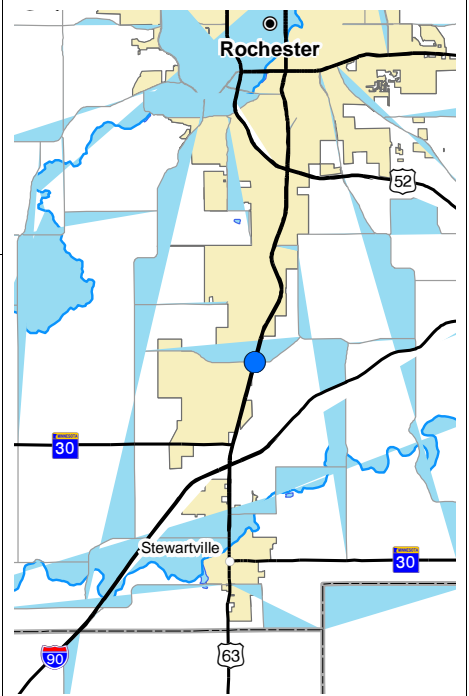
District Engineer: Mark Schoenfelder
Project Manager: Heather Lukes

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 63
County Road 16 interchange
Bridge 55040
State Project No. 5509-80

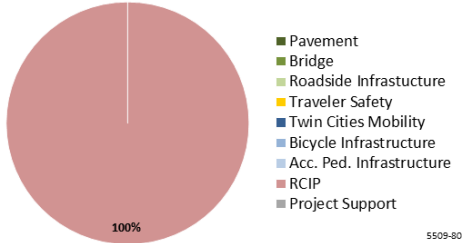
Substantially Complete



Primary Purpose

Performance-based Need: District Safety Plan, TED Project

Investment Category



Project Description

This project reconstructs 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 also incorporates space for pedestrians and bicyclists to enhance safety on Hwy 16.

Recent Changes and Updates

The project is complete.

Project History

The project was let on June 2, 2015. Olmsted County is lead agency. The project will 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. MnDOT District 6 design staff will provide oversight. 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	\$ 4.7
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 2.2	\$ 0.1
Right of Way:	\$ 0.4	\$ 0.0
Total:	\$ 11.6	\$ 4.9

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

Key Cost Estimate Assumptions

Current estimate reflex MnDOT's construction costs and does not include other agency contributions. The baseline estimate is reflective of the construction costs for MnDOT and local agency contributions.

Project Risks

No further project risks are anticipated at this time

Schedule

Environmental Approval Date: 9/9/2013
Municipal Consent Approval Date: 1/5/15
Geometric Layout Approval Date: 10/7/2014
Construction Limits Established Date: 3/11/2014
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

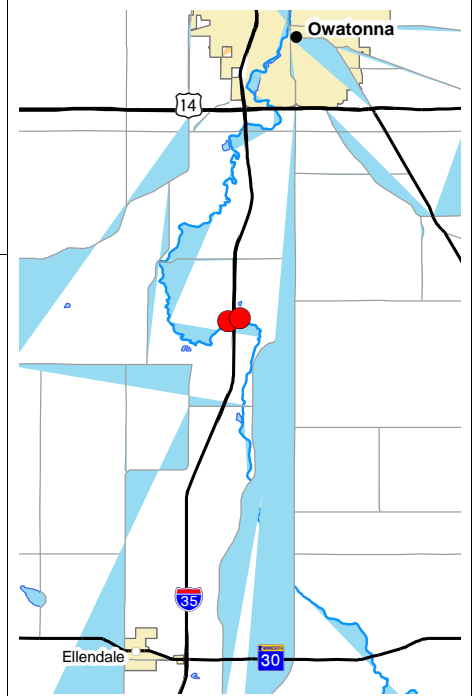
District Engineer: Mark Schoenfelder
Project Manager: Paul Schauer

Revised Date: 12/17/2018

PROJECT SUMMARY

I-35
Straight River Rest Area NB
State Project No. 7480-124

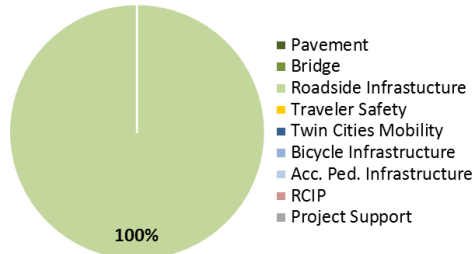
Substantially Complete



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

Project is constructed.

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. Original letting was February 2016. Design delays caused letting date to be moved. This project was let on June 2, 2016 and is under construction. Project had one bidder.

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	\$ 5.0
Other Construction Elements:	\$ 0.0	\$ 0.2
Engineering:	\$ 0.6	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 5.4	\$ 6.6

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

Key Cost Estimate Assumptions

Project construction letting cost was \$4.98 million. The bid costs were higher than expected.

Project Risks

There are currently no outstanding risks on this project.

Schedule

Environmental Approval Date: 3/1/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 12/15/2015
Original Letting Date: 2/26/2016
Current Letting Date: 6/2/2016
Construction Season: 2016
Estimated Substantial Completion: 10/2016



Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Kyle Lake

Revised Date: 12/17/2018

PROJECT SUMMARY

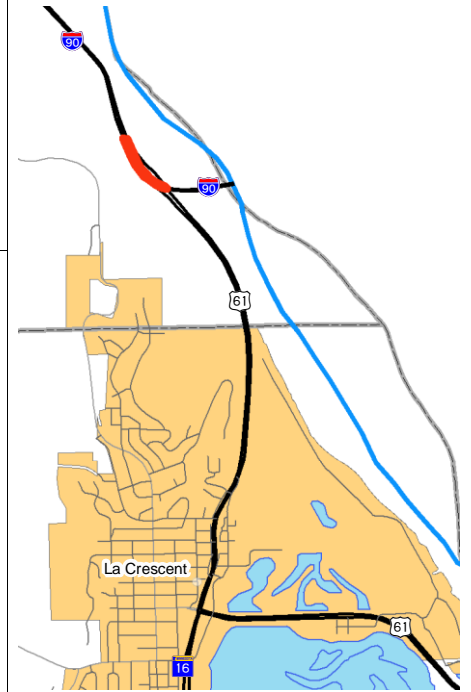
I-90

Mississippi River Bridges - Dresbach

Bridge 85801, 85802

State Project No. 8580-149

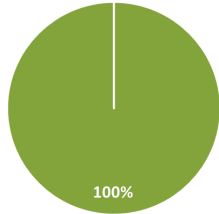
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

This project constructs a new I-90 river bridge, which includes a reconstructed interchange that improves traffic safety, capacity and access on and between Hwy 61, and Hwy 14 and I-90. The project includes grading, concrete surfacing and bridge replacement. New and enhanced bicycle and pedestrian facilities are 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 project is complete. The initial estimate was considerably higher because there were higher cost contingencies built into the preliminary level cost estimate. The project included a unique performance based construction staging and some 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 bid amount. Due to overruns and contract changes, including the state line prevailing wage change, the anticipated construction letting cost including other construction elements for the project is approximately \$193 million.

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 and riverfront access issues.

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	\$ 6.1
Engineering:	\$ 28.1	\$ 39.4
Right of Way:	\$ 0.0	\$ 0.5
Total:	\$ 293.6	\$ 233.5

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 U.S. Fish and Wildlife Services agreed 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. Although the project is coming to a close, the contractor is working to remove the old bridge and the embankments at both abutments. The contractor also has to remove a temporary causeway and bridge that was used for access to the island and to facilitate bridge removal.

Schedule

Environmental Approval Date: Need unknown
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 12/07/2011
Construction Limits Established Date: 6/14/2011
Original Letting Date: 01/24/2012
Current Letting Date: 10/19/2012
Construction Season: 2013/2016
Estimated Substantial Completion: 11/2017



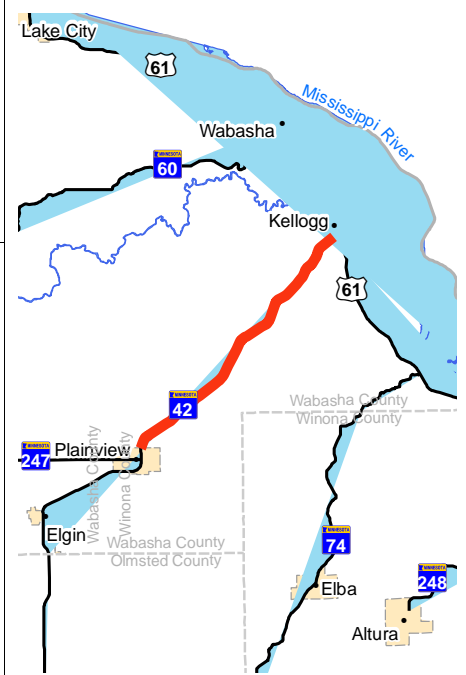
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Mark Anderson

Revised Date: 12/17/2018

PROJECT SUMMARY

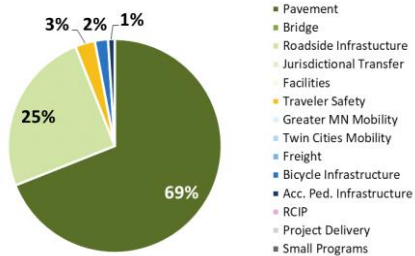
Hwy 42
0.35 Mi. N. of Hwy 247 to Hwy 61
State Project No. 7901-52



Primary Purpose

Performance-based Need: Pavement & Roadside Infrastructure Condition

Investment Category



Project Description

Hwy 42 from north of Hwy 247 to Hwy 61, will receive a bituminous mill and overlay including hydraulic improvements.

Recent Changes and Updates

Original project as scoped included dollars to improve the intersection of TH42/TH269/CR4/CR27 but was removed. Wabasha County could not secure funds to participate so the improvement will be developed as a future safety project.

Project History

Project was originally a FY2021 project. Within the project limits, TH 42 is a 2-lane undivided, rural highway. TH 42 pavement in the project limits is showing signs of deterioration. Within the project limits, a majority of TH 42 is considered fair but the roadway pavement does have a poor remaining service life of 0-3 years due to condition and age.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.7	\$ 4.9
Other Construction Elements:	\$ 0.7	\$ 0.3
Engineering:	\$ 1.1	\$ 1.0
Right of Way:	\$ 0.3	\$ 0.1
Total:	\$ 7.8	\$ 6.3

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

Key Cost Estimate Assumptions

Baseline estimate is from 2016 scoping report.

Current cost estimate reflects change in project scope and updated inflationary factors, which decreased the estimate from the baseline estimate.

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: 1/1/2021
Current Letting Date: 10/25/2019
Construction Season: 2020
Estimated Substantial Completion: 11/2020



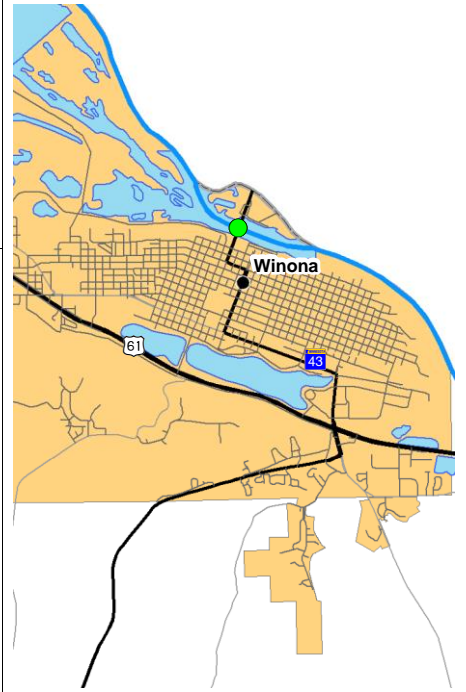
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Paul Zager

Revised Date: 12/17/2018

PROJECT SUMMARY

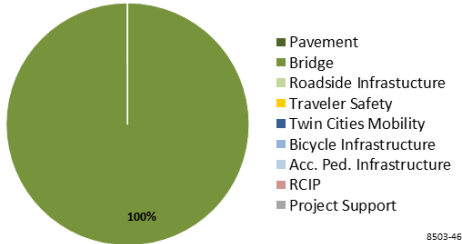
Hwy 43
Winona Bridge over Mississippi River
Bridge 5900
State Project No. 8503-46
[Hwy 43 Winona Bridge Project](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project constructs a new bridge and rehabilitates the existing bridge, along with associated roadway work.

Recent Changes and Updates

Since moving forward using the construction manager / general contractor approach, the risks and contingencies are more fully understood. Recent cost projections indicate the need for about \$30 million in additional project funding 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 and the current design will provide a structural design that meets current traffic requirements with no load postings.

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	\$ 145.0
Other Construction Elements:	\$ 0.0	\$ 2.0
Engineering:	\$ 25.2	\$ 35.0
Right of Way:	\$ 16.2	\$ 16.0
Total:	\$ 181.4	\$ 198.0

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 \$30 million in additional project funding 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 Winona downtown business district of presents unique challenges. The current bridge is eligible for placement on the National Register of Historic Places. Numerous environmental permits are required. This project is the first CMGC project for the district.

Schedule

Environmental Approval Date: January 2014
Municipal Consent Approval Date: 08/19/2013
Geometric Layout Approval Date: 7/1/2013
Construction Limits Established Date: Need unknown
Original Letting Date: 01/24/2014
Current Letting Date: 07/01/2014
Construction Season: 2014 - 2019
Estimated Substantial Completion: 12/2019



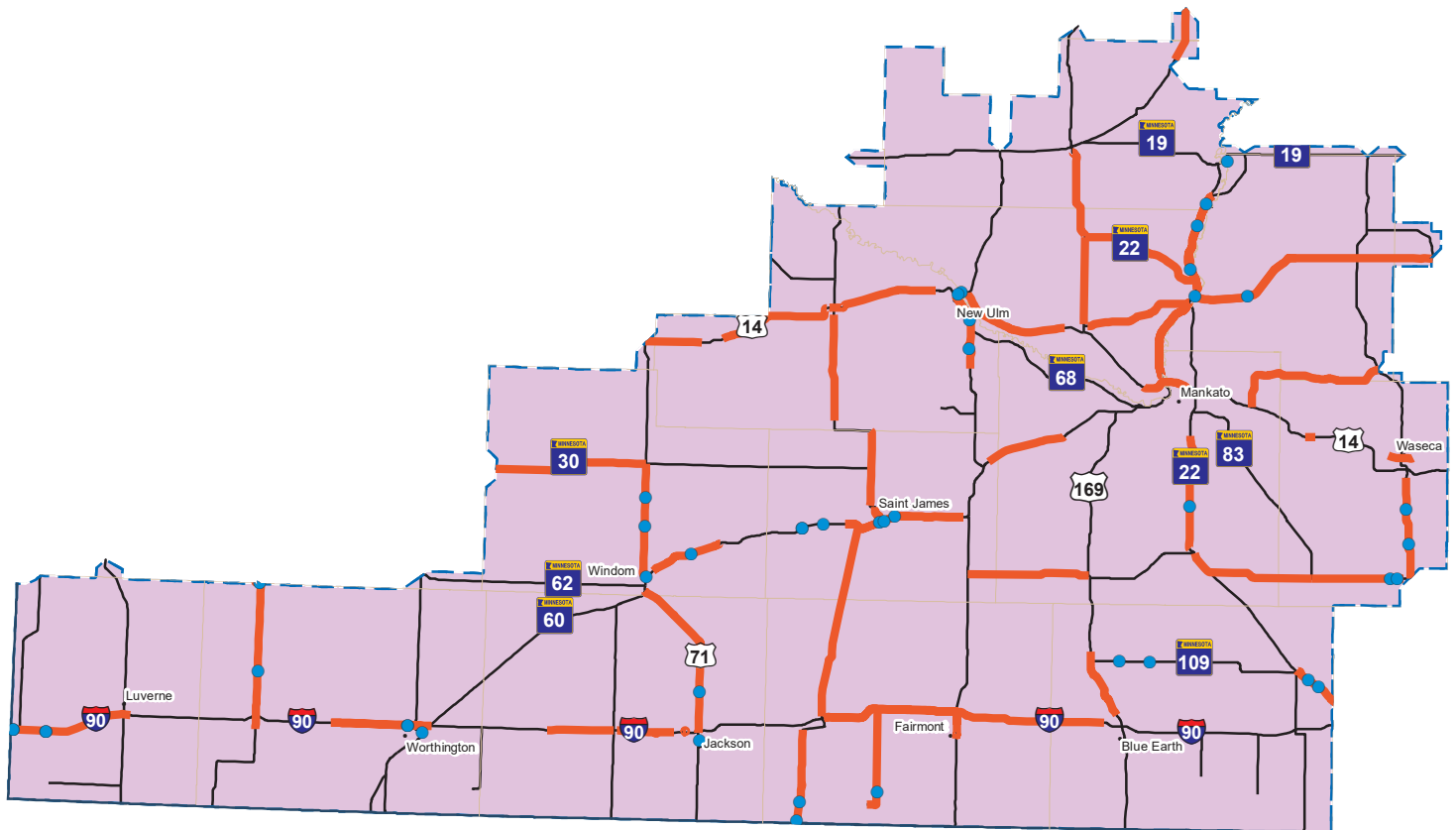
Minnesota Department of Transportation
District 6
2900 48th Street NW
(507) 286-7500

District Engineer: Mark Schoenfelder
Project Manager: Mark Anderson

Revised Date: 12/17/2018

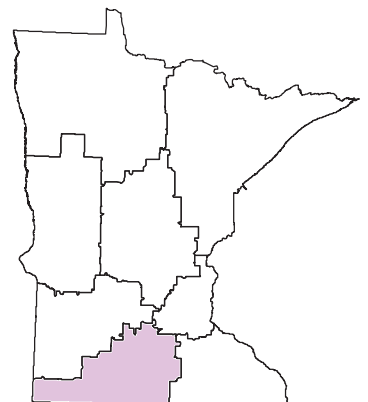
Major Highway Projects 2018

D7-MANKATO



Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- - - Construction District



District 7 Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 14	0803-43	Concrete overlay and guardrail repair from Sleepy Eye to Springfield.	F 2	250
Hwy 14	0803-44	Hwy 71 to Springfield	F 3	251
Hwy 22	0704-108	CR 15 to CR 90	F 4	252
Hwy 30	0707-88	Hwy 22 to Hwy 83	F 5	253
Hwy 30	8306-13	From Hwy 15 to Hwy 169	F 6	254
Hwy 4	4602-27	Sherburn to Hwy 60	F 7	255
Hwy 4	8302-48	Saint James to 1 mile north of the Watonwan County line	F 8	256
Hwy 60	0708-42	Madelia to Lake Crystal	F 9	257
I-90	4680-132	Eastbound lanes only from Sherburn to Fairmont	F 10	258
I-90	3280-131	From CSAH 9 to Hwy 86	F 11	259
I-90	6780-117	Westbound lanes from South Dakota to the Rock River in Luverne	F 12	260
TH 22	5205-113	N JCT TH 22/HWY 169 to TH 111	F 13	261
90	4680-129	From Hwy 15 in Fairmont to 2 miles west of Hwy 169	F 14	262
Hwy 4	0801-35	One mile north of the Watonwan County line to Ellsworth Street in Sleepy Eye	F 15	263
Hwy 5	7201-119	Green Isle to TH 212	F 16	264
Hwy 111, Hwy 22	5208-22	TH 111, 3rd Street in Nicollet to TH 22; TH 22, TH 111 to 280th St in Gaylord	F 17	265
Hwy 13	8101-57	Waseca to New Richland	F 18	266
Hwy 14	0804-81	New Ulm and junction with Hwy 15	F 19	267
Hwy 14	5202-56	HWY 15 TO W OF HWY 99	F 20	268
Hwy 15	4603-45	Fairmont	F 21	269
Hwy 15	0805-113	South of Searles to New Ulm	F 22	270
Hwy 169	5209-74	Hwy 22 in St Peter to Hwy 93 at Le Sueur	F 23	271
Hwy 169	2208-113	S of CSAH 6 to N of CSAH 12 in Winnebago	F 24	272
Hwy 22	0704-100	CR 7 to CR 15	F 25	273
Hwy 263	4609-17	County Rd 125 (Clark St) in Ceylon to I 90	F 26	274
Hwy 30	1701-27	CSAH 7 to TH 71	F 27	275
Hwy 30	8105-21	From Hwy 83 to New Richland	F 28	276
Hwy 4	4601-32	Iowa border to Martin CSAH 26	F 29	277
Hwy 60	1703-69	Windom to west of Mountain Lake	F 30	278
Hwy 60	4006-35	Hwy 14 to Hwy 13 in Waterville	F 31	279
Hwy 60	8309-52	Between St. James and Hwy 4 to Hwy 15	F 32	280
Hwy 71	3206-20	Jackson to Windom	F 33	281
Hwy 71	1706-29	Windom to Hwy 30	F 34	282
Hwy 99	4008-25	Over the Minnesota River in St Peter	F 35	283
Hwy 99	4010-10	CSAH 45 (Rabbit Road) to TH 21	F 36	284
I-90	3280-129	Clear Lake Rest Area	F 37	285
I-90	3280-130	Des Moines Rest Area	F 38	286
I-90	4680-126	Sherburn to Fairmont	F 39	287
Old Hwy 14	8103-115	From west to east Waseca city limits	F 40	288
I-90	6780-105	South Dakota border to east of Hwy 23	F 41	289
Hwy 169	5211-59	Hwy 14 in Mankato to St. Peter	F 42	290
Hwy 169	5211-61	Hwy 14 in Mankato to St. Peter	F 43	291
Hwy 19	4004-112	Over the Union Pacific railroad, east of Sibley/LeSueur county line	F 44	292

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 71	3205-29	Over the Des Moines River in Jackson	F 45	293
Hwy 99	4008-28	St. Peter to Le Center	F 46	294
I-90	3280-126	Eastbound Hwy 86 to Hwy 4 & westbound Hwy 5 to Hwy 4	F 47	295
I-90	5380-133	Worthing to Rushmore	F 48	296
Old Hwy 14	8103-114	Janesville	F 49	297
Hwy 109	2206-13	Hwy 22 in Wells to I-90 in Alden	F 50	298
Hwy 14	0803-38	Sleepy Eye	F 51	299
Hwy 14	0702-125	North Mankato to Mankato	F 52	300
Hwy 4	8302-38	South of 10th Ave to 11th Ave in St. James	F 53	301
Hwy 91	5308-29	Adrian to Nobles/Murray county line	F 54	302
Hwy 99	5206-31	Birch St in Nicollet to S Jct Hwy 169 in St Peter	F 55	303

PROJECT SUMMARY

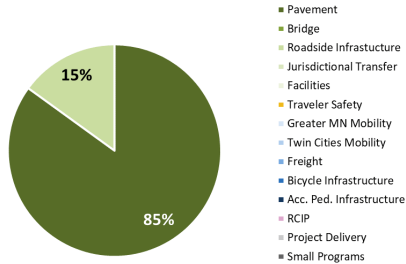
Hwy 14
Sleepy Eye to Springfield
State Project No. 0803-43

Substantially Complete

Primary Purpose

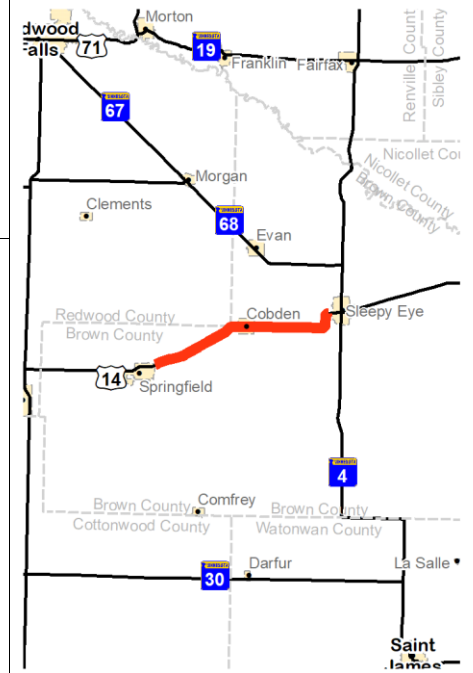
Performance-based Need: Pavement

Investment Category



Project Description

This project was a concrete unbonded overlay and guardrail repair project from Sleepy Eye to Springfield.



Recent Changes and Updates

Construction started and completed in 2017.

Project History

This project was split out from an in-town Sleepy Eye project, SP 0803-38.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.1	\$ 6.6
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.4	\$ 1.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.5	\$ 8.0

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

Key Cost Estimate Assumptions

Project was originally estimated in 2016 and inflated to 2017 construction. The project received favorable bids for concrete work showing a reduction in actual construction cost vs. estimated costs.

Project Risks

None remaining

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: 5/19/2017
Current Letting Date: 5/19/2017
Construction Season: 2017
Estimated Substantial Completion: 2017



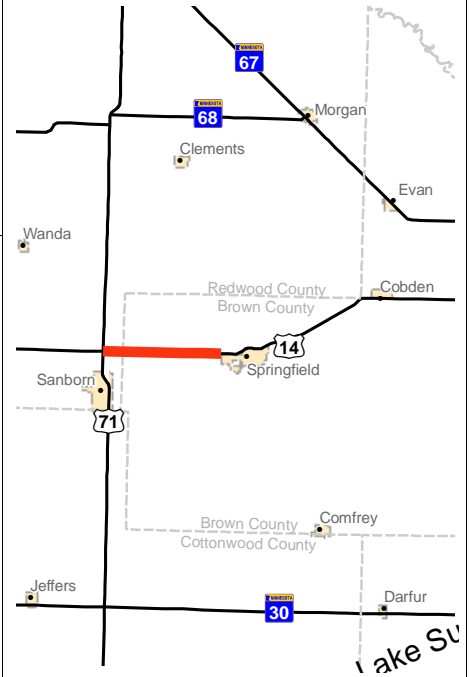
Minnesota Department of Transportation
District 7
2136 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

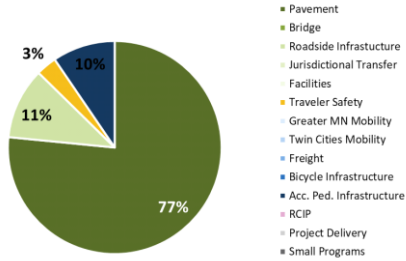
Hwy 14
Hwy 71 to Springfield
State Project No. 0803-44



Primary Purpose

Performance-Based Need: Pavement Condition

Investment Category



Project Description

This project is a medium mill and overlay and includes deactivation of a signal at Hwy 71 intersection and also ADA improvements in Springfield.

Recent Changes and Updates

None

Project History

MnDOT met with the city council to verify if utility upgrades are needed in 2017. There will be a meeting with the ADA Office in fall 2018 to determine ADA needs. The project starts at where 0803-43 ended and at the west side of our district (to include part of District 8 Sanborn Four Corners).

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.9	\$ 3.9
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.0	\$ 5.0

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

Key Cost Estimate Assumptions

Current cost estimates are without potential risks below.

Project Risks

Potential reconstruct with extensive utility and ADA improvements with construction agreement with Springfield.

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: 11/19/2021
Current Letting Date: 11/19/2021
Construction Season: 2022
Estimated Substantial Completion: 2022



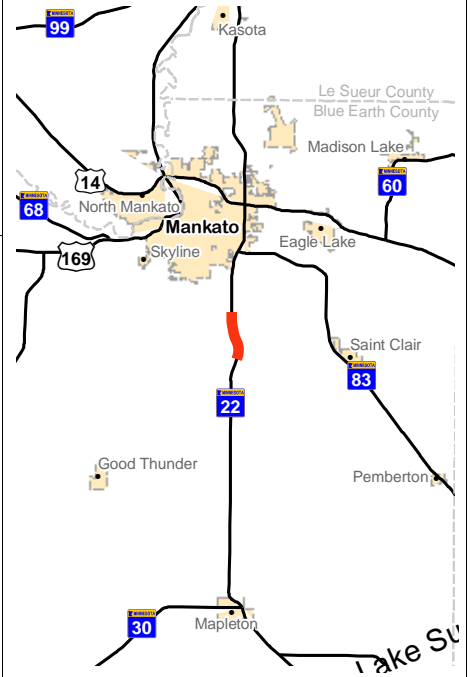
Minnesota Department of Transportation
District 7
2137 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

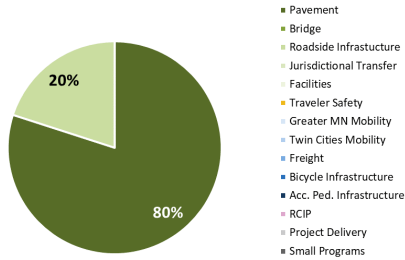
Hwy 22
CR 15 to CR 90
State Project No. 0704-108
[Hwy 22 Victory Drive Memorial](#)



Primary Purpose

Performance-based Need: Pavement condition
Performance-based need: District Safety Plan

Investment Category



Project Description

The project constructs a new roundabout at CR 90 and Hwy 22 along with a structural snow fence to help maintenance concerns. The project reconstructs pavement in need of repair north of CR 90 along with 1.5 miles south of CR 90 along Hwy 22 to CR 15.

Recent Changes and Updates

Added left turn lanes south of CR 90 roundabout for additional safety. Construction started in 2018.

Project History

The Highway Safety Improvement Program funded the safety project to add a roundabout at CR 90 and the Hwy 22 intersection. The project was upscoped to reconstruct pavement north and south of the roundabout along Hwy 22. The project further upscoped to add left turn lanes and a structural snow fence. MnDOT is partnering with Blue Earth County and landowners on right of way needs.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.3	\$ 4.1
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 6.9	\$ 5.7

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

Key Cost Estimate Assumptions

Project has been let and current estimate reflects letting construction cost. The project initially included more reconstruction work which was then modified based on materials investigations. This allowed for preservation work to occur which cost less.

Project Risks

Project risks include a more extensive fix of pavement structure to the south of Hwy 22, turn lane additions and landowner push back. The snow fence design will be the district's first dual layer system.

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: 1/26/2017
Current Letting Date: 3/23/2018
Construction Season: 2018
Estimated Substantial Completion: 2018



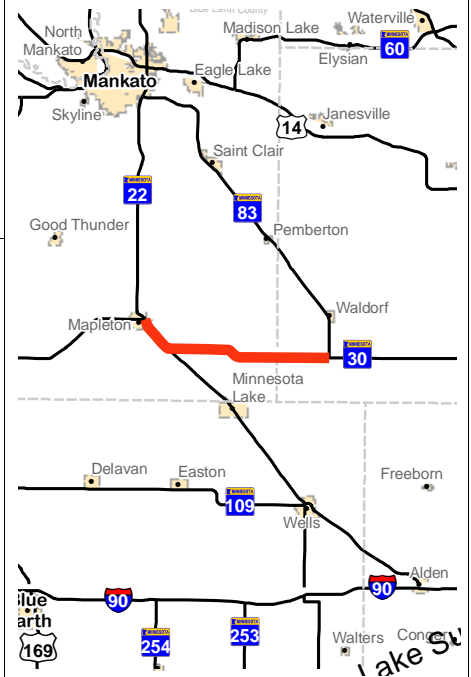
Minnesota Department of Transportation
District 7
2138 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

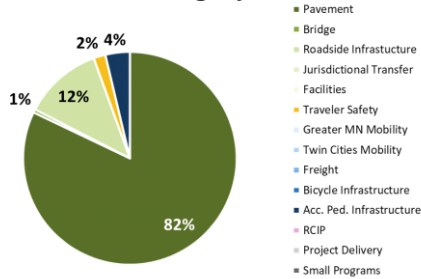
Hwy 30
Hwy 22 to Hwy 83
State Project No. 0707-88



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project consists of pavement resurfacing (cold in-place recycling) and culvert lining for nearly 11 miles from Hwy 22 to Hwy 83 in Blue Earth County.

Recent Changes and Updates

Project design has been accelerated to allow the project, currently slated for construction in 2023, to be constructed along with SP 8105-21 (from Hwy 83 to Hwy 13, Waseca County) in 2020.

Project History

None.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: NA

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.2	\$ 5.2
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.1	\$ 0.1
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

Estimate assumes inflation to mid-point of construction year 2020. A 1.21 inflation factor was used (from baseline FY 2017).

Project Risks

None.

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: 1/1/2023
Current Letting Date: 1/1/2023
Construction Season: 2023
Estimated Substantial Completion: Fall 2023



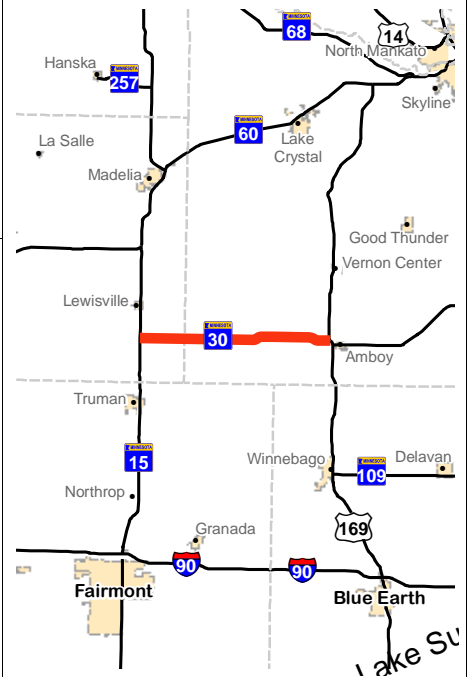
Minnesota Department of Transportation
District 7
2139 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

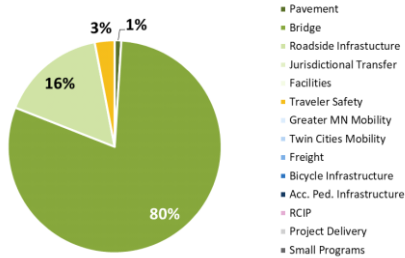
Hwy 30
Hwy 15 to Hwy 169
Bridge 1575, 1576, 8805
State Project No. 8306-13



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project replaces 3 deficient box culverts and rehabs 2 culverts on Hwy 30 just east of Hwy 15 including guardrail replacement.

Recent Changes and Updates

None.

Project History

Bridge culverts have structural deficiencies such as progressive cracks, silt build up, slope failures and erosion issues. The plate guardrails are problematic for snow removal; 3 cable guardrails are being damaged regularly due to uncertainty of their anchor locations during plowing. The purpose of this projects is to provide structures that meets current structural standards and provide performance based practical design. Improve slope/soil conditions. Remove, replace or repair guardrail.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.6	\$ 4.6
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.8
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

Midpoint construction 2021

Project Risks

This is a flex project with a flex letting date of 11/25/19. Coordination with nearby county project that is in FY 2021 may cause additional impacts to local traffic.

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: 11/20/2020
Current Letting Date: 11/20/2020
Construction Season: May 2021-Nov 2021
Estimated Substantial Completion: Oct 2021



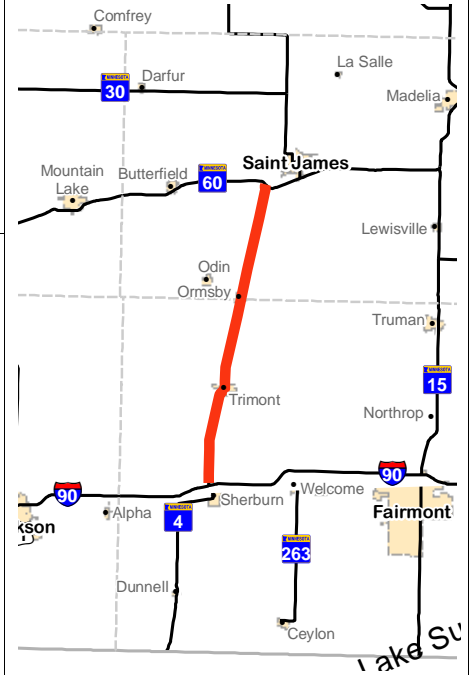
Minnesota Department of Transportation
District 7
2140 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/17/2018

PROJECT SUMMARY

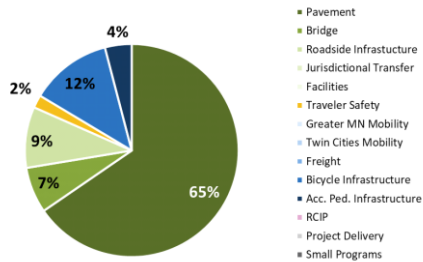
Hwy 4
Sherburn to Hwy 60
Bridge 46003, 6504, 8567, 5965
State Project No. 4602-27



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is a 24-mile pavement rehabilitation and resurfacing project beginning two miles west of Sherburn and ending at Hwy 60 through Martin and Watonwan Counties. The project includes roadway and associated drainage work and ADA items through Sherburn, Trimont and Ormsby. Bridge rehabilitation work is also planned on several bridges within the project that will require a detour.

Recent Changes and Updates

Pavement condition is projected to be in poor condition in 2022.

Project History

None

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: Pending

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 16.0	\$ 16.0
Other Construction Elements:	\$ 1.8	\$ 1.8
Engineering:	\$ 2.9	\$ 2.9
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

Project cost estimate based on preliminary pavement fix of milling the pavement surface, cold in place recycle and then placement of a bituminous overlay for the final driving surface.

Project Risks

Proposed pavement may be found to be too far gone or existing structure requires a more expensive and comprehensive pavement fix.

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: 10/22/2021
Current Letting Date: 10/22/2021
Construction Season: May 2022- Nov 2022
Estimated Substantial Completion: November 2022



Minnesota Department of Transportation
District 7
2141 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 4

Saint James to 1 mile north of the Watonwan County line

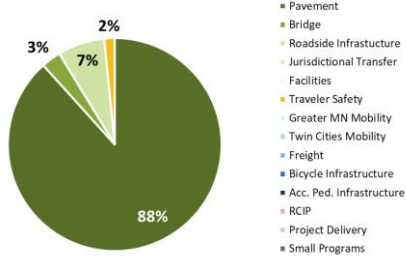
Bridge 5076

State Project No. 8302-48

Primary Purpose

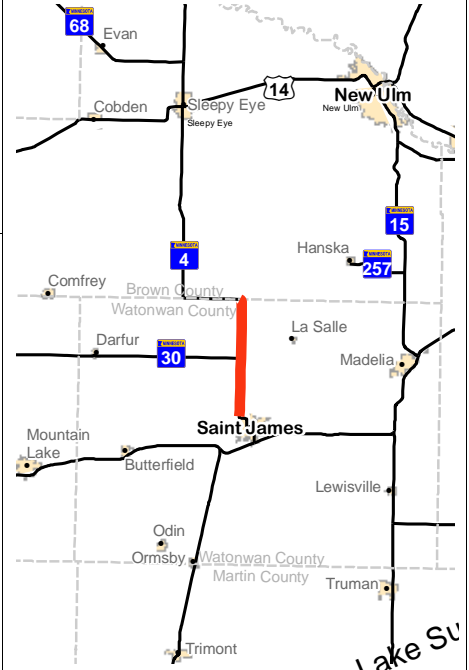
Performance-based Need: Pavement

Investment Category



Project Description

The project is a 13-mile pavement rehabilitation and resurfacing project beginning in Saint James and ending one mile north of the Watonwan County line at County Road 18. The project includes roadway and associated drainage work. Bridge 5076 will also be replaced. The project will require a detour.



Recent Changes and Updates

Pavement condition is expected to be in poor condition by 2023. Bridge 5076 is in poor condition.

Project History

None

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: Pending

	Baseline Est.	Current Est.
Construction Letting:	\$ 11.0	\$ 11.0
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 1.9	\$ 1.9
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

Project cost estimate based on preliminary pavement fix of milling the existing roadway, performing a stabilized full depth reclamation and placement of a 4-inch overlay. Bridge 5076 would be replaced with a box culvert instead of a span bridge.

Project Risks

Proposed pavement may be found to be too far gone or existing structure requires a more expensive and comprehensive pavement fix.

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: 10/22/2021
Current Letting Date: 10/22/2021
Construction Season: May 2022 - Nov 2022
Estimated Substantial Completion: November 2022



Minnesota Department of Transportation
District 7
2142 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/17/2018

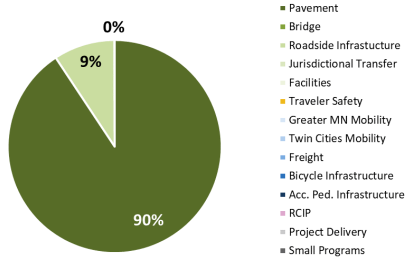
PROJECT SUMMARY

Hwy 60
Madelia to Lake Crystal
State Project No. 0708-42

Primary Purpose

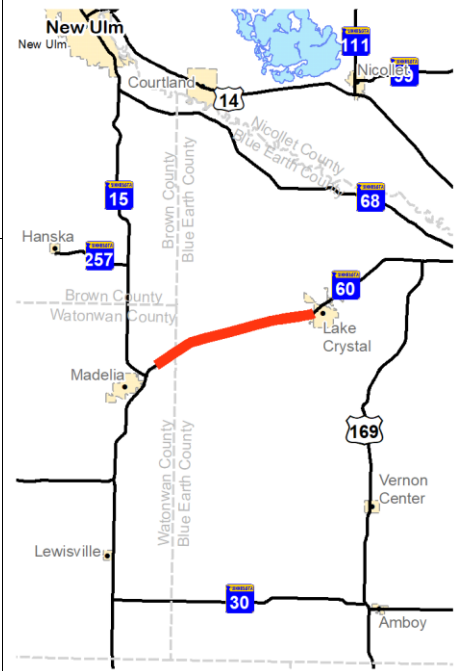
Performance-based Need: Pavement

Investment Category



Project Description

This project is a pavement rehabilitation mill and overlay, on Hwy 60 from just north of the junction of TH 15 to the west of CSAH 20. This will only be on the eastbound lanes.



Recent Changes and Updates

None.

Project History

Pavement is currently in fair condition, but it is predicted to be in poor condition by 2022. Resurfacing pavement in order to preserve the roadway and increase the RQI.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: NA

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.3	\$ 6.3
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.0	\$ 8.0

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 anticipated at this time. This project was identified as a possible project to move ahead from FY 2022 to FY 2021; therefore, mid-point of construction estimate is 2022. The project has not been scoped.

Project Risks

This project scope has not been finalized and is scheduled to be finalized fall of 2018.

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: 2/26/2021
Current Letting Date: 2/26/2021
Construction Season: May 2022-November 2022
Estimated Substantial Completion: October 2022



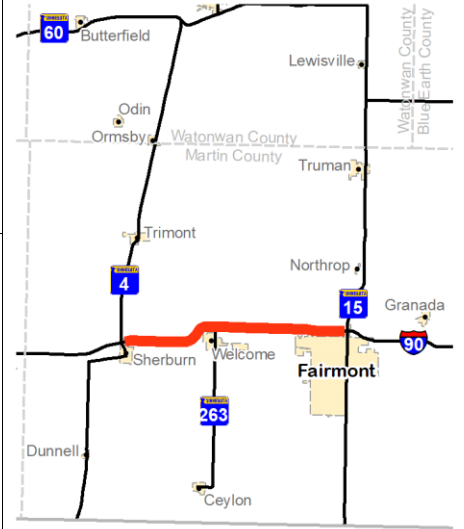
Minnesota Department of Transportation
District 7
2143 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/17/2018

PROJECT SUMMARY

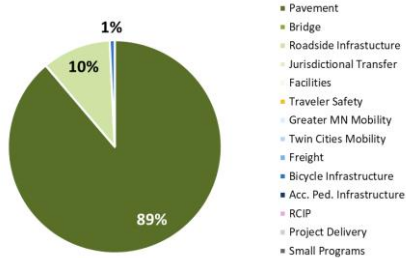
I-90
Eastbound lanes from Sherburn to Fairmont
Bridge 91355
State Project No. 4680-132



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This projects involve resurfacing I-90, from Sherburn to Fairmont (east bound only) for a distance of 14.35 miles. This project will be a cold in-place recycle with minor culvert work.

Recent Changes and Updates

No changes.

Project History

Pavement condition is predicted to be below terminal serviceability by 2022.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 11.5	\$ 11.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.8	\$ 1.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 13.3	\$ 13.3

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 cold in-place recycle prices inflated to 2022.

Project Risks

To be assessed during design.

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: 12/17/2021
Current Letting Date: 12/17/2021
Construction Season: 2022
Estimated Substantial Completion: November 2022



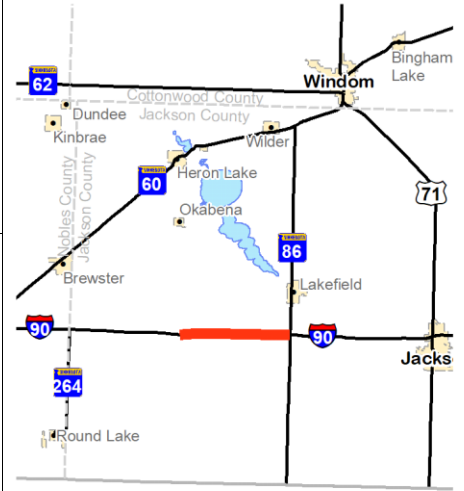
Minnesota Department of Transportation
District 7
2144 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matthew Young

Revised Date: 12/17/2018

PROJECT SUMMARY

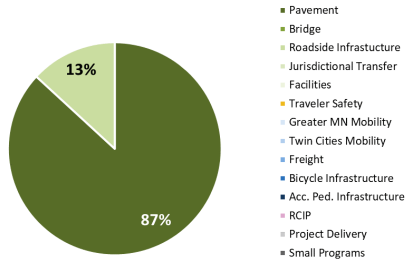
I-90
CSAH 9 to Hwy 86
State Project No. 3280-131



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project involves resurfacing I-90, from CSAH 9 to Hwy 86 (east bound only) for a distance of 10.8 miles. This project will be a mill & overlay with minor culvert work.

Recent Changes and Updates

This project is currently still in the scoping phase of development.

Project History

This project was chosen as a fiscal year 2022 project due to poor pavement condition.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.5	\$ 4.5
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 0.8	\$ 0.8
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 cost estimate is based on mill and overlay prices inflated to 2022.

Project Risks

The current risks to the project are overhead distance needs for bridges over I-90, traffic impacts and unknown culvert issues.

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: 6/25/2021
Current Letting Date: 6/25/2021
Construction Season: 2022
Estimated Substantial Completion: November 2022



Minnesota Department of Transportation
District 7
2145 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/17/2018

PROJECT SUMMARY

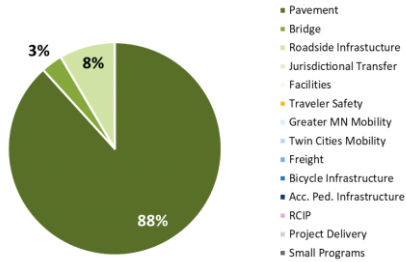
I-90

Westbound lanes from South Dakota to the Rock River in Luverne
Bridge 67801, 67805
State Project No. 6780-117

Primary Purpose

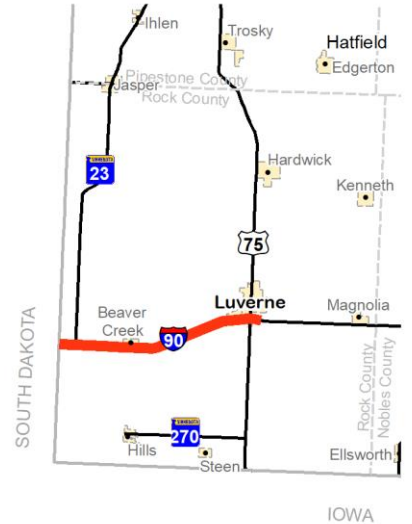
Performance-based Need: Pavement

Investment Category



Project Description

This project involves resurfacing I-90, from the South Dakota state line to the Rock River in Luverne for a distance of 13.2 miles. This project will be a concrete pavement rehabilitation with bridge rehabilitation and minor culvert work.



Recent Changes and Updates

No changes.

Project History

Pavement condition is predicted to be below terminal serviceability by 2022.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 13.6	\$ 13.6
Other Construction Elements:	\$ 1.1	\$ 1.1
Engineering:	\$ 2.3	\$ 2.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 17.0	\$ 17.0

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 concrete pavement rehabilitation prices inflated to 2022.

Project Risks

To be assessed during design.

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: 6/25/2021
Current Letting Date: 6/25/2021
Construction Season: 2022
Estimated Substantial Completion: November 2022



Minnesota Department of Transportation
District 7
2146 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matthew Young

Revised Date: 12/17/2018

PROJECT SUMMARY

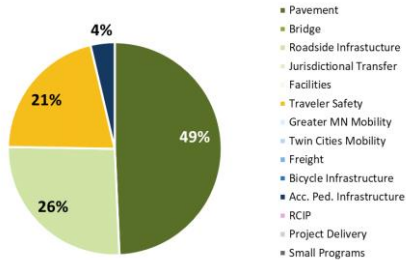
TH 22

N. Jct. TH 22/HWY 169 to TH 111
State Project No. 5205-113

Primary Purpose

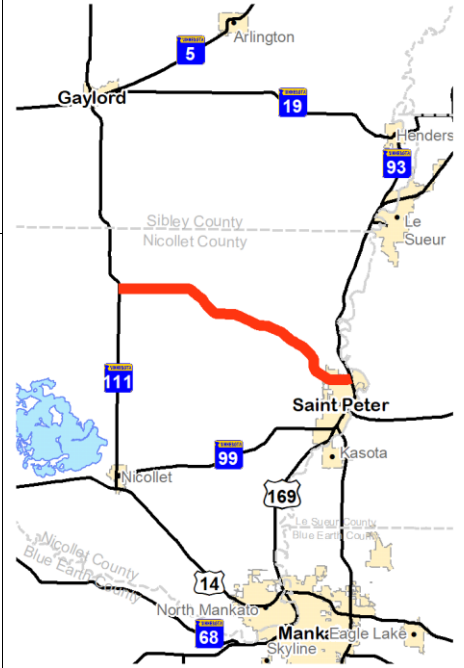
Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay to resurface the roadway to provide a smooth ride and extend the life of the road and make crown corrections.



Recent Changes and Updates

Project has been scoped as a mill and overlay with some updates to ADA sidewalks in St. Peter.

Project History

This is a typical preservation mill and overlay project that addresses the following: ADA compliant sidewalks in St. Peter, a thin mill and overlay with crown corrections and no additional edge drains installed and street widening.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.0	\$ 6.0
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.2	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.7	\$ 8.7

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

Key Cost Estimate Assumptions

There was a 2020 cost estimating inflation factor used to develop the baseline estimate for the mill and overlay work.

Project Risks

If this project becomes a turn-back, additional improvements will be required necessitating additional funding for the following: additional culverts lined or replaced, additional turn lanes, increased pavement fixes, additional sidewalk construction and erosion control mitigation and correct all driveway / field accesses with standard approach slopes.

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: 1/28/2022
Current Letting Date: 1/28/2022
Construction Season: 2022
Estimated Substantial Completion: 2022



Minnesota Department of Transportation
District 7
2147 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

90

Hwy 15 in Fairmont to 2 miles west of Hwy 169
Bridge 46835, 46836, 46831, 46824, 22801, 22802

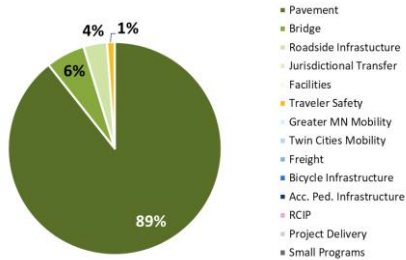
State Project No. 4680-129

[I-90 Corridor Preservation](#)

Primary Purpose

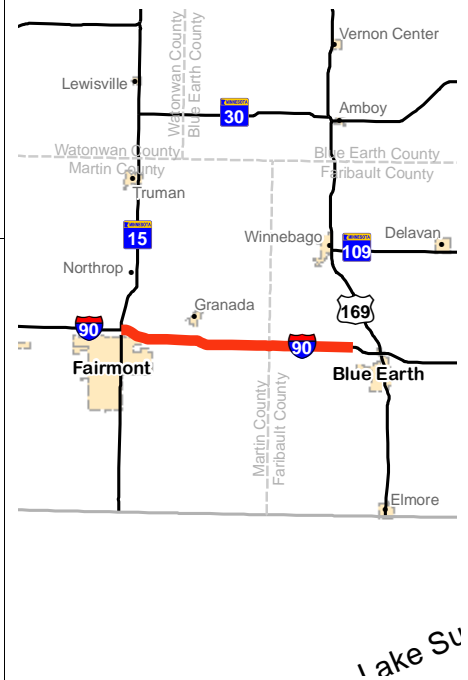
Performance-based Need: Pavement

Investment Category



Project Description

This project is an unbonded concrete overlay of I-90 on both the eastbound and westbound directions. The work includes resurfacing 16-miles of four lane roadway, shoulders and interchange ramps with concrete. It includes 6 bridge rehabs on I-90 and lighting at CSAH 53 & CSAH 1.



Recent Changes and Updates

The estimated project costs were updated based on the pavement and bridge repair recommendations.

Project History

This project was advanced to construction in 2019 as a result of the new legislative funding provided in 2017.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	Baseline Est.	Current Est.
Construction Letting:	\$ 40.0	\$ 39.0
Other Construction Elements:	\$ 3.3	\$ 3.3
Engineering:	\$ 5.2	\$ 5.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 49.0	\$ 48.0

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

Key Cost Estimate Assumptions

The project includes milling off a portion of the existing bituminous pavement and placing a concrete overlay on both the mainline pavement and shoulders. The current estimate included refinements in the pavement fix which were unknown when the baseline estimate was developed.

Project Risks

Additional grading impacts required as a result of a roadway grade raise. Extent of bridge and culvert work becomes more significant due to conditions being poorer than previously determined. The project costs come in higher than expected due to contractor availability and cost of construction materials.

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: 11/16/2018
Current Letting Date: 12/18/2018
Construction Season: Spring 2019 to Fall of 2020
Estimated Substantial Completion: November 2020



Minnesota Department of Transportation
District 7
2148 Bassett Drive
(507) 304-6100

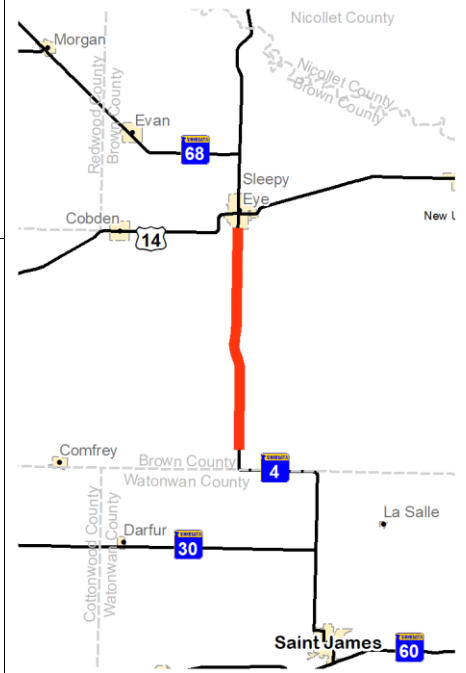
District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 4

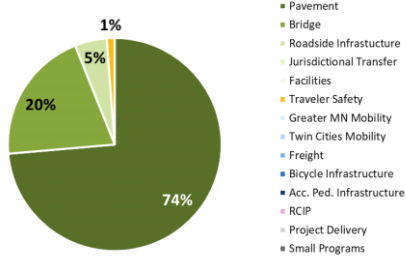
One mile north of the Watonwan County line to Ellsworth Street in Sleepy Eye
Bridge 8814, 08006, 6757, 8852
State Project No. 0801-35



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is an 11-mile pavement rehabilitation and resurfacing project beginning one mile north of the Watonwan County line at County Road 18 and ending at Ellsworth Street located at the south side of Sleepy Eye. The project includes roadway and associated drainage work. Bridges 6757 and 8852 will be replaced while bridges 8814 and 08006 will be rehabbed. The project will require a detour.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: Pending

	Baseline Est.	Current Est.
Construction Letting:	\$ 10.0	\$ 10.0
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 13.0	\$ 13.0

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

Recent Changes and Updates

Road surface is in poor condition or projected to be by 2024.

Project History

Pavement condition is in poor condition or projected to be by 2024.

Key Cost Estimate Assumptions

Project cost estimate based on preliminary pavement fix of milling the existing roadway, performing a stabilized full depth reclamation and placement of a 4-inch overlay.

Project Risks

Proposed pavement may be found to be too far gone or existing structure requires a more expensive and comprehensive pavement fix.

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: 10/22/2021
Current Letting Date: 10/22/2021
Construction Season: May 2022 -Nov 2022
Estimated Substantial Completion: November 2022



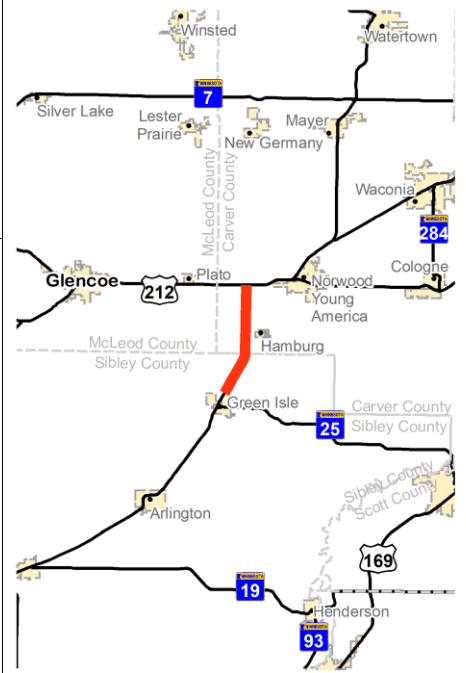
Minnesota Department of Transportation
District 7
2149 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/17/2018

PROJECT SUMMARY

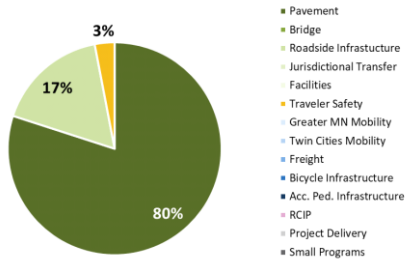
HWY 5
Green Isle to TH 212
State Project No. 7201-119



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project in Sibley and Carver counties from Green Isle to TH 212 is a cold in place recycle and bituminous overlay for about 6 miles.

Recent Changes and Updates

This project has been upscooped to include the Metro portion (Carver County) and for cold in-place recycle fix.

Project History

Originally scoped as a mill and overlay in 2017. Pavement is in fair condition and is expected to continue to deteriorate. Project will improve road surface and achieve a smooth riding surface. Project includes Metro District associated SP 1007-17 in Carver County.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 2.7	\$ 4.5
Other Construction Elements:	\$ 0.1	\$ 0.2
Engineering:	\$ 0.5	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 3.3	\$ 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 is based on cold in place recycle and bituminous overlay. This estimate has increased (to 5.6 million) due to upscoope to cold in-place recycle fix. Some contingency was included based on additional pipe replacements and traffic safety needs. This estimate was based on 2016 dollars then inflated to 2021dollars. The estimated rounded amount for participation: District 7 - 2.2 million, Metro District - 2.3 million.

Project Risks

There may be a need to replace additional culverts within project limits and perform additional hydraulic analysis.

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: 10/23/20
Current Letting Date: 10/23/20
Construction Season: 2021
Estimated Substantial Completion: October 2021



Minnesota Department of Transportation
District 7
2150 Bassett Drive
(507) 304-6100

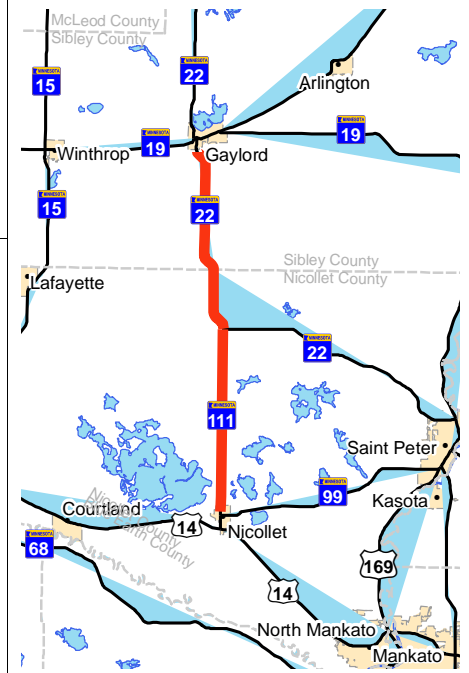
District Engineer: Greg Ous
Project Manager: Steve Oswald

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 111, Hwy 22

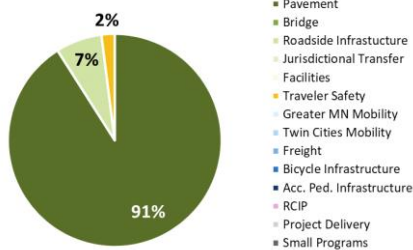
3rd Street in Nicollet to TH 22 & TH 22, Th 111 to 280th St in Gaylord
State Project No. 5208-22



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project on Hwy 111 and Hwy 22 consists of reclaiming the roadway surface and adding a new asphalt surface placed over the top. Repairs will be made to culverts as necessary. Lighting will be added at six county road intersections. Three snow fences will be added in areas prone to snow drifts. Nicollet is interested in storm sewer and water main improvements over a portion of Hwy 111 from 2nd Street to Elm Street.

Recent Changes and Updates

The scope has been updated to clarify the previous unknowns which are now shown in the project history. Three snow fences will be constructed, which includes two structural and one living fence to mitigate snow drifting. Nicollet will proceed with a water main extension and a re-alignment of the storm sewer system over two blocks in the city.

Project History

The scope was updated to focus on pavement needs. The following items were eliminated from the scope because they didn't meet performance based needs: adding turn lanes at CR 4, CR 5 and CR 15 and replacing bridge 8721. Work has begun with landowners about possible snow drifting mitigation. Nicollet is investigating possible reconstruction north of Hwy 99. This project was identified as a resurfacing candidate. The pavement condition is fair, but projected to be fair to poor before the project is constructed. A scoping review was completed by district staff during 2015. In this review work was recommended as bituminous reclamation. Additional scope was added to take care of problems while the surface was off the road.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 13.4	\$ 11.3
Other Construction Elements:	\$ 1.1	\$ 0.9
Engineering:	\$ 2.4	\$ 2.0
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 17.2	\$ 14.3

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

Key Cost Estimate Assumptions

The baseline cost estimate included all the original scoped work. The current estimate assumes a 3-inch mill, reclamation, and 4.5-inch overlay. The current estimate is reduced due to the following removals from the scope: Bridge 8721 replacement, edge drains, superelevation correction, turn lanes at 3 locations.

Project Risks

The pavement fix is being discussed for a possible upgrade to a stronger fix due to recent, sustained, increases in traffic volume.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: November 2017
Original Letting Date: 11/15/2019
Current Letting Date: 11/22/2019
Construction Season: 2020
Estimated Substantial Completion: November 2020



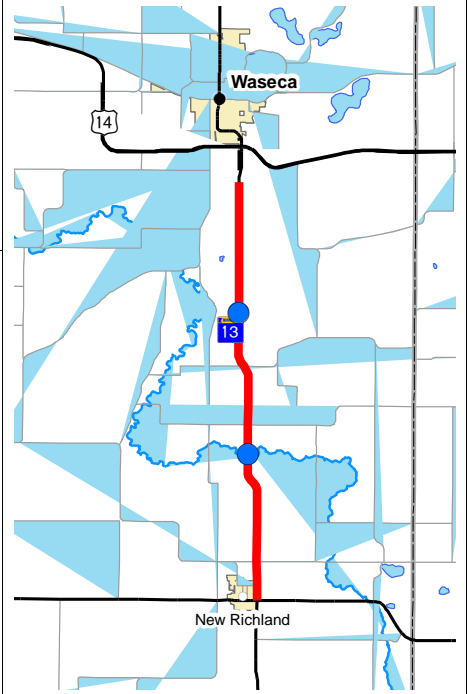
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matthew Young

Revised Date: 12/17/2018

PROJECT SUMMARY

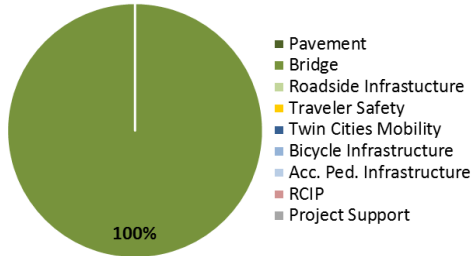
Hwy 13
Waseca to New Richland
Bridge 81001, 81002
State Project No. 8101-57



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay on Hwy 13 from south of Waseca to Hwy 30 in New Richland, a length of about 11 miles. The project also includes bridge rehabilitation work on bridges and some ADA updates to the county trail on the east side of New Richland.

Recent Changes and Updates

Under construction in summer 2018.

Project History

This project combines mill and overlay pavement preservation and bridge rehabilitation. It will also address some ADA concerns on the county trail on the east side of New Richland. The project reached 95 percent design with no significant changes. The project letting was delayed due to funding. Then it was let. Due to staffing shortages, the project will be constructed in 2018.

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	\$ 6.4
Other Construction Elements:	\$ 0.5	\$ 0.6
Engineering:	\$ 1.0	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 6.3	\$ 8.3

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

Key Cost Estimate Assumptions

The current estimate for construction is the actual bid. Original estimate didn't include major bridge work. Revised estimate included work to 2 Bridges (81001, 81002).

Project Risks

There are currently no outstanding risks on this project.

Schedule

Environmental Approval Date: 6/24/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 12/16/2016
Current Letting Date: 05/19/2017
Construction Season: 2018
Estimated Substantial Completion: Summer 2018



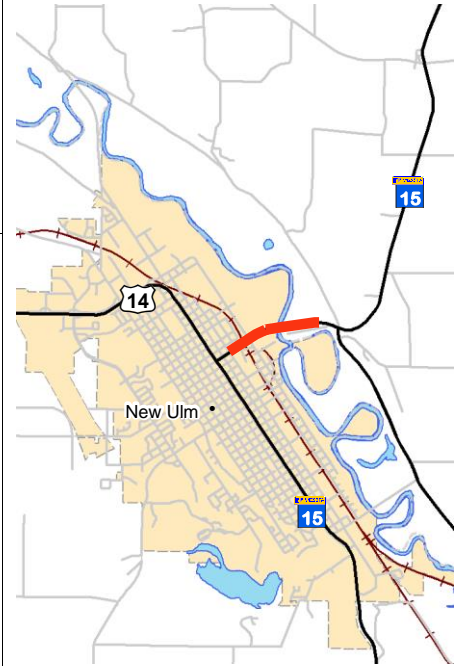
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

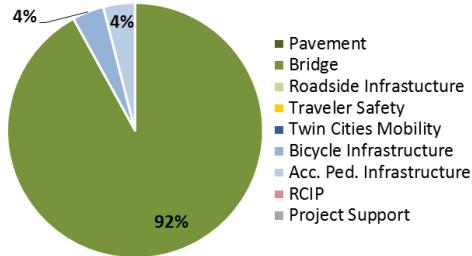
Hwy 14
New Ulm and at the Jct. of Hwy 15
Bridge 9200, &, 9294
State Project No. 0804-81
[Hwy 14 Gateway New Ulm Project](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project will construct two-lane bridges over the Minnesota River and Front St., reconstruct the in-town section of Hwy 14 from Front St. to the signal at Broadway St., and construct an interchange at the junction at Hwy 14/Hwy 15/CR 21 east of New Ulm.

Recent Changes and Updates

In town work is scheduled to be completed by Oct. 2018. The MN River bridge is currently behind schedule due to high water elevation. MnDOT and the contractor are reviewing ways to make up this delay to still have the project completed by the original schedule of fall 2019.

Project History

This project was originally scoped as a bridge replacement. A special task force was created to review priorities in the corridor and discussed how best to apply current funding. The task force issued a recommendation for the inclusion of 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. The preliminary design and geometric layout for the project was finished in May 2016. The letting date was moved to Sept. 2017 because the agency believed a better bid would be obtained with a fall letting over an early summer letting. Project letting was moved to Oct. 27, 2017 and has been let, but the construction schedule has not changed.

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	\$ 31.5
Other Construction Elements:	\$ 7.0	\$ 3.0
Engineering:	\$ 7.0	\$ 4.2
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 56.8	\$ 38.8

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 based on actual letting cost. The poor soils were mitigated with surcharging and wick drain installation. Other items were included to reduce project cost including removal of the free right for Hwy 14 EB, removal of retaining wall, limiting grading in areas not required like the south ramps of Front St/Hwy 14.

Project Risks

A moderate amount of surcharging and wick drains is included in the cost to mitigate poor soil concerns. A multi-year detour will be required for this work to be completed.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Pending approval
Geometric Layout Approval Date: 5/11/2016
Construction Limits Established Date: 5/11/2016
Original Letting Date: 5/01/2017
Current Letting Date: 10/27/2017
Construction Season: 2017 - 2019
Estimated Substantial Completion: December 2019



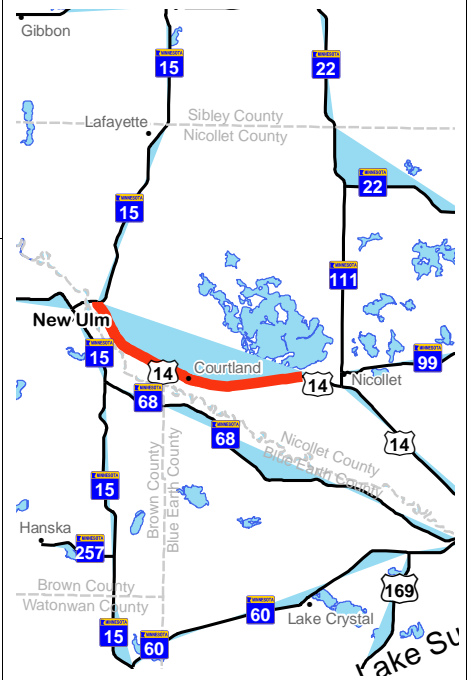
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/17/2018

PROJECT SUMMARY

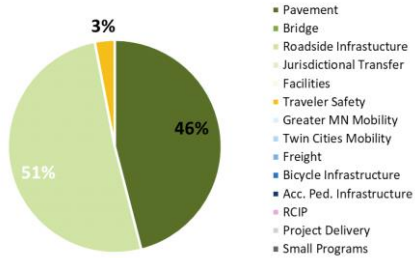
Hwy 14
Hwy 15 to W. of Hwy 99
State Project No. 5202-56



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a 12-mile thin mill and overlay from New Ulm to Nicollet on Hwy 14 including repairs to drainage infrastructure.

Recent Changes and Updates

No changes.

Project History

The pavement is predicted to be poor by 2021. The purpose of this project is to achieve a smooth riding surface while minimizing long-term pavement treatments given the potential for a future 4-lane expansion on this section of roadway.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 8.6	\$ 8.6
Other Construction Elements:	\$ 0.7	\$ 0.7
Engineering:	\$ 1.5	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 10.8	\$ 10.8

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

Key Cost Estimate Assumptions

Cost estimate was prepared of a preliminary itemized cost estimate using 2016 costs and inflating to 2021.

Project Risks

Depending on the development of the future 4-lane expansion of Hwy 14, this projects limits and improvements could drastically change.

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: 12/18/2020
Current Letting Date: 12/18/2020
Construction Season: Summer 2021
Estimated Substantial Completion: September 2021



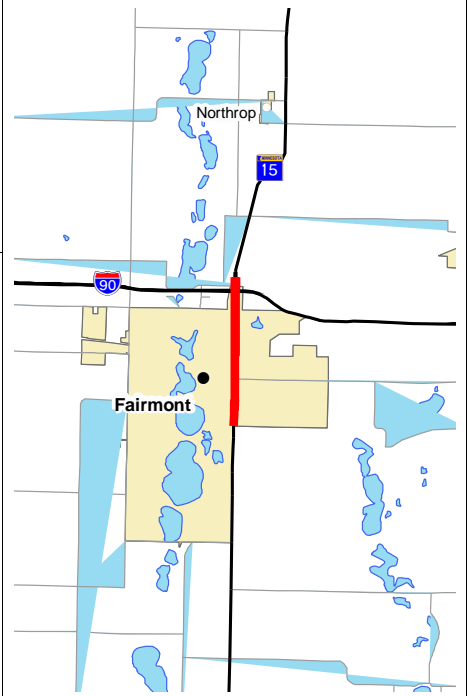
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/17/2018

PROJECT SUMMARY

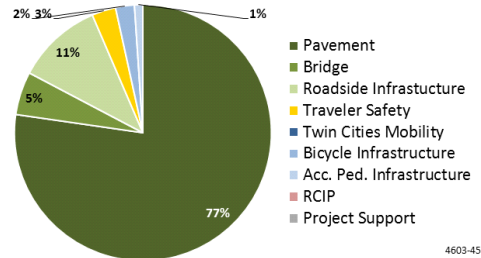
Hwy 15
Fairmont
State Project No. 4603-45
[Hwy 15 Fairmont Preservation](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



4603-45

Project Description

This section of Hwy 15 includes the urban section of roadway in Fairmont, from the south end of the project at Johnson Street to the north end at Goemann Road. The roadway work will consist of a mill and overlay. Updates to signals and pedestrian ramps to meet ADA requirements will also be completed, along with performing spot repairs of the existing storm sewer system and underground utilities.

Recent Changes and Updates

Project construction completed in 2017.

Project History

The original project letting date of Jan. 2017 was delayed until April 2017 due to MnDOT not receiving legislative funding approval for the additional FAST Act federal funds. The project was let on April 28, 2017 and construction started on the project in July 2017. Construction progressed to be substantially complete fall 2017. Traffic signals at four of the seven signalized intersections within the project limits will be replaced. This is due to age and repair costs associated with ADA and flashing yellow arrow upgrades. Spot repairs to the storm sewer system and city underground utilities were identified for inclusion under the project. Where feasible, the city is repairing its utilities in advance. There is project coordination with the city of Fairmont to review sidewalks and intersection control. The prelim. design work and final design began in 2015. Additional scoping yet to be completed includes the city's utilities needs and the life cycle cost analysis. Rehab. of the bridge over Center Creek was re-evaluated and this work is no longer planned as part of this project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.1	\$ 4.9
Other Construction Elements:	\$ 0.6	\$ 0.6
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 7.9	\$ 6.7

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

Key Cost Estimate Assumptions

The project includes a mill and overlay without the need to fully close the roadway to traffic. Short term detours using Fairmont street systems needed to perform spot repairs of the underground utilities. The construction letting cost under the current estimate column is less than the baseline estimate due to estimated savings in the pavement mill and overlay.

Project Risks

There are two railroad companies with crossings to Highway 15. The timelines of when the railroads will make their crossing repairs could impact the construction staging and impact traffic to businesses. One railroad replaced their crossing in the fall of 2016, and the other railroad was not able to schedule the crossing replacement ahead of the project. If after milling the top surface of the pavement the condition of the underlying pavement is found to be in worse condition than expected, there could be additional pavement repair costs. If upon televising and cleaning of the storm sewer there are additional areas needing spot repairs, there could be additional repair and pavement costs.

Schedule

Environmental Approval Date: 7/1/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 1/27/2016
Original Letting Date: 1/01/2017
Current Letting Date: 1/27/2017
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



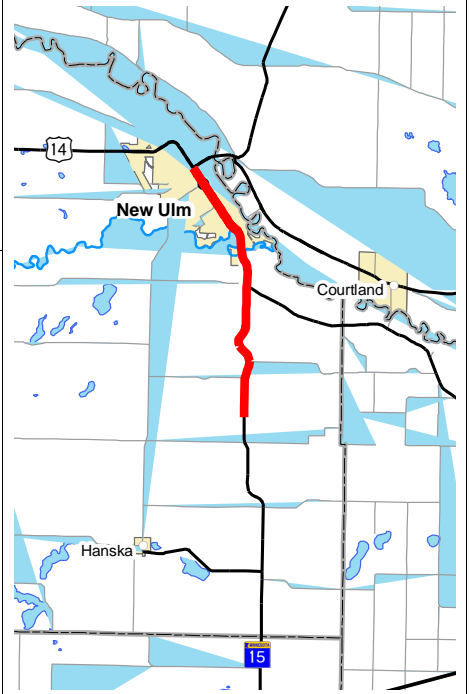
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/17/2018

PROJECT SUMMARY

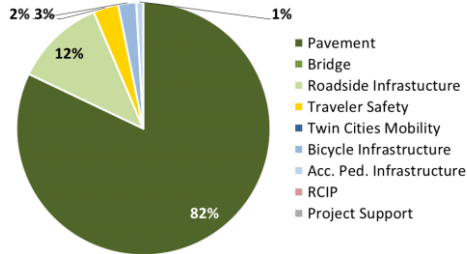
Hwy 15
South of Searles to New Ulm
Bridge 08010, 08011
State Project No. 0805-113



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay on Hwy 15 from Township Road 46 on the south side of Searles to the junction of Hwy 14 and Hwy 15 in New Ulm, for a distance of 8.5 miles. This project also improves sidewalks and curb ramps in New Ulm to bring them to ADA standards. Three signal systems will also be replaced.

Recent Changes and Updates

The project was let.

Project History

This project will provide a smooth riding surface and reconstruct the failing sidewalk and pedestrian ramps in New Ulm to meet ADA guidelines. The project was scoped and a minimal amount of risks were identified. 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 selected. The project scope was modified to include three traffic signal upgrades due to age of the current structures. A continuous two-way left turn lane was added on the south end of New Ulm to accommodate left turners and to make this section of road safer.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.2	\$ 7.1
Other Construction Elements:	\$ 0.6	\$ 0.1
Engineering:	\$ 1.3	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.4
Total:	\$ 9.1	\$ 8.0

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 on Feb. 24, 2017 for \$7.1 million, this accounts for around \$600,00 in bid savings.

Project Risks

Detours will be needed for bridge repairs 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. Tree removals will need to be done prior to June 1, for environmental reasons.

Schedule

Environmental Approval Date: 11/16/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 7/27/2015
Original Letting Date: 1/01/2017
Current Letting Date: 2/24/2017
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: 12/17/2018

PROJECT SUMMARY

Hwy 169

Hwy 22 in St Peter to Hwy 93 at Le Sueur

Bridge 52002, 52001, 8961

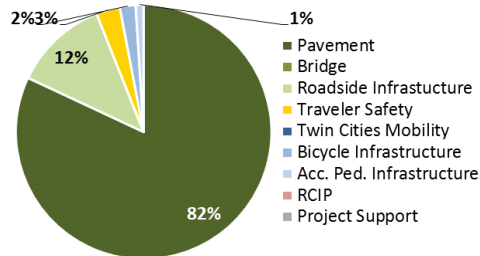
State Project No. 5209-74

[Hwy 169 Preservation - St. Peter to LeSueur](#)

Primary Purpose

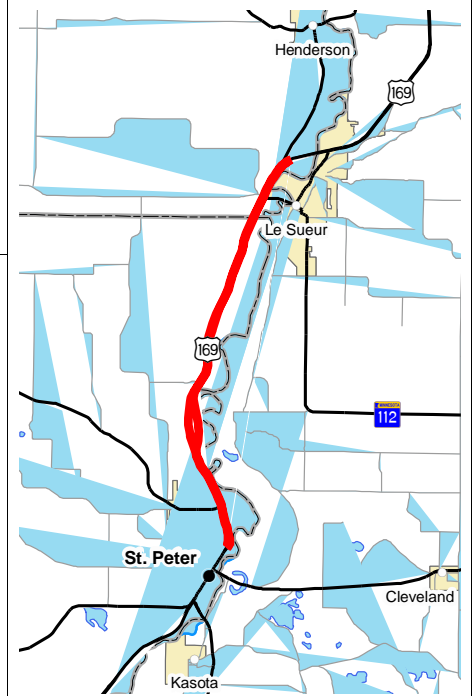
Performance-based Need: Pavement
Condition, Bridge Condition

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. One bridge will be replaced, one bridge will have railing and guardrail improvements and one culvert will be rehabed.



Recent Changes and Updates

Project construction started in the summer of 2018 and scheduled for substantial completion in fall 2018.

Project History

Project is planned for one construction season now, but originally it was scheduled for two seasons. Project was upscaled to include guardrail and bridge rail modifications to Bridge 52001 over Robarts Creek southbound. Project was downscoped to remove rehabilitation of bridges 52004 and 8649. Experimental intelligent work zone features were added to include driver warning systems for slowing or stopped traffic ahead in the work zones. This project will 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.3	\$ 15.0
Other Construction Elements:	\$ 0.4	\$ 1.0
Engineering:	\$ 1.1	\$ 3.1
Right of Way:	\$ 0.0	\$ 0.2
Total:	\$ 7.8	\$ 19.2

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

Key Cost Estimate Assumptions

The cost estimate assumed construction in 2018. Current Estimate included a pavement recommendation change from a mill and overlay project to a concrete overlay project to extend the service life. Other scope items were then added to coincide with a longer service life.

Project Risks

Majors risks were mitigated.

Schedule

Environmental Approval Date: 2/2/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 3/14/2016
Original Letting Date: 11/17/2017
Current Letting Date: 11/17/2017
Construction Season: 2018
Estimated Substantial Completion: 2018



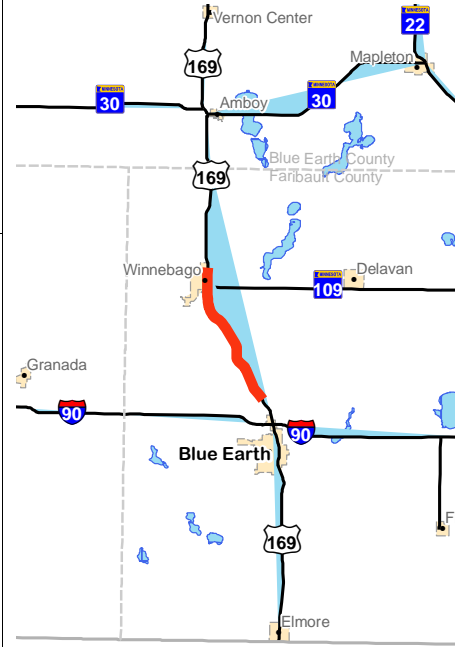
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Peter Harff

Revised Date: 12/17/2018

PROJECT SUMMARY

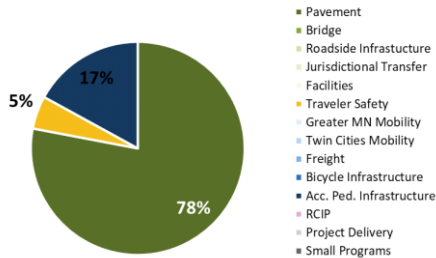
Hwy 169
S of CSAH 6 to N of CSAH 12 in Winnebago
State Project No. 2208-113



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is an overlay on Hwy 169 from just south of CSAH 6 to just north of Winnebago, for a distance of 7.74 miles. The rural section of this project will also receive an ultra-thin bonded wear coarse over bituminous overlay. This project also improves sidewalks and curb ramps in Winnebago to bring them up to ADA standards. There will also be lighting upgrades to two county road intersections.

Recent Changes and Updates

This project started Aug. 20, 2018 with an estimated completion in mid Oct. 2018.

Project History

The purpose of this project is to provide a smooth riding surface and reconstruct the failing sidewalk and pedestrian ramps in Winnebago to meet ADA guidelines. The project was scoped and a minimal amount of risks were identified. 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 selected. Recently this project changed from an ultra-thin bonded wear coarse to an overlay and the UTBWC. The pavement deteriorated faster than anticipated.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 9/2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.8	\$ 3.6
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 4.8	\$ 4.9

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

Key Cost Estimate Assumptions

Actual letting cost was \$3.6 million.

Project Risks

There is not a detour planned for this project, which could make some utility modifications difficult in Winnebago.

Schedule

Environmental Approval Date: 7/14/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: 12/14/2015
Original Letting Date: 10/27/2017
Current Letting Date: 4/27/2018
Construction Season: 2018
Estimated Substantial Completion: Nov-18



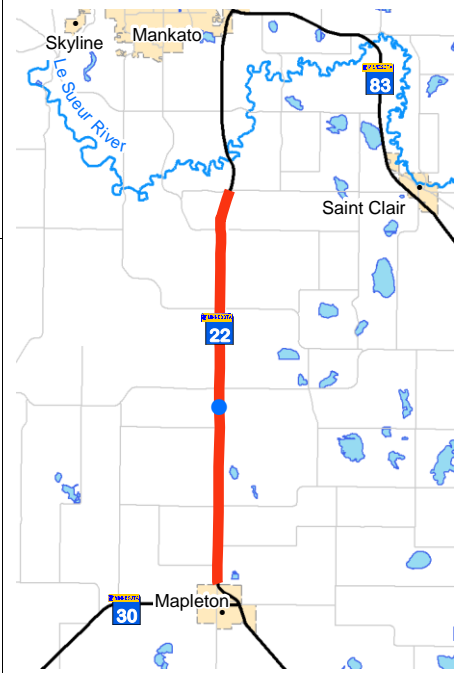
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/17/2018

PROJECT SUMMARY

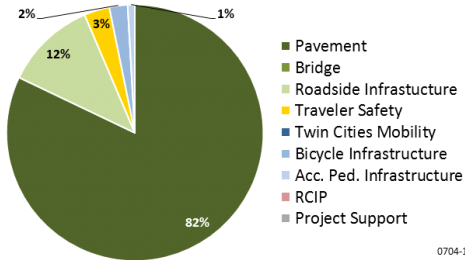
Hwy 22
CR 7 to CR 15
Bridge 5959
State Project No. 0704-100
[Hwy 22 Reconstruction from Mapleton to CR 15](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



0704-100

Project Description

This project consists of reconstructing 10.5 miles of pavement from Mapleton near CR 7 to CR 15, including the replacement of a bridge over the Big Cobb River. In addition, turn lanes will be constructed at several county roadways.

Recent Changes and Updates

Second year of two-year construction of this project started this spring 2018.

Project History

Bridge over the Big Cobb River is scheduled to be replaced. The condition of the pavement was investigated in 2014 and found to be too deteriorated and 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 over the Le Sueur River will not be included with this project. The letting date was changed to accommodate the Bridge Offices work load. The project was let in early 2017 and is underway. The project was let this year. Construction of the south half is underway. The highway is open to traffic north of County Hwy 10. There were rain delays, but the Mapleton to County Hwy 10 should be open this fall. Since last year the decision was made to add a left turn lane at County Hwy 15. Construction on that will take place in spring and summer 2018 along with the rest of the northern segment.

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	\$ 16.5
Other Construction Elements:	\$ 2.9	\$ 2.9
Engineering:	\$ 4.6	\$ 4.6
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 33.5	\$ 24.1

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 so the current estimate is the actual let amount. The baseline cost estimate and initial scope of work originally included this project and a separate project, SP 0704-108 which was then later let independently from this project.

Project Risks

The project will need to be constructed over two years.

Schedule

Environmental Approval Date: 8/26/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 1/26/2016
Construction Limits Established Date: 6/04/2015
Original Letting Date: 1/01/2017
Current Letting Date: 1/27/2017
Construction Season: 2017 - 2018
Estimated Substantial Completion: Fall 2018



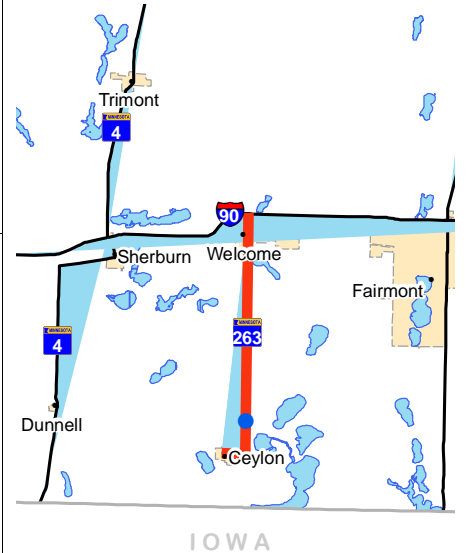
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

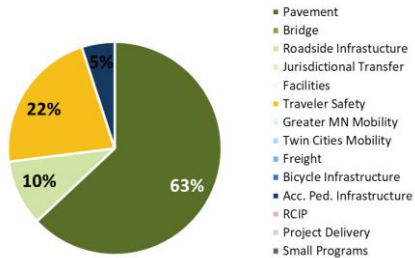
Hwy 263
County Rd 125 (Clark St) in Ceylon to I 90
Bridge 46010
State Project No. 4609-17



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a reclaim on Hwy 263 from Clark St. in Ceylon to the north I-90 ramps, for a distance of 11.2 miles. This project also improves sidewalks and curb ramps in Ceylon to bring them to ADA standards. There will also be guardrail work on bridge 46010, and lighting at a few county road intersections.

Recent Changes and Updates

This project is currently planned to be a turn-back project. This section of roadway will be turned back to the county upon completion of the project in 2021.

Project History

This is a new project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.5	\$ 0.5
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

The estimate is based on the reclaim and ADA work. This is estimated in 2021 dollars.

Project Risks

Getting landowner permission for snow fence locations. Unknown pipe issues.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: Pending approval
Original Letting Date: 11/20/2020
Current Letting Date: 11/20/2020
Construction Season: 2021
Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/17/2018

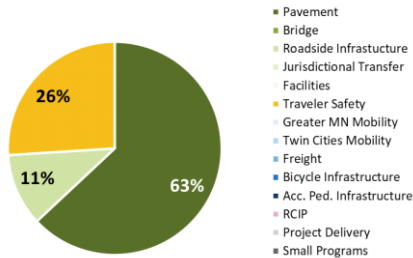
PROJECT SUMMARY

Hwy 30
CSAH 7 to TH 71
State Project No. 1701-27

Primary Purpose

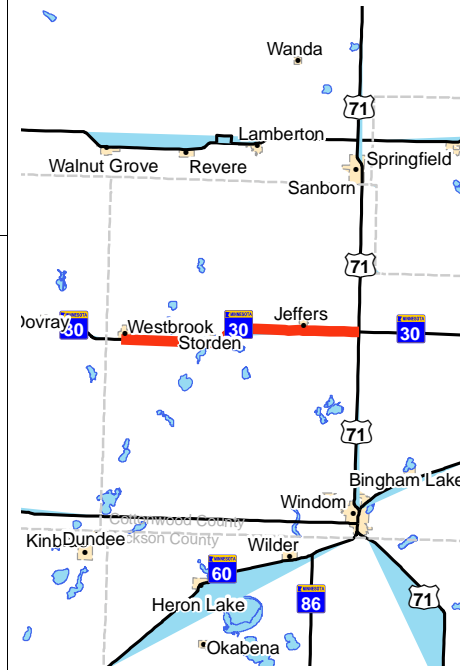
Performance-based Need: Pavement

Investment Category



Project Description

This project consists of a mill and overlay with asphalt. Following the milling, deteriorated joints will be repaired. Locations that do not have 2 feet of shoulder will be widened to allow for rumble strips. Minor culvert repairs will be completed. Guardrail will be updated. Some accesses may be removed if landowners are willing. No detour is planned.



Recent Changes and Updates

Lighting was removed from this project and included in county wide lighting project.

Project History

The project was identified as a resurfacing candidate. The pavement condition is fair and projected to be poor before the project is constructed. A scoping review was completed by district staff during 2016. The box culvert bridges do not require work under this project. If money becomes available this would be a candidate for an up scope to a bituminous reclamation. It was selected to enter the STIP as a project for FY 2021. Scoping for this project has been completed.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.6	\$ 5.6
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.0
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

The estimate assumed 2-inch mill and 2-inch overlay. It assumed lighting at all paved county roads. Estimate was inflated to 2021.

Project Risks

This project is a candidate for a bituminous reclamation. If additional funding is received it may be up scoped.

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: 12/18/2020
Current Letting Date: 12/18/2020
Construction Season: 2021
Estimated Substantial Completion: November 2021



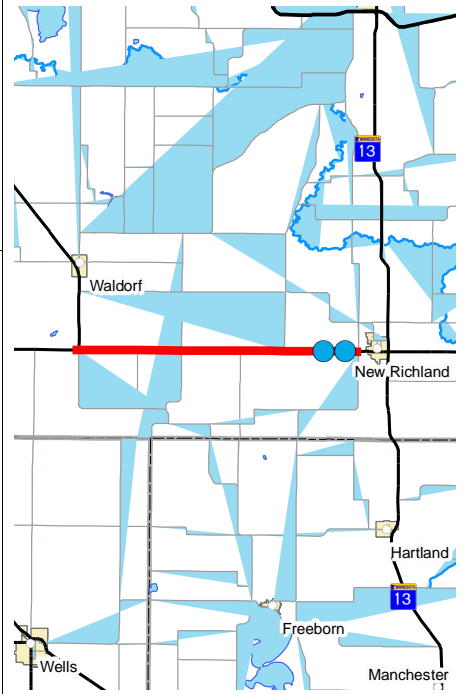
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/17/2018

PROJECT SUMMARY

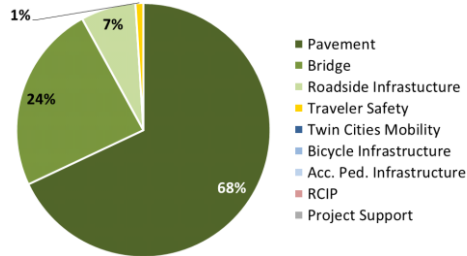
Hwy 30
Hwy 83 to New Richland
Bridge 6789, &, 8131
State Project No. 8105-21



Primary Purpose

Performance-based Need: Pavement Condition and Bridge Condition

Investment Category



Project Description

This is a rural preservation project consisting of a mill and overlay of about 10 miles of Hwy 30. In addition, two bridges will be replaced.

Recent Changes and Updates

Letting date changed (see below)

Project History

Bridge 6789 is scour critical and bridge 8131 is old. Both bridges are in need of replacement. Bridge 6789 and 8131 will be replaced and extended with right of way acquisition. The project letting date and the construction year moved to 2020 for district budget needs. Project moved to 2020 for budgetary reasons and will be tied to TH 30 West project SP 0707-88.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.7	\$ 5.9
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.1	\$ 7.3

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 mill and overlay, two bridge replacements, right of way acquisition and culvert linings. Changing the construction year from 2019 to 2020 inflation raised the current estimate slightly.

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: 12/20/2019
Construction Season: 2020
Estimated Substantial Completion: 2020



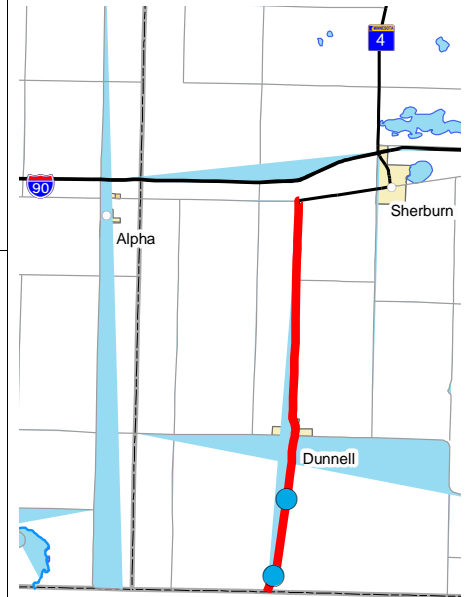
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

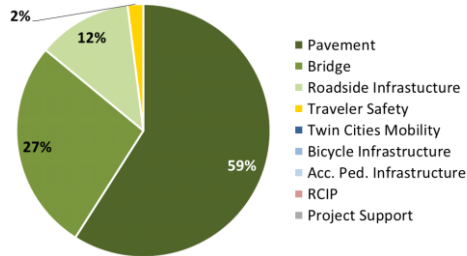
Hwy 4
Iowa border to Martin CSAH 26
Bridge 3572, 3878
State Project No. 4601-32
[Hwy 4 Resurfacing - Sherburn to Iowa](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project consists of a mill and overlay for the rural section of Hwy 4 in Martin County, from the Iowa border to the west junction of Martin CSAH 26, located southwest of Sherburn. It will also replace two bridges with new box culverts. The box culvert installations will require the roadway to be detoured during construction. The project length is about 10.1 miles.

Recent Changes and Updates

Project costs updated based on pavement repair recommendations received.

Project History

Repairs to the highway crossing culverts and bridges further investigated to determine right of way needs. The project was shifted from fiscal year 2018 to 2019 as a ripple effect of projects coming in overestimate in 2016. This project will resurface the pavement to achieve a smooth riding surface and improve the ride quality index. The project also includes replacing 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.1	\$ 4.0
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.1	\$ 1.1
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 7.7	\$ 5.7

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

Key Cost Estimate Assumptions

Project costs updated based on pavement repair recommendations received as a mill and overlay. The current estimate is in 2017 dollars inflated to 2019. The current estimate removed scope items compared to the base estimate which included an underseal and other minor pavement recommendations which weren't completely known at baseline development.

Project Risks

A more substantial or long term fix would require raising the road grade or require regrading, which would increase costs significantly. The project contingency does not include a change for this type of major risk.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: 6/12/2017
Original Letting Date: 1/26/2018
Current Letting Date: 1/25/2019
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: Glen Coudron

Revised Date: 12/17/2018

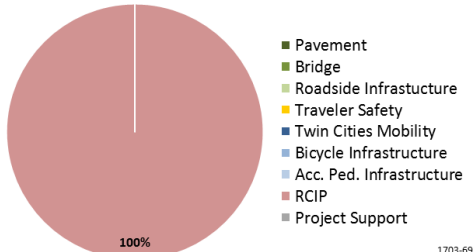
PROJECT SUMMARY

Hwy 60
Windom to west of Mountain Lake
Bridge 8260
State Project No. 1703-69
[Hwy 60 Four-Lane Expansion - Windom to Mountain Lake](#)

Primary Purpose

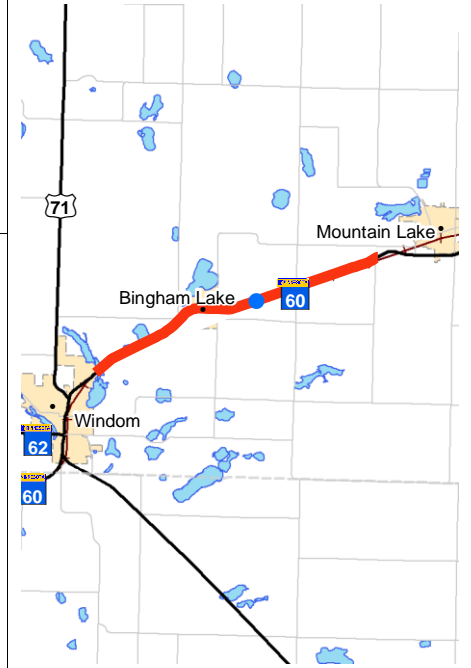
Performance-based Need: Regional & Community Improvement Priority

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 near Mountain Lake. It includes construction through Bingham Lake.



Recent Changes and Updates

Construction continues during the 2018 season. Project should be substantially complete in fall 2018.

Project History

The project received municipal consent on the layout from Bingham Lake. The consultant that will do the final design was procured. The cost estimate was lowered because contingencies for poor soils and retaining walls were reduced. 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. Project was let and is nearing completion first of the year of two years of construction. No major issues were found during construction.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	Baseline Est.	Current Est.
Construction Letting:	\$ 27.1	\$ 19.7
Other Construction Elements:	\$ 3.0	\$ 2.3
Engineering:	\$ 4.9	\$ 4.6
Right of Way:	\$ 1.5	\$ 2.1
Total:	\$ 36.5	\$ 35.8

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 the cost estimates for this project. The actual amount is 19.7 million and reflects good bid savings.

Project Risks

All major project design risks were retired.

Schedule

Environmental Approval Date: 11/23/2012
Municipal Consent Approval Date: 05/04/2015
Geometric Layout Approval Date: 7/27/2015
Construction Limits Established Date: 4/22/2015
Original Letting Date: 2/24/2017
Current Letting Date: 2/08/2017
Construction Season: 2017 - 2018
Estimated Substantial Completion: Fall 2018



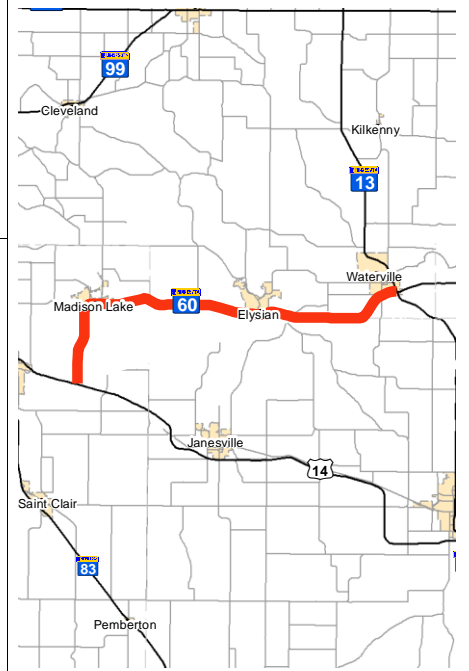
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/17/2018

PROJECT SUMMARY

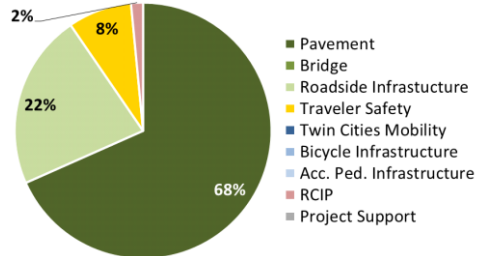
Hwy 60
Hwy 14 to Hwy 13 in Waterville
State Project No. 4006-35
[Hwy 60 - The Lake Connection](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This projects involves resurfacing Hwy 60, from the Intersection of Hwy 14 east of Eagle Lake to Hwy 13 in Waterville, for a distance of 16.3 miles. This project also includes the reconstruction of Madison Lake. The current cross-section in Madison Lake will change to improve pedestrian access and increase safety. Several county intersections will receive lighting. The project also consists of installing several turn lanes.

Recent Changes and Updates

This project was upscoped to include the reconstruction of Madison Lake. This will improve pedestrian sidewalks, safety and drainage. We are also looking into adding passing lanes along the corridor. It was confirmed that we will not be removing bridge 5467 by Waterville. This was being considered due to the fact the bridge is over an old RR track that is no longer being used.

Project History

This project is was upscoped to become a reclaim rather than a mill and overlay. This is a better fix and will last longer. It will also include resurfacing in Madison Lake. A bridge was identified for removal due to not being needed any longer. It was over an old rail road which is no longer in use.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 11.0	\$ 19.0
Other Construction Elements:	\$ 0.9	\$ 1.5
Engineering:	\$ 2.0	\$ 1.5
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 14.0	\$ 22.0

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 reclaim inflated to 2020. The current estimate is significantly higher from the baseline estimate due to the up scope of the entire project to a reclaim vs. a mill and overlay, an up scope to a reconstruction in Madison Lake and an increase in the amount of turn lanes that will be installed.

Project Risks

Identifying good detour routes will be a challenge due to adjacent county roads are not in good condition. Passing lanes are currently being studied to see if there is a need for them along this corridor. These passing lanes are not currently funded.

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: 12/20/2019
Current Letting Date: 2/28/2020
Construction Season: 2020
Estimated Substantial Completion: 2020



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/17/2018

PROJECT SUMMARY

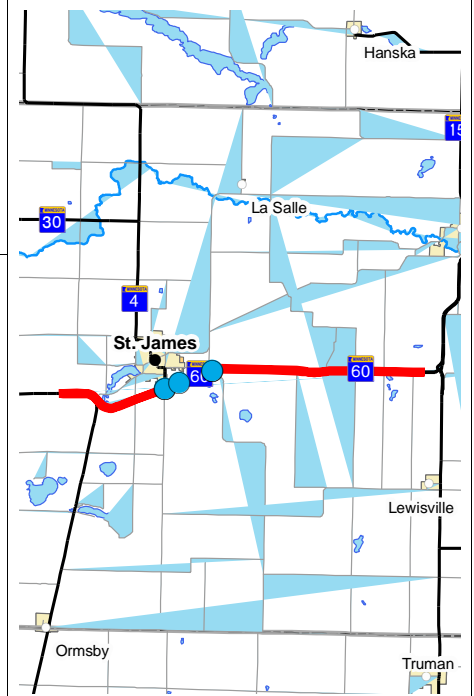
Hwy 60

Between St. James and Hwy 4 to Hwy 15

Bridge 83026, 91543, 83027

State Project No. 8309-52

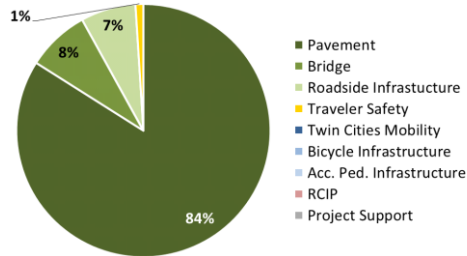
[Hwy 60 Watonwan County Resurfacing](#)



Primary Purpose

Performance-based Need: Pavement

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 15. The project includes the following: concrete overlay, culvert repairs, a mill and overlay to bridge 83026 and 83027, pour new invert to and paint Bridge 91543 which is 3 side-by-side box culverts. Includes concrete pavement rehab on Hwy 4 and Co. Rd. 12 within MnDOT right of way.

Recent Changes and Updates

This two year project is currently under construction. It will be substantially complete in fall 2020.

Project History

Upscoping of this project to an unbonded concrete overlay to be constructed in 2018 and 2019. Pipe repair work is expected to be completed ahead of time (under SP 8827-271) in the 2017 construction season. The project will resurface the pavement to provide an improved ride quality index rating, a smooth riding surface and to preserve pavement life. The pavement is in poor condition and will be at the end of its service life by 2019. The scope of the project includes preservation work on the interchange ramps and bridge rehabilitation work in St. James.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 12.4	\$ 27.5
Other Construction Elements:	\$ 1.2	\$ 2.5
Engineering:	\$ 2.4	\$ 6.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 16.0	\$ 36.2

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

Key Cost Estimate Assumptions

The baseline estimate of cost was created using an itemized cost for each section of repair with average bid prices for projects in the area. Scope and timeframe was changed significantly due to new funding. Project was up scoped to a long term fix from concrete pavement rehabilitation to unbonded concrete overlay. Actual construction let amount was \$27.5 million.

Project Risks

All major project design 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: 10/26/2018
Current Letting Date: 4/27/2018
Construction Season: 2018-2019
Estimated Substantial Completion: November 2019



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matthew Young

Revised Date: 12/17/2018

PROJECT SUMMARY

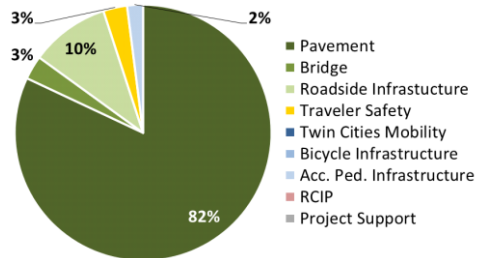
Hwy 71
Jackson to Windom
Bridge 8325
State Project No. 3206-20



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This cold in-place recycling project is on Hwy 71 from CSAH 38 in Jackson to Hwy 60 in Windom, for a total of 18.1 miles. Project includes replacement of bridge 8325.

Recent Changes and Updates

Project pulled back to in-house design.

Project History

The project will resurface the roadway to provide a smooth ride and extend the life of the road, using newer cold in-place recycling technique. It will also replace bridge 8325. Scoping was completed in 2016.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 9.3	\$ 9.3
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 1.9	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 11.9	\$ 11.9

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

Key Cost Estimate Assumptions

The 2017 baseline estimate uses cost calculations for cold in-place recycling form of resurfacing, along with bridge replacement and culvert removals and repairs. This was estimated in 2015 dollars then inflated to 2020 dollars.

Project Risks

A change in costs could change the project scope on the type of resurfacing (down scoping from a cold in-place recycling to a medium mill and overlay). Bike trail extension along Hwy 71 north of Jackson was not pursued by Jackson or Jackson County.

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: 1/31/2020
Current Letting Date: 12/20/2019
Construction Season: 2020
Estimated Substantial Completion: October 2020



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Steve Oswald

Revised Date: 12/17/2018

PROJECT SUMMARY

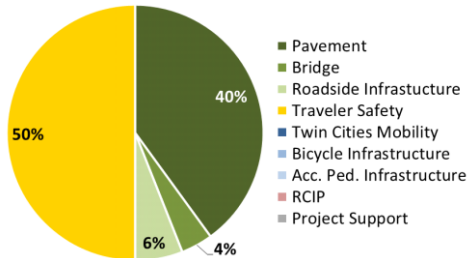
Hwy 71
Windom to Hwy 30
Bridge 8701, 8328, 5633
State Project No. 1706-29



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a 12.3 mile mill and overlay from the north junction of Hwy 60 in Windom to Hwy 30.

Recent Changes and Updates

Project pulled back in for in-house design. Eliminated bridge 8701 rehabilitation. Upscoped to medium mill and overlay. Letting date moved up from 12/20/2019 to 5/1/2019.

Project History

This project was a micro mill and micro-surface. This project was up scoped to a mill and overlay and is reflected in current estimate. Project changed from design consultant to in-house design. The project will resurface the roadway to provide a smooth ride and extend the life of the road.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.3	\$ 4.0
Other Construction Elements:	\$ 0.4	\$ 0.3
Engineering:	\$ 0.8	\$ 0.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.5	\$ 5.1

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

Key Cost Estimate Assumptions

The 2017 cost estimate is based on staying within the existing right of way, milling and overlaying the roadway and shoulders. Project estimate now reflects upscope to a medium mill and overlay in 2016 dollars inflated to 2020 dollars.

Project Risks

A change in costs could result from changing the project scope on type of resurfacing. There is potential that additional culverts or bridges may need rehabilitation. Additional right of way may be necessary for work on some of the culverts. The city has expressed an interest in realigning an intersection. The county has expressed an interest in some additional turn lanes.

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: 12/20/2019
Current Letting Date: 5/1/2019
Construction Season: 2020
Estimated Substantial Completion: 2020



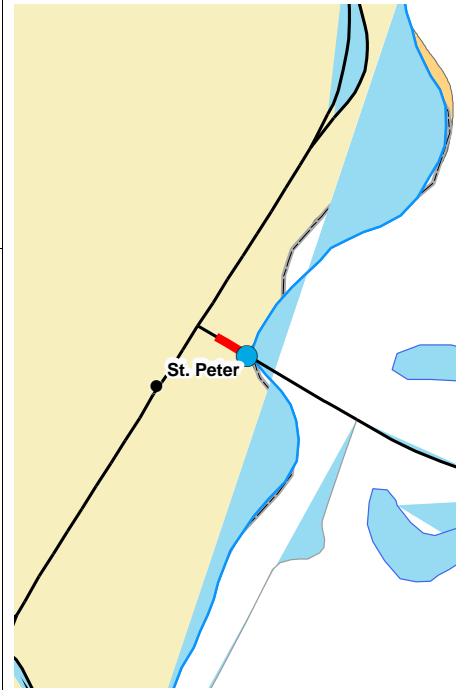
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Steve Oswald

Revised Date: 12/17/2018

PROJECT SUMMARY

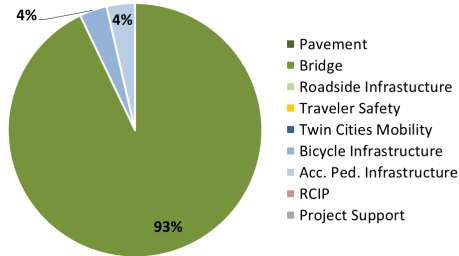
Hwy 99
Over the Minnesota River in St Peter
Bridge 4930
State Project No. 4008-25
[Historic Hwy 99 Minnesota River Bridge Rehabilitation](#)



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 floor beams, 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

The bridge was open to traffic at the end of Nov. 2017.

Project History

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. The existing bridge was built in 1931 and has a National Bridge Inventory structure evaluation rated at 5, which is fair to poor. This project was let in 2014 but the low bidder was deemed non-responsive with regards to DBE goals. The project will be re-let to not conflict with other St. Peter area work. The project was updated to the 2016 Standard Specifications and will be re-let on Nov. 18, 2016 for construction in 2017. The project was let in November 2016 with construction starting in March 2017. Construction is expected to be complete by Dec. 1, 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:	\$ 4.9	\$ 4.4
Other Construction Elements:	\$ 0.3	\$ 0.5
Engineering:	\$ 0.5	\$ 0.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.7	\$ 5.4

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 2016 for \$4.4 million. Some additional unplanned work occurred in construction due to additional deterioration of unexpected steel bridge members.

Project Risks

With most of the structural repairs complete, the major project risk is now to project completion. With later season temperatures sensitive to construction work, additional effort will be expended on the housing and heating parts of the bridge to accomplish the work this construction season.

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: 1/01/2014
Current Letting Date: 11/18/2016
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: 12/17/2018

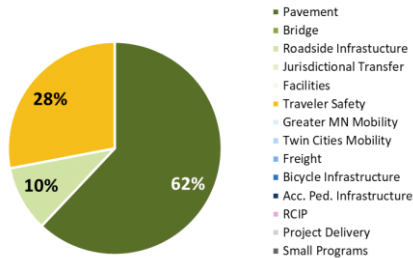
PROJECT SUMMARY

Hwy 99
CSAH 45 (Rabbit Road) to TH 21
Bridge 8893
State Project No. 4010-10

Primary Purpose

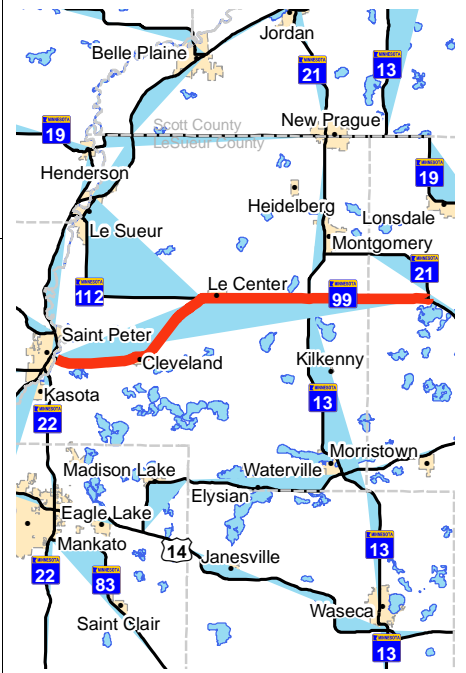
Performance-based Need: Pavement

Investment Category



Project Description

This project involves resurfacing Hwy 99 from Hwy 13 to Hwy 21 for a distance of 8 miles. This area of the project includes culvert replacement, lighting and turn lane additions. The project also includes a section of Hwy 99 from the Minnesota River Bridge to Le Center that was paved in 2017. This project area will include culvert repair, lighting, turn lanes, guardrail, bridge replacement and minor mill and overlay work.



Recent Changes and Updates

This letting date changed due to right of way acquisition. The pavement treatment changed from a mill and overlay to a cold in-place recycle.

Project History

Due to deteriorating pavement, the district decided to split 4008-28 in to two projects. The first project was strictly a paving project in 2017 that encompassed Hwy 99 from the Minnesota River Bridge to Le Center. The second project was added into SP4010-10 due to proximity. This work includes minor milling and overlay, culvert repair, turn lane modifications, bridge replacement, guardrail and lighting.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.9	\$ 9.9
Other Construction Elements:	\$ 0.3	\$ 0.8
Engineering:	\$ 0.9	\$ 1.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.1	\$ 12.6

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

Key Cost Estimate Assumptions

The project estimate is based on bituminous pavement, lighting, bridge replacement, culvert repair/replacement and guardrail work. The project estimate was inflated to 2019 dollars. This project increased in cost due to the addition of items left over from SP4008-28. SP4008-28 was slated for 2019. The pavement was deteriorating faster than expect and therefore paved in 2017. All items that were not improved (e.g.: culverts, bridge, lighting, shoulders, guardrail, and turn lanes) were added to this project due to proximity.

Project Risks

The bridge replacement is in Cleveland, MN. The intent of the bridge (box culvert) replacement is to extend it beyond clear zone to remove guardrail along the roadway, which is a hazard. This will affect a park and will need additional analysis to ensure the extension impacts the park as little as possible. The project also includes some intersection improvements in Cleveland, MN. The modifications will need municipal consent.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: 11/27/2017
Original Letting Date: 12/14/2018
Current Letting Date: 2/22/2019
Construction Season: 2019
Estimated Substantial Completion: Fall 2019



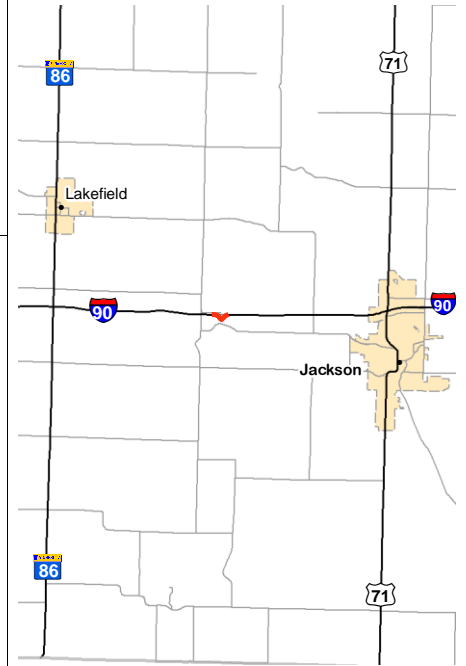
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/17/2018

PROJECT SUMMARY

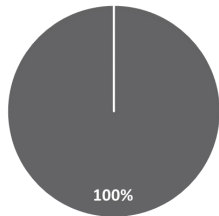
I-90
Clear Lake Rest Area
State Project No. 3280-129



Primary Purpose

Performance-based need: Roadside Infrastructure Condition

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

This project involves improvements to the Clear Lake Rest Area that is located along I-90, west of the city of Jackson.

Recent Changes and Updates

This project is not scoped, so it is not yet fully known what it entails or what the costs total. Scoping and costs for rest areas are generally developed in the central office with construction inspection managed through the district.

Project History

This project was developed this year.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.5	\$ 6.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.8	\$ 7.8

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

Key Cost Estimate Assumptions

The project is not yet scoped. This estimate is a placeholder until more is known.

Project Risks

The project is not yet scoped so risks are not identified.

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: 1/01/2019
Current Letting Date: 1/01/2019
Construction Season: 2019
Estimated Substantial Completion: 2020



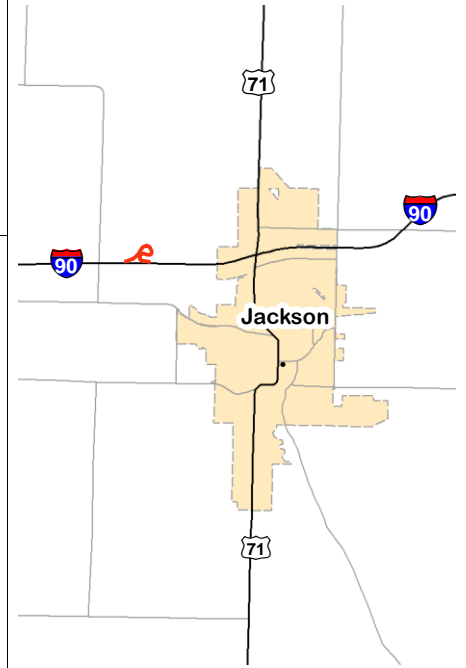
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert H Williams

Revised Date: 12/17/2018

PROJECT SUMMARY

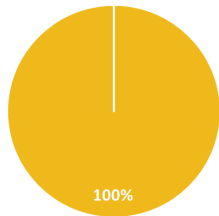
I-90
Des Moines Rest Area
State Project No. 3280-130



Primary Purpose

Performance-based need: Roadside Infrastructure Condition

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

The project involves improvements to the Des Moines Rest Area located along I-90 near Hwy 70.

Recent Changes and Updates

This project has not been scoped, so it is not yet fully known what it entails or what the costs total. Scoping and costs for rest areas are generally developed in central office with construction inspection managed through the district.

Project History

This project was developed this year. The building is currently not ADA compliant and is beyond its service life.

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:	\$ 6.5	\$ 6.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 1.3	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.8	\$ 7.8

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

Key Cost Estimate Assumptions

This project is not scoped. The estimate is an early placeholder.

Project Risks

The project is not scoped. Risks have not been identified.

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: 1/01/2020
Current Letting Date: 1/01/2020
Construction Season: 2020
Estimated Substantial Completion: 2021



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert H Williams

Revised Date: 12/17/2018

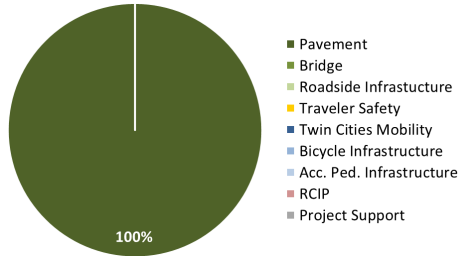
PROJECT SUMMARY

I-90
Sherburn to Fairmont
Bridge Multiple
State Project No. 4680-126
[I-90 Corridor Preservation](#)

Primary Purpose

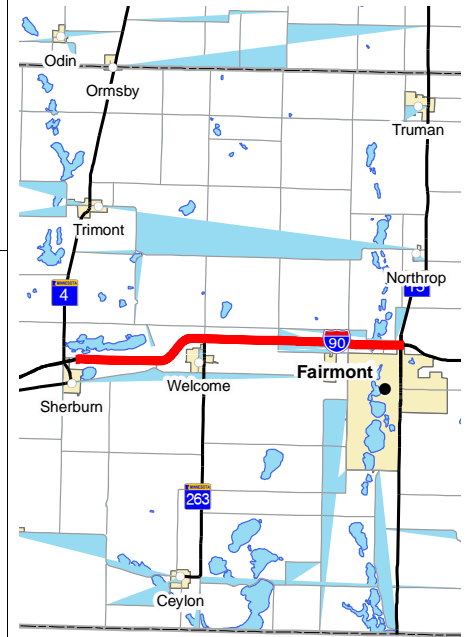
Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay of the westbound lanes on I-90, between Hwy 4 in Sherburn and just east of Hwy 15 in Fairmont. There will also be some drainage, lighting, and guardrail repairs. The bridge end posts will also be upgraded.



Recent Changes and Updates

Project was completed in 2017.

Project History

This project was added to the FY 2017 program. This acceleration was made possible due to an additional \$25 million 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:	\$ 7.4	\$ 7.4
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.5	\$ 1.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.4	\$ 9.6

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

Key Cost Estimate Assumptions

The current estimate is the actual bid amount.

Project Risks

There are no remaining risks.

Schedule

Environmental Approval Date: 9/30/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 12/16/2016
Current Letting Date: 12/16/2016
Construction Season: 2017
Estimated Substantial Completion: 12/01/2017



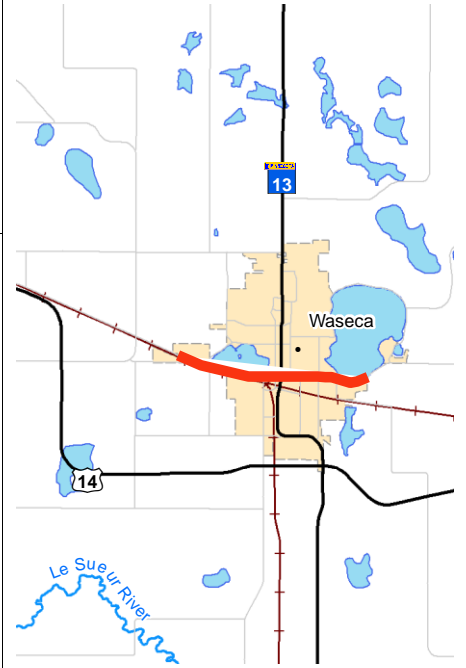
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Andrew Lawver

Revised Date: 12/17/2018

PROJECT SUMMARY

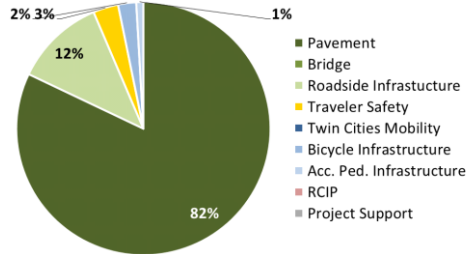
Old Hwy 14
West to east Waseca city limits
State Project No. 8103-115



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project consists of 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

This project is under construction. It is a two year project, scheduled to be completed in fall 2018.

Project History

The turn back of Old Hwy 14 in Waseca and Steele counties was contested. A settlement agreement was defined what was to be constructed. Waseca is leading the project. They are applying federal funds and will do a separate environmental document.

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	\$ 18.3
Other Construction Elements:	\$ 1.0	\$ 1.0
Engineering:	\$ 2.7	\$ 2.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 21.5	\$ 22.0

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 let amount. Of that, approximately \$14 million is state cost. The current estimate included minor scope refinements that were unknown when the baseline estimate was developed.

Project Risks

The Settlement Agreement was very prescriptive in some areas and vague in others.

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: 4/15/2016
Current Letting Date: 12/15/2016
Construction Season: May 2017 - November 2018
Estimated Substantial Completion: 11/01/2018



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matt Rottermond

Revised Date: 12/17/2018

PROJECT SUMMARY

I-90

South Dakota border to east of Hwy 23

Bridge 9685, 9686, 9689, 9690

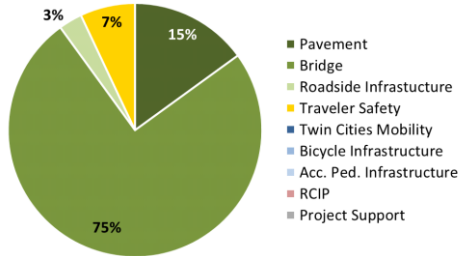
State Project No. 6780-105

Substantially Complete

Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project involves rehabilitating four bridges on I-90 near Beaver Creek, from the South Dakota border to 2.9 mi east of Hwy 23. The project will also construct permanent median crossovers for traffic control and safety. A storm water pond will be constructed to meet permit requirements.



Recent Changes and Updates

Construction is complete.

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	\$ 6.8
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 7.9

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

Key Cost Estimate Assumptions

Project was let March 24, 2017. The baseline estimate was outdated and the MnDOT pre-letting estimate was in line with the winning bid. The current estimate is the awarded bid amount.

Project Risks

All risks retired.

Schedule

Environmental Approval Date: 3/24/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: Not needed
Original Letting Date: 3/24/2017
Current Letting Date: 3/24/2017
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: Matthew Young

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 169

Hwy 14 in Mankato to St. Peter

State Project No. 5211-59, 5211-59ED

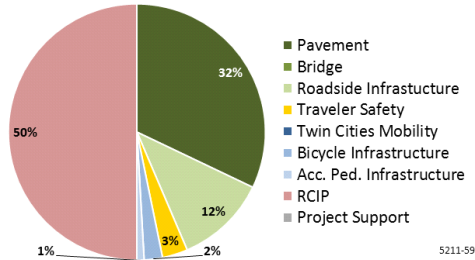
[Hwy 169, Hwy 22 Minnesota River Flood Mitigation](#)

Substantially Complete

Primary Purpose

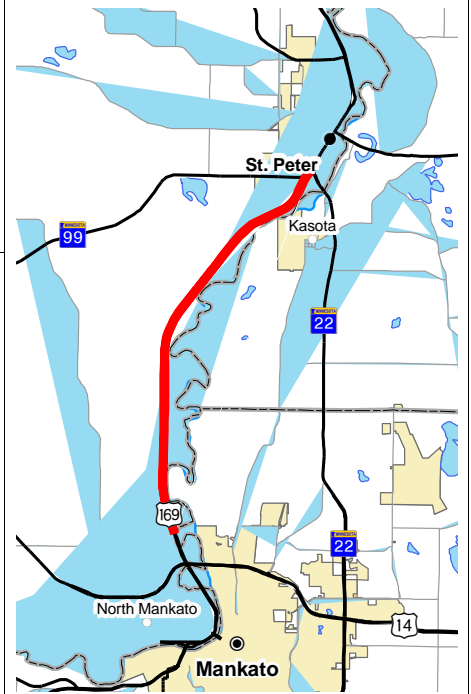
Performance-based Need: Regional & Community Improvement Priority

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.



Recent Changes and Updates

Project is complete.

Project History

This project received a \$9.8 million federal grant from the Economic Development Administration, U.S. Department of Commerce. Except for the bend way weirs, the project was constructed in 2016. Construction was completed one month ahead of the original target date due to an incentive for early completion. Traffic management was successful.

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	\$ 17.0
Other Construction Elements:	\$ 1.2	\$ 1.7
Engineering:	\$ 2.7	\$ 2.3
Right of Way:	\$ 0.1	\$ 0.3
Total:	\$ 18.6	\$ 21.0

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

Key Cost Estimate Assumptions

The current estimate for construction letting is based on the actual accepted bid amount. The Current estimate included additional staging requirements which increased the project cost which were unknown when the baseline estimate was developed.

Project Risks

The bend way weirs may not get done under this contract as the river level has not yet gone down.

Schedule

Environmental Approval Date: 3/11/2013
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 5/6/2015
Construction Limits Established Date: 6/1/2014
Original Letting Date: 11/20/2015
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: 12/17/2018

PROJECT SUMMARY

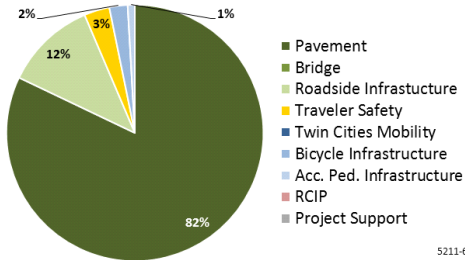
Hwy 169
Hwy 14 in Mankato to St. Peter
State Project No. 5211-61

Substantially Complete

Primary Purpose

Performance-based Need: Pavement

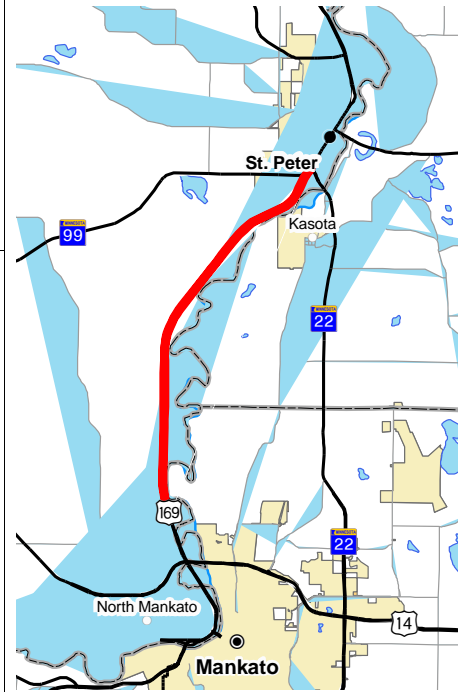
Investment Category



5211-61

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.



Recent Changes and Updates

Project is complete.

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 U.S. Department of Commerce funding. The cost estimate increased due to the decision to use concrete median barrier for safety and use full depth concrete for the median pavement to speed up construction. The project was constructed in 2016. Construction was completed one month ahead of the original target date due to an incentive for early completion. Traffic management was successful.

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	\$ 12.8
Other Construction Elements:	\$ 0.6	\$ 1.4
Engineering:	\$ 1.8	\$ 1.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.6	\$ 15.5

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

Key Cost Estimate Assumptions

The current estimate for construction letting is based on the actual accepted bid amount.

Project Risks

Water level may remain high and the bend way weirs may need to be dropped from this contract and added to another.

Schedule

Environmental Approval Date: Not needed
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 6/1/2014
Original Letting Date: 10/20/2015
Current Letting Date: 12/18/2015
Construction Season: 2016
Estimated Substantial Completion: Fall 2017



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Peter Harff

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 19

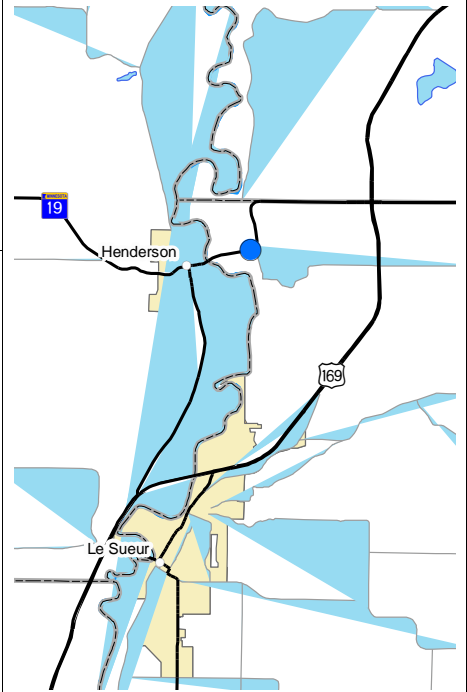
Over the Union Pacific railroad, east of Sibley/LeSueur county line

Bridge 5369

State Project No. 4004-112

[Hwy 19 Bridge over Union Pacific Railroad](#)

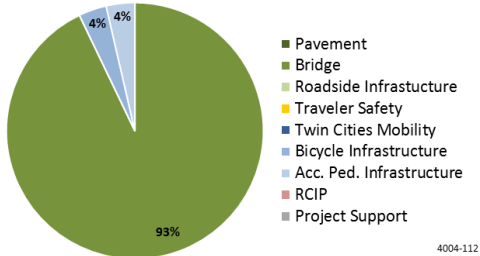
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



4004-112

Project Description

This project will replace a bridge over Union Pacific Railroad track east of Henderson. The project includes associated grading and paving on the ends of the bridge.

Recent Changes and Updates

Project is complete.

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 and wetland, floodplain and wildlife refuge impacts.

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	\$ 5.2
Other Construction Elements:	\$ 0.5	\$ 0.4
Engineering:	\$ 0.6	\$ 1.5
Right of Way:	\$ 0.1	\$ 0.0
Total:	\$ 4.2	\$ 7.1

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; the current estimate costs reflect the awarded contract price. In early 2014, a switch was made in the project to use a reinforced-soil slope embankment, which allows steeper slopes and 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 \$1.7 million. Current estimate included refinements to foundations recommendations that were unknown when the baseline estimate was developed.

Project Risks

Railroad coordination may pose a schedule risk in design and construction.

Schedule

Environmental Approval Date: 12/11/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 7/8/2014
Construction Limits Established Date: 6/18/2014
Original Letting Date: 2/28/2014
Current Letting Date: 3/18/2016
Construction Season: 2016
Estimated Substantial Completion: Nov-16



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Dan Franta

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 71

Over the Des Moines River in Jackson

Bridge 6741, (old), 32011, (new)

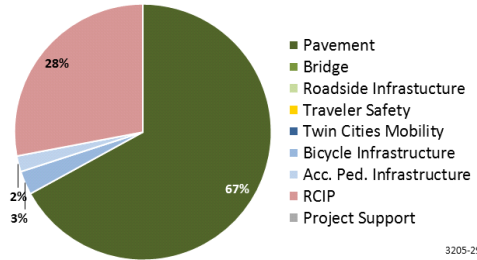
State Project No. 3205-29

Substantially Complete

Primary Purpose

Performance-based Need: Bridge Condition

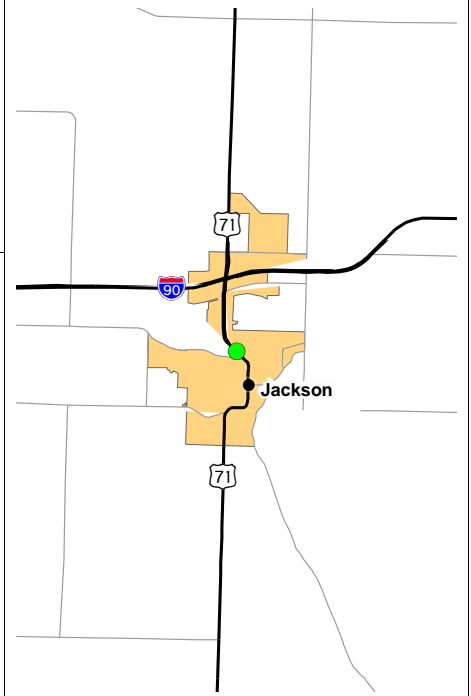
Investment Category



3205-29

Project Description

This project will replace a bridge over the Des Moines River, from Springfield Parkway to Industrial Boulevard 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

Project was completed in 2015.

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. Construction was completed fall 2016.

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:	\$ 1.0	\$ 0.1
Engineering:	\$ 1.0	\$ 1.4
Right of Way:	\$ 0.1	\$ 0.2
Total:	\$ 7.1	\$ 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 for construction letting is based on the awarded contract price. The initial baseline estimate assumed a rough percentage for the other construction elements, which didn't end up being accurate. When the project was completed there wasn't much other construction elements lowering the current estimate from the baseline estimate.

Project Risks

The project is adjacent to a delisted superfund site that has successfully achieved complete response actions and all cleanup goals for the site, but may still require extensive response work after post review requirements which is a risk.

Schedule

Environmental Approval Date: 2/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 5/2014
Construction Limits Established Date: 3/1/2013
Original Letting Date: 11/15/2004
Current Letting Date: 5/15/2015
Construction Season: 2015 - 2016
Estimated Substantial Completion: Fall 2016



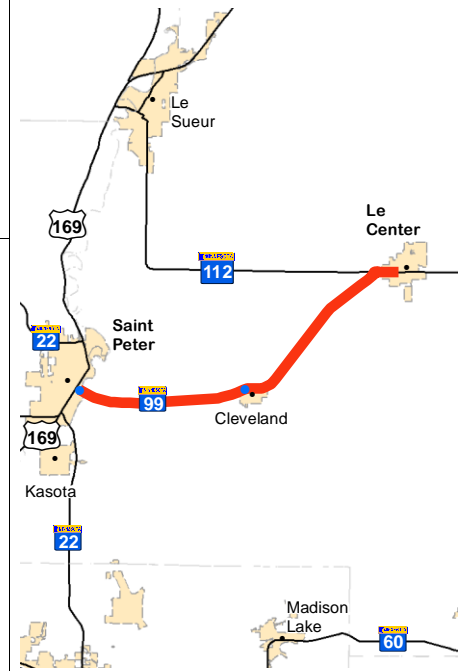
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Williams

Revised Date: 12/17/2018

PROJECT SUMMARY

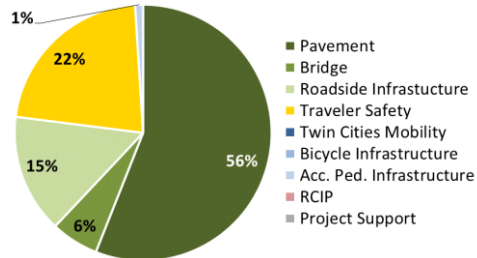
Hwy 99
St. Peter to Le Center
Bridge 8893
State Project No. 4008-28
Substantially Complete



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay on Hwy 99 from Minnesota River Bridge just outside of St. Peter to S Maple Ave. in Le Center, for a distance of 12.6 miles. This project is strictly a pavement resurfacing project.

Recent Changes and Updates

This project was completed in 2017. The remaining items that were not completed with this project will be done in 2019 with SP4010-10.

Project History

The project was scoped and early development is underway. The project became a fiscal 2019 project. Due to deteriorating pavement the district decided to split this into two projects. This project became strictly a mill and overlay and was paved in 2017. All other items will be done in 2019 on a different project. This lowered the project cost significantly.

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:	\$ 8.1	\$ 2.7
Other Construction Elements:	\$ 0.7	\$ 0.1
Engineering:	\$ 1.5	\$ 0.3
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 10.0	\$ 3.2

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 June 23, 2017. The cost estimate change is because the project was split into this project and another project, SP 4010-10.

Project Risks

None remaining

Schedule

Environmental Approval Date: 4/25/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: Spring 2017
Original Letting Date: 12/14/2018
Current Letting Date: 6/23/2017
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: 12/17/2018

PROJECT SUMMARY

I-90

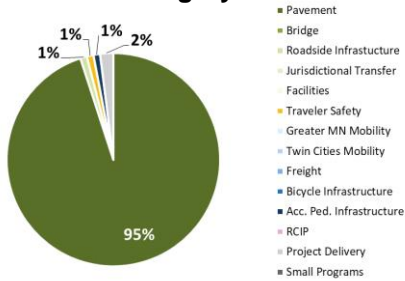
Eastbound Hwy 86 to Hwy 4 & westbound Hwy 5 to Hwy 4
State Project No. 3280-126

Substantially Complete

Primary Purpose

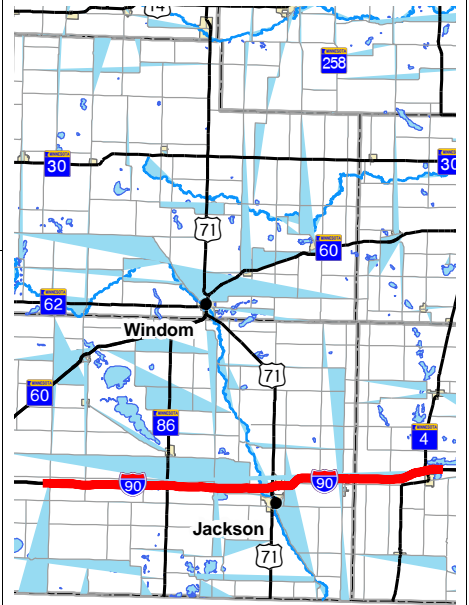
Performance-based Need: Pavement

Investment Category



Project Description

This project is for pavement resurfacing 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.



Recent Changes and Updates

Project is complete. Change orders were needed during construction, causing the cost to increase. Notably, there was an addition of a chip seal for the bituminous portion of the project, which was after substantial completion. This caused the project to run longer, thus the need for more engineering.

Project History

This project now includes work on what used to be under other MnDOT projects (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 to provide a smooth ride and meet performance targets for ride quality and provide a longer service 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:	\$ 36.3	\$ 36.3
Other Construction Elements:	\$ 0.8	\$ 2.5
Engineering:	\$ 2.0	\$ 2.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 39.1	\$ 41.1

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. It uses the design/build method of contracting.

Project Risks

Trying to define a variable scope project in an RFP is challenging.

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: 1/21/2015
Current Letting Date: 2/24/2015
Construction Season: May 2015/November 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: 12/17/2018

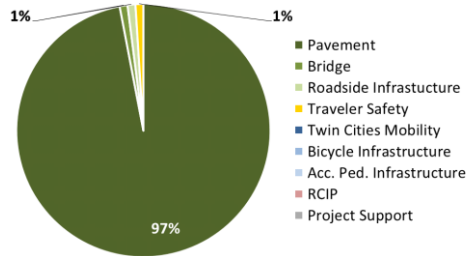
PROJECT SUMMARY

I-90
Worthing to Rushmore
Bridge 53815, 53816
State Project No. 5380-133
I-90 Corridor Preservation
Substantially Complete

Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project includes resurfacing the eastbound and westbound lanes of I-90 from Hwy 60 in Worthington to near Rushmore. The project will also include lighting replacement, drainage repairs and possibly some bridge repairs.



Recent Changes and Updates

Construction is complete.

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. The upgrade to replace end posts for bridges 53815 and 53816 was added to meet current guardrail safety standards. To balance the construction workload, it was decided to build the project in late 2016. Construction was completed in fall 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:	\$ 9.6	\$ 7.3
Other Construction Elements:	\$ 0.7	\$ 0.8
Engineering:	\$ 1.9	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.2	\$ 8.5

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; the current estimate is based on the first year substantially complete project cost accounting. The current estimate included minor refinements that were unknown at baseline estimate development. Bids received were also favorable for the project which reduced the overall cost.

Project Risks

There are no remaining identified risks.

Schedule

Environmental Approval Date: 1/19/2016
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: 3/18/2016
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: Robert Sneller

Revised Date: 12/17/2018

PROJECT SUMMARY

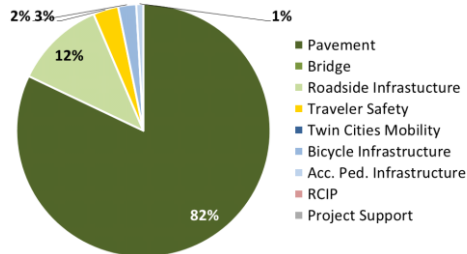
Old Hwy 14
Janesville
State Project No. 8103-114

Substantially Complete

Primary Purpose

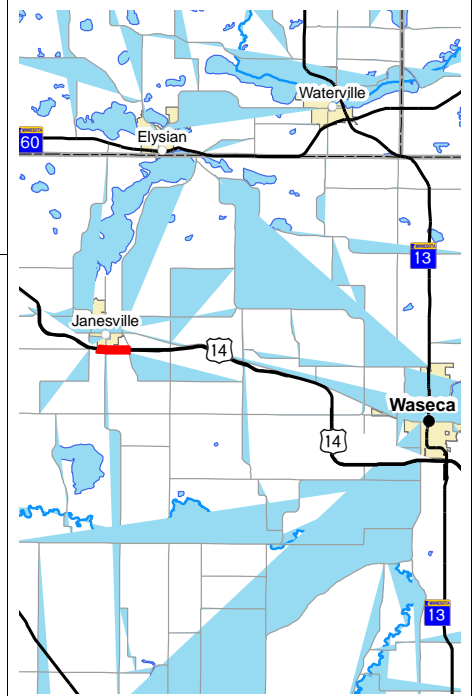
Performance-based Need: Pavement

Investment Category



Project Description

This project consists of the reconstruction of Old Hwy 14 within the city limits of Janesville. The city will replace 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 complete.

Project History

The turnback of Old Hwy 14 in Waseca and Steele counties was contested. A settlement agreement defined what was to be constructed. Construction was planned for 2015; however, Janesville is leading the project development and decided to move construction to 2016. The letting date was moved and the cost estimate was updated to account for an additional year of inflation, but a very good bid still brought the actual in below the initial estimate.

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	\$ 4.0
Other Construction Elements:	\$ 0.3	\$ 0.3
Engineering:	\$ 0.9	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.8	\$ 5.2

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

Key Cost Estimate Assumptions

The current estimate cost given is only for the state share of the actual letting cost.

Project Risks

The settlement agreement was very prescriptive in some areas and vague in others.

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: 4/15/2015
Current Letting Date: 3/05/2016
Construction Season: May 2016 - Nov 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: Matt Rottermond

Revised Date: 12/17/2018

PROJECT SUMMARY

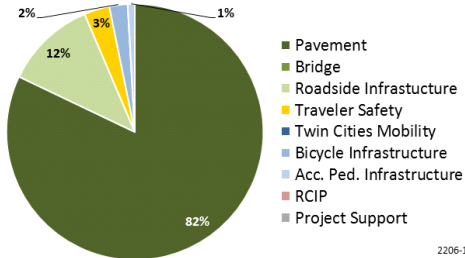
Hwy 109
Hwy 22 in Wells to I-90 in Alden
State Project No. 2206-13



Primary Purpose

Performance-based Need: Pavement

Investment Category



2206-13

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 and several pipes. There will be a detour to accommodate these activities.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.9	\$ 5.8
Other Construction Elements:	\$ 0.5	\$ 0.5
Engineering:	\$ 1.0	\$ 1.4
Right of Way:	\$ 0.1	\$ 0.1
Total:	\$ 7.4	\$ 7.8

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

Key Cost Estimate Assumptions

Actual letting cost is construction letting cost in current estimate.

Project Risks

None remaining.

Recent Changes and Updates

This project was let in Sept. 2017.

Project History

This project will resurface the pavement to achieve a smooth riding surface. 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. 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. The letting needed to be pushed to FY 2018. Construction in fall 2017 was considered, but construction staff limitations made that undoable. The change in construction year resulted in the estimate changing to account for additional inflation. This project is about to be let (Sept. 22, 2017) and has gone well. The only item that was added in the past year was a few tile crossings that the county requested be removed and

Schedule

Environmental Approval Date: 8/24/2016
Municipal Consent Approval Date: 12/7/2015
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 10/2/2015
Original Letting Date: 1/01/2017
Current Letting Date: 9/22/2017
Construction Season: 2018
Estimated Substantial Completion: Summer 2018



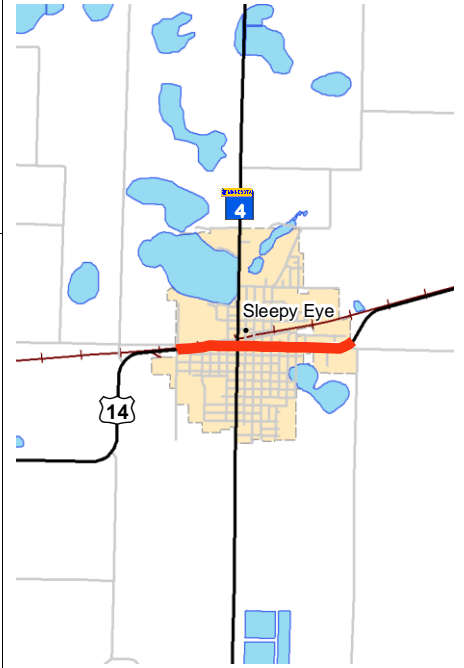
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Forrest Hasty

Revised Date: 12/17/2018

PROJECT SUMMARY

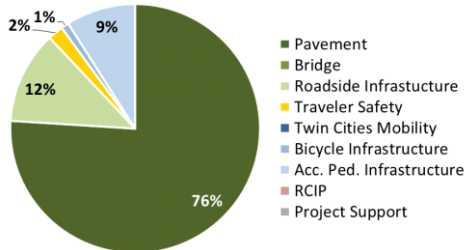
Hwy 14
Sleepy Eye
State Project No. 0803-38



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is for pavement work, ADA improvements and the addition of turn lanes in Sleepy Eye.

Recent Changes and Updates

Construction started spring 2018.

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) was done under another project (SP 0804-114) and was removed from this one. The rural portion has been dropped from this project and is a potential shelf project (under SP 0803-43). 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 rural portion has been dropped from this project and the project now only covers 1.5 miles of in-town work.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.1	\$ 3.3
Other Construction Elements:	\$ 0.4	\$ 0.2
Engineering:	\$ 1.5	\$ 0.4
Right of Way:	\$ 0.0	\$ 0.4
Total:	\$ 9.0	\$ 4.2

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 2018 and current estimate above was updated. This project was separated into 2 projects which is why the current estimate is substantially less. The other project is SP 0803-43.

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. Another potential cost would come from adding the original rural portion back to this project.

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: 1/26/2018
Current Letting Date: 3/23/2018
Construction Season: 2018
Estimated Substantial Completion: 2018



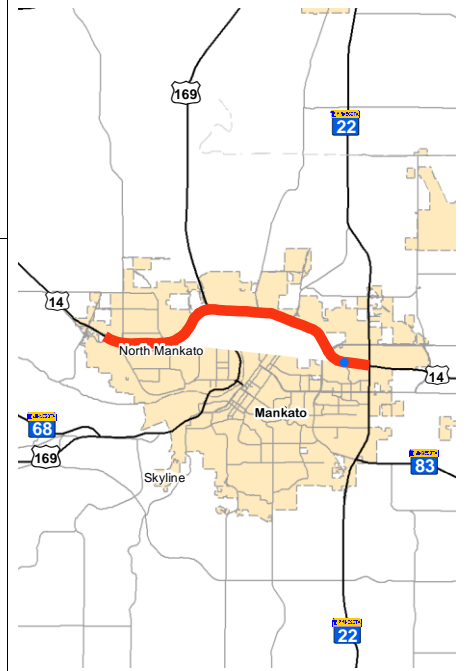
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones

Revised Date: 12/17/2018

PROJECT SUMMARY

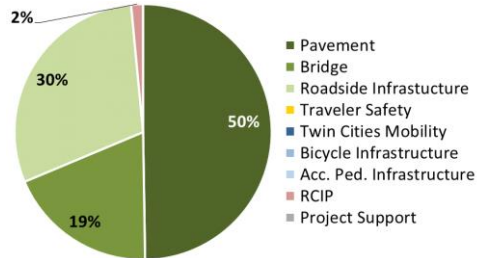
Hwy 14
North Mankato to Mankato
Bridge 91387
State Project No. 0702-125
[Hwy 14 Mankato/North Mankato Resurfacing](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This is a resurfacing project to mill and overlay the existing blacktop pavement from west of Lookout Drive in North Mankato to Hwy 22 in Mankato. Resurfacing will include both westbound and eastbound lanes. Repairs will be made to a large metal culvert at Thompson Creek.

Recent Changes and Updates

The project was let in March 2018 and construction began summer 2018 with a substantial completion in September 2018. The project costs were updated to reflect the pavement and bridge repair design plans. The project construction timeline was accelerated to complete the TH 14 pavement work in early summer to accommodate the Mankato Levee construction taking place at the interchange of TH 169 with TH 14 during fall 2018.

Project History

The roadway is deteriorating more rapidly than expected. It required extensive roadway patching during the summer 2017. The resurfacing was moved one construction season earlier in 2018 rather than 2019. Project scoping was completed and the project was selected for work. The project is driven by poor and rapidly deteriorating pavement and by corrosion on bridge 91387.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.1	\$ 5.3
Other Construction Elements:	\$ 0.6	\$ 0.5
Engineering:	\$ 1.3	\$ 1.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 9.0	\$ 7.0

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

Key Cost Estimate Assumptions

Current estimate reflects actual project letting cost for the project. Baseline cost estimates are inflated to the 2018 mid-point of construction. Current Estimate was updated to reflect the current pavement fix. At Baseline, this wasn't completely known.

Project Risks

The roadway section has the highest volume of traffic in District 7 with significant peak morning and afternoon traffic volumes, which can impact project costs due to performing the work without a detour or road closure. The costs for the large culvert rehabilitation are not easily estimated due to the bridge configuration, culvert depth and type of specialized repair needed. Costs were not included for the roadway bridge end post work because a more extensive bridge project is planned for the future.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Not needed
Construction Limits Established Date: 4/28/2017
Original Letting Date: 3/19/2019
Current Letting Date: 3/23/2018
Construction Season: Summer 2018
Estimated Substantial Completion: Fall 2018



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Glen Coudron

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 4

South of 10th Ave to 11th Ave in St. James

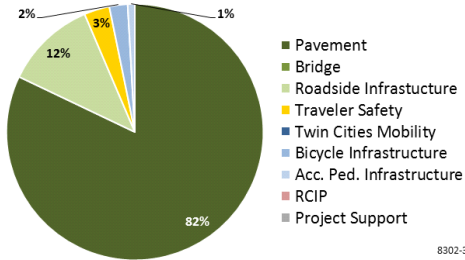
State Project No. 8302-38

[Hwy 4 Reconstruction in St. James](#)

Primary Purpose

Performance-based Need: Pavement

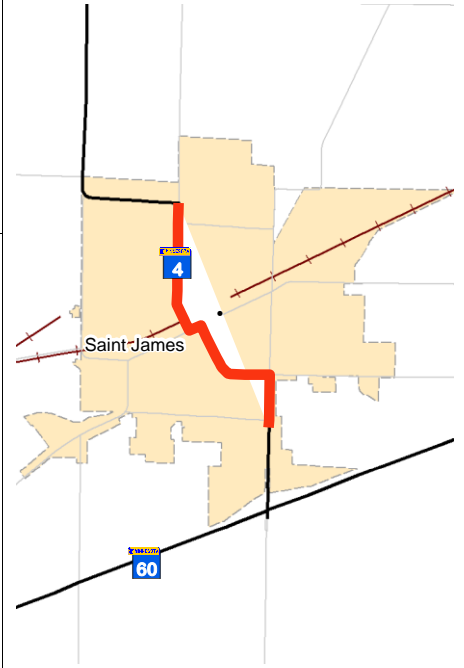
Investment Category



8302-38

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. 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

Project is in its 3rd and final year of construction.

Project History

The city approved the geometric layout. A consultant was procured for the final design work. The letting date changed to align with a scheduled letting date after the project was programmed. Some temporary easements will be needed in the process of making the sidewalks ADA compliant. The existing 1951 concrete throughout the corridor is in very poor condition. Multiple city utility breaks occur each winter due to poor utilities below the roadway. The project was first let in Feb. 2016 and all bids were rejected with the lowest being \$18.8 million. The reasons for the bids being well over the estimate include tight staging requirements, specifications for contaminated soil handling, and a less competitive bidding environment. Staging was revised and the project was re-bid in May 2016 giving contractors an additional year for construction work. The low bid was at \$15.7 million.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.3	\$ 15.7
Other Construction Elements:	\$ 0.4	\$ 0.7
Engineering:	\$ 1.0	\$ 1.5
Right of Way:	\$ 0.2	\$ 0.2
Total:	\$ 6.9	\$ 18.1

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

Key Cost Estimate Assumptions

The construction cost breakdown is: MnDOT's share - \$8.1 million; city share - \$6.9 million; and county share - \$0.6 million. The current estimate is based on the awarded contract from the May 2016 letting.

Project Risks

While in construction with the majority of the underground work complete, the project risks are mostly related to construction schedule with the contractor; however, the project is still expected to be complete in 2018.

Schedule

Environmental Approval Date: 11/23/2015
Municipal Consent Approval Date: 12/02/2014
Geometric Layout Approval Date: 4/10/2015
Construction Limits Established Date: Summer 2015
Original Letting Date: 6/30/2016
Current Letting Date: 5/22/2016
Construction Season: 2016 - 2018
Estimated Substantial Completion: Fall 2018



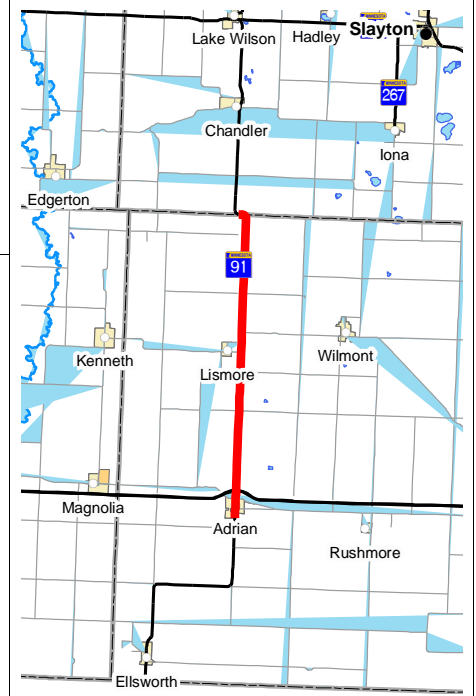
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Zachary Tess

Revised Date: 12/17/2018

PROJECT SUMMARY

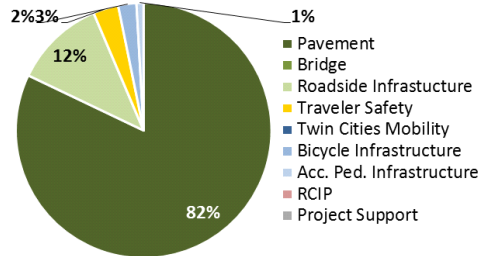
Hwy 91
Adrian to Nobles/Murray county line
Bridge 1503, 8793
State Project No. 5308-29
[Hwy 91 Adrian Resurfacing](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a 15-mile cold in place recycle of Hwy 91 from the southern Adrian city limits to the Nobles/Murray county line. This does not include a concrete pavement rehabilitation in downtown Adrian. The project includes the replacement of two box culverts/bridges.

Recent Changes and Updates

The scope was changed to increase the life of the pavement fix by changing from a mill and overlay to a cold in place recycle fix. Guardrail updates were included in two locations. A right turn lane and sidewalk extension were added due to a new residential development on the south end of town.

Project History

The project was moved to FY 2020 to free up funding for other projects in FY 2018. The replacement of two bridges (#1503 and #8793) was added to the scope. The scope was also revised to include sidewalk repairs to improve ADA compliance. 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.9	\$ 9.9
Other Construction Elements:	\$ 4.7	\$ 0.9
Engineering:	\$ 1.3	\$ 2.1
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 8.7	\$ 12.9

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

Key Cost Estimate Assumptions

The baseline estimate assumes a medium mill and overlay, extensive ADA work, and the replacement of two box culverts. There is no work at other box culverts. The current estimate of cost changed to account for an additional year of inflation, added bridges, additional ADA work, included guardrail, included city development work and upgraded pavement fix.

Project Risks

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: 2/22/2019
Construction Season: August 2019 - November 2020
Estimated Substantial Completion: Fall 2020



Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Matthew Young

Revised Date: 12/17/2018

PROJECT SUMMARY

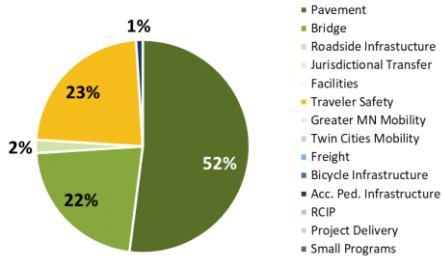
Hwy 99

Birch St in Nicollet to S Jct Hwy 169 in St Peter
State Project No. 5206-31

Primary Purpose

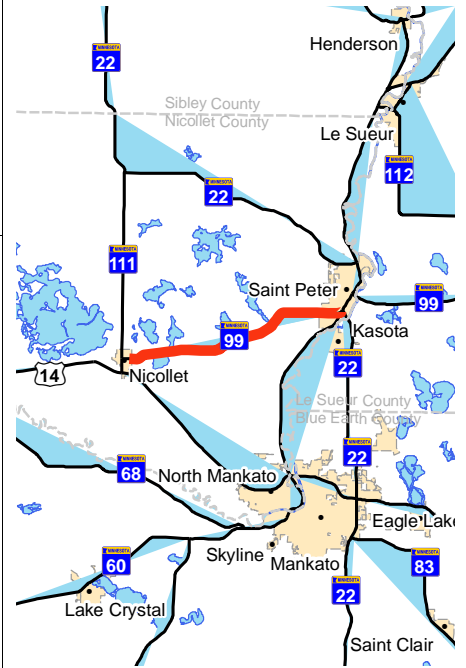
Performance-based need: Pavement Condition

Investment Category



Project Description

For this project, the roadway surface will be milled and overlaid with asphalt. Following the milling, deteriorated joints will be repaired. Locations that do not have 4 feet of shoulder will be widened to allow for rumble strips and a bike shared-lane marking. Lighting will be added at some intersections. Major culvert repairs/replacements will be completed. Guardrail will be updated. Some accesses may be removed if landowners are willing. The work will be done with lane closures.



Recent Changes and Updates

Scoping for this project is completed. ADA recommendations have been made. MnDOT ADA Office has provided recommendations for possible improvements to pedestrian infrastructure (if additional funding is provided).

Project History

The project was identified as a resurfacing candidate. The pavement condition is fair and projected to be poor before the project is constructed. The box culvert bridges require work under this project. It was selected to enter the STIP as a project for FY 2021.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.4	\$ 5.4
Other Construction Elements:	\$ 0.4	\$ 0.4
Engineering:	\$ 1.0	\$ 1.0
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.

Key Cost Estimate Assumptions

The estimate assumed 4-inches mill and 4-inches overlay. It assumed lighting at all paved county roads. Estimate was inflated to 2021.

Project Risks

This project is a candidate for a bituminous reclamation. If additional funding is received it may be up scoped. There may be fewer county roads lighted than anticipated.

Schedule

Environmental Approval Date: Pending Approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Need unknown
Construction Limits Established Date: Need unknown
Original Letting Date: 10/23/2020
Current Letting Date: 10/23/2020
Construction Season: 2021
Estimated Substantial Completion: 2021



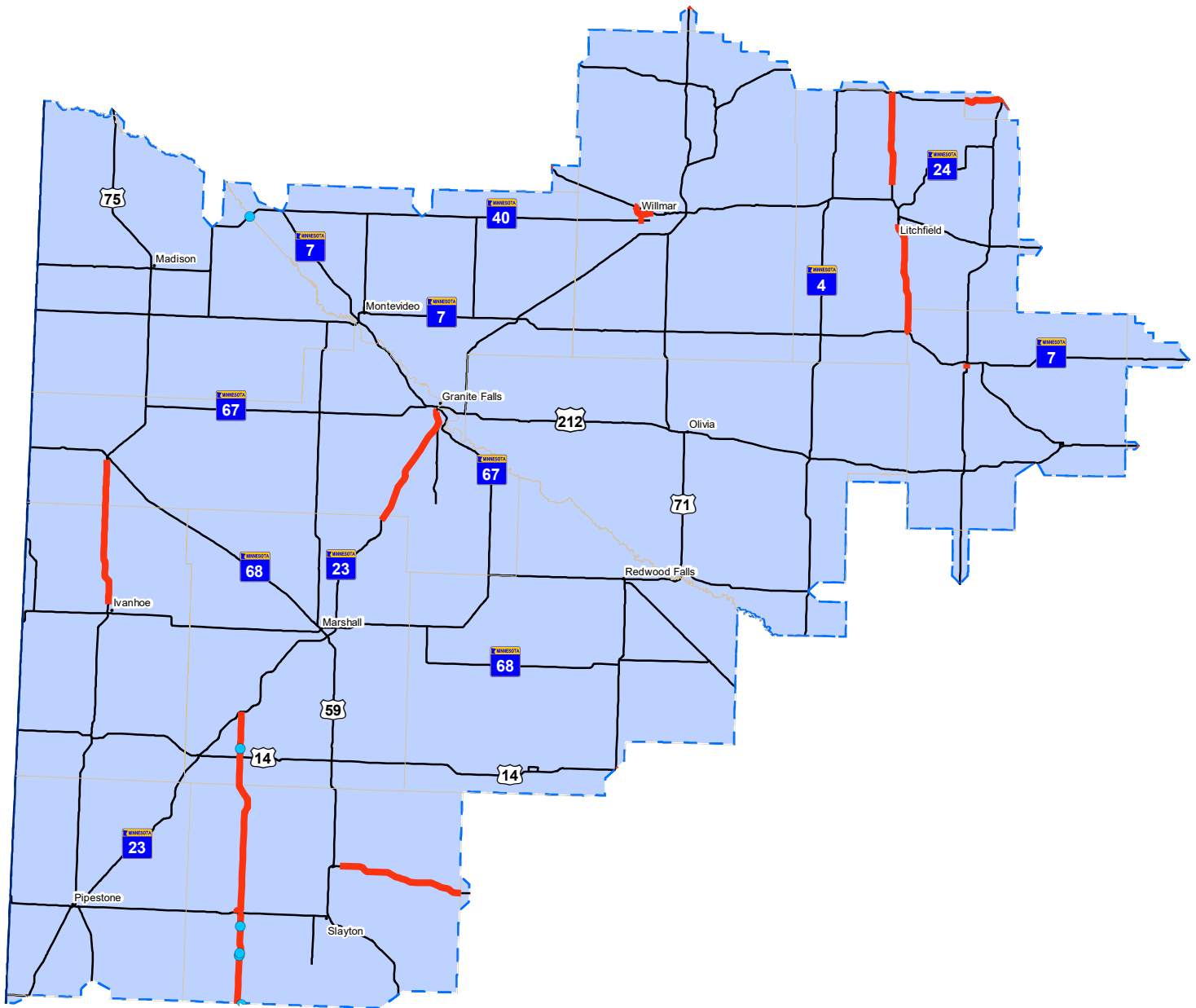
Minnesota Department of Transportation
District 7
2151 Bassett Drive
(507) 304-6100

District Engineer: Greg Ous
Project Manager: Robert Jones






Revised Date: 12/17/2018

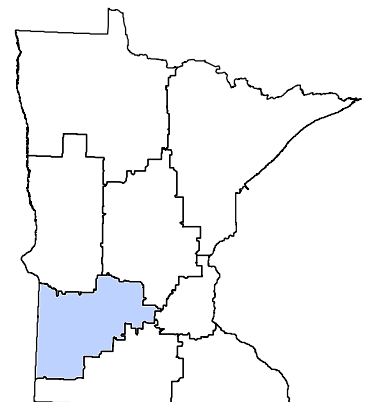
Major Highway Projects 2018

D8-WILLMAR



Major Highway Projects

-  Bridge Projects
-  Roadway Projects
-  State Boundary
-  County Line
-  Construction District

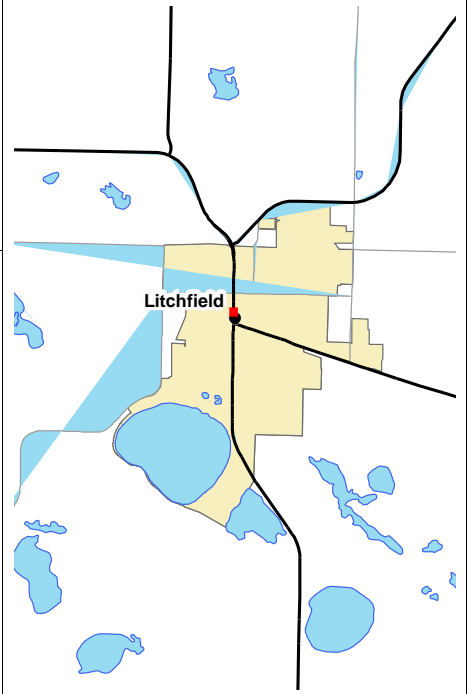


District 8 Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 12	4704-89	4th Street to the south junction of Hwy 22, south of the railroad tracks, in Litchfield	G 2	306
Hwy 40	1209-22	3 miles west of Milan	G 3	307
Hwy 75	4109-29	Hwy 19 in Ivanhoe to Canby	G 4	308
Hwy 91	5108-12	Hwy 30 in Lake Wilson to Hwy 23	G 5	309
Hwy 91	5107-14	Murray/Nobles County Line to MN30 (Lake Wilson)	G 6	310
Hwy 15	4304-53	Hutchinson- 5th Ave. SW to 2nd Ave. NE	G 7	311
Hwy 23	4203-50	Cottonwood to Jct. 212 Granite Falls	G 8	312
Hwy 30	5103-91	E of U.S. 59 to Murray/Cottonwood County Line	G 9	313
Hwys 12 & 40	3403-74	Hwy 12 - Twp. 26 to CSAH 55; Hwy 40 - CSAH 55 to CSAH 5	G 10	314
Hwy 22	4308-34	From the junction of Hwy 7 to the south edge of Litchfield	G 11	315

PROJECT SUMMARY

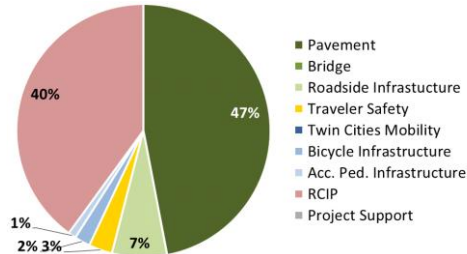
Hwy 12
4th Street to the south junction of Hwy 22, south of the railroad tracks, in
Litchfield
State Project No. 4704-89
[Hwy 12 Reconstruction in Litchfield](#)



Primary Purpose

Performance-based Need: Pavement

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

Outreach continues. Final plans have started. On schedule for letting.

Project History

The district hired a consultant to assist with the development of this project. Over the last year, the project progressed through the project development process, while continuing to work with the city and continuing public outreach. Costs were updated to reflect the current estimate. From Oct. 2015 to April 2016, the district, with the assistance of a consultant, conducted a robust public engagement process to determine what the Litchfield community wanted out of a downtown reconstruction project. Currently this project is progressing through the project development phases and there will be continued public involvement from design through construction. The letting for this project was moved up several months to provide more time in construction for this large and complex project. 2015 was the first year in the report.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 3.7	\$ 5.5
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 0.6	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 4.5	\$ 6.4

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

Key Cost Estimate Assumptions

The cost estimate includes many of the risks described below. Several factors caused the cost estimates to increase as follows: the project limits were extended two blocks on TH 12 to the east, five City blocks had to be added to the project in order to accommodate storm sewer needs, and finally a water quality pond was added that was not in the original scope.

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: Pending approval
Municipal Consent Approval Date: Pending approval
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: Pending approval
Original Letting Date: 03/22/2019
Current Letting Date: 03/22/2019
Construction Season: 2020
Estimated Substantial Completion: Fall 2020



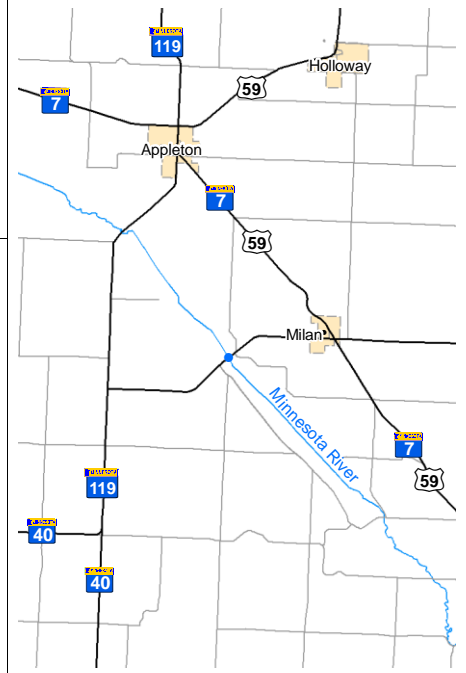
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Lowell Flaten

Revised Date: 12/17/2018

PROJECT SUMMARY

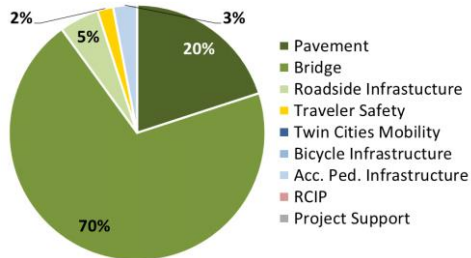
Hwy 40
3 miles west of Milan
Bridge 5380
State Project No. 1209-22
[Hwy 40 Bridge Replacement](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project is the replacement of bridge 5380 over the Minnesota River or Lac qui Parle Lake.

Recent Changes and Updates

Geometric layout approved. Preliminary bridge and roadway plans at 50 percent. On schedule for letting date.

Project History

This project is continuing through the project development process, including public outreach. This project recently changed from a bridge rehabilitation to a bridge replacement due to public concerns. The decision to replace the bridge rather than rehabilitate the existing structure was determined through extensive public outreach. This project was previously a bridge rehabilitation until late 2015, when it changed to a bridge replacement. The 2017-2020 state transportation improvement program is the first year it is shown as a bridge replacement.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 5.3	\$ 5.3
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.0	\$ 0.9
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 6.8	\$ 6.8

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

Key Cost Estimate Assumptions

Engineering is 20 percent of construction total and right of way costs are based on previous scopes to replace the bridge in 2009. The cost estimates went down when the project shifted from rehab to replacement due to the historic nature of the bridge. It is more costly to rehab when following historic guidelines.

Project Risks

This project will need an Army Corps of Engineer's permit and review through the environmental process, including Minnesota State Historic Preservation Office concurrence.

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: 3/22/19
Current Letting Date: 3/22/19
Construction Season: 2019
Estimated Substantial Completion: 2019



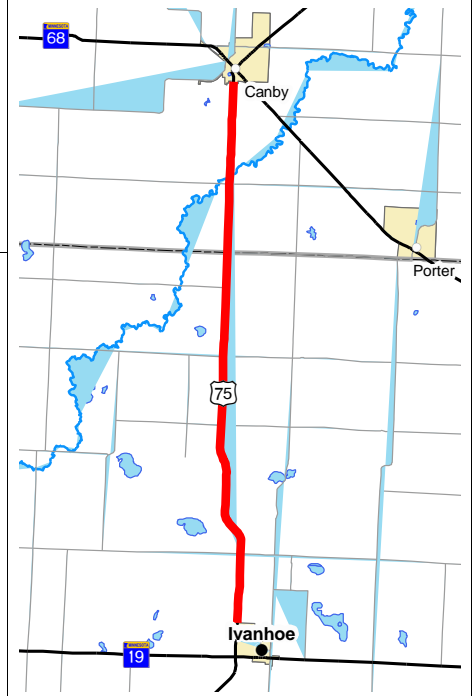
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Gene East

Revised Date: 12/17/2018

PROJECT SUMMARY

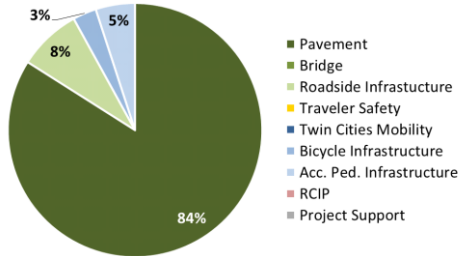
Hwy 75
Hwy 19 in Ivanhoe to Canby
State Project No. 4109-29



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay on Highway 75 and for approximately 17 miles from Hwy 19 in Ivanhoe to Canby, as well as a small portion of Highway 68 in 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 five culverts.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.6	\$ 5.3
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.8	\$ 0.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.5	\$ 6.3

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

Recent Changes and Updates

ADA costs determined. Final design phase and plan preparation in progress. On schedule for letting. The letting date was advanced for program balanced letting.

Project History

The scope of this project has changed to include a portion of Highway 68 for better project coordination. All cost estimates have been updated to reflect the change in scope. This project is continuing to progress through the project development phases. This project is progressing through the project development phases. 2015 was the first year this project appeared in the report.

Key Cost Estimate Assumptions

Engineering estimates reflect 20 percent of construction letting. This project has no right of way costs.

Project Risks

No known significant project risks.

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: 03/22/2019
Current Letting Date: 10/26/2018
Construction Season: 2019
Estimated Substantial Completion: Fall 2019



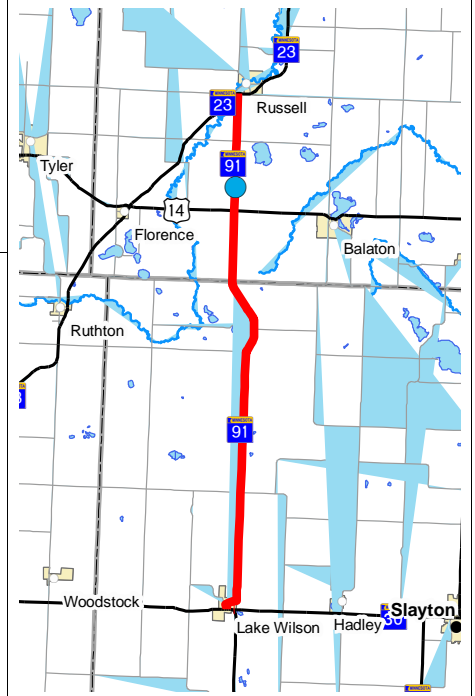
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Kent Medalen

Revised Date: 12/17/2018

PROJECT SUMMARY

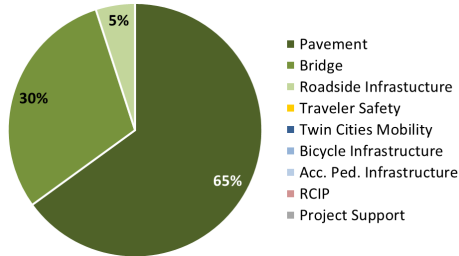
Hwy 91
Hwy 30 in Lake Wilson to Hwy 23
Bridge 9094
State Project No. 5108-12



Primary Purpose

Performance-based Need: Pavement
Condition 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

Final design phase and plan preparation in progress. On schedule for letting date.

Project History

This project is progressing through the project development process. The geometric layout and construction limits were approved since last year's report. The total project cost estimate was reduced due to updated inflation factors. 2015 was the first year this project was in the report. 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 7.1	\$ 6.0
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.1	\$ 1.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 8.4	\$ 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. This project has no right of way costs.

Project Risks

No known significant project risks. Relatively minor cost risk for culverts scoped for liners, may need to be replaced. Pedestrian improvements in the urban section may incur costs for unknown issues.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/4/2017
Construction Limits Established Date: 8/4/2017
Original Letting Date: 02/22/2019
Current Letting Date: 02/22/2019
Construction Season: 2019
Estimated Substantial Completion: Fall 2019



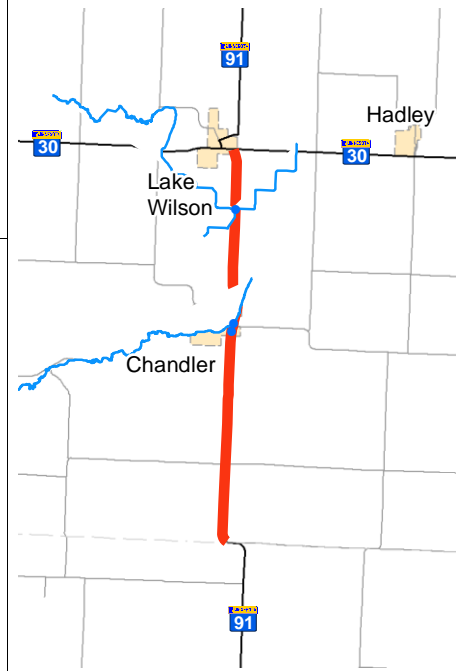
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Jesse Vlamminck

Revised Date: 12/17/2018

PROJECT SUMMARY

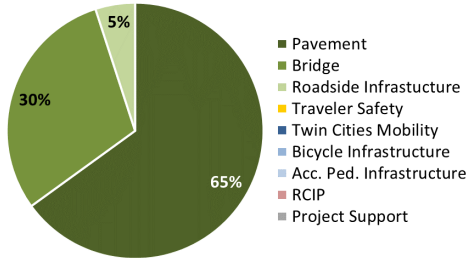
Hwy 91
Murray/Nobles County Line to MN30 (Lake Wilson)
Bridge 6753, 6754, 8759
State Project No. 5107-14



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is a mill and overlay of Hwy 91 from Hwy 30 in Lake Wilson to Hwy 23 near Russell. The project also includes bridge replacements on bridge 6782, 6754 and 8759 over the Des Moines River.

Recent Changes and Updates

Final design phase and plan preparation in progress. On schedule for letting.

Project History

This project is continuing to progress through the project development process. The geometric layout and construction limits were approved since last year's report. The project is progressing through the project development phases. The total project cost estimate was reduced due to updated inflation factors. 2016 was the first year in the report.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.3	\$ 4.1
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.7	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.1	\$ 4.8

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. No right of way costs are foreseen for the project.

Project Risks

No significant project risks.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/4/2017
Construction Limits Established Date: 8/4/2017
Original Letting Date: 2/22/2019
Current Letting Date: 2/22/2019
Construction Season: 2020
Estimated Substantial Completion: Fall 2019



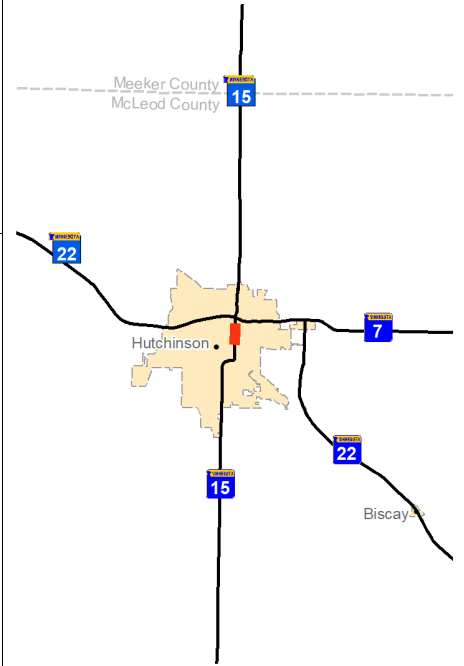
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Jesse Vlamink

Revised Date: 12/17/2018

PROJECT SUMMARY

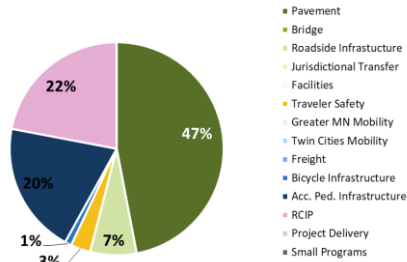
Hwy. 15
Hutchinson - 5th Ave. SW to 2nd Ave. NE
State Project No. 4304-53
[Hwy 15 Hutchinson Reconstruction](#)



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This is a reconstruction of State Highway 15 between 5th Ave. SW and 2nd Ave. NE, which contains land use similar to downtown commercial and residential. The project includes the replacement of the pavement, curb and gutter, sidewalk, pedestrian ramps, driveways, signals, lighting, striping, storm sewer, etc. and for the local unit of government, replacement of the utilities with sewer and water.

Recent Changes and Updates

The layout, construction limits and right of way acquisition process is underway. Additional milestones on the horizon are preliminary plan submittals. MnDOT has continued to conduct public engagement activities as the project progresses through design.

Project History

This reconstruction project was selected due to poor pavement condition and local utility improvement needs. The Community has done extensive study and outreach for their downtown/main street area. Cost sharing is anticipated for parking lanes, sidewalk, traffic signals, and aesthetics. Tied to SP # 4304-53.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 6.3	\$ 6.3
Other Construction Elements:	\$ 0.2	\$ 0.2
Engineering:	\$ 1.0	\$ 1.0
Right of Way:	\$ 0.2	\$ 0.2
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

12 percent for engineering and 8 percent for construction administration. It is also assumed that right of way will be approximately \$200,000, but that will not be fully realized until the property is acquired.

Project Risks

Project risks include encountering unknowns during construction that may come in the form of building irregularities or contaminated soil. The risk of these items were mitigated by completing building inspections and performing environmental reviews of the soil. Minor right of way acquisitions may be needed.

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: 11/22/2019
Current Letting Date: 11/22/2019
Construction Season: 2020
Estimated Substantial Completion: Fall 2020



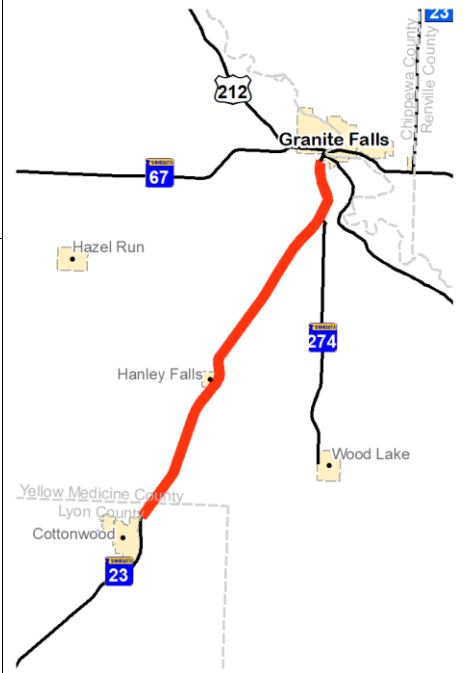
Minnesota Department of Transportation
District 8
2506 Transportation Road
(320) 231-5195

District Engineer: Jon Huesby
Project Manager: Gene East

Revised Date: 12/17/2018

PROJECT SUMMARY

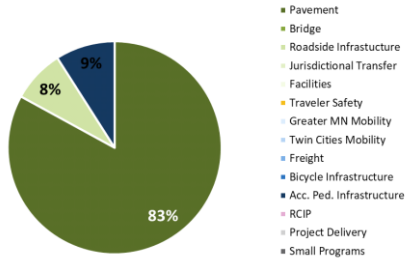
Hwy. 23
Cottonwood to Jct. 212 Granite Falls
Bridge 91419, 91420, 91459, 87007
State Project No. 4203-50



Primary Purpose

Performance-based Need: Pavement
Condition and Bridge Condition

Investment Category



Project Description

The project is a 3" mill and 7" concrete overlay. It also replaces 3 pipe bridges with box culvert bridges 91419, 91420 and 91459 with new panels on bridge 87007. There will be construction of five sets of left turn lanes at county road intersections. Realignment of County Road 9 in Cottonwood County for safety improvements.

Recent Changes and Updates

Geometric layout in progress. Bridge replacements added via recommendation by the MnDOT Bridge Office.

Project History

The pavement section along this stretch of road is full depth bituminous and one of the last remaining of that type in the District. The characteristics of such a pavement section is that the bottom part of the bituminous lacks the necessary drainage needed to wick away moisture and consequently the pavement deteriorates from the bottom up. This creates additional maintenance then is shown on the surface. For this reason this section of road has required substantial maintenance in recent years in order to preserve the road and maintain an acceptable ride, until a more substantial fix can be completed. The improvements on this project have been coordinated with our local government partners who include Lyon County, Yellow Medicine County, Cottonwood, and Granite Falls on those items of interest to the community, in particular the detour and highway improvements.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 26.2	\$ 26.2
Other Construction Elements:	\$ 0.9	\$ 0.9
Engineering:	\$ 4.4	\$ 4.4
Right of Way:	\$ 0.4	\$ 0.4
Total:	\$ 31.9	\$ 31.9

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 known significant project risks.

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: January 2020
Current Letting Date: January 2020
Construction Season: 2020
Estimated Substantial Completion: Fall 2020



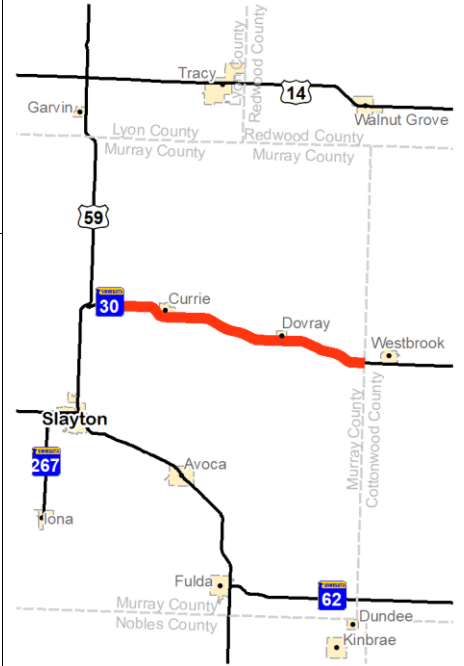
Minnesota Department of Transportation
District 8
2507 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Lance Kalthoff

Revised Date: 12/17/2018

PROJECT SUMMARY

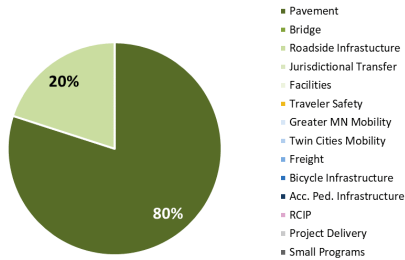
Hwy. 30
0.1 Mi. E. of U.S. 59 to Murray/Cottonwood County Line
Bridge 6782
State Project No. 5103-91



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

This project is on TH 30 from TH 59 to the Murray-Cottonwood County line. The anticipated pavement fix is a 2.5" mill and overlay. This project also includes a concrete overlay of bridge 6782, along with deck repairs, replacement of guardrail and replacement of end posts. The installation of culvert liners along the corridor is also anticipated.

Recent Changes and Updates

Scope was approved on 8/25/2017. Design and plan preparation are in progress and it's on schedule for letting.

Project History

Project was initially scoped in the fall of 2016 as a pavement rehabilitation project due to anticipated pavement deterioration over the next decade. Over the next several months, the initial scope of the project was modified to include guardrail replacement, end post repairs, and deck repairs of Bridge #6782 east of Currie. The installation of culvert liners was also added to the scope to facilitate drainage improvements along the corridor. The final scope was approved on August 25, 2017.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 4.2	\$ 4.2
Other Construction Elements:	\$ 0.1	\$ 0.1
Engineering:	\$ 0.7	\$ 0.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 5.0	\$ 5.0

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 known significant project risks.

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: 11/20/2020
Current Letting Date: 11/20/2020
Construction Season: 2021
Estimated Substantial Completion: Fall 2021



Minnesota Department of Transportation
District 8
2508 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Chris Nienaber

Revised Date: 12/17/2018

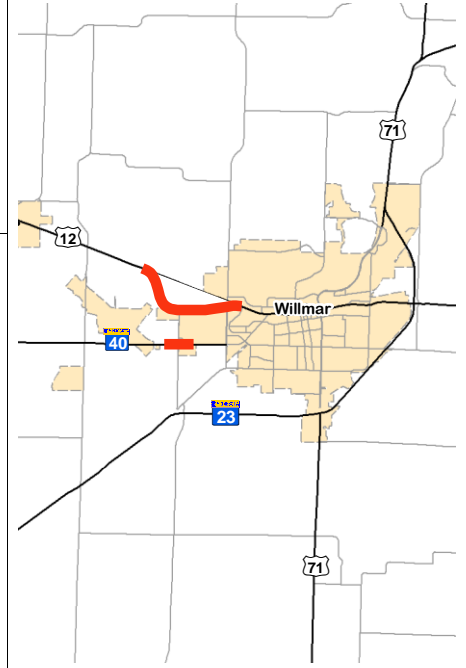
PROJECT SUMMARY

Hwys 12 & 40

E. of Twp. 26 to E. of CSAH 55; Hwy 40 - W. of CSAH 55 to W. of CSAH 5

State Project No. 3403-74

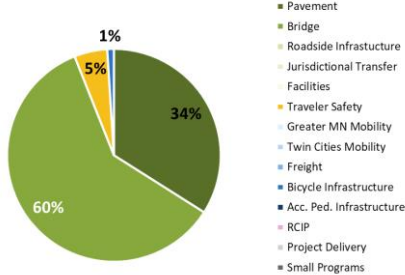
[Willmar Wye Project](#)



Primary Purpose

Performance-based Need: Regional and Community Improvement Priority

Investment Category



Project Description

This is a collaborative project between MnDOT, Burlington Northern Santa Fe, Willmar, Kandiyohi County and Willmar's Economic Development Commission. The project creates a rail connection between two existing Burlington Northern Santa Fe railway lines and modifies surrounding roadways to better move freight through Willmar. US 12 will be reconstructed from just east of Township Road to east of CSAH 5. A bridge for Hwy 12 traffic will be added over the new rail line. MN 40 will be reconstructed just west of CSAH 55 to just west of CSAH 5 and a new bridge for Hwy 40 traffic will be constructed over the new rail line.

Recent Changes and Updates

Substantial progress was made in negotiation of the master cooperative agreement. The complexity of the agreement resulted in significant delays to the project schedule, but the delays do not threaten the project. Final agreement is expected soon, with final execution of the master cooperative agreement anticipated.

Project History

Several key permits and agreements were attained or are approaching completion. The master cooperative agreement (State, City, County and BNSF) is nearing its final draft stage. Extra geotechnical monitoring will be used in the construction process to minimize risk of instability. Construction is expected to take place from 2018 through 2021 for the highway portion of the project. There are several agreements that still need to be negotiated. This project will require a large quantity of borrow dirt and the area does not have a borrow site. The price of borrow dirt could change dramatically depending on how far away it is to haul from. A soils investigation will likely show some poor soils. How these poor soils are dealt with could have a significant cost. This is a design-build project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2016

	Baseline Est.	Current Est.
Construction Letting:	\$ 36.2	\$ 27.2
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.0	\$ 3.0
Right of Way:	\$ 2.5	\$ 2.5
Total:	\$ 41.7	\$ 32.7

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

Key Cost Estimate Assumptions

Assumptions for the construction letting include: 1) Alternative 2B will be chosen 2) \$20.2 million railroad costs and \$16 million roadway costs 3) Includes 15 percent of the roadway costs for design-build assumptions for engineering/consultant costs include: 1) 8 percent of the total letting cost to cover preliminary design of the roadway and preliminary and final design of the railroad. The cost estimates were fairly fluid as the Tiger Grant cost shares with the various entities shifted as did the project development costs.

Project Risks

Given that this project is a public/private partnership, there are several major risks inherent to the project related to the public private partnership between MnDOT, Kandiyohi County, Willmar and BNSF Railway. Risks remain for the unknown source(s) and costs of borrow material for the project. The design-build RFP will also allow for geotechnical innovation to mitigate potential soils risks.

Schedule

Environmental Approval Date: 5/4/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: Pending approval
Original Letting Date: 10/19/2017
Current Letting Date: 9/26/2018
Construction Season: 2018
Estimated Substantial Completion: 2022



Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Paul Rasmussen

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 22

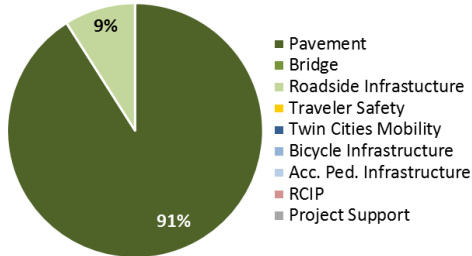
From the junction of Hwy 7 to the south edge of Litchfield
State Project No. 4308-34

Substantially Complete

Primary Purpose

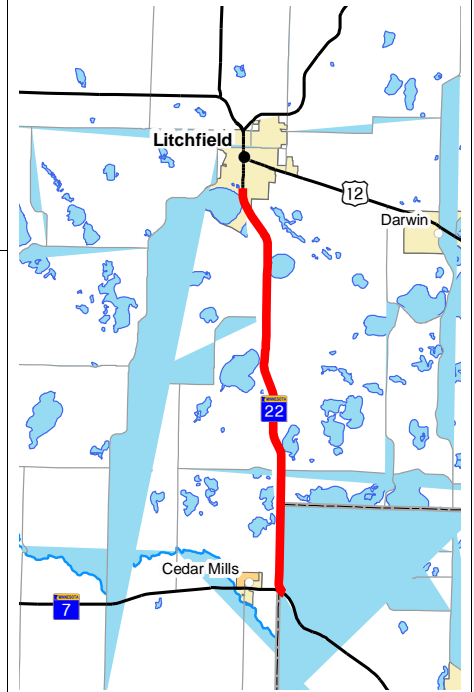
Performance-based Need: Pavement

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 Litchfield.



Recent Changes and Updates

One culvert liner was not replaced with the project, but will be replaced in separate projects. Project is complete as of fall 2017.

Project History

This project was recently let, the environmental documentation was approved and updated below since last year's report. All cost estimates were updated with the letting costs. The environmental documentation for this project is now complete. The total project cost estimate was reduced due to updated inflation factors. 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	\$ 5.0
Other Construction Elements:	\$ 0.1	\$ 0.0
Engineering:	\$ 1.1	\$ 0.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 7.2	\$ 5.6

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 reflects the letting cost.

Project Risks

There are currently no outstanding risks on this project.

Schedule

Environmental Approval Date: 12/12/2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: June 2015
Construction Limits Established Date: Not needed
Original Letting Date: 01/27/2017
Current Letting Date: 01/27/2017
Construction Season: 2017
Estimated Substantial Completion: Fall 2017



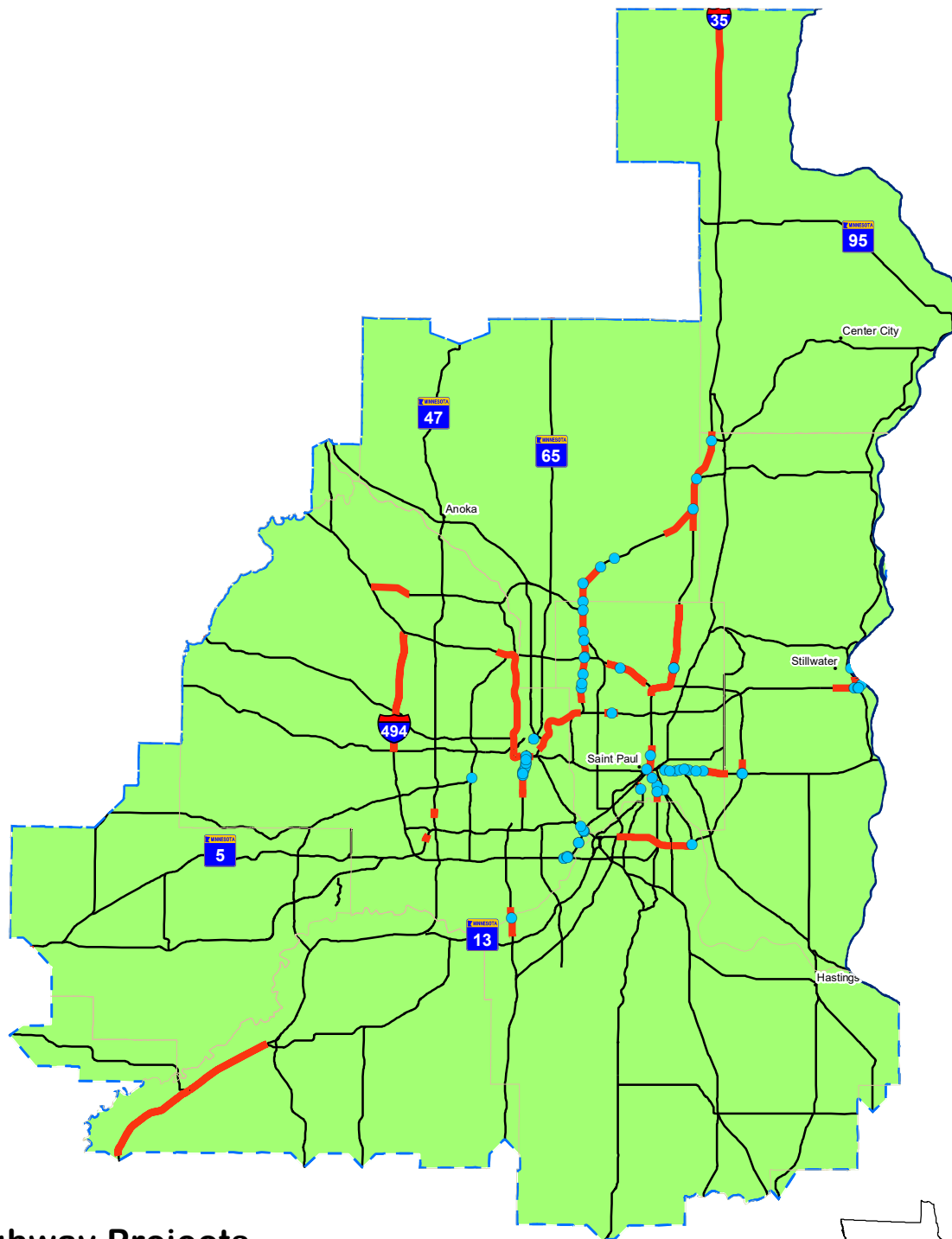
Minnesota Department of Transportation
District 8
2505 Transportation Road
(320) 231-5195

District Engineer: Jon Huseby
Project Manager: Kelly Brunkhorst

Revised Date: 12/17/2018

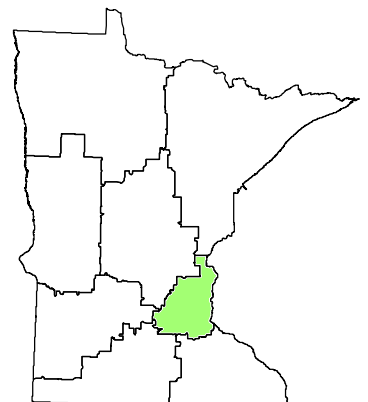
Major Highway Projects 2018

D-METRO



Major Highway Projects

- Bridge Projects
- Roadway Projects
- State Boundary
- County Line
- Construction District



Metro District Project List

ROUTE	STATE PROJECT #	PROJECT LOCATION	PAGE NAME	PAGE #
Hwy 149	6223-20	Smith Avenue High Bridge over the Mississippi River in St. Paul	H 2	318
Hwy 169	7007-34	Hwy 19 to Ash St in Belle Plaine	H 3	319
Hwy 169	7008-111	Scott County, from Hwy 25 in Belle Plaine to Hwy 282 in Jordan	H 4	320
Hwy 36	8221-01	Oak Park Heights, Stillwater and Bayport	H 5	321
Hwy 5	2732-105	Hwy 5/I-494 Jct to south end of MN River bridge	H 6	322
Hwy 65	2710-47	Minneapolis	H 7	323
Hwy 952A (Robert St)	6217-43	Robert St, from Annapolis St to 12th St. in St. Paul	H 8	324
I-35	1380-84	Harris to Chisago-Pine county line	H 9	325
I-35	8280-47	Washington, Anoka Counties	H 10	326
I-35E	6281-25	Vadnais Heights and White Bear Lake - Goose Lake Road Bridges	H 11	327
I-35W	2782-347	Minneapolis	H 12	328
I-35W	2783-166	Minneapolis, Roseville	H 13	329
I-35W	1981-124	Minnesota River Crossing (Bloomington and Burnsville)	H 14	330
I-35W	2782-327	43rd Street to I-94 Commons	H 15	331
I-35W	6284-180	Roseville to Hwy 10	H 16	332
I-494	1985-149	South St Paul to Inver Grove Heights	H 17	333
I-494	1985-148	South St. Paul to Mendota Heights	H 18	334
I-694	8286-81	Oakdale/Woodbury	H 19	335
I-694	6285-143	Little Canada to Arden Hills	H 20	336
I-94	2781-432	Nicollet Avenue in Minneapolis to Shingle Creek Bridge in Brooklyn Center	H 21	337
I-94	6283-234	I-94 (Mounds Blvd to Hwy 120) and Hwy 61 (Burns Avenue to Hwy 5)	H 22	338
Hwy 10	0202-95	Hwy 10 at County Road 83 (Armstrong Blvd) interchange	H 23	339
Hwy 100	2734-33	36th Street to 25 1/2 Street in St. Louis Park	H 24	340
Hwy 169	2772-113	Nine Mile Creek Bridge (Hopkins, Edina, Minnetonka)	H 25	341
Hwy 212	2763-49	At Shady Oak Road in Eden Prairie	H 26	342
Hwy 36	6212-148	Lexington Ave bridge over Hwy 36 in Roseville	H 27	343
Hwy 610	2771-37	Hwy 81 to I-94 in Maple Grove	H 28	344
I-35E	6281-47	Little Canada Rd in Little Canada to Lino Lakes	H 29	345
I-35E	6280-308	Cayuga Bridge between University Ave and Maryland Ave	H 30	346
I-494	2785-330	I-394 in Minnetonka to I-94/494/694 in Maple Grove	H 31	347

PROJECT SUMMARY

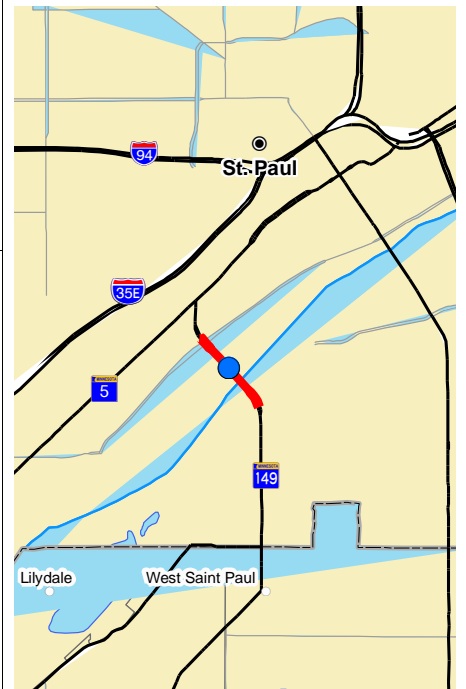
Hwy 149

Smith Avenue High Bridge over the Mississippi River in St. Paul

Bridge 62090

State Project No. 6223-20

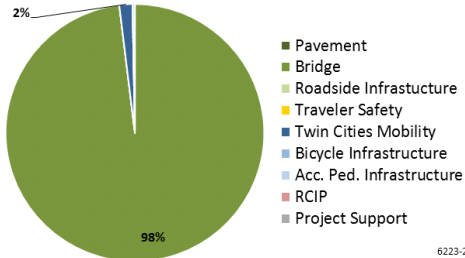
[Hwy 149 High Bridge](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

The project is redecking the Smith Avenue High Bridge over the Mississippi River. Associated miscellaneous work, such as replacing the approach panels, is included. ADA facilities adjacent to the bridge will be upgraded to comply with the current standards. The project will be delivered using the Construction Manager/General Contractor project delivery method, which is expected to save time, reduce risk and foster innovation.

Recent Changes and Updates

The project letting in August 2017 resulted in a construction bid of \$43 million, which was higher than the estimate of \$36.6 million in the previous MHPR. This was a result of unfavorable but acceptable bids. Construction continues and the bridge is expected to open in December 2018.

Project History

In 2016, additional inspections and project scoping found the bridge more deteriorated than originally known when the project was initially scoped in 2012. Significant deterioration was found on deck surface and under the deck. Initial scoping efforts did not accurately reflect the costs associated with the bridge or the cost to accelerate construction to keep the full bridge closure to one year. A separate work package was developed to install a scaffolding system prior to the start of major construction to create safe and efficient access for construction crews. Cost of scaffolding was split from larger project's cost. Changes in 2015 include updating the letting date to Jan. 27, 2017, with an estimated substantial completion date of Jan. 26, 2018. A pavement project in West St. Paul (SP 1917-45) was tied to the bridge project.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2013

	Baseline Est.	Current Est.
Construction Letting:	\$ 14.2	\$ 40.0
Other Construction Elements:	\$ 0.0	\$ 2.3
Engineering:	\$ 2.8	\$ 7.8
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 17.0	\$ 50.1

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

Key Cost Estimate Assumptions

Several significant changes occurred with this project in 2017 that greatly increased the TPCE from \$17 million to \$46.7 million, including discovery of unknown bridge damage, the original scope undervaluing the construction costs associated with this unique bridge type and location, and an accelerated construction timetable with a one-year bridge closure. Standard practices were used to develop estimates for this project. The project uses the CMGC method of delivery.

Project Risks

The bridge needs to be closed for one construction season, which impacts access for local businesses and neighborhoods. The rail line crossing under the north end of the bridge needs agreements and flagging during construction and must maintain river navigation during construction.

Schedule

Environmental Approval Date: 4/10/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Pending approval / CMGC
Construction Limits Established Date: 4/10/2017
Original Letting Date: 06/14/2017
Current Letting Date: 08/02/2017
Construction Season: 2017/2018
Estimated Substantial Completion: 12/01/2018



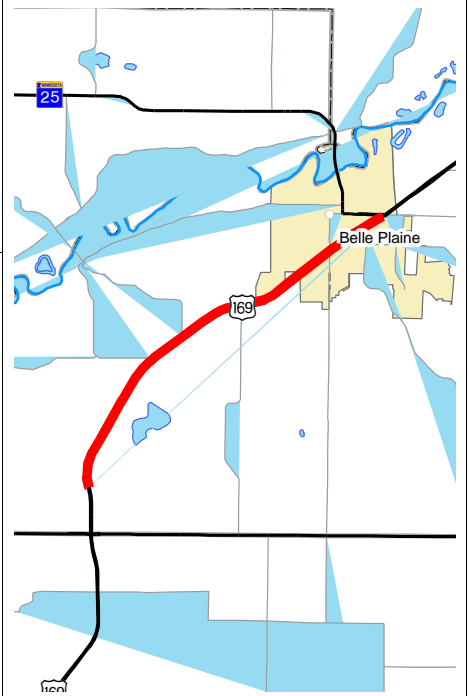
Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Dale Gade/Steve Kordows

Revised Date: 12/17/2018

PROJECT SUMMARY

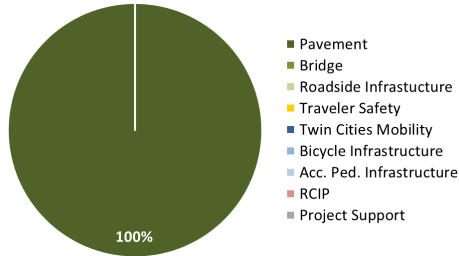
Hwy 169
Hwy 19 to Ash St in Belle Plaine
State Project No. 7007-34



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project is an unbonded concrete overlay of Highway 169 from Highway 19 to Ash Street in Belle Plaine. It also includes some minor concrete pavement rehabilitation work and minor drainage repairs.

Recent Changes and Updates

In 2018, the letting date changed from January to March, 2018. This project has been tied to another project on US 169, SP 7008-111, and they had a combined construction estimate of \$30.7 million. Favorable bids were received and the projects were let together for a construction letting of \$25 million. This project's share of the construction letting is shown under the Current Estimate as \$14.9 million.

Project History

In 2017, the project was tied to another pavement project on US Hwy 169, 7008-111, the letting date was moved to SFY2018, and the current construction letting estimate was lowered from \$21.5 million to \$18.7 million due to project coordination. Coordination resulted in savings due to shared traffic cross overs, median work, traffic control, and other construction elements. This project was first included in the Major Highway Projects Report in 2016. This project will provide a long-term pavement improvement to this road segment along a heavily traveled corridor with significant freight volumes.

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	\$ 14.9
Other Construction Elements:	\$ 0.0	\$ 0.8
Engineering:	\$ 3.6	\$ 3.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 25.1	\$ 19.4

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

Key Cost Estimate Assumptions

Cost savings occurred because of project coordination with another project on US 169 near Jordan, 7008-111. These savings included shared costs for traffic cross overs, median work, traffic control, and other construction elements. The current construction letting estimate decreased from \$21.5 million in 2016 to \$18.7 million due to coordination with 7008-111. Other costs that increased include \$0.1 million to engineering and an additional \$0.7 million to other construction elements for risk. In 2016 a scoping change reduced the construction letting costs resulting in a lower total project cost estimate.

Project Risks

Project risks include soil contamination, traffic detour and access for adjacent properties, including a school and businesses.

Schedule

Environmental Approval Date: 2/27/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: Pending approval
Original Letting Date: 07/27/18
Current Letting Date: 01/26/2018
Construction Season: 2018/2020
Estimated Substantial Completion: 10/01/2020



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Nicole Peterson

Revised Date: 12/17/2018

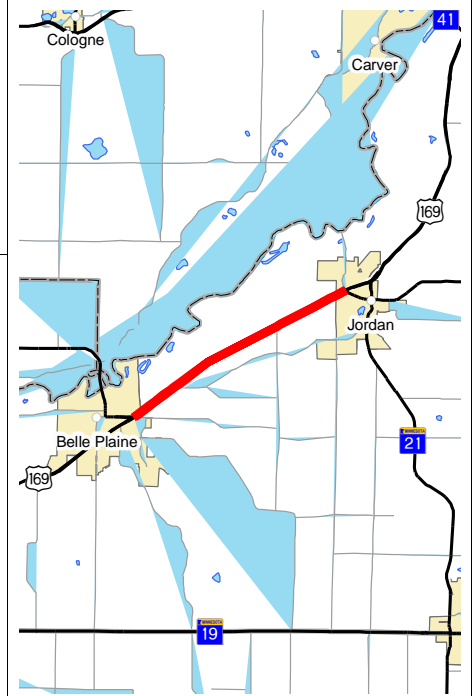
PROJECT SUMMARY

Hwy 169

Scott County, from Hwy 25 in Belle Plaine to Hwy 282 in Jordan

State Project No. 7008-111

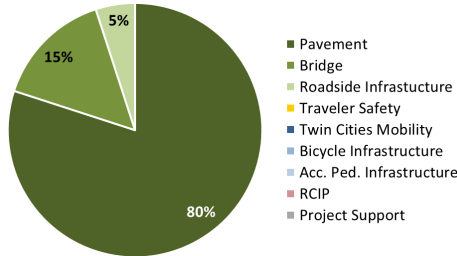
[Highway 169, Belle Plaine to Jordan](#)



Primary Purpose

Performance-based Need: Pavement Condition and District Safety Plan

Investment Category



Project Description

This project is for an unbonded concrete overlay, median closures, add in u-turns, and cable guardrails on Highway 169 from Highway 25 in Belle Plaine to Highway 282 in Jordan.

Recent Changes and Updates

In 2018, the letting date changed from January to March 2018. This project was tied to another project on US 169, SP 7007-34, and they had a combined construction estimate of \$34.7 million. The project received favorable bids they were let together for a construction letting of \$25 million. This project's share of the construction letting is shown under the Current Estimate as \$12.6 million.

Project History

In 2017, this project was tied to another pavement project on US 169, 7007-34, the letting date was moved to 2018, and the current construction letting estimate was lowered from \$18 million to \$15.8 million. Coordination resulted in savings due to shared traffic cross overs, median work, traffic control, and other construction elements. This project was first included in the Major Highway Projects Report in 2016. This project will provide a long-term pavement improvement to this road segment along a heavily traveled corridor with significant freight volumes. In addition to pavement work, safety improvements include a reduced conflict intersection at the Hwy 169/CSAH 59 intersection, elimination of median

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2014

	Baseline Est.	Current Est.
Construction Letting:	\$ 18.0	\$ 12.6
Other Construction Elements:	\$ 0.0	\$ 0.7
Engineering:	\$ 3.0	\$ 3.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 21.0	\$ 16.4

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. The current construction letting estimate decreased from \$16.6 million in 2016 to \$15.8 million due to coordination with 7007-34, which reduced the total project cost estimate from \$19.6 million to \$18.8 million. Other costs that increased include \$0.1 million to engineering and an additional \$0.7 million to other construction elements for risk. In 2016 a scoping change reduced the construction letting costs resulting in a lower total project cost estimate.

Project Risks

Potential local opposition to the reduced conflict intersection.

Schedule

Environmental Approval Date: 4/4/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: Pending approval
Construction Limits Established Date: Pending approval
Original Letting Date: 07/21/2017
Current Letting Date: 03/07/2018
Construction Season: 2018/2020
Estimated Substantial Completion: 10/01/2020



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Nicole Peterson

Revised Date: 12/17/2018

PROJECT SUMMARY

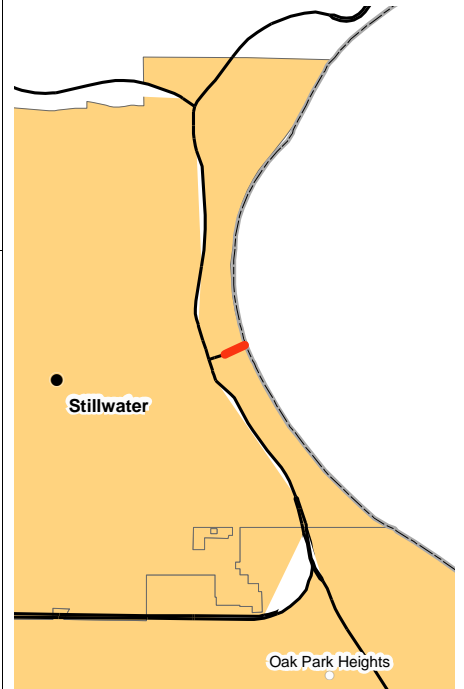
Hwy 36

Oak Park Heights, Stillwater and Bayport

Bridge 82043, 82047, 82048, 82045

State Project No. 8221-01, 8214-114, 8221-82045A, etc.

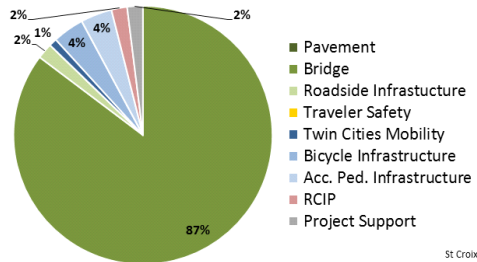
[St. Croix Crossing Project](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

A joint MnDOT and WisDOT project to 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 35) 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. Implementation of an environmental mitigation package is included in 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:	\$ 410.8	\$ 473.6
Other Construction Elements:	\$ 136.2	\$ 73.3
Engineering:	\$ 55.0	\$ 85.4
Right of Way:	\$ 31.4	\$ 14.5
Total:	\$ 633.4	\$ 646.8

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

Recent Changes and Updates

The new river crossing opened to traffic in Aug. 2017. Roadway approaches, loop trails, state entry/exit signs and landscaping continue to be worked on in 2017. Additional loop trails, the Stillwater Lift Bridge conversation, landscaping and wetland restoration project will continue into 2018 and 2019. While the bridge is open to traffic and the main work is complete the project is not considered substantially complete for the major highway projects report and so will continue to track project costs.

Project History

Bridge opening was delayed from 2016 to 2017 due to several factors. An early cold season in fall 2014 and rebar complexity slowed construction. Design-build contract for the Minnesota approach work began in 2013 and was complete in 2015. Bridge pier foundations began construction in 2013 and completed in 2014. Work on the bridge superstructure contract began in 2014 and was open in 2017. The St. Croix Crossing Bridge replaces the Stillwater Lift Bridge. Congressional approval was granted in March 2012 to allow the project to proceed. In 2013 permits were requested and the project began construction.

Key Cost Estimate Assumptions

Commitments made in the 2006 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 and risk. Baseline estimate assumed only the MN portion of the contingency costs and was a planning level estimate. Current estimates are based on June 30, 2016 data and includes contingencies for both MN and WI.

Project Risks

Legal claims of schedule impacts are still risks.

Schedule

Environmental Approval Date: 9/5/2012
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: 2013/2019
Estimated Substantial Completion: Fall 2019



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Todd Clarkowski

Revised Date: 12/17/2018

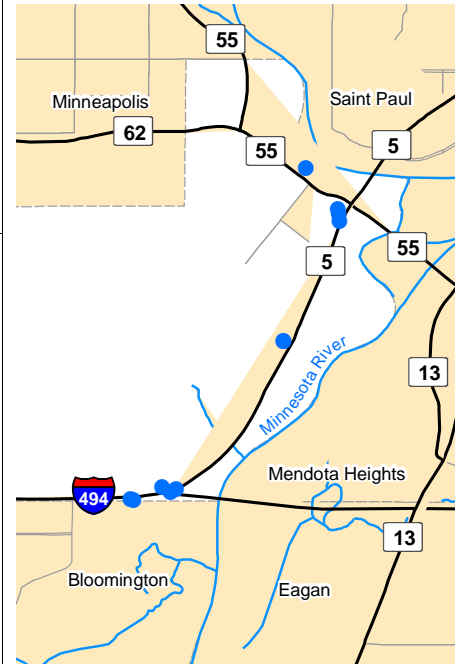
PROJECT SUMMARY

Hwy 5

Hwy 5/I-494 Jct to south end of MN River bridge

Bridge 27161, 27107, 27118, 27763, 27764, 27766, 27983, 27984, 9153, 9154, 9306

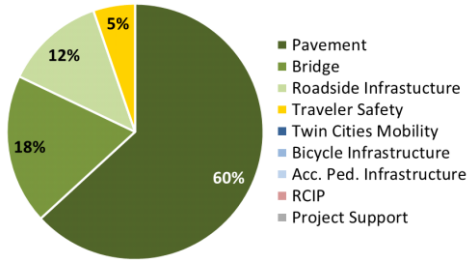
State Project No. 2732-105



Primary Purpose

Performance-based Need: Pavement
Condition Performance-based need: Bridge
Condition

Investment Category



Project Description

The project includes concrete pavement overlay, cable median barrier and the rehabilitation of 11 bridges.

Recent Changes and Updates

The project continues to move forward for a letting in October 2019. Risk remain for project and TPCE is likely to increase in the next year's report.

Project History

In 2017, costs for the project increased to \$18.9 million due to additional engineering and refinement of the construction letting estimate. The project will improve the pavement condition of the road segment on Hwy 5 near the Minneapolis-St. Paul International Airport and work will be done to 11 bridges. The drainage systems will be repaired to stop erosion problems. The current letting date was moved from the original due to coordination of projects near the airport and river crossings.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 18.3	\$ 18.9
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 3.0	\$ 3.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 21.3	\$ 22.1

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

The project risks include traffic staging, ponding for erosion control, contaminated properties, project location adjacent to Fort Snelling and Fort Snelling State Park, and the Metropolitan Airports Commission interest in realigning the Post Road interchange.

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: 07/27/2018
Current Letting Date: 10/25/2019
Construction Season: 2020
Estimated Substantial Completion: 10/01/2020



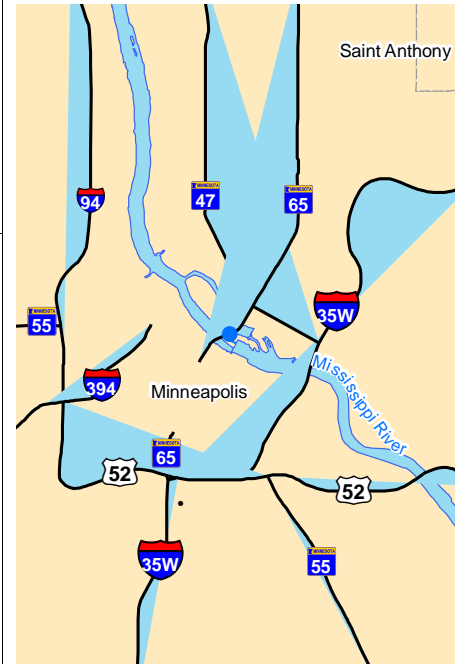
Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Chad Casey

Revised Date: 12/17/2018

PROJECT SUMMARY

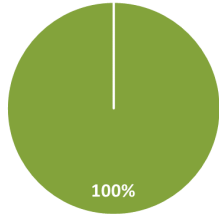
Hwy 65
Minneapolis
Bridge 2440
State Project No. 2710-47
[Third Avenue Bridge](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



- Pavement
- Bridge
- Roadside Infrastructure
- Jurisdictional Transfer
- Facilities
- Traveler Safety
- Greater MN Mobility
- Twin Cities Mobility
- Freight
- Bicycle Infrastructure
- Acc. Ped. Infrastructure
- RCIP
- Project Delivery
- Small Programs

Project Description

The project rehabilitates the historic 3rd Avenue bridge 2440 over the Mississippi River in downtown Minneapolis.

Recent Changes and Updates

This complex project continues to have the scope refined and a portion of the funding is identified in year 2021 of the 2018-2021 STIP. Additional inspections are being used to evaluate project cost.

Project History

The estimated cost in the 2017 MHPR is preliminary and is expected to increase. This project was once planned to be let in 2018, but was pushed back due to the needs of other bridges and lack of funding. The project will be delivered by the Construction Manager/General Contractor method, which is used on complex projects to help save time, reduce risk and foster innovation. The 3rd Avenue Bridge was constructed between 1914 and 1917, and is an example of Melan arch construction. The alignment and spacing of arches was designed to avoid dangerous limestone breaks in the falls which produced an overall image as a gateway to downtown Minneapolis. This is a historic bridge and is a contributing element to the St. Anthony Falls Industrial Historic District, listed on the National Register of Historic Places.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 50.0	\$ 50.0
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 7.3	\$ 7.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 67.3	\$ 67.3

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 estimates for this project. The project will use the Construction Manager/General Contractor delivery method and possibly have multiple work packages.

Project Risks

Project risks include additional unknown conditions, Construction Manager/General Contractor costs, construction access to the bridge, traffic control, the number of construction seasons and historic/cultural resource mitigation.

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: 07/27/2018
Current Letting Date: 06/15/2022
Construction Season: 2021/2022
Estimated Substantial Completion: 01/27/2023



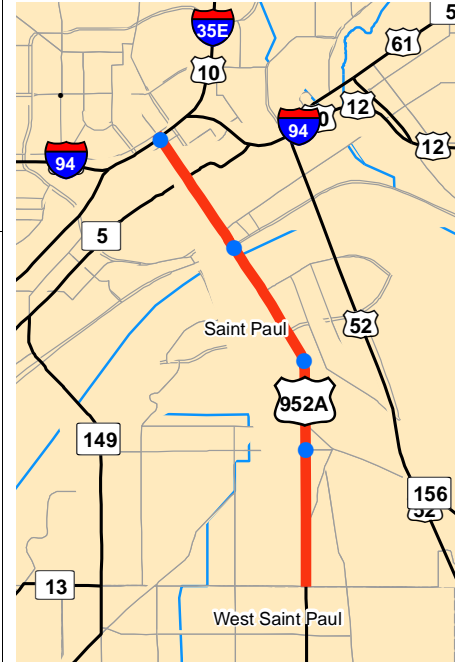
Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Christian Hoberg

Revised Date: 12/17/2018

PROJECT SUMMARY

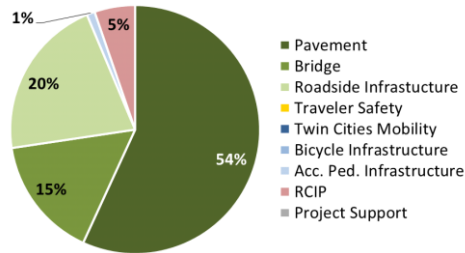
Hwy 952A (Robert St)
Robert St, from Annapolis St to 12th St. in St. Paul
Bridge 62894, 62050, 9036, 90381
State Project No. 6217-43
[Robert Street, St Paul](#)



Primary Purpose

Performance-based Need: Pavement
Condition Performance-based need: Bridge
Condition

Investment Category



Project Description

The project includes pavement overlay, rehabilitation on four bridges, drainage, traffic signals, ADA improvements and sidewalk replacement.

Recent Changes and Updates

In 2018, the pavement and bridge work to the Robert Street bridge 9036 were separated into two projects, which resulted in both these projects being under the Metro threshold for inclusion in the MHPR. The pavement project may be likely to move back into 2022 as a result of the bridge and pavement work being separated.

Project History

2017 was the first year the project was included in the MHPR. The original letting date in 2018 was moved to 2020 due to the scoping process revealing additional needs, such as utilities and ADA work, that did not have funding in that fiscal year. Robert Street is a low speed urban arterial. This corridor was coded as a municipal street and is no longer signed as a state highway. The pavement in this heavily used urban segment is in very poor condition with multiple surface problems. ADA pedestrian ramps have not been updated to current standards and sidewalks are in poor condition throughout the corridor.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 12.8	\$ 12.8
Other Construction Elements:	\$ 1.4	\$ 1.4
Engineering:	\$ 2.9	\$ 2.9
Right of Way:	\$ 0.7	\$ 0.7
Total:	\$ 17.8	\$ 17.8

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

Key Cost Estimate Assumptions

Robert Street Bridge over I-94 is a redeck. Sidewalk replacement is based on estimate of the percent of sidewalks out of compliance.

Project Risks

Project risks include unknown right of way needs and alignment in downtown St. Paul, cost to repair drainage infrastructure, presence of contaminated materials and city utility needs. The significance of these risks may result in the project moving out of 2020 or being split into phases to be delivered over a number of years.

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: 07/27/2018
Current Letting Date: 01/31/2020
Construction Season: 2020
Estimated Substantial Completion: 11/01/2020



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Marcell Walker

Revised Date: 12/17/2018

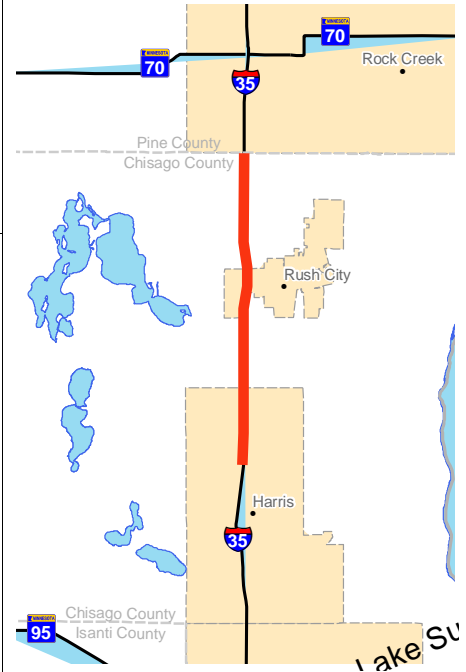
PROJECT SUMMARY

I-35

Harris to Chisago-Pine county line

State Project No. 1380-84

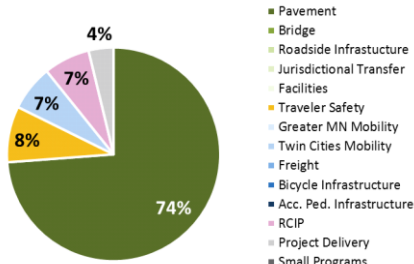
I-35 Road Resurfacing Project



Primary Purpose

Performance-based Need: Pavement
Condition Performance-based need: Bridge
Condition

Investment Category



Project Description

The project is from I-35 at CSAH 9 near Harris to the Chisago-Pine county line. The project includes an unbonded concrete pavement overlay and storm water drainage repair.

Recent Changes and Updates

2018 is the second year this project has been included in the MHP. Construction letting for this project was moved to 01/25/2019. The increase from baseline to current estimate is because of an increase in engineering costs for final design work. A state transportation improvement program modification was done in 2018 to split off early crossover work as part of this project and is being let in June 2018 under SP 1380-95.

Project History

The project was identified for coordination with a District 1 project in Pine County on I-35. Funding was used to advance the project into 2019 from 2021. The goal of this project is to improve the ride smoothness and restore the pavement. The project will also include cable medians, drainage repairs to culverts, pipes and concrete aprons.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 27.1	\$ 26.8
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 4.3	\$ 5.1
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 31.4	\$ 31.9

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 costs.

Project Risks

Traffic mitigation and staging accounts for some of the construction letting costs, cost could rise based on the final layout for cross overs. There are bridges in the corridor that currently do not have any needs at this time. There may be more drainage needs as additional information is gathered.

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: 7/27/2018
Current Letting Date: 01/25/2019
Construction Season: 2019
Estimated Substantial Completion: 11/15/2019



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **Dmitry Tomasevich**

Revised Date: 12/17/2018

PROJECT SUMMARY

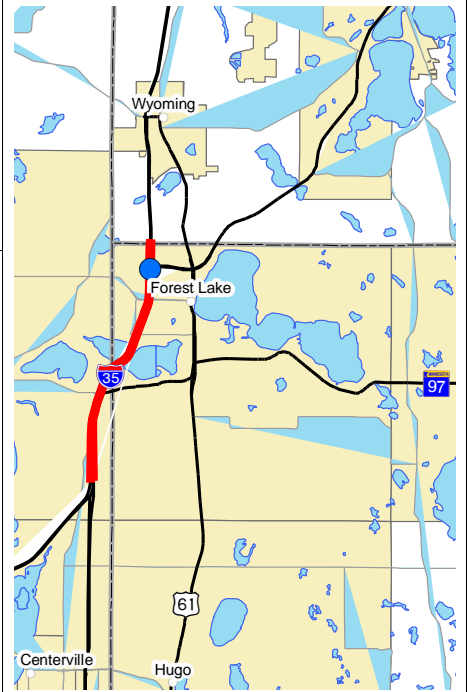
I-35

Washington, Anoka Counties

Bridge 82815, 02804, 02806

State Project No. 8280-47

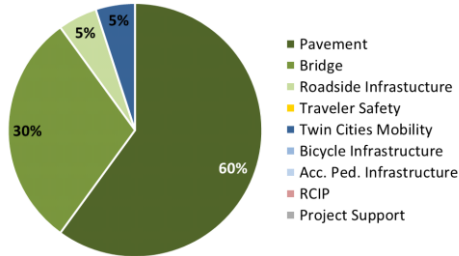
[I-35 North Metro Split](#)



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. The project includes I-35E from 80th Street E to the junction of I-35/I-35W/I-35E; on I-35W from north of Main Street 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 Highway 8. The three bridges are: northbound I-35W over southbound I-35E, Highway 97 over I-35, and Highway 8 over I-35.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2015

	Baseline Est.	Current Est.
Construction Letting:	\$ 39.6	\$ 60.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 6.4	\$ 9.5
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 46.0	\$ 70.0

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

Recent Changes and Updates

Project was let in June 2017 for close to the \$61.1 million estimate in the 2017 MHPR. Engineering costs increased to \$9.5 million as project design needs increase.

Project History

The current condition of this road section is anticipated to decline quickly due to failing road base that hasn't been improved since 1969. Currently this section has a mill and overlay every seven years, and the concrete overlay project is a longer term fix to correct base failures.

Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates for this project. In 2017 the TPCE increased from \$56.6 million to \$67.4 million due to higher bids for this design-build project. The project also received \$4 million from Anoka County to expand the Hwy 97 Bridge, and an additional \$1.4 million in federal freight funding was used to complete a project at the Forest Lake weigh station within the larger project. In 2016, the TPCE was \$58.6 million, with construction letting increasing to \$50.1 million and engineering to \$6.9 million. The \$10 million increase to the construction letting cost was due to discovery of damage to the substructure of the roadway and refining the cost estimate for project components as the project moved into final design. MnDOT also adjusted the estimate to adapt to a fluctuating bid environment and expects bids for this project to be much higher than when the original estimate was developed during an economic downturn.

Project Risks

Risks include traffic impacts during construction, interagency coordination and communication and previously identified risks realized for cost increases due to switching the delivery method to design-build delivery.

Schedule

Environmental Approval Date: 10/7/2015
Municipal Consent Approval Date: 10/7/2015
Geometric Layout Approval Date: 1/16/2015
Construction Limits Established Date: 1/16/2015
Original Letting Date: 07/21/2017
Current Letting Date: 06/02/2017
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: 12/17/2018

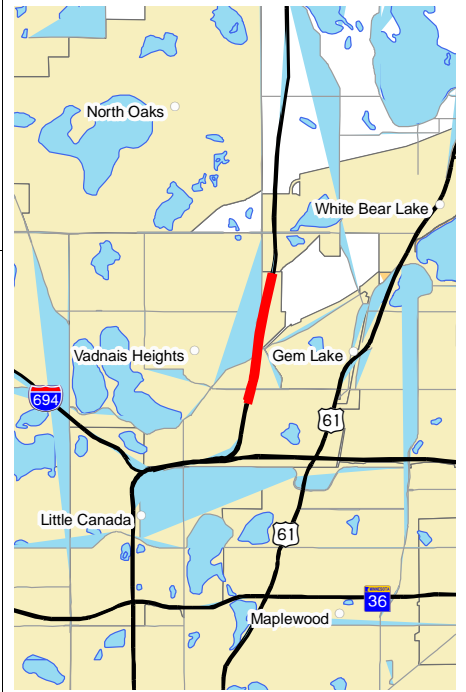
PROJECT SUMMARY

I-35E

Vadnais Heights and White Bear Lake - Goose Lake Road Bridges
Bridge 9567, (new, 62729), &, 9568, (new, 62730)

State Project No. 6281-25

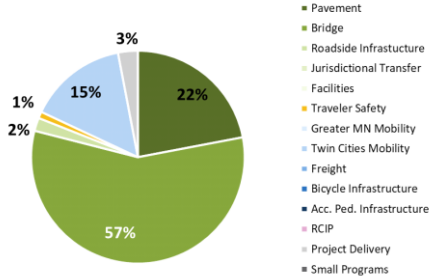
[I-35E between Hwy 36 and County Road J](#)



Primary Purpose

Performance-based Need: Bridge Condition and Pavement Condition

Investment Category



Project Description

The project replaces the Goose Lake Road bridges including profile adjustments on both sides of the bridges, mill and unbonded concrete overlay, ADA, retaining walls, ponding, guardrail, drainage and transportation management system improvements.

Recent Changes and Updates

This project is open to traffic and substantially complete.

Project History

This project is open to traffic but there continues to be minor work and intermittent lane closures that continue into fall 2017. There were no cost changes since the 2015 major highway projects report. In 2015, construction letting increased \$2 million as result of railroad agreement costs, changing the pavement fix and bridge clearance. In 2014, the project costs increased from \$10.1 million to \$20 million due to the addition of mill and concrete overlay work and staging the bridges and pavement to be ready for a MnPASS extension into this area. The I-35E bridges over Goose Lake Road and the BNSF railroad in Vadnais Heights were replaced with new wide structures to accommodate three lanes of traffic and also includes profile adjustments of pavement on both sides of the bridges.

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	\$ 0.3
Engineering:	\$ 2.1	\$ 4.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 12.6	\$ 26.7

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 cost estimates for this project.

Project Risks

Project is now open with minor work continuing and some risk with traffic impacts remains.

Schedule

Environmental Approval Date: 3/16/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 12/2014
Construction Limits Established Date: 12/2014
Original Letting Date: 01/23/2015
Current Letting Date: 06/05/2015
Construction Season: 2015/2016
Estimated Substantial Completion: 12/02/2016



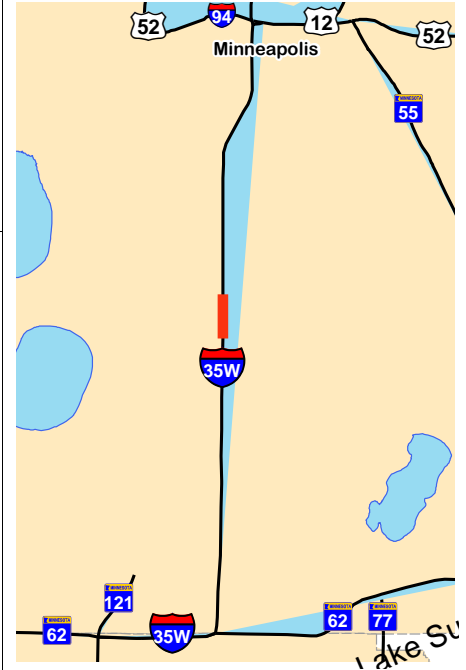
Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **Mohammad Dehdashti**

Revised Date: 12/17/2018

PROJECT SUMMARY

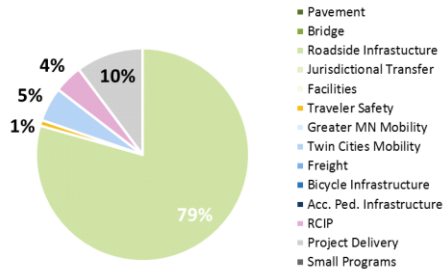
I-35W
Minneapolis
State Project No. 2782-347



Primary Purpose

Performance-based Need: Roadside Infrastructure Condition

Investment Category



Project Description

Construct a storm water holding cavern system on I-35W, from 42nd Street to 39th Street in Minneapolis.

Recent Changes and Updates

In 2018, the project continued to have the scope refined and the project designed. The cost will increase substantially in the next MHPR.

Project History

2017 is the first year this project is included in the Major Highway Projects Report. This project was split from the larger I-35W/Lake Street project (2782-327) because of the complex nature and design of the storm water caverns. This project was originally included in the larger I-35W/Lake Street project (SP 2782-327) but due to the complex nature and design of the project, design-build will be used to deliver the project. The flooding at the 42nd Street sag location will be addressed to meet MnDOT Drainage Manual Standards to improve safety and prevent property damage to the surrounding areas.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2018

	Baseline Est.	Current Est.
Construction Letting:	\$ 26.7	\$ 26.7
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 0.7	\$ 26.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 27.4	\$ 27.4

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

Key Cost Estimate Assumptions

Costs are not inflated to 2020 dollars. Cost estimate does not capture final local contribution.

Project Risks

Due to the complexities of the storm water cavern design, design-build delivery will be used. Those costs are not in the baseline estimate. Some traffic mitigation measures to continue from the larger I-35W/Lake St. construction. Costs are likely to increase substantially as additional information on the cavern design and delivery are gathered and analyzed.

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: 03/23/2018
Current Letting Date: 01/24/2020
Construction Season: 2020-2021
Estimated Substantial Completion: 12/01/2021



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Nick Olson

Revised Date: 12/17/2018

PROJECT SUMMARY

I-35W

Minneapolis, Roseville

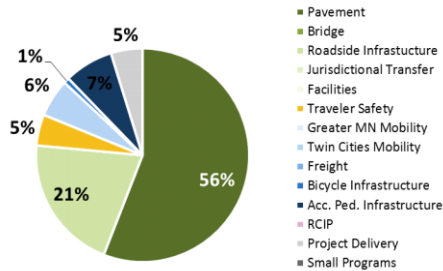
State Project No. 2783-166

[I-35W Resurfacing, Minneapolis to Roseville](#)

Primary Purpose

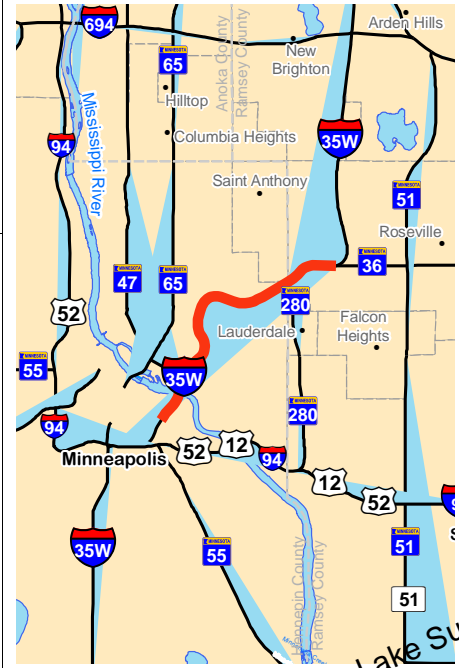
Performance-based Need: Pavement

Investment Category



Project Description

The project is a bituminous mill and overlay with ADA improvements along I-35W from 4th Street in Minneapolis to Rosegate in Roseville.



Recent Changes and Updates

This project was let in April 2018 and under construction in 2018. As of September 2018, it is open to traffic with minor work to be completed. The TPCE has increased from last year because the construction letting was \$ 19.2 million, which was higher than the baseline estimate of \$16.9 million as a result of higher bids.

Project History

This segment of I-35W deteriorated quickly since the last concrete pavement repair in 2008. The deterioration accelerated over the last two seasons, requiring regular night maintenance patching. This project will be completed prior to the I-35W North MnPASS project (SP 6284-180) which is adjacent to the north of this segment.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 16.9	\$ 19.2
Other Construction Elements:	\$ 0.8	\$ 0.8
Engineering:	\$ 3.0	\$ 3.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 20.7	\$ 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 estimates for this project.

Project Risks

Risks include local signal work at I-35W and Industrial Blvd and traffic control measures.

Schedule

Environmental Approval Date: 7/6/2017
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 8/25/2017
Construction Limits Established Date: 8/25/2017
Original Letting Date: 6/15/2020
Current Letting Date: 04/27/2018
Construction Season: 2018
Estimated Substantial Completion: 10/01/2018



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Jerome Adams

Revised Date: 12/17/2018

PROJECT SUMMARY

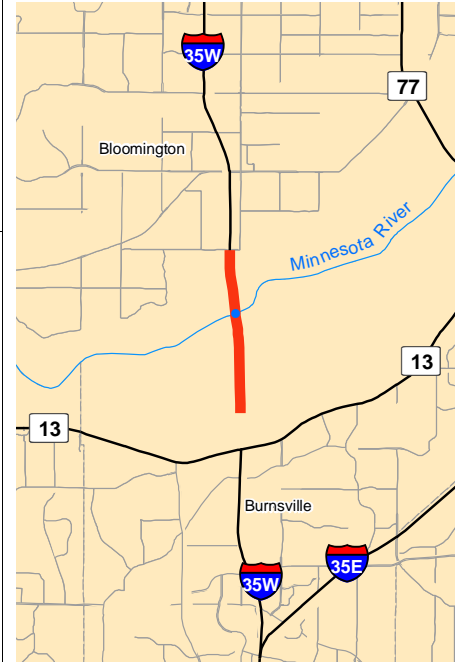
I-35W

Minnesota River Crossing (Bloomington and Burnsville)

Bridge 5983, 9043, 9044

State Project No. 1981-124

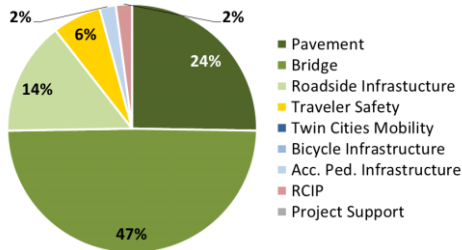
[I-35W Minnesota River Bridge](#)



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

This project includes bridge replacements, pavement reconstruction, auxiliary lanes, signing, lighting, traffic management systems, trails, drainage and guardrail on I-35W from the Cliff Road interchange to the 106th Street interchange, in the cities of Burnsville and Bloomington within Hennepin and Dakota counties. An off-road trail will also be added for pedestrian and bicycle crossing of the Minnesota River.

Recent Changes and Updates

In 2018, a design build contract letting resulted in lower current estimate from the baseline estimate. Favorable bids came in lower than the project cost estimate. Construction began in

Project History

In 2017, this project was advanced from 2020 to 2018. In 2017, scope and costs increased from the baseline estimate due to the inclusion of the 106th St bridges (mainline) and profile correction to bring the approaches out of the floor plain and. It will be delivered with the design-build delivery method. In 2009, lane re-configuration allowed for High Occupancy Toll lanes but reduced the existing shoulders on the bridge. This project will widen the bridge to allow for shoulder lanes and add auxiliary lanes in each direction to manage traffic weaving between the 106th Street and the Cliff Road interchanges. An off-road trail will also be added for pedestrian and bicycle crossing of the Minnesota River.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 134.0	\$ 112.5
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 22.4	\$ 24.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 156.4	\$ 136.5

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 estimates for this project.

Project Risks

Remaining risks include construction and traffic control during construction.

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: 06/14/2020
Current Letting Date: 05/09/2018
Construction Season: 2018/2021
Estimated Substantial Completion: 11/25/2021



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **Scott Pedersen**

Revised Date: 12/17/2018

PROJECT SUMMARY

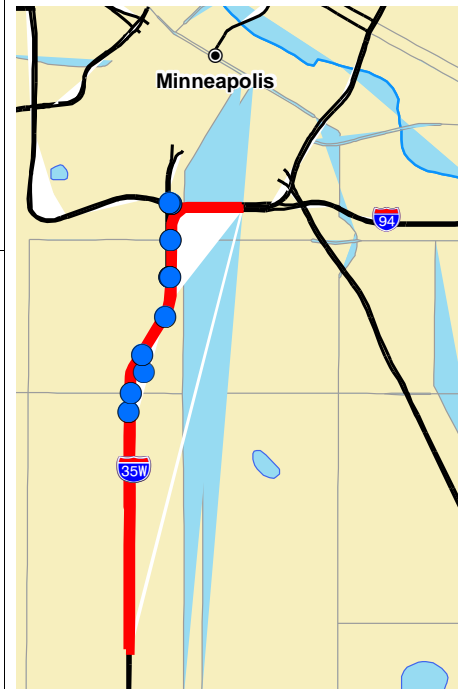
I-35W

43rd Street to I-94 Commons

Bridge 9731, 9733, 27842, 27843, 27867, 27868, 27869, 27870, 27871, 27872

State Project No. 2782-327

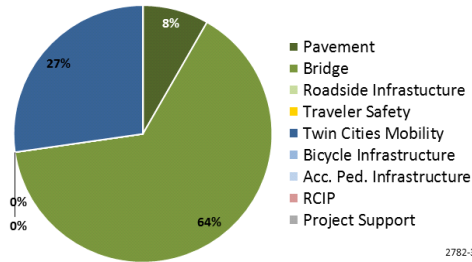
[35W @ 94: Downtown to Crosstown](#)



Primary Purpose

Performance-based Need: Twin Cities
Mobility, Bridge Condition and Pavement
Condition

Investment Category



2782-327

Project Description

Adjust the alignment of I-94, I-35 and Highway 65. Replace the following bridges: 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 I-35W 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

	Baseline Est.	Current Est.
Construction Letting:	\$ 265.5	\$ 239.0
Other Construction Elements:	\$ 0.0	\$ 28.4
Engineering:	\$ 44.5	\$ 46.4
Right of Way:	\$ 3.6	\$ 3.6
Total:	\$ 313.6	\$ 317.4

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

Recent Changes and Updates

This project was let in June 2017 and is under construction, which will last four construction seasons. Cost are likely to increase as post-construction change orders are reported in future MHPRs. The FTA Small Starts grant is still pending award.

Project History

In 2016, engineering was reduced by \$0.5 million. Funding was confirmed from project partners with increased contributions from Hennepin County, Metropolitan Council and the Counties Transit Investment Board, and competitive bids resulted in a construction letting bid of \$239 million (designer estimate was \$242 million). In 2015, there was an increase to the construction letting from an increased local share of funding, which had previously been attributed to MnDOT's contribution and the 40th St. pedestrian bridge was added to this project. In 2014, the project transitioned from Hennepin County as the lead agency to MnDOT. This project has been pursued since the mid-1990s to upgrade the on-line transit station, better access to Lake Street, and extended MnPASS in and out of downtown Minneapolis.

Key Cost Estimate Assumptions

The baseline estimate includes the MnDOT portion (\$183 million). This large project is done in partnership with Minneapolis, Hennepin County and the Metropolitan Council. The current estimate includes funding from all project partners. The Construction Letting amount includes over \$82 million in local funding from Minneapolis, Hennepin County, Metro Transit, Metropolitan Council and CTIB. Other Construction Elements include utility agreements and post letting costs for overruns, incentives and construction traffic management. In 2017, storm water cavern work on this project was separated reducing the Other Construction Elements by \$28.4 million.

Project Risks

Storm water tunnels and drainage present a potential project risk; that portion of the project is now a separate project. Traffic impacts during construction will be a major project risk. Temporary lanes are being added to I-394 and MN 62 to help mitigate traffic concerns.

Schedule

Environmental Approval Date: Spring 2016
Municipal Consent Approval Date: Spring 2016
Geometric Layout Approval Date: 10/19/2015
Construction Limits Established Date: 11/28/2015
Original Letting Date: 07/21/2017
Current Letting Date: 06/28/2017
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: 12/17/2018

PROJECT SUMMARY

I-35W

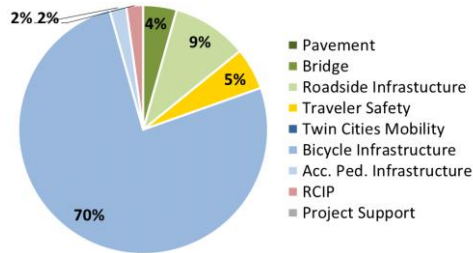
Roseville to Hwy 10

Bridge 02550, 02566, 02571, 62732, 62873, 62890, 62911, 62938, 62939, 62940, 62941, 62942, 91071, 9355, 9357, 9492, 9578, 9601, 9602, 9605, 9604, 9831

Primary Purpose

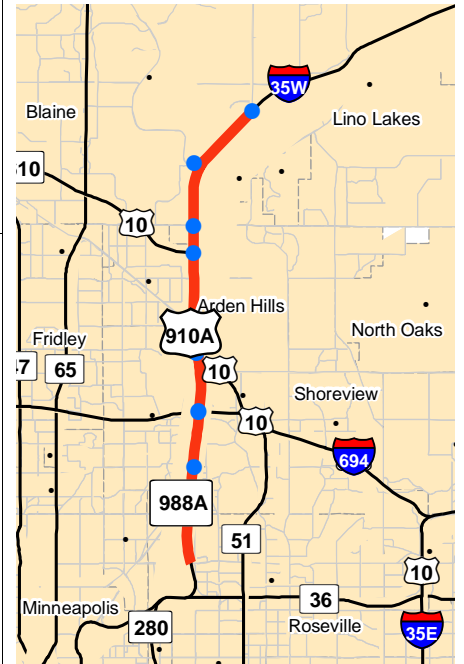
Performance-based Need: Twin Cities Mobility, Pavement Condition and Bridge Condition

Investment Category



Project Description

This project will add managed lanes (MnPASS) and spot mobility improvements on I-35W from Roseville to Blaine, provide a long-term pavement fix, repair 21 bridges and improve roadside infrastructure.



Recent Changes and Updates

This project will be delivered with the Design-Build procurement method, which is used because it provides flexibility to maximize the value received per dollar spent in complex projects like this. This project has a letting in Sept. 2018.

Project History

Construction was identified to stretch into four seasons, but early traffic control work, including traffic cross-overs and shoulder work will start in fall 2018 so major work can begin quickly during the 2019 construction season. MnPASS lanes on I-35W between Hwy 36 and Lexington Ave are being added to improve mobility and travel time in the corridor. In addition to MnPASS, a long-term pavement fix will eliminate the need to do short term pavement fixes every 7-8 years in the corridor, and 16 bridges will be improved to meet current height clearance for freight vehicles.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 208.0	\$ 176.0
Other Construction Elements:	\$ 6.1	\$ 4.2
Engineering:	\$ 3.6	\$ 11.3
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 217.7	\$ 191.5

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

Key Cost Estimate Assumptions

Quantities based estimate from staff approved layout. In 2018, the TPCE was revised to a lower amount after refinement of the construction estimate and retirement of some risks. The current TPCE is a total of \$191.5 million (\$176 million for construction letting, \$11.3 million engineering and \$4.2 million other construction elements). In 2017, construction estimate was \$208M, 6.1M other construction elements, \$3.6 in engineering for a total of \$217.7 million. 2016 was the first year the project was in the MHPR. There were no changes from 2016 to 2017 in the TPCE.

Project Risks

The project risks include possible utility relocation, flooding and water quality mitigation.

Schedule

Environmental Approval Date: Pending approval
Municipal Consent Approval Date: 12/15/2016
Geometric Layout Approval Date: 4/1/2016
Construction Limits Established Date: 4/1/2016
Original Letting Date: 08/17/2018
Current Letting Date: 09/12/2018
Construction Season: 2019/2021
Estimated Substantial Completion: 11/01/2022



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Jerome Adams

Revised Date: 12/17/2018

PROJECT SUMMARY

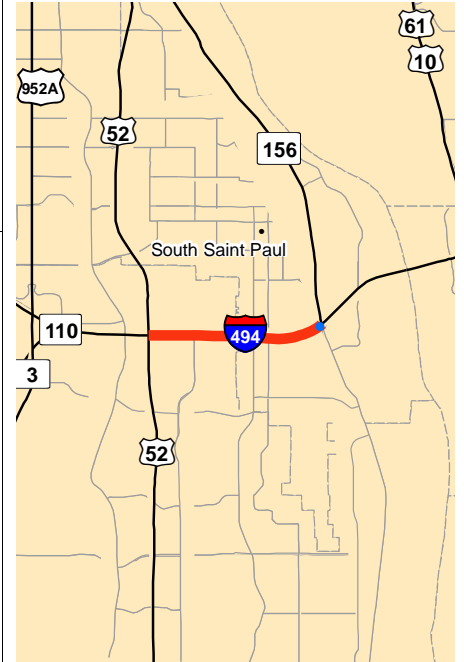
I-494

South St Paul to Inver Grove Heights

Bridge 19865

State Project No. 1985-149

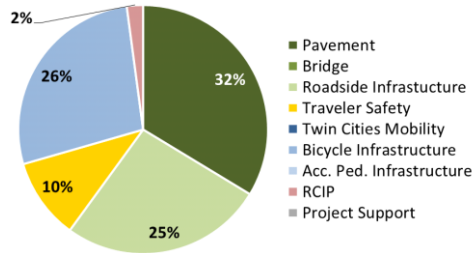
[I-494, Inver Grove Heights to South St. Paul](#)



Primary Purpose

Performance-based Need: Twin Cities Mobility, Pavement Condition and Bridge Condition

Investment Category



Project Description

The project includes construction of an auxiliary lane from Concord Street to Highway 52, concrete pavement repair, bridge repair and widening, drainage, retaining wall, ADA improvement, signing and lighting.

Recent Changes and Updates

This project was let in June 2018, for \$16.2 million, which is more than the baseline but less than the previous estimate of \$20.2 million. The lower let amount is a result of retiring risks associated with storm water infrastructure and favorable bids. Construction is underway through the fall of 2019.

Project History

In 2017, the construction letting estimate increased due to the inclusion of additional sanitary and storm water drainage (\$4.3 million). The 2017 funding allowed for advancing the letting from July to February 2019. The auxiliary lane will provide drivers an opportunity to speed up and slow down in a space not used by high-speed through traffic. Built in 1980, bridge 19865 has the original overlay and joints and the bridge overlay and joints have reached the expected useful life. The project will also improve the pavement condition. Because of the high impacts to traffic, construction to complete the roadway work and bridge will work at the same time.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	<u>Baseline Est.</u>	<u>Current Est.</u>
Construction Letting:	\$ 15.8	\$ 16.2
Other Construction Elements:	\$ 0.0	\$ 0.6
Engineering:	\$ 2.9	\$ 2.9
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 18.7	\$ 19.7

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 cost estimates for this project.

Project Risks

Project has high traffic impacts, storm water needs and the sanitary sewers under the 5th and 7th Ave bridges may have impacts on design.

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: 07/26/2019
Current Letting Date: 02/22/2019
Construction Season: 2019
Estimated Substantial Completion: 11/01/2019



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **Mohammad Dehdashti**

Revised Date: 12/17/2018

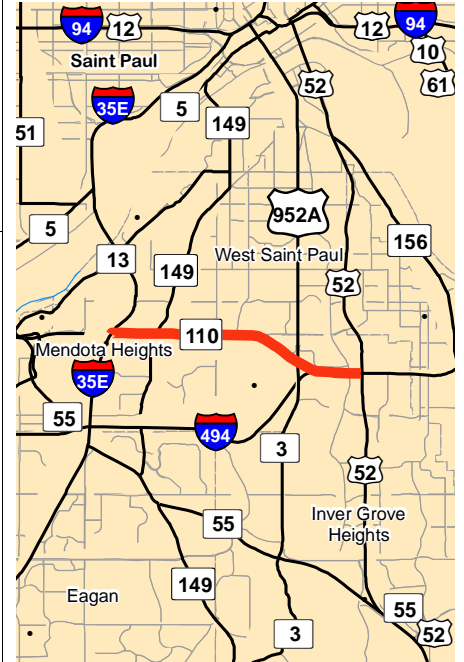
PROJECT SUMMARY

I-494

South St. Paul to Mendota Heights

Bridge 19823, 19824, 19878, 19897, 19898, 19899, 19900, 27765

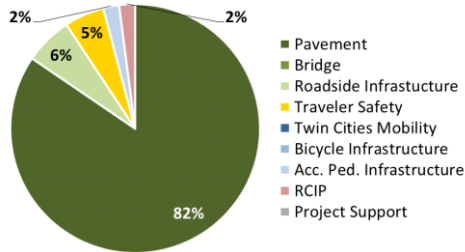
State Project No. 1985-148



Primary Purpose

Performance-based Need: Pavement

Investment Category



Project Description

The project includes a mill and pavement overlay, drainage, repairs to eight bridges, guardrail, traffic management system, ADA and sidewalk repairs.

Recent Changes and Updates

In 2018, the TPCE increased from \$32 million to \$33.5 million due to a construction estimate increased of \$0.7 million and engineering costs of \$0.8 million due to final design changes. The letting date from was advanced from 12/27/2019 to 05/17/2019.

Project History

In 2017, the letting date was moved to Dec. 2019. There was a cost increase of \$0.9 million due to moving the project from 2019 to 2020. In 2016, eight bridges were added to the project and the TPCE increased to \$32 million. The condition of the pavement in this road section requires regular, heavy maintenance patching in areas, and the proposed work to the pavement should reduce this type of ongoing maintenance. The current pedestrian access routes are largely substandard and will be improved. Existing drainage infrastructure deficiencies identified include pipes, culverts, aprons, catch basins, or manholes in unacceptable conditions. Several in-place median guardrail installations did not meet current standards.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 17.5	\$ 26.9
Other Construction Elements:	\$ 0.0	\$ 1.2
Engineering:	\$ 2.9	\$ 5.4
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 20.4	\$ 33.5

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 for this project.

Project Risks

Previous project risks realized this past year included the late letting date triggering the project to move out of 2019 construction season, need for additional right of way for ADA work and traffic control expected to be high cost.

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: 07/27/2018
Current Letting Date: 12/27/2019
Construction Season: 2020
Estimated Substantial Completion: 11/01/2020



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Mohammad Dehdashti

Revised Date: 12/17/2018

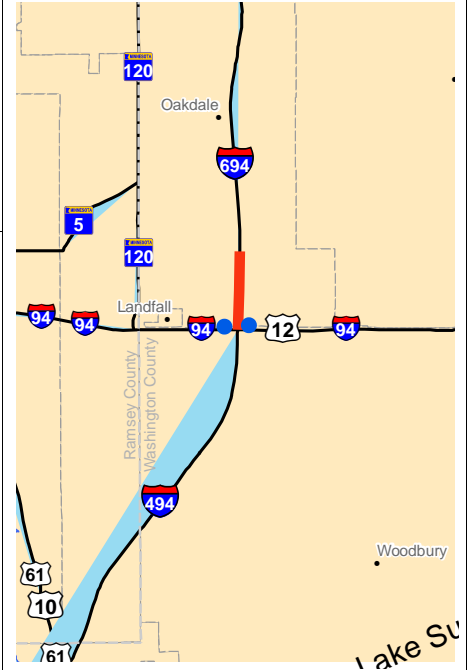
PROJECT SUMMARY

I-694

Oakdale/Woodbury

Bridge 82831, 82832

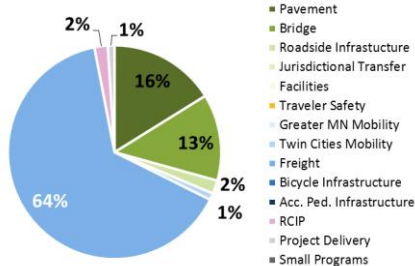
State Project No. 8286-81



Primary Purpose

Performance-based Need: Bridge
Condition/Performance-based need:
Pavement Condition

Investment Category



Project Description

This project involves constructing the I-694/494/94 system interchange in Oakdale/Woodbury from 10th St (CSAH10) to Tamarack Rd. The project includes a concrete pavement overlay, adding a southbound auxiliary lane from 10th Street to I-94, replacing and widening two bridges the I-694 bridges over I-94, reconstructing the southwest loop and median work on the collector-distributor ramp.

Recent Changes and Updates

In 2018, the project's letting date was moved to October 2018.

Project History

The project had once been planned to be let in 2017, but was moved into calendar year 2018 due to the scope changes and additional freight funding. In 2017, the project was up scoped from an \$8.7 million bridge project to \$30.2 million (construction costs only) after receiving \$19.5 million in federal freight funding to correct ramps and loops, improve the bridge deck and apply a long-term pavement fix.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2017

	Baseline Est.	Current Est.
Construction Letting:	\$ 30.2	\$ 30.3
Other Construction Elements:	\$ 1.4	\$ 1.4
Engineering:	\$ 5.6	\$ 5.6
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 37.2	\$ 37.3

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. This project will be delivered with the design build method.

Project Risks

The project could be extended into two construction seasons depending on the timing of closing ramps during construction, possible right of way contamination, local interest in a larger project, construction may require a temporary bridge and inability to salvage existing bridge pier locations.

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: 07/21/2017
Current Letting Date: 10/26/2018
Construction Season: 2019
Estimated Substantial Completion: 11/01/2019



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Ryan Coddington

Revised Date: 12/17/2018

PROJECT SUMMARY

I-694

Little Canada to Arden Hills

Bridge 62723

State Project No. 6285-143

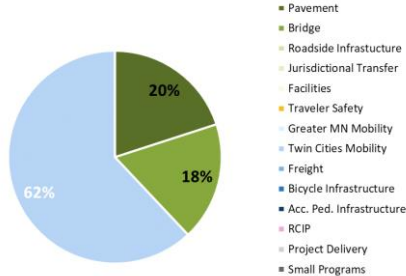
[I-694 from Little Canada to Arden Hills](#)



Primary Purpose

Performance-based Need: Regional & Community Improvement
Priority: Metro Capacity Development

Investment Category



Project Description

The project is for the construction of a general purpose lane on I-694 from Rice Street in Little Canada to Lexington Avenue in Arden Hills, for the reconstruction of existing lanes, low slump overlay on the Island Lake Channel bridge, noise wall and median barrier construction.

Recent Changes and Updates

This project was open to traffic in November 2017. There remains some minor landscaping work to be done. There were no changes to the TPCE in 2018.

Project History

The project was selected for the Corridors of Commerce program in 2013 and initially included a dynamic shoulder lane, which was changed to a general purpose lane in each direction between Rice St and Lexington Ave. There is also pavement reconstruction between Rice St and Lexington Ave, rebuilding interstate ramps at three locations and improving 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	\$ 34.7
Other Construction Elements:	\$ 0.0	\$ 1.5
Engineering:	\$ 7.8	\$ 5.1
Right of Way:	\$ 1.5	\$ 0.2
Total:	\$ 49.5	\$ 41.5

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 for this project. Increased construction staging costs are due to traffic control during construction. Right of way required for water treatment and to build storm water ponds. In 2018, the current TPCE is \$41.5 million, which reflects that the bids were competitive and lower than the construction estimate. Right of way was also lower than expected. In 2017, the TPCE was lower than the baseline estimate because the awarded construction bid was less than the estimate. Engineering costs were also reduced from the baseline estimate.

Project Risks

Risks mostly retired as the project was completed in 2017.

Schedule

Environmental Approval Date: 10/2014
Municipal Consent Approval Date: 12/2014
Geometric Layout Approval Date: 2/1/2014
Construction Limits Established Date: 2/1/2014
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: 12/17/2018

PROJECT SUMMARY

I-94

Nicollet Avenue in Minneapolis to Shingle Creek Bridge in Brooklyn Center

Bridge multiple, bridges, (50+)

State Project No. 2781-432

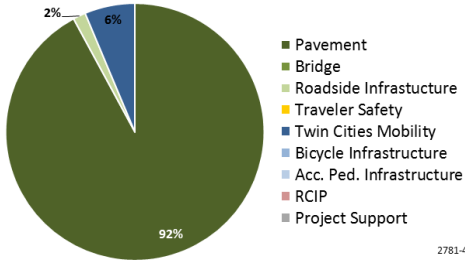
[I-94 from Minneapolis to Brooklyn Center](#)



Primary Purpose

Performance-based Need: Pavement
Condition Performance-based Need: Bridge
Condition

Investment Category



2781-432

Project Description

The project includes concrete pavement repair and diamond grinding south of Highway 55, bituminous overlay north of Highway 55, drainage and slope repair, Lowry Tunnel tile repair, Portland Tunnel joint repair, bridge redeck of westbound I-94 over southbound Highway 252 and miscellaneous repair of 49 bridges. In 2016, the cost increased due to adding \$6 million of lighting work throughout the nine-mile corridor. Advancing the lighting work to coincide with the pavement and bridge project in 2017 reduced impact on this highly-traveled corridor.

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	\$ 46.3
Other Construction Elements:	\$ 0.0	\$ 0.0
Engineering:	\$ 2.3	\$ 8.2
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 25.7	\$ 54.5

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

Recent Changes and Updates

The project is open to traffic in 2018, but there is some remaining landscaping work to be finished. This project was modified by a supplemental agreement to include significant work to the Whitney pedestrian bridge, which connects the Minneapolis Sculpture Garden to Loring Park. The work done to the bridge was approximately \$2.5 million and the increase in construction letting and engineering from the 2017 numbers reflect that change.

Project History

In 2017, the TPCE increased by \$3 million to \$54.5 million because the lowest bid for the construction letting was greater than the project estimate. Engineering costs have remained at \$8.2 million since 2016. In 2015, the TPCE increase to \$48.3 million due to better known costs of traffic control mitigation and bridge scope changes. In 2014 a project revision request added 48 bridges to the project, which increased the estimate from the baseline estimate to \$37.6 million and the letting date was also moved. Pavement inspections also showed more severe degradation than expected.

Key Cost Estimate Assumptions

Concrete pavement rehabilitation, traffic mitigation, bridge cost and scope are based on December 2014 bridge recommendations.

Project Risks

The project is open to traffic and most risk has been retired.

Schedule

Environmental Approval Date: 2016
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 2016
Construction Limits Established Date: 2016
Original Letting Date: 06/14/2013
Current Letting Date: 02/03/2017
Construction Season: 2017/2018
Estimated Substantial Completion: 07/01/2018



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **April Crockett**

Revised Date: 12/17/2018

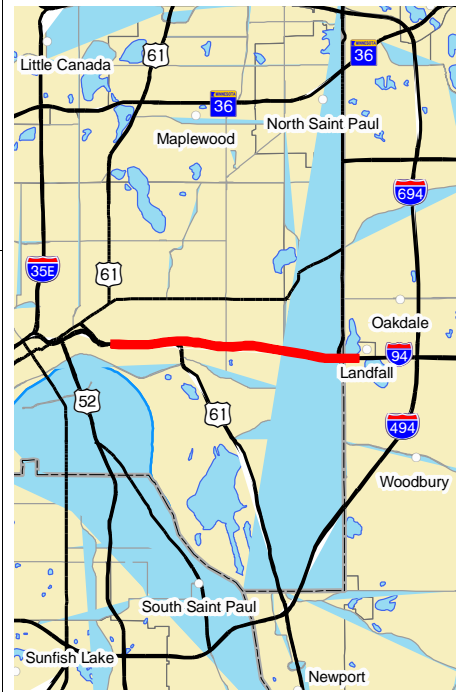
PROJECT SUMMARY

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

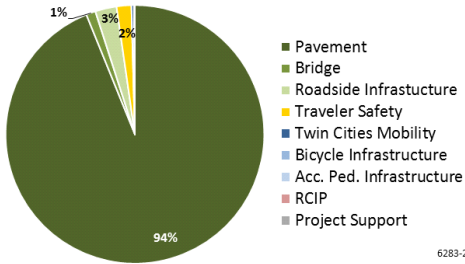
[I-94 from St. Paul to Woodbury](#)



Primary Purpose

Performance-based Need: Pavement
ConditionPerformance-based Need: Bridge
Condition

Investment Category



6283-234

Project Description

This project is for an unbonded concrete overlay on I-94 from Mounds Boulevard to east of Ruth Street, a bituminous resurfacing to east of Highway 120 and on Highway 61 north of Mounds Boulevard, a concrete overlay will be applied. Repair of nine bridges, signals, signing, lighting, guardrail, concrete median barrier, drainage, traffic management system and ADA are also included.

Recent Changes and Updates

This project was open to traffic in Nov. 2017 and minor landscaping work continued into the summer of 2018. There have been no changes to the TPCE since 2015.

Project History

In 2015, a portion of the project from Mounds Blvd. to White Bear Ave. was changed to a long-term pavement fix. This change in work increased the cost because of the change in materials and substructure treatment, and the concrete work triggered work on entrance/exit ramps along I-94. Other changes include adding a median barrier, improvements to storm sewer curbs and gutters, slope work, on-street bike/pedestrian trails, ADA and signal improvements, and work being done on the cross street-Hwy 120. There was an increase in the construction letting from \$43.3 million to \$46.1 million as a result of higher bids than the estimate.

Total Project Cost Estimate (millions)

Date in which the project entered into the STIP: 2012

	Baseline Est.	Current Est.
Construction Letting:	\$ 32.5	\$ 46.1
Other Construction Elements:	\$ 0.0	\$ 5.6
Engineering:	\$ 6.5	\$ 4.0
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 39.0	\$ 55.7

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

Key Cost Estimate Assumptions

In 2015, the construction costs increased from \$32 million to \$43.3 million, a result of a number of project changes. Additional state and federal funding was brought to this project resulting in longer life cycle pavement repair. Traffic Control Mitigation was increased to \$2 million. Water Resources cost estimate was increased by \$2.54 million. The current estimate increased from \$51.9 million to \$55.7 million in 2015. Changes include an increase in Other Construction Elements to \$5.6 million which is a result of post-letting change orders and enhanced traffic control mitigation. There is approx. \$0.4 million in local funds on this project.

Project Risks

Risks mostly retired as the project was completed in 2017.

Schedule

Environmental Approval Date: 05/14/2015
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 5/14/2015
Construction Limits Established Date: 5/14/2015
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: Steve Kordosky

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 10

Hwy 10 at County Road 83 (Armstrong Blvd) interchange

Bridge 02007, 02586

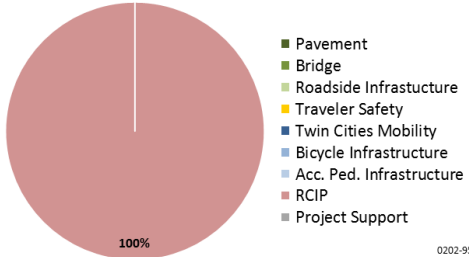
State Project No. 0202-95

Substantially Complete

Primary Purpose

Performance-based Need: Regional and Community Improvement Priority: CIMS, TIGER, CTIB, LRIP, BNSF, local funds

Investment Category



0202-95

Project Description

This project constructs an interchange, railroad grade-separation, access closures and frontage road at Highway 10 and Armstrong Boulevard (County Road 83).



Recent Changes and Updates

This project was led by Anoka County. 2018 is the second year this project is identified as substantially complete. The Total Project Cost Estimate has not changed since the 2015 MHPR. The Current Estimate reflects the known costs for the project.

Project History

The costs remained the same since the 2015 report, which included an increase to construction engineering costs based on bids and final engineering costs. Project funding included a Corridor Investment Management Strategy grant from MnDOT of \$10 million in 2013, \$10 million from the Counties Transit Improvement Board in 2014, \$10 million from a federal TIGER grant, Local Roads Improvement Program funds, BNSF funding, and local funds from Anoka County and Ramsey. The CIMS funding represents the MnDOT portion of the funding. Current letting date was changed from original letting date due to needs of the lead agency, Anoka County.

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

The Current Estimate is based on bids and final engineering costs.

Project Risks

The project is complete and major risks were retired.

Schedule

Environmental Approval Date: 6/4/2013
Municipal Consent Approval Date: Not needed
Geometric Layout Approval Date: 10/1/2013
Construction Limits Established Date: 1/1/2014
Original Letting Date: 11/01/2014
Current Letting Date: 03/31/2015
Construction Season: 2015/2016
Estimated Substantial Completion: 07/15/2016



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Phil Bergem

Revised Date: 12/17/2018

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

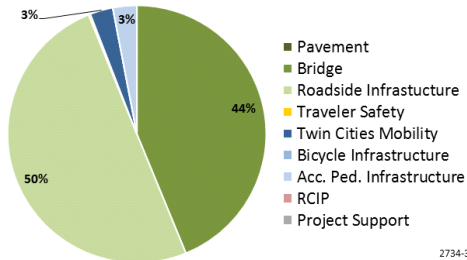
[Hwy 100 from St. Louis Park to Bloomington](#)

Substantially Complete

Primary Purpose

Performance-based Need: Twin Cities Mobility and Roadside Infrastructure Condition

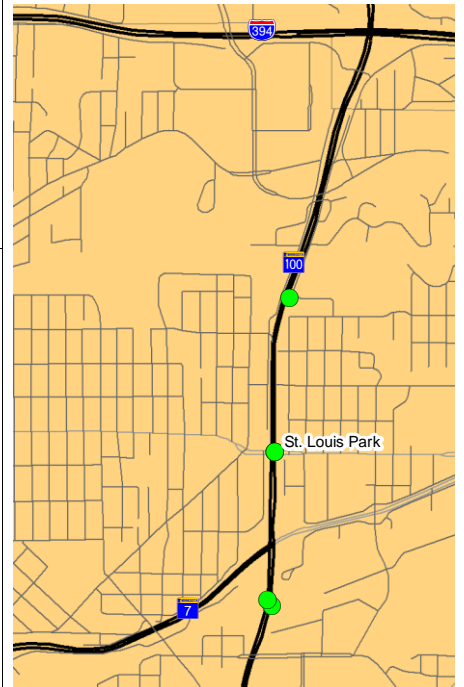
Investment Category



2734-33

Project Description

This project consists of freeway and interchange reconstruction from West 36th Street to Cedar Lake Rd. It replaces bridges, grading, surfacing, drainage, utilities, noise and retaining walls and installation of traffic management cameras.



Recent Changes and Updates

2018 is the second year this project is identified as substantially complete. The project was open to traffic in fall 2017. The TPCE does not have substantial changes since the 2014 MHPR. There is approximately \$2.5 million in local funds on this project reflected in the Construction and Engineering costs.

Project History

The TPCE had not changed since the 2014 MHP report. This project was a reconstruction of Hwy 100 at the Hwy 7 and Minnetonka Blvd interchanges in St. Louis Park and widened the road to include three lanes in each direction. A reduction in scope and retirement of risk and contingency release were the reasons for a reduced project's estimated costs in previous MHP reports.

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	\$ 43.3
Other Construction Elements:	\$ 4.0	\$ 4.8
Engineering:	\$ 13.0	\$ 8.1
Right of Way:	\$ 3.0	\$ 8.2
Total:	\$ 80.0	\$ 64.4

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

This project is complete, no risks remain.

Schedule

Environmental Approval Date: 6/10/2013
Municipal Consent Approval Date: 12/03/2012
Geometric Layout Approval Date: 9/17/2013
Construction Limits Established Date: 8/15/2012
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: **Andrew Lutaya**

Revised Date: 12/17/2018

PROJECT SUMMARY

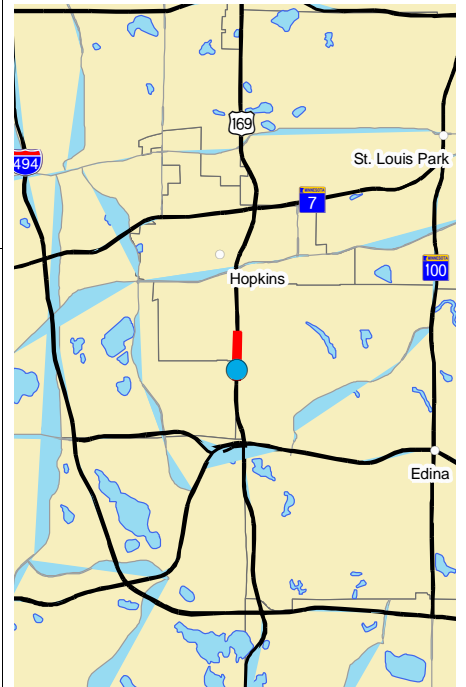
Hwy 169

Nine Mile Creek Bridge (Hopkins, Edina, Minnetonka)

Bridge 27568

State Project No. 2772-113

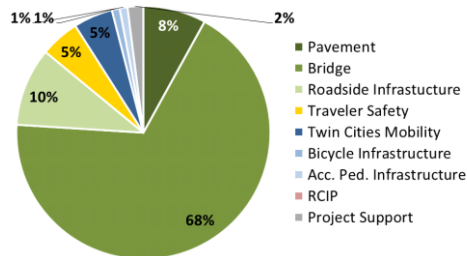
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



Project Description

The project replaced the 3,000 ft. long bridge and culverts over Nine Mile Creek in Hopkins and Edina. This was a design build project.

Recent Changes and Updates

2018 MHPR is the first year this project is identified as substantially complete. The project was open to traffic in fall 2017. The change from the baseline to current estimate reflects that a pavement project was split from the bridge project. Other construction elements estimate increased due to post-letting change orders and engineering costs grew with final design.

Project History

The Nine Mile Creek Bridge was under construction during calendar year 2017. To keep the project to one construction season, the bridge was closed to all traffic. The closure resulted in major traffic impacts to the local road system. MnDOT funded traffic control and other detour costs in residential neighborhoods impacted by the traffic. In 2016, the bridge replacement was split from a pavement project on Hwy 169 (SP 2772-105) and developed as a design-build contract. In the 2015 Minnesota legislative session, funding was provided for the Nine Mile Creek Bridge project and the project advanced from 2021 into 2017.

Schedule

Environmental Approval Date: 3/1/2016
Municipal Consent Approval Date: 2016
Geometric Layout Approval Date: 2016
Construction Limits Established Date: 2016
Original Letting Date: 06/14/2021
Current Letting Date: 08/05/2016
Construction Season: 2017
Estimated Substantial Completion: 10/31/2017

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	\$ 45.3
Other Construction Elements:	\$ 1.8	\$ 8.3
Engineering:	\$ 1.3	\$ 6.9
Right of Way:	\$ 0.9	\$ 0.8
Total:	\$ 69.9	\$ 61.3

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

Key Cost Estimate Assumptions

The design-build project delivery method estimates a savings over traditional design-bid-build project delivery.

Project Risks

Risks are mostly retired as the project was completed in 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: 12/17/2018

PROJECT SUMMARY

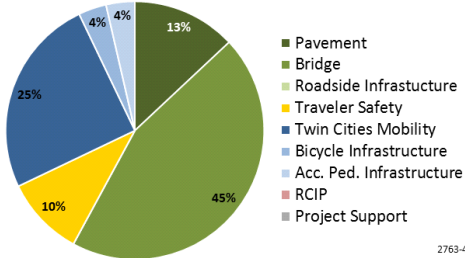
Hwy 212
At Shady Oak Road in Eden Prairie
State Project No. 2763-49

Substantially Complete

Primary Purpose

Performance-based Need: Bridge Condition

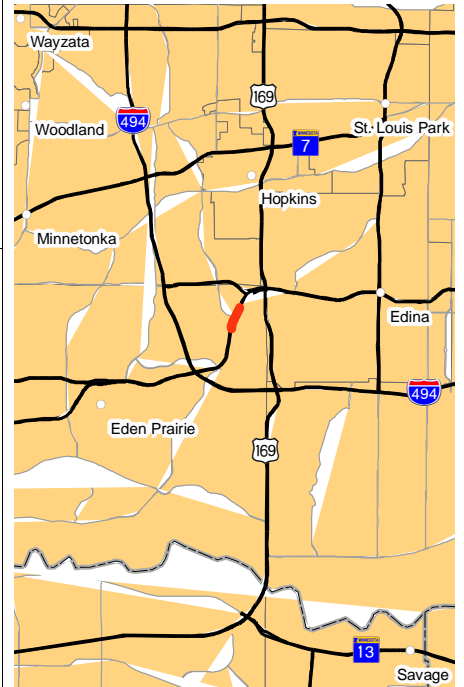
Investment Category



2763-49

Project Description

This project is for the reconstruction of an existing local interchange for additional capacity, led by Eden Prairie.



Recent Changes and Updates

2018 is the second year the project was identified as substantially complete. It is a locally led project. The MnDOT portion of the funding, \$7.1 million, is represented in Construction, Other Construction and Engineering costs.

Project History

Additional costs for right of way and other incidentals may be expected. This project was open to traffic in November 2015. The project was a reconstruction of a diamond interchange to provide additional capacity on Shady Oak Road and improve access to Hwy 212. There was coordination with Eden Prairie, MnDOT and Southwest LRT. The project received Transportation Economic Development funding of \$7.1 million in 2012, which comprised the extent of MnDOT's share of the project.

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 had oversight and review of project design.

Project Risks

The project is complete and no risks remain.

Schedule

Environmental Approval Date: Not needed
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: 2014/2016
Estimated Substantial Completion: 06/30/2016



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

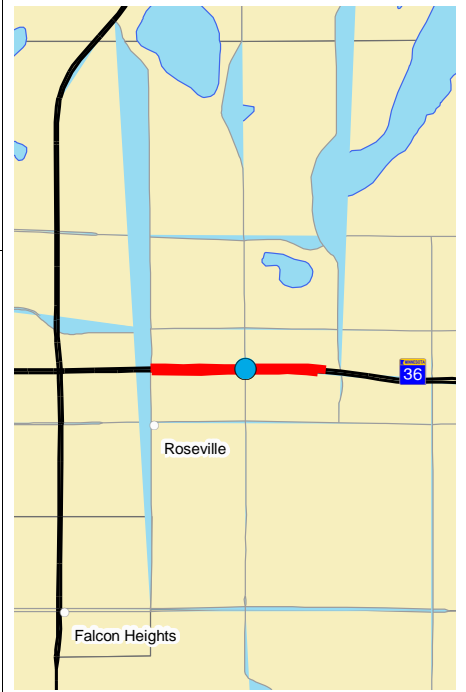
District Engineer: Scott McBride
Project Manager: April Crockett

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 36
Lexington Ave bridge over Hwy 36 in Roseville
Bridge 5723
State Project No. 6212-148
Hwy 36 at Lexington Ave.

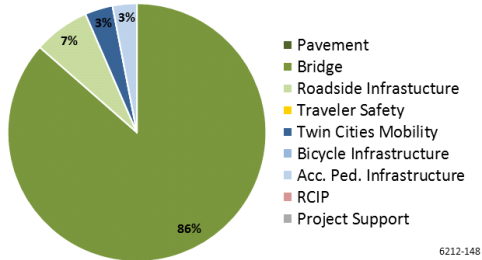
Substantially Complete



Primary Purpose

Performance-based Need: Bridge Condition

Investment Category



6212-148

Project Description

This project replaces the Lexington Avenue bridge including access ramps. It also addresses ADA issues on the multiuse trail and replaces two existing signals at the ramp terminals.

Recent Changes and Updates

2018 is the second year this project was identified as substantially complete. The project TPCE fell under \$15 million, which is the threshold for projects to be included in the MHPR. The construction letting was lowered due to some post-letting change order because traffic control cost less than a previous estimate.

Project History

This project was open to traffic in November 2016. The TPCE did not change from 2016 to 2017. In 2015, the project letting date was moved to avoid conflicts with I-35E work in 2015. In 2015, the TPCE changed from \$16.1 million to \$15 million due to the construction bid coming in lower than the estimate. Pavement work on westbound Hamline Ave ramps was added for staging/future MnPASS lane. The condition of the Lexington Ave Bridge was the driving force behind this project. The Lexington Ave Bridge, constructed in 1938, was funded through the Chapter 152 bridge bonding program.

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	\$ 9.9
Other Construction Elements:	\$ 0.0	\$ 0.6
Engineering:	\$ 2.5	\$ 1.7
Right of Way:	\$ 0.0	\$ 0.0
Total:	\$ 16.1	\$ 12.2

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

Key Cost Estimate Assumptions

Lexington Ave. was closed for bridge construction while traffic used the temporary bypass. Four lanes of traffic were maintained on Hwy 36 during construction.

Project Risks

The project is complete and no risks remain.

Schedule

Environmental Approval Date: 8/7/2012
Municipal Consent Approval Date: Not needed
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: 2016
Estimated Substantial Completion: 11/19/2016



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **Michael Kruse**

Revised Date: 12/17/2018

PROJECT SUMMARY

Hwy 610

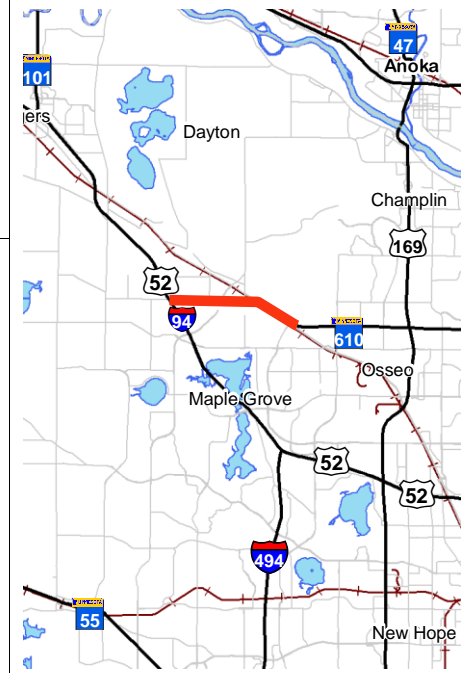
Hwy 81 to I-94 in Maple Grove

Bridge 27228, 27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16

State Project No. 2771-37

Hwy 610 from Elm Creek Blvd to I-94

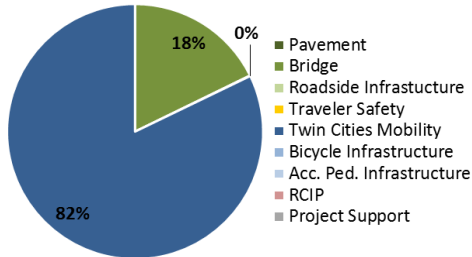
Substantially Complete



Primary Purpose

Performance-based Need: Regional & Community Improvement Priority: Corridors of Commerce Project

Investment Category



Project Description

This project realigns and extends a highway from County Road 81 and Elm Creek Boulevard to I-94, including constructing Highway 610 bridge over Fernbrook Lane, constructing an interchange at Hwy 610 and Maple Grove Parkway, closing and removing a half mile segment of 101st Avenue North, between I-94 and Fernbrook Lane, and extending 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	\$ 2.5
Engineering:	\$ 3.6	\$ 10.6
Right of Way:	\$ 49.0	\$ 44.6
Total:	\$ 175.6	\$ 138.4

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

Recent Changes and Updates

The Current TPCE has decreased since the 2017 MHPR from \$139.9 million to \$137.2 million as a result of lower post-letting costs than previously estimated. There is approximately \$1.3 million in local funds reflected in the Construction and Engineering costs.

Project History

This project was open to traffic in the fall 2016 and additional minor work continued in the summer of 2017. The project costs did not change from the 2014 to the 2107 Major Highway Projects Report. Project costs changed in the 2014 MHPR due to awarding the construction bid at \$80.7 million in 2014, which was less than the baseline estimate and the result a competitive bids. The project was built with design-build as the contracting method. The project is the final connection of I-94 to Hwy 610, connecting I-94 to the existing portion of Hwy 610 that currently ends at the CSAH 81, Elm Creek Blvd., and Hwy 610 interchange.

Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates.

Project Risks

Construction substantially complete.

Schedule

Environmental Approval Date: 2/27/2014
Municipal Consent Approval Date: 03/03/2014
Geometric Layout Approval Date: 6/2/2014
Construction Limits Established Date: 10/8/2013
Original Letting Date: 08/08/2014
Current Letting Date: 08/08/2014
Construction Season: October 2014/October 2016
Estimated Substantial Completion: 10/15/2016



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: Scott McBride
Project Manager: Jerome Adams

Revised Date: 12/17/2018

PROJECT SUMMARY

I-35E

Little Canada Rd in Little Canada to Lino Lakes

State Project No. 6281-47

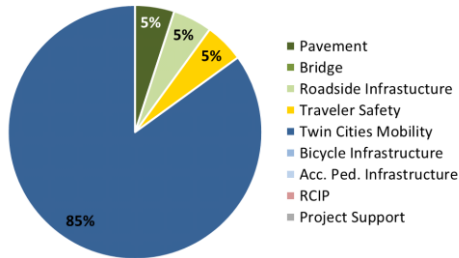
[I-35E MnPASS extension](#)

Substantially Complete

Primary Purpose

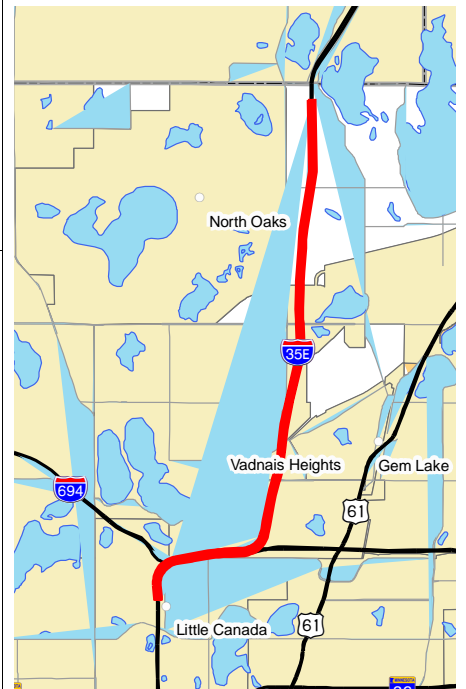
Performance-based Need: Twin Cities Mobility

Investment Category



Project Description

This project extends the I-35E MnPASS from Little Canada Road to CSAH 96 in both directions (with exceptions in the I-35E/694 Commons areas) and north to Lino Lakes for the northbound lane only.



Recent Changes and Updates

The TPCE in 2018 is \$26 million, similar to the 2017 TPCE which was \$25.6 million. The increase is in Other Construction Elements, which reflects post-letting change orders.

Project History

It was open to traffic in 2017 with some remaining work to noise walls, overhead signs and MnPASS toll readers. The project costs did not change from the 2014 to 2016 MHPR. In 2016, the construction letting costs changed to reflect the awarded bid, which was higher than estimate and was the result of added costs for increased traffic control during construction. 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 I-35E/694 Commons areas) and north past County Road J for the northbound lane only.

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	\$ 22.0
Other Construction Elements:	\$ 0.0	\$ 1.7
Engineering:	\$ 3.3	\$ 2.0
Right of Way:	\$ 0.3	\$ 0.3
Total:	\$ 23.0	\$ 26.0

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

The project is complete and little risk remain.

Schedule

Environmental Approval Date: December 2015
Municipal Consent Approval Date: February 2015
Geometric Layout Approval Date: December 2015
Construction Limits Established Date: December 2015
Original Letting Date: 3/25/2016
Current Letting Date: 03/18/2016
Construction Season: 2016/2017
Estimated Substantial Completion: 07/14/2017



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **Dale Gade**

Revised Date: 12/17/2018

PROJECT SUMMARY

I-35E

Cayuga Bridge between University Ave and Maryland Ave

Bridge 6515, 9265, 6517

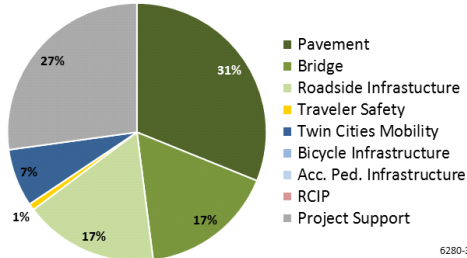
State Project No. 6280-308

Cayuga Bridge replacement
Substantially Complete

Primary Purpose

Performance-based Need: Bridge Condition

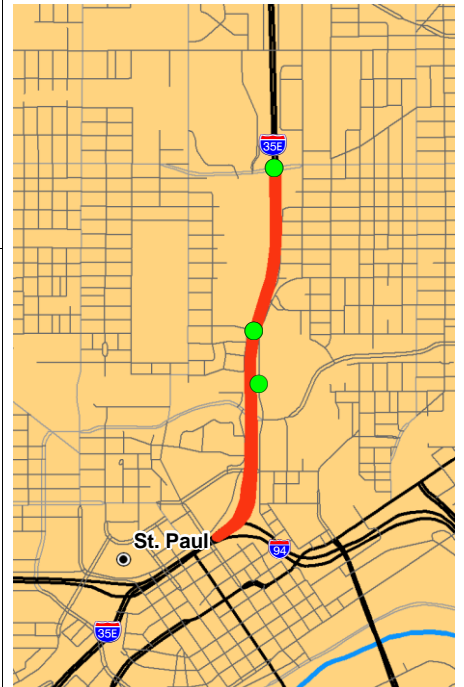
Investment Category



6280-367

Project Description

The project replaces the Cayuga Bridge (6515), Pennsylvania Ave. Bridge (9265), and the BNSF RR Bridge (6517). It also replaces the Pennsylvania interchange with the interchange at Cayuga to solve safety and operational problems, improve geometrics on 35E and extend the auxiliary lane from Pennsylvania to Maryland.



Recent Changes and Updates

The project was open to traffic in the fall of 2017. The TPCE in 2018 remains similar to previous years. There is approximately \$2 million in local funds on this project that is reflected in the construction and engineering amounts.

Project History

In 2017, the TPCE had not changed since the 2013 Major Highway Projects Report. The Cayuga Bridge was built in 1965. Since then it has had bridge repairs and painting in 1975 and a "limited service" overlay in 2004. The Current Estimate reflects construction letting of \$116 million in 2012, which was a competitive bid likely the result of the economy recovering in the 2010s. Other Construction elements include post-letting costs such as supplemental agreements. The letting date was moved up from 2014 to 2012 due to shifts in other projects in the STIP.

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	\$ 115.8
Other Construction Elements:	\$ 5.3	\$ 25.5
Engineering:	\$ 24.4	\$ 31.5
Right of Way:	\$ 11.3	\$ 12.7
Total:	\$ 184.9	\$ 185.5

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

Key Cost Estimate Assumptions

Costs do not include the Maryland bridge portion of the project. ***Make a single comment on why the current estimate is higher than the baseline estimate when this project received such a good bid price.***

Project Risks

Major risks have mainly been retired.

Schedule

Environmental Approval Date: 9/15/2011
Municipal Consent Approval Date: 9/5/2012
Geometric Layout Approval Date: 5/10/2012
Construction Limits Established Date: 5/16/2011
Original Letting Date: 04/25/2014
Current Letting Date: 11/16/2012
Construction Season: 2012/2016
Estimated Substantial Completion: 07/01/2017



Minnesota Department of Transportation
District M
1500 West County Road B2
(651) 234-7500

District Engineer: **Scott McBride**
Project Manager: **Dale Gade**

Revised Date: 12/17/2018

PROJECT SUMMARY

I-494

I-394 in Minnetonka to I-94/494/694 in Maple Grove

State Project No. 2785-330

[I-494 in Plymouth](#)

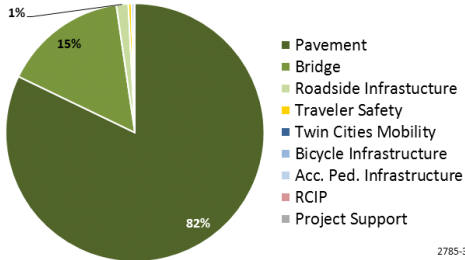
Substantially Complete



Primary Purpose

Performance-based Need: Twin Cities Mobility and Pavement Condition

Investment Category



2785-330

Project Description

The project adds a general purpose lane between Highway 55 and I-94/I-694, adds an auxiliary lane northbound between I-394 and Carlson Parkway and adds auxiliary lanes between Highway 55 and County Road 6. It also includes pavement resurfacing and reconstruction, ponds, noise walls, signal revisions, lighting, traffic management system, bridge replacements and repairs.

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	\$ 86.4
Other Construction Elements:	\$ 0.0	\$ 14.9
Engineering:	\$ 11.8	\$ 13.6
Right of Way:	\$ 0.0	\$ 0.1
Total:	\$ 73.0	\$ 115.0

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

Recent Changes and Updates

2018 is the second year this project was identified as substantially complete. There are changes to the TPCE from \$102.5 million to \$115 million this year that are an increase in post-letting change orders addressing traffic control mitigation.

Project History

The project costs did not change from the 2014 to the 2107 MHPR. The project was open to traffic in November 2016. In 2014, the scope of the project was changed from a dynamic shoulder to an additional third general purpose lane between Hwy 55 and the I-494/I-694/I-94 interchange. Costs increased from the baseline estimate when the change to the scope occurred.

Key Cost Estimate Assumptions

Standard practices were used to develop cost estimates.

Project Risks

Construction substantially complete.

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: 12/17/2018

Appendix D: Future Major Highway Projects (planned 2021-2032)

Major Highway Projects (Planned 2022-2032)

District	Route	State Project Number	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate Range (In Millions)	Total Project Cost Estimate Range (In Millions)
1	Hwy 27	0104-06, ASSOC.0903-29,0912-37	Derek Fredrickson	2021	MN 27 RP 221+00.259 to 231+00.365	MN 27 Fr N. Jct MN 65 To Aitkin/Carlton Co. Line & N. Jct MN 73 To W. Limit Moose Lake. & MN 73, In Kettle River Fr W. Jct MN 27 To 0.09 Mi. S. CSAH 12/Locker Plant Rd. mill and overlay, Reclaim & shoulder Upgrades	Not needed	Not needed	Not needed	Not needed	\$2.7 - \$3.8	\$3.5 - \$5.0
1	Hwy 61	1604-45, 1603-53	Thomas Prew	2021	MN 61 RP 133+00.802 to 150+00.835	**ELLA**SPP** MN 61 From Jct Reservation Bay Rd To U.S./Canadian Border. Bituminous Reclamation & mill and overlay. (Assoc. 1603-53)	Not needed	Not needed	Not needed	Not needed	\$9.1 - \$13.2	\$11.9 - \$17.2
1	Hwy 65	3609-41	Brian Larson	2021	MN65 254+00.760 to 270+00.739	MN 65 0.6 Mi. S. CSAH 8 To Jct U.S. 71. Overlay.	Not needed	Not needed	Not needed	Not needed	\$4.2 - \$6.0	\$5.5 - \$7.9
1	Hwy 1	3101-38	Randy Costley	2022	MN 1 RP 198+00.000 to 207+00	MN 1, 0.5 Mi. N Bass Lake Rd To 0.7 Mi. S. Jct CR 542/CR 550/MN 1 Reclaim.	Not needed	Not needed	Not needed	Not needed	\$14.8 - \$21.4	\$19.4 - \$28.0
1	Hwy 2	3104-60, 3105-16	Randy Costley	2022	US 2 RP 186+00.904 to 211+00.366	**17New**SPP**ELLA**Us 2, 0.4 Mi E. Bridge #31032 Over Prairie River To Jct MN 200. Medium Mill & Overlay. (Assoc. 3105-16, 0101-13)	Not needed	Not needed	Not needed	Not needed	\$9.7 - \$14.1	\$12.8 - \$18.4
1	Hwy 61	3804-61	Randy Costley	2022	MN61 RP 17+00.830 to 24+00.344	*SPP**MN 61 Expressway NB & SB From 0.1 Mi. N. Knife River To 0.32 Mi. S CSAH 61. Mill & Overlay	Not needed	Not needed	Not needed	Not needed	\$5.2 - \$7.5	\$6.8 - \$9.8
1	Hwy 65	3609-42 ASSOC 3113-07	Doug Kerfeld	2022	MN 65 RP 213+00.832 to 254+00.760	MN 65 0.4 Mi. S. Cr 547 To 0.5 Mi. S. CSAH 8. Reclaim & Mill & Overlay (Assoc. 3113-07)	Not needed	Not needed	Not needed	Not needed	\$7.3 - \$10.6	\$9.6 - \$13.9
1	Hwy 73	6930-41	Not assigned	2025	Limits to be defined	Pavement Resurfacing From National Forest Development Road 111 To Highway 1	Not needed	Not needed	Not needed	Not needed		\$12.7 - \$18.3
1	I-35	6982-318	Brian Larson	2022	I35 RP 249+00.062 to 251+00.753	**SPP** I-35, In Proctor At Thompson Hill, From 0.51 So. Boundary Ave. To N End Bridge No. 69879 Over MN 23, Reconstruct Pavement.	Not needed	Not needed	Not needed	Not needed	\$11.7 - \$16.9	\$15.3 - \$22.1
1	I-35	5807-30 ASSOC. 5807-9791, 5880-197	Derek Fredrickson	2022	MN 23 RP 289+00.063 to 289+00.113	MN 23 Over I-35, Replace Br#9791& I-35 Construct Cross Overs, Guardrail And Grading For Br #9791(Assoc. 5880-197)	Not needed	Not needed	Not needed	Not needed	\$2.5 - \$3.6	\$3.3 - \$4.8
1	Hwy 194	6932-14	Thomas Prew	2022	US 2 to TH 53	MN 194 Jct U.S. 2 To W. Jct U.S. 53. Mill & Overlay, Construct Roundabout At CSAH 13/Midway Rd.& Construct Reduced Conflict Intersection Jct U.S. 53/MN 194/Lindahl Rd(Assoc. 6916-113)	Not needed	Not needed	Not needed	Not needed	\$3.2 - \$4.6	\$4.1 - \$6.0
1	Hwy 2	6908-61 Assoc. 6907-51,	Brian Larson	2023	Limits to be defined	Pavement Resurfacing From West Of County Road 874 To Highway 194	Not needed	Not needed	Not needed	Not needed	\$2.8 - \$4.0	\$3.6 - \$5.2
1	Hwy 23	5809-16(prime) ASSOC. 5807-29, 5803-38, 5808-24	Sarah BaeHurst	2022	Limits to be defined	MN 23, In Sandstone From 0.06 Mi. N Oriole St E. To Jct Merchant St, CSAH 66 In Askov Cold Inplace Recycle, mill and overlay & Jct MN18/CSAH 61 Intersection Lighting Revisions. (Assoc. 5807-29, 5803-38, 5808-24)	Not needed	Not needed	Not needed	Not needed	\$4.0 - \$5.7	\$5.2 - \$7.5
1	Hwy 23	0901-81	Randy Costley	2023	MN 23 RP 315+00.530 to 355+00.665	MN 23, 0.4 Mile East Of The Pine-Carlton County Line To The Saint Louis River Bridge, Mill/Overlay	Not needed	Not needed	Not needed	Not needed	\$10.3 - \$14.9	\$13.5 - \$19.5
1	Hwy 23	6910-105	Doug Kerfeld	2023	Limits to be defined	MN 23 In Duluth Fr. 0.1Mi. N 130Th Ave To 0.1M. S. Jct Becks Rd. mill and overlay	Not needed	Not needed	Not needed	Not needed	\$3.5 - \$5.1	\$4.6 - \$6.7
1	Hwy 61	6925-144 ASSOC 6926-54	Josie Olson	2023	MN 61 5+00.818 to 10+00.428	MN 61 NB & SB In Duluth From 0.3M N. Superior St To Mcquade Rd/CSAH 33. mill and overlay (Assoc. 6926-54)	Not needed	Not needed	Not needed	Not needed	\$4.0 - \$5.7	\$5.2 - \$7.5
1	Hwy 61	1601-66Prime ASSOC. 3808-37	Sarah BaeHurst	2023	Limits to be defined	**SPP**MN 61, 2.6 Miles North Of CSAH-6 To 1.4 Mile South Of CSAH 79, Mill/Overlay (Assoc. 3808-37)	Not needed	Not needed	Not needed	Not needed	\$7.4 - \$10.6	\$9.7 - \$13.9
1	Hwy 65	0111-27	Brian Larson	2023	MN 65 RP 105+00.179 to 116+00.649	MN 65 From N. Jct MN 27 To E.Jct MN 210. mill and overlay	Not needed	Not needed	Not needed	Not needed	\$5.9 - \$8.6	\$7.8 - \$11.3
1	Hwy 73	6930-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing from County Road 66 (13th Street Northwest) to National Forest Development Road 111	Not needed	Not needed	Not needed	Not needed	\$3.3 - \$4.8	\$4.4 - \$6.3
1	I-35	5880-9790	Not assigned	2024	Limits to be defined	Replace the Northbound Bridge over the Burlington Northern Santa Fe Rail Road North of Highway 48	Not needed	Not needed	Not needed	Not needed	\$3.6 - \$5.2	\$4.7 - \$6.8
1	I-35	5880-9789	Not assigned	2024	Limits to be defined	Replace the Southbound Bridge over the Burlington Northern Santa Fe Rail Road North of Highway 48	Not needed	Not needed	Not needed	Not needed	\$2.8 - \$4.1	\$3.7 - \$5.4
1	Hwy 169	6935-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Northbound, from South of County Road 67 to West of County Road 109	Not needed	Not needed	Not needed	Not needed	\$6.8 - \$9.8	\$8.9 - \$12.9
1	Hwy 169	6935-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Southbound from South of County Road 5 to West of County Road 109	Not needed	Not needed	Not needed	Not needed	\$3.9 - \$5.6	\$5.1 - \$7.4
1	Hwy 194	6933-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Northbound and Southbound, in Duluth, from East of Highway 53 (Trinity Road) to North of Mesaba Avenue	Not needed	Not needed	Not needed	Not needed	\$3.9 - \$5.6	\$5.0 - \$7.3
1	Hwy 53	6917-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing Northbound from North of Highway 33 to South of County Road 52	Not needed	Not needed	Not needed	Not needed	\$6.1 - \$8.9	\$8.0 - \$11.6
1	Hwy 65	0112-XXX	Not assigned	2024	Limits to be defined	Pavement Resurfacing from West of Highway 210 to South of the Sandy River	Not needed	Not needed	Not needed	Not needed	\$5.9 - \$8.5	\$7.7 - \$11.1
1	I-35	6982-XXX	Not assigned	2024	Limits to be defined	Concrete Pavement Restoration Northbound and Southbound, in Duluth, from Lake Avenue to Highway 61	Not needed	Not needed	Not needed	Not needed	\$4.7 - \$6.8	\$6.2 - \$8.9
1	Hwy 135	6913-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from North of the Embarrass River to Highway 1	Not needed	Not needed	Not needed	Not needed	\$6.8 - \$9.8	\$8.8 - \$12.8
1	Hwy 11	3605-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing in International Falls, from West of County Road 332 to 12th Ave	Not needed	Not needed	Not needed	Not needed	\$5.2 - \$7.5	\$6.8 - \$9.9
1	Hwy 2	3103-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing Eastbound and Westbound, in Grand Rapids, West of 19th Avenue Northwest to East of Highway 169	Not needed	Not needed	Not needed	Not needed	\$3.6 - \$5.1	\$4.7 - \$6.7
1	Hwy 210	0915-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from East End of the Bridge over Railroad to West of I-35	Not needed	Not needed	Not needed	Not needed	\$8.4 - \$12.2	\$11.1 - \$16.0
1	Hwy 38	3108-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from Highway 2 to North of County Road 49	Not needed	Not needed	Not needed	Not needed	\$3.2 - \$4.6	\$4.2 - \$6.1
1	Hwy 53	6918-XXX, 6919-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from 12th Ave West in Virginia to North of Wayside Rest	Not needed	Not needed	Not needed	Not needed	\$5.5 - \$7.9	\$7.2 - \$10.4
1	Hwy 61	6925-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing Northbound and Southbound, in Duluth, from 28th Avenue East to 60th Avenue East	Not needed	Not needed	Not needed	Not needed	\$3.4 - \$4.9	\$4.4 - \$6.4
1	Hwy 61	1601-6202	Not assigned	2025	Limits to be defined	Bridge Replacement Over the Two Island River	Not needed	Not needed	Not needed	Not needed	\$3.3 - \$4.7	\$4.3 - \$6.2
1	Hwy 73	6927-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from North of County Road 86 to South Highway 2	Not needed	Not needed	Not needed	Not needed	\$4.5 - \$6.4	\$5.8 - \$8.4
1	Hwy 53	6918-38	Thomas Prew	2021	TH 53 at 6th Avnue West in Virgina	Replace Bridges 69009 and 690110	Not needed	Not needed	Not needed	Not needed		
1	Hwy 73	6929-XXX	Not assigned	2025	Limits to be defined	Pavement Resurfacing from North of bridge over the West Swan River to South of Highway 169, Dillon Road	Not needed	Not needed	Not needed	Not needed	\$5.3 - \$7.7	\$7.0 - \$10.0
2	Hwy 75	3509-28	Stephen Frisco	2022	From Hallock To Canadian Border	Bituminous Mill & Overlay & Bridge Replacement	Pending approval	Not needed	Not needed	Pending Approval	\$8.2	\$10.7
2	Hwy 92	1506-41	Stephen Frisco	2022	From CR 35 To Hwy 200	Bituminous Reclaim	Pending approval	Not needed	Not needed	Pending Approval	\$6.7	\$8.7
2	Hwy 2	6005-68	Laura Hadrava	2022	Ebl From 0.5 Mi E Of U.S. 59 To W Limits Of Fosston	Concrete Replacement	Pending approval	Pending approval	Pending approval	Pending Approval	\$24.0	\$31.2
2	Hwy 2	1102-70, 3102-50	Laura Hadrava	2022	From Cass CR 91 To Itasca CR 18	Bituminous Mill & Overlay	Pending approval	Pending approval	Pending approval	Pending Approval	\$8.5	\$11.1
2	Hwy 75	3509-26	Stephen Frisco	2022	In Hallock	Urban Reconstruct, Roadside Infrastructure	Pending approval	Pending approval	Pending approval	Pending Approval	\$5.2	\$6.8
2	Hwy 34	2902-44	Laura Hadrava	2022	In Akeley	Urban Reconstruct	Pending approval	Pending approval	Pending approval	Pending Approval	\$4.0	\$5.2
2	Hwy 71	0410-50	Brandy Pemberton	2022	From Hwy 197 To 1.3 Mi N Of CR 15	Bituminous Reclaim, Turn Lanes	Pending approval	Pending approval	Pending approval	Pending Approval	\$6.0	\$7.8
2	Hwy 87	2909-17	N/A	2023	From Hwy 71 To Bridge Over CRow Wing River	Bituminous Reconstruction/Rehabilitation	Pending approval	Not needed	Not needed	Pending Approval	\$7.8 - \$10.6	\$10.1 - \$13.8
2	Hwy 59	5705-61	N/A	2023	From Brooks To Thief River Falls	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.8 - \$6.6	\$6.2 - \$13.8
2	Hwy 71	0410-51	N/A	2023	From CR 22 To Blackduck	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.3 - \$5.8	\$5.6 - \$13.8
2	Hwy 92	N/A	N/A	2023	From E Limits Of Gonvick To Bagley	Bituminous Mill & Overlay	Pending approval	Pending approval	Pending approval	Pending Approval	\$3.5 - \$4.7	\$4.6 - \$13.8
2	Hwy 89	N/A	N/A	2024	From North Red Lake Indian Reservation Border To CR 44	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$3.5 - \$4.7	\$4.6 - \$13.8
2	Hwy 11	6803-43	Laura Hadrava	2024	From E City Limits Of Roseau To Jct MN 313 In Warroad	Bituminous Reclaim, Bridge Replacement	Pending approval	Not needed	Not needed	Pending Approval	\$8.3 - \$11.3	\$10.8 - \$13.8
2	Hwy 32	4504-19	N/A	2024	From Middle River To Greenbush	Bituminous Reclaim, Bridge Replacements	Pending approval	Not needed	Not needed	Pending Approval	\$7.2 - \$9.8	\$9.4 - \$13.8
2	Hwy 89	N/A	N/A	2024	From Hwy 219 To Wannaska	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$5.2 - \$7.0	\$6.8 - \$13.8
2	Hwy 75	N/A	N/A	2024	From S Limts Of Donaldson To S Limits Of Hallock	Bituminous Reconstruct, Mill & Overlay & Bridge Replacement	Pending approval	Not needed	Not needed	Pending Approval	\$5.6 - \$7.6	\$7.3 - \$13.8

District	Route	State Project Number	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate Range (In Millions)	Total Project Cost Estimate Range (In Millions)
2	Hwy 1	N/A	N/A	2025	MN 1 From North Dakota Border To 3.3 Mi E Of Oslo, Br. 9100	Bituminous Mill & Overlay, Bridge Replacement	Pending approval	Not needed	Not needed	Pending Approval	\$7.3 - \$9.9	\$9.5 - \$13.8
2	Hwy 11	N/A	N/A	2025	From CR 5 To Roseau/Lake Of The Woods County Line	Bituminous Mill & Overlay, Widening	Pending approval	Not needed	Not needed	Pending Approval	\$4.4 - \$6.0	\$5.7 - \$13.8
2	Hwy 1	N/A	N/A	2025	From S Clearwater County Line To N Clearwater County Line	Bituminous Mill & Overlay	Pending approval	Pending approval	Pending approval	Pending Approval	\$3.8 - \$5.2	\$4.9 - \$13.8
2	Hwy 2	N/A	N/A	2025	Eastbound From 1.0 Mi E Of MN 9 To 0.8 Mi W Of MN 32	Bituminous Mill & Overlay, Rehabilitate Bridge	Pending approval	Pending approval	Pending approval	Pending Approval	\$3.6 - \$4.8	\$4.7 - \$13.8
2	Hwy 2	N/A	N/A	2026	Eastbound From E Fosston Limits To W Bagley Limits	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.1 \$5.5	\$5.3 \$13.8
2	Hwy 200	N/A	N/A	2026	MN 200 From CSAH 39 To Hubbard/Cass County Line	Bituminous Reclaim	Pending approval	Not needed	Not needed	Pending Approval	\$5.6 - \$7.6	\$7.3 - \$13.8
2	Hwy 2	N/A	N/A	2026	Over 4Th St NW In East Grand Forks, Br. 60001	Bridge Replacement	Pending approval	Not needed	Not needed	Pending Approval	\$5.1 - \$6.9	\$6.6 - \$13.8
2	Hwy 59	N/A	N/A	2026	Over Red Lake River In Thief River Falls, Br. 5327	Bridge Replacement	Pending approval	Not needed	Not needed	Pending Approval	\$6.4 - \$8.6	\$8.3 - \$13.8
2	Hwy 72	N/A	N/A	2026	From 2.9 Mi S Of Beltrami/Lake Of The Woods County Line To 2.1 Mi N Low CR 1	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$3.7 - \$4.9	\$4.8 - \$13.8
2	Hwy 75	N/A	N/A	2026	From Norman/Clay County Line To S Limits Of Hendrum	Bituminous Mill & Overlay With Pasb	Pending approval	Not needed	Not needed	Pending Approval	\$3.9 - \$5.3	\$5.1 - \$13.8
2	Hwy 32	N/A	N/A	2027	MN 32 From Polk CSAH 1 To U.S. 2, Fertile	Bituminous Mill & Overlay, ADA In Fertile	Pending approval	Pending approval	Pending approval	Pending Approval	\$6.8 - \$9.2	\$8.8 - \$13.8
2	Hwy 1	N/A	N/A	2027	From Beltrami/Clearwater County Line To S Jct Of MN 89	Bituminous Mill & Overlay, Shoulder Widening	Pending approval	Not needed	Not needed	Pending Approval	\$5.3 - \$7.1	\$6.9 - \$13.8
2	Hwy 2	N/A	N/A	2027	Westbound From E Fosston Limits To W Bagley Limits	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.9 - \$6.7	\$6.4 - \$13.8
2	Hwy 2	N/A	N/A	2027	Westbound From Hwy 59 To Fosston	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$3.4 - \$4.6	\$4.4 - \$13.8
2	Hwy 2	N/A	N/A	2027	Eastbound From East Grand Forks To Polk CR 15	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$4.1 - \$5.5	\$5.3 - \$13.8
2	Hwy 89	N/A	N/A	2027	From Wannaska To Roseau	Bituminous Mill & Overlay	Pending approval	Not needed	Not needed	Pending Approval	\$5.9 - \$7.9	\$7.7 - \$13.8
3	Hwy 10/Hwy 23	0503-91	Dumont	2022	West of St. Germain Street in St. Cloud to Benton/Sherburne Co line & Pedestrian Bridge in St. Cloud to west of Benton Co CSAH 1	Reconstruction and replacement of Bridges #9021 and #9022 over Hwy 10	Not needed	Not needed	Not needed	Not needed	\$24.9 - \$33.7	\$29.9 - \$40.4
3	Hwy 23	0504-20	Dumont	2022	Foley to Milaca	Unbonded Conc Overlay	Not needed	Not needed	Not needed	Not needed	\$10.0 - \$14.0	\$14.0 - \$16.0
3	Hwy 25	1811-35	Indihar	2022	MN 25 in Brainerd	Replace Br 9099 over BNSF RR E of Jct CR 3	Not needed	Not needed	Not needed	Not needed	\$3.0 - \$5.0	\$5.0 - \$7.0
3	Hwy 25	8604-37	Fellbaum	2022	MN 25 in Buffalo	Urban Reconstruction	Not needed	Not needed	Not needed	Not needed	\$5.2 - \$7.2	\$7.2 - \$9.2
3	Hwy 27	7703-16	Fellbaum	2022	MN 27 from Osakis to Jct 71	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$13.0 - \$16.0	\$16.0 - \$19.0
3	I-94	7380-259	Dumont	2022	W of MN 23 Interchange	Replace Bridge 73875 and Bridge 73876	Not needed	Not needed	Not needed	Not needed	\$5.0 - \$7.0	\$7.0 - \$9.0
3	Hwy 210	0119-30	Schiller	2022	From Aitkin to Hassman Corner to Mississippi River Br	Unbonded Conc Overlay + Br 7592	Not needed	Not needed	Not needed	Not needed	\$6.0 - \$9.0	\$9.0 - \$12.0
3	MN371B	1814-08	Wehseler	2022	MN 371B in Brainerd	Reconstruction and mill and overlay	Not needed	Not needed	Not needed	Not needed	\$5.0 - \$7.0	\$7.0 - \$9.0
3	Hwy 23	4801-25	Schiller	2023	Milaca to Groundhouse River east of Ogilvie	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$4.2 - \$5.6	\$5.0 - \$6.7
3	Hwy 238	4913-26	Dumont	2023	3rd Avenue in Upsala to MN 27	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$5.7 - \$7.7	\$6.8 - \$9.2
3	Hwy 25	1808-26	Schiller	2023	Pierz to Morrison-Crow Wing County line	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$4.1 - \$5.5	\$4.9 - \$6.6
3	Hwy 95	3006-39	Dumont	2023	Fern Street to Davis Street in Cambridge	Urban reconstruction	Not needed	Not needed	Not needed	Not needed	\$6.0 - \$8.1	\$7.2 - \$9.7
3	MN 18	0102-28	TBD	2023	US 169 to MN 47	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$4.8 - \$6.5	\$5.8 - \$7.8
3	US 169	4814-56	TBD	2023	Mille Lacs Band Reservation to Garrison	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$6.5 - \$8.7	\$7.8 - \$10.4
3	Hwy 169	0116-XX	TBD	2024	MN 210 to MN 200	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$13.2 - \$17.9	\$15.8 - \$21.5
3	Hwy 169	4811-76	TBD	2024	Long Siding to 2 miles north of Pease	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$4.9 - \$6.7	\$5.9 - \$8.0
3	Hwy 23	4801-26	Dumont	2024	Milaca	Urban Reconstruction	Not needed	Not needed	Not needed	Not needed	\$4.0 - \$5.4	\$4.8 - \$6.5
3	Hwy 6	1103-27	TBD	2024	Roosevelt Lake in Outing to MN 200 in Remer	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$6.9 - \$9.3	\$8.3 - \$11.2
3	Hwy 65	3004-65	TBD	2024	Cambridge to MN 107	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$5.1 - \$6.9	\$6.1 - \$8.3
3	Hwy 71	7319-42	Dumont	2024	I-94 to North Sauk Centre	Urban Reconstruction	Not needed	Not needed	Not needed	Not needed	\$10.4 - \$14.0	\$12.5 - \$16.8
3	Hwy 71	7319-437707-25	Schiller	2024	North Sauk Centre to south Long Prairie	Cold In Place Recycle	Not needed	Not needed	Not needed	Not needed	\$6.8 - \$9.2	\$8.2 - \$11.0
3	Hwy 210	1805-1806-XX	Schiller	2025	Beginning of 4-Lane Baxter Dr. to end of 4-Lane east of Brainerd	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$9.9 - \$13.3	\$11.9 - \$16.0
3	Hwy 210	1805-XX	Schiller	2025	Replace BR 5060 over Mississippi River in Brainerd	Bridge Replacement	Not needed	Not needed	Not needed	Not needed	\$3.0 - \$5.0	\$5.0 - \$7.0
3	Hwy 210	4909-XX/1115-XX	Schiller	2025	Motley to Pillager	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$2.9 - \$4.9	\$4.9 - \$6.9
3	Hwy 23	7305-XX	Dumont	2025	West city limits Waite Park to MN 15 in St. Cloud	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$4.4 - \$6.0	\$5.3 - \$7.2
3	Hwy 23	7305-XX	TBD	2025	Richmond to I-94 (EB & WB)	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$14.2 - \$19.2	\$17.0 - \$23.0
3	Hwy 28	7308-XX	TBD	2025	Hwy 71 to Swanville	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$7.3 - \$9.9	\$8.8 - \$11.9
3	Hwy 71	8004-XX	Schiller	2025	Elm Avenue in Wadena to Red Eye River in Sebeka	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$6.8 - \$9.2	\$8.2 - \$11.0
3	Hwy 101	8608-xx	Schiller	2025	From Wright/Hennepin Co line to Wright CR 42	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$3.5 - \$5.5	\$5.5 - \$7.5
3	I-94	8680-XX	Dumont	2025	East of Monticello to CSAH 19 in Albertville	Unbonded Overlay	Not needed	Not needed	Not needed	Not needed	\$8.5 - \$11.5	\$11.5 - \$13.5
3	Hwy 10	4901-XX/0505-XX	TBD	2026	Little Falls to Half Way Crossing south of Royalton (EB & WB)	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$10.2 - \$13.8	\$12.2 - \$16.6

Major Highway Projects (Planned 2022-2032)												
District	Route	State Project Number	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate Range (In Millions)	Total Project Cost Estimate Range (In Millions)
3	Hwy 10	8001-XX	TBD	2026	Oink Joint Road in Wadena to Staples	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$12.6 - \$17.0	\$15.1 - \$20.4
3	Hwy 64	1109-XX	Indihar	2026	MN 210 east of Motley to Jct MN 87	Bituminous Resurfacing	Not needed	Not needed	Not needed	Not needed	\$8.5 - \$11.5	\$10.2 - \$13.8
3	Hwy 95	4809/4810	Dumont	2026	Benton/Mille Lacs Co Line to RP 29	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$6.0 - \$8.1	\$7.2 - \$9.7
3	I-94	7380-XX	TBD	2026	Douglas-Todd County line to U.S. 71 in Sauk Centre	Concrete pavement rehab	Not needed	Not needed	Not needed	Not needed	\$5.4 - \$7.4	\$6.5 - \$8.9
3	I-94	7380-XX	TBD	2026	Melrose to Albany (EB & WB)	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$12.1 - \$16.3	\$14.5 - \$19.6
3	Hwy 10	7102-XX	TBD	2027	Big Lake to Joplin Ave in Elk River	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$7.3 - \$9.9	\$8.8 - \$11.9
3	Hwy 10	4902-XX	TBD	2027	Cushing to Little Falls	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$17.0 - \$23.0	\$20.4 - \$27.6
3	Hwy 10	0502-XX	TBD	2027	Halfway Crossing to Watab	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$9.3 - \$11.3	\$11.3 - \$13.3
3	Hwy 25	1808-XX	TBD	2027	Morrison/Crow Wing Co Line to Brainerd	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$3.8 - \$5.8	\$5.8 - \$7.8
3	Hwy 169	4811-XX	TBD	2027	Milaca bypass to Mille Lacs CSAH 11	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$8.0 - \$10.8	\$9.6 - \$13.0
3	Hwy 210	7701-XX	TBD	2027	Hewitt to U.S. 10 in Staples	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$8.1 - \$10.9	\$9.7 - \$13.1
3	Hwy 371	1810-XX	TBD	2027	MN 210 in Baxter to Nisswa	Reclamation	Not needed	Not needed	Not needed	Not needed	\$11.6 - \$15.6	\$13.9 - \$18.7
3	Hwy 371	1119-XX	TBD	2027	S Jct 200 to N of Walker	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$3.3 - \$5.3	\$5.3 - \$6.3
3	Hwy 71	8005-XX	TBD	2027	Sebeka to Wadena-Hubbard County Line	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$6.2 - \$8.4	\$7.4 - \$10.1
3	Hwy 95	0505-XX	TBD	2027	MN 23 east of St. Cloud to Benton-Mille Lacs County line	Reclamation	Not needed	Not needed	Not needed	Not needed	\$8.2 - \$11.1	\$9.8 - \$13.3
3	Hwy 95	3007-XX	TBD	2027	E of Cambridge to Chisago Co Line	Bituminous resurfacing	Not needed	Not needed	Not needed	Not needed	\$2.8 - \$4.8	\$4.8 - \$6.8
3	I-94	7380-XX	TBD	2027	Albany to Stearns CR 159 in Collegeville	Reclamation	Not needed	Not needed	Not needed	Not needed	\$9.7 - \$13.1	\$11.6 - \$15.7
4	Hwy 9	8409-26	Tom Lundberg	2022	Barnseville to Breckenridge	Cold In-Place Recycle and Box Culvert Work	Pending approval	Pending approval	Pending approval	Pending approval	\$8.0 - \$12.0	\$10.4 - \$15.6
4	Hwy 34	0303-68	Katy Reiersen	2022	0.2 Miles East of CSAH 29 to Ponsford Road	Reclaim	Pending approval	Pending approval	Pending approval	Pending approval	\$9.9 - \$14.8	\$12.9 - \$15.6
4	Hwy 34	0303-67	Katy Reiersen	2023	Hwy 225 to E Becker Co Line	Reclaim and Widen Shoulders	Pending approval	Pending approval	Pending approval	Pending approval	\$4.6 - \$6.8	\$6.0 - \$15.6
4	I94EB	8480-42	Tom Lundberg	2023	West Of MN 108 To West Of CSAH 11	Unbonded Concrete Overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$7.8 - \$11.5	\$10.1 - \$15.6
4	Hwy 55	2609-28	Tom Pace	2023	Elbow Lake to Barrett	Reclaim, shoulder widening	Pending approval	Pending approval	Pending approval	Pending approval	\$6.9 - \$10.2	\$9.0 - \$15.6
4	Hwy 28	6102-25	Justin Knopf	2024	Pomme deTerre Bridge to Starbuck	Reclaim	Pending approval	Pending approval	Pending approval	Pending approval	\$6.7 - \$10.1	\$8.7 - \$15.6
4	Hwy75	7806-32	Brian Bausman	2024	N end of Br 78006 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 - \$15.6
4	Hwy 10	5605-23	Lori Vanderhider	2024	East of CSAH 84 to West of Bluffton	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.4 - \$6.5	\$5.7 - \$15.6
4	Hwy 59	5617-31	Brian Bausman	2024	0.3 Miles North of I-94 to 4th Avenue in Pelican Rapids	Thick mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.8 - \$13.0	\$11.4 - \$15.6
4	Hwy 210	5604-XX	Tom Pace	2024	TH 29 to .02 Miles W of U.S. 71	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$4.3 - \$6.3	\$5.6 - \$15.6
4	I94WB	5680-144	Justin Knopf	2025	East of Otter Tail CSAH 11 to North of U.S. 59	Concrete Pavement Rehabilitation and Bridge Work	Pending approval	Pending approval	Pending approval	Pending approval	\$7.8 - \$11.5	\$10.1 - \$15.6
4	I94WB	2180-118	Lori Vanderhider	2025	Hwy 114 to Hwy 29	Unbonded Concrete Overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$7.8 - \$11.5	\$10.1 - \$15.6
4	Hwy 10 EB	5607-43	Lori Vanderhider	2025	CSAH 10 to 6 miles E of perham (NE end of Br over RR)	Thick mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$8.6 - \$12.6	\$11.2 - \$15.6
4	Hwy 59	2610-12	Justin Knopf	2025	South Grant County Line to Hwy 55 in Barrett	Concrete Rehabilitation	Pending approval	Pending approval	Pending approval	Pending approval	\$5.7 - \$8.5	\$7.4 - \$15.6
4	Hwy 75/10	1406-76	Justin Knopf	2025	On U.S. 75, From N. Of 24Th Ave. S. To U.S. 10 (Main Ave.), On U.S. 10, From Red River To E. Of U.S. 75, Grading Bituminous & Concrete Paving, ADA Improvements And Signals, AC Project	Reconstruct	Pending approval	Pending approval	Pending approval	Pending approval	\$25.5 - \$37.5	\$33.2 - \$15.6
4	Hwy 10	1401-180	Katy Reiersen	2026	East Of U.S. 75 In Moorhead To 220Th St In Hawley	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$9.1 - \$13.3	\$11.8 - \$15.6
4	Hwy 10EB	1401-182	Katy Reiersen	2026	14Th Street In Moorhead To CSAH 31	Medium mill and overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$10.2 - \$14.9	\$13.3 - \$15.6
4	I94EB	1480-180	Tom Lundberg	2026	.56 Mi E. of ND State line to .3 Mi E. of CSAH 11/MN 336	Reconstruct	Pending approval	Pending approval	Pending approval	Pending approval	\$9.9 - \$14.5	\$12.9 - \$15.6
4	Hwy 27	7803-13	Tom Pace	2027	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	\$10.5 - \$15.5	\$13.7 - \$15.6
4	I94EB	2680-48	Lori Vanderhider	2027	0.4 Miles E. of Grant Co. Line to Jct. MN 79	Concrete Rehabilitation including shoulder	Pending approval	Pending approval	Pending approval	Pending approval	\$8.3 - \$12.2	\$10.8 - \$15.6
4	I94WB	5680-146	Lori Vanderhider	2027	1.5 Miles W of TH 108 to 0.1 Miles W of U.S. 59	Concrete Rehabilitation including shoulder	Pending approval	Pending approval	Pending approval	Pending approval	\$11.1 - \$16.4	\$14.4 - \$15.6
4	MN29	XXXX-XX	Not assigned	2027	50Th Ave In Alexandria To 0.1M N Of Mckay Ave	Concrete Rehabilitation	Pending approval	Pending approval	Pending approval	Pending approval	\$5.3 - \$7.8	\$6.9 - \$15.6
4	I94WB	XXXX-XX	Not assigned	2028	0.4 W Of MN29 To Becker/Douglas County Line	Unbonded Concrete Overlay	Pending approval	Pending approval	Pending approval	Pending approval	\$17.9 - \$26.3	\$23.3 - \$15.6
4	I94WB	XXXX-XX	Not assigned	2028	0.565 E. State Line To 0.3 E Of MN336	Reconstruct	Pending approval	Pending approval	Pending approval	Pending approval	\$8.2 - \$12.1	\$10.7 - \$15.6
6	30	2305-30	Richard Augustin	2022	Hwy 30 From West City Limits To MN 43 - Rushford Urban Section	Reconstruct	Pending approval	Need unknown	Need unknown	Pending approval	\$4.1 - \$6.5	\$5.2 - \$8.2
6	43	8503-53	Craig Lenz	2022	Hwy 43 From Hwy 61 In Winona To Mankato Ave/Sarnia Ave Junction	Reconstruct All Lanes	Pending approval	Need unknown	Pending approval	Pending approval	\$9.3 - \$9.7	\$11.6 - \$12.2
6	60	7902-25	Heather Lukes	2022	Hwy 60 From Hwy 52 To Hwy 63 Near Zumbro Falls	Repaving And ADA Improvements	Pending approval	Pending approval	Pending approval	Pending approval	\$9.7 - \$10.1	\$12.1 - \$12.7
6	61	7904-44	Heather Lukes	2022	Hwy 61 Southbound Lanes From Hwy 248 In Winona County To Hwy 60 In Wabasha County	Repaving	Pending approval	Not needed	Need unknown	Pending approval	\$11.7 - \$12.3	\$14.6 - \$15.4
6	61	2513-97	Paul Zager	2022	Hwy 61 From One Mile North Of Lake City To Ready Mix Entrance In Red Wing	Repaving	Pending approval	Need unknown	Need unknown	Pending approval	\$4.3 - \$6.8	\$5.3 - \$8.4

Major Highway Projects (Planned 2022-2032)												
District	Route	State Project Number	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate Range (In Millions)	Total Project Cost Estimate Range (In Millions)
6	90	2482-77	Paul Zager	2022	I-90 Eastbound Lanes From FreEborn County Road 46 Near Petran To Hwy 105 Near Austin	Repaving	Pending approval	Not needed	Pending approval	Pending approval	\$14.1 - \$14.9	\$17.7 - \$18.6
6	19	6602-30	Mark Harle	2023	Hwy 19 From Hwy 13 To Hwy 3 In Rice County	Repaving	Pending approval	Need unknown	Need unknown	Pending approval	\$9.9 - \$10.5	\$12.4 - \$13.1
6	35	6680-117	Paul Zager	2023	I-35 From Rice County Road 48 To Hwy 21	Repaving All Lanes	Pending approval	Not needed	Not needed	Pending approval	\$11.3 - \$11.9	\$14.1 - \$14.8
6	43	2306-26	Aaron Breyfogle	2023	Hwy 43 From Hwy 44 Near Mabel To Hwy 16 Junction Near Rushford In Fillmore County	Repaving	Pending approval	Need unknown	Need unknown	Pending approval	\$9.8 - \$10.3	\$12.2 - \$12.8
6	61	2514-121	Craig Lenz	2023	Hwy 61 Over Hay Creek And Withers Harbor Drive And Over Abandoned Railroad In Red Wing	Replace Bridge 6483 And Plug Bridge 6482	Pending approval	Pending approval	Pending approval	Oct-17	\$9.3 - \$9.7	\$11.6 - \$12.2
6	90	5080-170	Jai Kalsy/Mark Harle	2023	I-90 Austin Design Build	Replace 4 Bridges And Rehabilitate 3 Bridges	Pending approval	Need unknown	Pending approval	Pending approval	\$27.7 - \$29.1	\$34.6 - \$36.4
6	90	8580-175	Paul Zager	2023	I-90 From Winona County Road 12 To Hwy 61/Dakota	Repaving	Pending approval	Not needed	Need unknown	Pending approval	\$3.9 - \$6.2	\$4.9 - \$7.7
6	218	7408-50	Richard Augustin	2023	Hwy 218 From Hwy 30 Near Blooming Prairie To Hwy 14 Near Owatonna	Repaving	Pending approval	Not needed	Not needed	Pending approval	\$6.2 - \$6.6	\$7.7 - \$8.2
6	218	7408-54	Richard Augustin	2023	Hwy 218 From 0.6 Mi S Jct Hwy 30 To S Jct Hwy 30 (Blooming Prairie)	Reconstruct	Pending approval	Pending approval	Pending approval	Pending approval	\$5.4 - \$5.8	\$6.8 - \$7.2
6	251	2408-23	Tom Austin	2023	Hwy 251 From I-35 To Hwy 218	Repaving	Pending approval	Pending approval	Pending approval	Pending approval	\$7.5 - \$7.9	\$9.3 - \$9.9
6	30	5505-30	Richard Augustin	2024	Hwy 30 From Hwy 63 Near Stewartville To Hwy 52 Near Chatfield In Olmsted County	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$7.5 - \$7.9	\$9.3 - \$9.9
6	80	NEW	Paul Zager	2024	Hwy 80 From Hwy 16 To Hwy 52	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$3.9 - \$6.2	\$4.9 - \$7.7
6	90	NEW	Aaron Breyfogle	2024	I-90 From Alden To Hwy 13	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$12.0 - \$12.6	\$15.0 - \$15.8
6	218	NEW	Richard Augustin	2024	Hwy 218 From I-90 To Hwy 30	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$6.2 - \$6.6	\$7.7 - \$8.2
6	246	6614-28	Mark Harle	2024	Hwy 246 From Hwy 3 To Nerstrand	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$5.8 - \$6.2	\$7.3 - \$7.7
6	13	NEW	Paul Zager	2025	Hwy 13 From Hwy 69 To Hwy 30	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$7.7 - \$8.2	\$9.7 - \$10.3
6	16	2301-15	Richard Augustin	2025	Hwy 16 From Tracey Road (Spring Valley) To E Griswald St	Reconstruction	Need unknown	Need unknown	Need unknown	Need unknown	\$5.8 - \$6.2	\$7.3 - \$7.7
6	44	NEW	Aaron Breyfogle	2025	Hwy 44 From Houston County Road 12 To Hokah	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$6.3 - \$6.7	\$7.9 - \$8.4
6	90	NEW	Heather Lukes	2025	I-90 WB Lanes From Hwy 43 To Hwy 76	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$12.5 - \$13.2	\$15.6 - \$16.4
6	218	NEW	Mark Harle	2025	Hwy 218 From Iowa Border To East Of I-90 Junction In Mower County	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$6.2 - \$6.6	\$7.7 - \$8.2
6	30	NEW	TBD	2026	Hwy 30 From Hwy 218 In Blooming Prairie To Hwy 56 In Hayfield	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$5.5 - \$5.9	\$6.9 - \$7.3
6	57	NEW	TBD	2026	Hwy 57 From Dodge County Road 34 In Kasson To Dodge County Road 30 Near Wanamingo	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$10.1 - \$10.7	\$12.7 - \$13.3
6	60	NEW	TBD	2026	Hwy 60 From Huseth Ave In Kenyon To Hwy 52 In Goodhue County	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$8.1 - \$8.7	\$10.2 - \$10.8
6	90	NEW	TBD	2026	I-90 WB Lanes From Hwy 74 To Hwy 43	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$6.4 - \$6.8	\$8.0 - \$8.5
6	90	NEW	TBD	2026	I-90 From Hwy 105 To Mower County Road 46	Repaving All Lanes	Need unknown	Need unknown	Need unknown	Need unknown	\$10.8 - \$11.4	\$13.6 - \$14.3
6	90	NEW	TBD	2026	I-90 From CSAH 46 To Hwy 16	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$7.6 - \$8.0	\$9.5 - \$10.0
6	14	NEW	TBD	2027	Hwy 14 From 1.5 Mi E Cr 9 To 0.23 Mi W Cr 5	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$7.1 - \$7.5	\$8.9 - \$9.4
6	14	NEW	TBD	2027	Hwy 14 From W Jct Hwy 74 To Hwy 61	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$11.4 - \$12.0	\$14.3 - \$15.0
6	44	NEW	TBD	2027	Hwy 44 From Spring Grove To Caledonia	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$4.5 - \$7.1	\$5.6 - \$8.8
6	52	NEW	TBD	2027	Hwy 52 From County Road 12 To Hwy 60	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$17.7 - \$18.7	\$22.2 - \$23.3
6	74	NEW	TBD	2027	Hwy 74 From Hwy 52 To East Of Hwy 14 Junction	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$7.0 - \$7.4	\$8.7 - \$9.3
6	76	NEW	TBD	2027	Hwy 76 From Houston To I-90	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$6.6 - \$7.0	\$8.2 - \$8.8
6	90	NEW	TBD	2027	I-90 EB Lanes From County Road 46 To Hwy 16	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$20.6 - \$21.7	\$25.8 - \$27.1
6	14	NEW	TBD	2028	Hwy 14, EB And WB From Byron To Rochester	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$7.9 - \$8.4	\$9.9 - \$10.5
6	16	NEW	TBD	2028	Hwy 16 From Rushford To Houston	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$5.8 - \$6.1	\$7.2 - \$7.7
6	30	NEW	TBD	2028	Hwy 30 From Hwy 13 To Ellendale	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$4.2 - \$6.7	\$5.3 - \$8.3
6	35	NEW	TBD	2028	I-35, NB From Iowa/MN State Line To 0.5 Mi N Hwy 30 And SB From Iowa/MN State Line To 0.66 Mi. S. CSAH 23	Concrete Pavement Rehab	Need unknown	Need unknown	Need unknown	Need unknown	\$14.0 - \$14.8	\$17.6 - \$18.5
6	60	NEW	TBD	2028	Hwy 60 EB And WB From 0.3 Mi E Hwy 13 To Hwy 21	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$8.1 - \$8.7	\$10.2 - \$10.8
6	61	NEW	TBD	2028	Hwy 61 NB Lanes From Hwy 14 To Hwy 42 And SB Lanes From Hwy 14 To Hwy 248	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$13.9 - \$14.7	\$17.4 - \$18.3
6	61	NEW	TBD	2028	Hwy 61, NB And SB From Homer To Winona	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$6.8 - \$7.2	\$8.5 - \$9.0
6	74	NEW	TBD	2028	Hwy 74 From W Jct Hwy 14 To N Limits Elba	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$4.7 - \$7.5	\$5.9 - \$9.4
6	76	NEW	TBD	2028	Hwy 76 From Caledonia To Houston	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$5.4 - \$5.7	\$6.8 - \$7.2

Major Highway Projects (Planned 2022-2032)

District	Route	State Project Number	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate Range (In Millions)	Total Project Cost Estimate Range (In Millions)
6	90	NEW	TBD	2028	I-90 WB From 0.5 Mi E U.S. 63 To 1.7 Mi E CSAH 19	Repaving	Need unknown	Need unknown	Need unknown	Need unknown	\$6.5 - \$6.9	\$8.1 - \$8.6
7	I 90	3280-131	Caleb Fenske	2022	3.7 mi E of Nobles/Jackson County line to TH 86	Medium Mill and Overlay, EB lanes	Not needed	Not needed	Not needed	Not needed	\$4.9 - \$6.6	\$6.1 - \$9.6
7	I 90	4680-129	Glen Coudron	2022	From Fairmont to County Line	Thick Mill & Overlay	Not needed	Not needed	Not needed	Not needed	\$9.9 - \$13.3	\$12.4 - \$19.3
7	MN 19	7206-117	Matt Young	2022	Gaylord to TH 169	Medium Mill and Overlay	Not needed	Not needed	Not needed	Not needed	\$8.4 - \$11.4	\$10.5 - \$19.3
7	MN 22	2203-115	Steve Oswald	2022	Iowa to I-90	Medium Mill and Overlay	Not needed	Not needed	Not needed	Not needed	\$4.5 - \$6.1	\$5.6 - \$19.3
7	MN 4	4602-27	Glen Coudron	2022	South of Sherburn to Martin/Watonwan County Line	Mill and Overlay	Not needed	Not needed	Not needed	Not needed	\$10.0 - \$13.5	\$12.5 - \$19.3
7	MN 22	0704-109	Zak Tess	2023	TH 83 to Bassett Drive in Mankato	Reconstruct	Not needed	Not needed	Not needed	Not needed	\$7.7 - \$10.4	\$9.6 - \$19.3
7	MN 30	0707-88	Robert Jones	2023	TH 22 to 1.5 mi E of TH 83	Medium Mill and Overlay	Not needed	Not needed	Not needed	Not needed	\$5.0 - \$6.8	\$6.2 - \$19.3
7	MN 4	8302-48	Glen Coudron	2023	St James to Brown County line	Reclaim and Overlay & Replace Bridge 5076	Not needed	Not needed	Not needed	Not needed	\$8.0 - \$10.8	\$10.0 - \$19.3
7	MN 22	2204-27	Not Assigned	2023	South of I-90 to Wells	Reclaim	Not needed	Not needed	Not needed	Not needed	\$3.7 \$5.0	\$4.6 \$19.3
7	US 169	2207-118	Matt Young	2023	Iowa to Blue Earth	CIR & Medium Overlay	Not needed	Not needed	Not needed	Not needed	\$3.7 \$5.0	\$4.6 \$19.3
7	I 90	6780-117	Matt Young	2024	Beaver Creek to Luverne	Thick Overlay & Major CPR/Grind, WB lanes	Not needed	Not needed	Not needed	Not needed	\$8.1 - \$10.9	\$16.6 - \$19.3
7	MN 22	5205-113	Robert Jones	2024	St Peter to TH 111	Reclaim and Overlay	Not needed	Not needed	Not needed	Not needed	\$8.2 - \$11.2	\$10.2 - \$19.3
7	MN 4	0801-37	Not Assigned	2024	From 2 miles N of County Line to South Sleepy Eye	Reclaim & Overlay	Not needed	Not needed	Not needed	Not needed	\$7.9 - \$10.7	\$9.9 - \$19.3
7	US 169	0713-81	Forrest Hasty	2024	On U.S. 169 in Mankato	Rehab Br 52008, 52011, 52012, 9098 & 07029	Not needed	Not needed	Not needed	Not needed	\$9.3 - \$12.6	\$11.6 - \$19.3
7	MN 22	0714-35	Not Assigned	2024	North side of Mankato to River Bridge at St Peter	Medum Mill & Overlay	Not needed	Not needed	Not needed	Not needed	\$3.1 - \$4.2	\$3.9 - \$19.3
7	MN 22	2205-13	Not Assigned	2025	Wells to Mapleton	Cold Inplace Recycle and Medium Overlay	Not needed	Not needed	Not needed	Not needed	\$7.6 - \$10.3	\$9.5 - \$19.3
7	US 169	2208-114	Not Assigned	2025	Winnebago to Amboy	Unbonded Overlay & Rehab Br 91355, 91744, 91002, 91077, 91223, 91085, 91136, 91371, 91339, 91003, 91541	Not needed	Not needed	Not needed	Not needed	\$9.9 - \$13.4	\$12.4 - \$19.3
7	US 75	6705-47	Not Assigned	2025	Luverne to 2.2 miles N of North County line	Cold Inplace Recycle and Medium Overlay	Not needed	Not needed	Not needed	Not needed	\$7.3 - \$9.9	\$9.1 - \$19.3
7	MN 60	1703-83	Not Assigned	2025	In Windom over the Des Moines River	Replace Br 17001	Not needed	Not needed	Not needed	Not needed	\$3.4 - \$4.6	\$4.2 - \$19.3
7	I 90	5380-125	Not Assigned	2025	On I-90	Replace Multiple bridges 53815 (WB); 53816 (EB); 53817 (WB); 53818 (EB); 53821 ; 53822	Not needed	Not needed	Not needed	Not needed	\$3.4 - \$4.6	\$4.2 - \$19.3
7	MN 21	6605-38	Not Assigned	2025	Jct of TH 99 to 15 mi N	Medium Mill and Overlay	Not needed	Not needed	Not needed	Not needed	\$4.2 - \$5.7	\$5.2 - \$19.3
7	MN 30	0705-26	Not Assigned	2026	TH 15 to TH 169	Concrete overlay, White topped (doweled)	Not needed	Not needed	Not needed	Not needed	\$13.9 - \$18.9	\$17.4 - \$19.3
7	US 14	0702-128	Not Assigned	2026	TH 22 to TH 60, EB lanes	Major Concrete Pavement Rehab, Grind	Not needed	Not needed	Not needed	Not needed	\$5.0 - \$6.7	\$6.2 - \$19.3
7	MN 19	4004-126	Not Assigned	2026	TH 169 to TH 13	Thin Mill & Overlay	Not needed	Not needed	Not needed	Not needed	\$4.3 - \$5.8	\$5.4 - \$19.3
7	MN 13	8102-30	Not Assigned	2026	Waseca to Waterville	Medum Mill and Overlay	Not needed	Not needed	Not needed	Not needed	\$4.0 - \$5.4	\$5.0 - \$19.3
7	I 90	5380-154	Not Assigned	2026	Adrian to Rushmore	Unbonded Overlay, WB lanes	Not needed	Not needed	Not needed	Not needed	\$14.2 - \$19.2	\$17.8 - \$19.3
7	I 90	2280-143	Not Assigned	2027	2.1 miles West of Blue Earth to TH 22	Unbonded Overlay, Both lanes, EB lanes	Not needed	Not needed	Not needed	Not needed	\$8.7 - \$11.8	\$10.9 - \$19.3
7	I 90	4680-132	Matt Young	2027	Sherburn to Fairmont	Cold Inplace Recycle and Overlay, EB lanes	Not needed	Not needed	Not needed	Not needed	\$7.4 - \$10.0	\$9.2 - \$19.3
7	MN 13	4001-48	Not Assigned	2027	TH 60 to Th 21 at the South limits of Montgomery	Reclaim & Overlay, Cold Inplace Recycle & Overlay & Medium Overlay	Not needed	Not needed	Not needed	Not needed	\$19.6 - \$26.5	\$24.5 - \$19.3
7	US 59	5304-41	Not Assigned	2027	In Worthington	Urban Reconstruct	Not needed	Not needed	Not needed	Not needed	\$11.6 - \$15.6	\$14.5 - \$19.3
7	US 75	6704-116	Not Assigned	2027	Iowa to Luverne	Cold Inplace Recycle and Medium Overlay	Not needed	Not needed	Not needed	Not needed	\$5.0 - \$6.7	\$6.2 - \$19.3
8	Hwy 68	4210-49AC	Chris Nienaber	2022	Minneota to Marshall	Shoulder widening and culvert/bridges	Need unknown	Not needed	Need unknown	Need unknown	\$8.2	\$10.5
8	Hwy 75	3703-25	Jesse Vlaminc	2022	8th Street in Madison to MN 7	3" CIR & 2" overlay	Need unknown	Not needed	Need unknown	Need unknown	\$7.2	\$8.4
8	Hwy 15	4707-26	Ben Sandoz	2022	Dassel to Meeker/Stearns county line	Reclaim & Overlay	Need unknown	Need unknown	Need unknown	Need unknown	\$7.0	\$8.0
8	Hwy 212	6510-67AC	Ron Mortensen	2023	Sacred Heart to Renville	Unbonded Concrete overlay	Need unknown	Need unknown	Need unknown	Need unknown	\$17.8	\$20.5
8	Hwy 59	4208-60	Cody Brand	2023	N. Jct MN 30 to U.S. 14	Major CPR & diamond grind plus reclaim shoulders	Need unknown	Need unknown	Need unknown	Need unknown	\$5.3	NA
8	Hwy 7	3402-23 AC	Cody Brand	2023	U.S. 71 to MN 4 in Cosmos	2" mill and 3" overlay	Need unknown	Need unknown	Need unknown	Need unknown	\$10.2	\$11.7
8	Hwy 23	5902-25	Chris Nienaber	2024	U.S. 75 in Pipestone to 0.6 miles east of Lyon County CSAH 18	3" mill and overlay & Overlay & Re-deck Bridge 59002	Need unknown	Need unknown	Need unknown	Need unknown	\$14.2	NA
8	Hwy 40	1210-XX	TBD	2025	MN 29 to MN 277	3" mill and overlay	Need unknown	Need unknown	Need unknown	Need unknown	\$4.8 - \$5.5	\$5.7 - \$6.6
8	Hwy 19	4205-XX	TBD	2025	Marshall	Urban Reconstruction	Need unknown	Need unknown	Need unknown	Need unknown	\$9.6 - \$12.6	\$11.7 - \$15.4
8	Hwy 68	8709-XX	TBD	2026	Canby to Minneota	3" mill & overlay	Need unknown	Need unknown	Need unknown	Need unknown	5.9	NA
8	Hwy 4	4701-32	TBD	2026	Cosmos to 0.5 miles N. of TWP 243/451	Reclaim & Overlay	Need unknown	Need unknown	Need unknown	Need unknown	6.4	NA
8	Hwy 4	6503-XXAC	TBD	2026	U.S. 212 to S. Limit of Cosmos	Reclaim & Overlay	Need unknown	Need unknown	Need unknown	Need unknown	6.4	NA
8	Hwy 7	4302-XX	TBD	2026	Silver Lake to MN 25	Medium mill & overlay	Need unknown	Need unknown	Need unknown	Need unknown	8	NA
8	Hwy 59	4209-26	TBD	2027	CSAH 33, just north of Marshall to Yellow Medicine County CSAH 3	3" mill and overlay	Need unknown	Need unknown	Need unknown	Need unknown	7.2	NA
8	Hwy 4	6502-XX	TBD	2027	MN 19 (Fairfax) to U.S. 212 (Hector)	Reclaim & Overlay	Need unknown	Need unknown	Need unknown	Need unknown	4	NA
8	Hwy 59	4209-26	TBD	2027	CSAH 33 to CSAH 3	3" mill and overlay	Need unknown	Need unknown	Need unknown	Need unknown	7.2	NA
8	Hwy 68	6408-XX	TBD	2027	N. Jct U.S. 71 to MN 67 (Morgan)	Medium mill & overlay	Need unknown	Need unknown	Need unknown	Need unknown	5	NA
8	Hwy 7	1201-XX	TBD	2027	MN 40 to MN 29	Reclaim & Overlay	Need unknown	Need unknown	Need unknown	Need unknown	10.9	NA
8	Hwy 71	3414-XX	TBD	2027	MN 9 to MN 55	Reclaim & Overlay	Need unknown	Need unknown	Need unknown	Need unknown	6.1	NA
8	Hwy 71	6508-XX	TBD	2027	0.6 miles N. of E. Jct MN 19 to U.S. 212 (Olivia)	Reclaim & Overlay	Need unknown	Need unknown	Need unknown	Need unknown	11.2	NA
M	Hwy 10	7101-xx	Not assigned	2026	Anoka	Mill And Overlay, From Cleveland/Jarvis To Fair oak	Need unknown	Need unknown	Need unknown	Need unknown	\$10.5 - \$12.6	\$12.4 - \$14.9
M	Hwy 10	0214-XX	Not assigned	2026	Anoka	Unbonded Concrete Overlay, Hwy 65 To I-35W	Need unknown	Need unknown	Need unknown	Need unknown	\$14.0 - \$16.8	\$16.5 - \$14.9
M	Hwy 100	2734-XX	Not assigned	2025	Hennepin	Mill And Overlay, Under Ped Br/Exit Cedar Lk Rd To I-694	Need unknown	Need unknown	Need unknown	Need unknown	\$18.2 - \$21.8	\$21.5 - \$14.9
M	Hwy 12	N/A	Not assigned	2024	Hennepin	Concrete Pavement Repair/Mill And Overlay, Wayzata Exit To I-494	Need unknown	Need unknown	Need unknown	Need unknown	\$10.5 - \$12.6	\$12.4 - \$14.9
M	Hwy 120	6227-86	Ryan Coddington	2023	Ramsey, Washington	Pavement Reconstruction, 4Th St To Hwy 244	Need unknown	Need unknown	Need unknown	Need unknown	\$9.3 - \$11.2	\$11.0 - \$14.9
M	Hwy 169	N/A	Not assigned	2024	Scott	Concrete Pavement Repair, From Hwy 21 To CSAH 15	Need unknown	Need unknown	Need unknown	Need unknown	\$13.0 - \$15.6	\$15.3 - \$14.9
M	Hwy 169	N/A	Not assigned	2026	Scott	Concrete Pavement Repair, CSAH 15 To Bloomington Ferry Br	Need unknown	Need unknown	Need unknown	Need unknown	\$25.0 - \$30.0	\$29.5 - \$14.9
M	Hwy 212	1013-97	Nicole Peterson	2023	Carver County	Concrete Pavement Repair/Mill And Overlay, CSAH 134 To Chaska Bypass	Need unknown	Need unknown	Need unknown	Need unknown	\$15.0 - \$18.0	\$17.7 - \$14.9
M	Hwy 212	N/A	Not assigned	2026	Hennepin	Concrete Pavement Repair/Mill And Overlay, From CSAH 4 To Hwy 62	Need unknown	Need unknown	Need unknown	Need unknown	\$9.2 - \$11.0	\$10.9 - \$14.9
M	Hwy 252	N/A	Not assigned	-	Hennepin	Concrete Pavement Repair/Mill And Overlay, I-94 To 85Th	Need unknown	Need unknown	Need unknown	Need unknown	\$10.9 - \$13.1	\$12.9 - \$14.9
M	Hwy 47	N/A	Not assigned	2025	Anoka	Mill And Overlay, Bunker Lk Blvd To Anoka/Isanti County Line	Need unknown	Need unknown	Need unknown	Need unknown	\$11.7 \$14.0	\$13.8 \$14.9

Major Highway Projects (Planned 2022-2032)

District	Route	State Project Number	Assigned Project Manager	Year	Location	Description	Environmental Document Status	Municipal Consent Status	Geometric Layout Approval Status	Construction Limits Status	Construction Letting Cost Estimate Range (In Millions)	Total Project Cost Estimate Range (In Millions)
M	Hwy 5	6201-91	Mark Lindeberg	2024	Ramsey	Thin Bit Mill And Overlay, Munster Ave To Jct 61/Mounds Blvd	Need unknown	Need unknown	Need unknown	Need unknown	\$14.0 - \$16.8	\$16.5 - \$14.9
M	Hwy 5	N/A	Not assigned	2024	Carver	Concrete Pavement Repair, From Hwy 41 To CSAH 4	Need unknown	Need unknown	Need unknown	Need unknown	\$10.3 - \$12.4	\$12.2 - \$14.9
M	Hwy 52	1906-71	Not assigned	2023	Dakota	Unbonded Concrete Overlay, From CR 86 To CSAH 42	Need unknown	Need unknown	Need unknown	Need unknown	\$45.0 - \$54.0	\$53.1 - \$14.9
M	Hwy 52	N/A	Not assigned	2027	Dakota	Unbonded Concrete Overlay/Mill And Overlay, From Clayton To Hwy 55	Need unknown	Need unknown	Need unknown	Need unknown	\$27.7 - \$33.2	\$32.7 - \$14.9
M	Hwy 55	2722-XXX	Not assigned	2028	Hennepin	Medium Bituminous Mill & Overlay, Wright-Hennepin County Line To Fernbrook	Need unknown	Need unknown	Need unknown	Need unknown	\$17.7 - \$21.2	\$20.9 - \$14.9
M	Hwy 55	1909-103	Sulmann Khan	2023	Dakota	Redeck/Overlay Br #19819 (Th 55 Over I-35E), Br #19827 (Th 55 Over I-494)	Need unknown	Need unknown	Need unknown	Need unknown	\$10.5 - \$12.6	\$12.4 - \$14.9
M	Hwy 55	1909-99	Sulmann Khan	2023	Dakota	Concrete Pavement Repair/Medium Mill And Overlay/Reclaim, From Br 27116 Over Bloomington Rd To CR-63 (Argenta Tr)	Need unknown	Need unknown	Need unknown	Need unknown	\$11.0 - \$13.2	\$13.0 - \$14.9
M	Hwy 55	N/A	Not assigned	2025	Hennepin	Mill And Overlay/Reclaim, From I-494 To General Mills Blvd	Need unknown	Need unknown	Need unknown	Need unknown	\$15.5 - \$18.6	\$18.3 - \$14.9
M	Hwy 61	6221-107	Not assigned	2025	Dakota	Unbonded Concrete Overlay, Hwy 316 To W 36Th St In Hastings	Need unknown	Need unknown	Need unknown	Need unknown	\$8.5 - \$10.2	\$10.0 - \$14.9
M	Hwy 610	2771-110	Marcell Walker	2023	Hennepin	Medium Concrete Pavement Repair, US 169 To Mississippi River	Need unknown	Need unknown	Need unknown	Need unknown	\$15.3 \$18.4	\$18.1 \$14.9
M	Hwy 65	N/A	Not assigned	2024	Hennepin	Concrete Pavement Repair, From 153Rd Ave To 217Th Ave	Need unknown	Need unknown	Need unknown	Need unknown	\$23.3 - \$28.0	\$27.5 - \$14.9
M	Hwy 7	2704-XX	Not assigned	2026	Hennepin	Mill And Overlay, St. Bonifacius To Christmas Lake Rd	Need unknown	Need unknown	Need unknown	Need unknown	\$18.0 - \$21.6	\$21.2 - \$14.9
M	Hwy 77	N/A	Not assigned	2028	Dakota	Unbonded Concrete Overlay, 138Th St/CSAH-23 To MN13	Need unknown	Need unknown	Need unknown	Need unknown	\$25.0 - \$30.0	\$29.5 - \$14.9
M	Hwy 95	N/A	Not assigned	2026	Chisago	Reclaim/Mill And Overlay, From I-35 To Hwy 95	Need unknown	Need unknown	Need unknown	Need unknown	\$10.0 - \$12.0	\$11.8 - \$14.9
M	Hwy 95	N/A	Not assigned	2028	Washington	Medium Bituminous Mill And Overlay, MN 97 To MN 36	Need unknown	Need unknown	Need unknown	Need unknown	\$14.1 - \$16.9	\$16.6 - \$14.9
M	Hwy 96	N/A	Not assigned	2028	Ramsey	Cold In Place Recycle, US 61 To MN 95	Need unknown	Need unknown	Need unknown	Need unknown	\$11.6 - \$13.9	\$13.7 - \$14.9
M	Hwy 97	N/A	Not assigned	2027	Washington	Medium Bituminous Mill And Overlay, US 61 To MN 95	Need unknown	Need unknown	Need unknown	Need unknown	\$10.0 - \$12.0	\$11.8 - \$14.9
M	I-35	N/A	Not assigned	2028	Hennepin	Minor Concrete Pavement Repair/ Medium Bituminous Mill & Overlay, US 8 To Bridge Under MN95	Need unknown	Need unknown	Need unknown	Need unknown	\$23.1 - \$27.7	\$27.3 - \$14.9
M	I-35E	N/A	Not assigned	2025	Dakota	Mill And Overlay/Pavement Replacement, From Shepard Rd To 10Th St Bridge	Need unknown	Need unknown	Need unknown	Need unknown	\$20.3 - \$24.4	\$24.0 - \$14.9
M	I-35E	N/A	Not assigned	2027	Ramsey	Concrete Pavement Repair, Jct I-35W/I-35 To Lone Oak Rd	Need unknown	Need unknown	Need unknown	Need unknown	\$25.0 - \$30.0	\$29.5 - \$14.9
M	I-35W	2782-352	Dan Mattison	2023	Hennepin	Medium Mill And Overlay, N End Of Bridge Over 106Th St To 76Th St	Need unknown	Need unknown	Need unknown	Need unknown	\$11.7 - \$14.0	\$13.8 - \$14.9
M	I-35W	N/A	Not assigned	2025	Hennepin	Concrete Pavement Repair, From I-35W/I-35E Split To South End Of Bridge Over Cliff Rd	Need unknown	Need unknown	Need unknown	Need unknown	\$10.0 - \$12.0	\$11.8 - \$14.9
M	I-394	N/A	Not assigned	2026-2027	Hennepin	Redeck Bridge #27831, I-394 Over Dunwoody Blvd	Need unknown	Need unknown	Need unknown	Need unknown	\$64.0 - \$76.8	\$75.5 - \$14.9
M	I-394	N/A	Not assigned	2027	Hennepin	Medium Bituminous Mill & Overlay, I-494/US 12 To MN 100	Need unknown	Need unknown	Need unknown	Need unknown	\$18.0 - \$21.6	\$21.2 - \$14.9
M	I-494	N/A	Not assigned	2025	Hennepin	Medium Mill And Overlay, 24Th Av S To France Ave	Need unknown	Need unknown	Need unknown	Need unknown	\$20.0 \$24.0	\$23.6 \$14.9
M	I-494	N/A	Not assigned	2027	Hennepin	Minor Concrete Pavement Repair, From France Ave To Exit 19B WB U.S. 12	Need unknown	Need unknown	Need unknown	Need unknown	\$18.0 - \$21.6	\$21.2 - \$14.9
M	I-694	N/A	Not assigned	2024	Ramsey	Concrete Pavement Repair, From US 61 To CSAH 10	Need unknown	Need unknown	Need unknown	Need unknown	\$10.5 - \$12.6	\$12.4 - \$14.9
M	I-694	N/A	Not assigned	2026	Ramsey/Anoka	Unbonded Concrete Overlay, From E Dupont To I-35W	Need unknown	Need unknown	Need unknown	Need unknown	\$40.0 - \$48.0	\$47.2 - \$14.9
M	I-94	N/A	Not assigned	2027	Hennepin	Medium Bituminous Mill & Overlay, Nicollet Ave To MN 280	Need unknown	Need unknown	Need unknown	Need unknown	\$18.0 \$21.6	\$21.2 \$14.9
M	I-94	N/A	Not assigned	2023	Hennepin, Ramsey	I-94 MnPass, St Paul To Minneapolis	Need unknown	Need unknown	Need unknown	Need unknown	\$50.0 - \$60.0	\$59.0 - \$14.9
M	I-94	8282-132	Ryan Coddington	2023-2024	Washington	Unbonded Concrete Overlay From Hwy 120 To Wisconsin Border, 2 Year Project	Need unknown	Need unknown	Need unknown	Need unknown	\$107.0 - \$128.4	\$126.3 - \$14.9

Appendix E: Efficiency Pages

Highway 2 Fracture Critical Bridge Rehabilitation in Duluth

Highway 2	SP 6933-97	District 1	City of Duluth	Project Cost: \$10.1M
Project Manager: Brian Larson	Project Length: 1.3 miles	Letting Date: 2/23/18		
PROJECT SUMMARY:				
The project was located in Duluth. The project work included bridge rehabilitation to two bridges on Hwy 2 and two bridges on Hwy 194/Mesaba Ave. The rehabilitation work involved retrofitting the fracture critical pier caps.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$1,175,000
Performance Based Practical Design	
Lane and shoulder widths remained at existing widths and were not upgraded to the standard. Slope corrections were done with overlays in critical ADA areas only. This limited major reconstruction and allowed the roadway to remain open to traffic.	\$375,000
Critical thinking on ADA designs resulted in efficiencies because it limited roadway replacements to only where it was needed.	\$200,000
Value Engineering	
Retrofitted fracture critical bridge pier caps instead of full replacement of substructure based on the condition and extending service life.	\$600,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> The level of ADA effort was significant due to the terrain. Strong coordination with the ADA office was critical to success. Maintained traffic up and down Mesaba Ave. Concrete pavement rehabilitation survey work will be done within one year of letting. Surveys conducted more than one year after on poor pavements are likely inaccurate. This project originally had two bridges programmed for repair. Duluth was using one of the bridges as a detour route for a different project and removing that bridge from service would have caused significant traffic flow issues. So, MnDOT postponed repairs on this bridge to help alleviate traffic impacts. Coordination between the city and the agency were important. 	

Highway 38 Pavement Rehabilitation - Marcell

Highway 38	SP 3108-70	District 1	City of Marcell	Project Cost: \$16.3M
Project Manager: Michael Kalnbach	Project Length: 14 miles		Letting Date: 12/15/17	
PROJECT SUMMARY:				
The project was 14 miles long from County Road 19 to the city of Marcell. The work consisted of pavement resurfacing, drainage and other road improvements. The project also included intersection improvements at the Highway 38 intersections with County Road 48 and County Road 49.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$350,000
Pavement Design Methodology	
New MnPAVE software design yielded a more efficient pavement section.	\$350,000

Highway 92 Urban Reconstruction in Bagley

Highway 92	SP 1507-66	District 2	City of Bagley	Project Cost: \$5.8M
Project Manager: Jeremy Hadrava	Project Length: 1.1 miles		Letting Date: 1/16/18	
PROJECT SUMMARY:				
The project replaced 1.1 miles of pavement and curb and gutter, replaced or repaired failing drainage infrastructure, replaced sidewalk and pedestrian ramps, constructed a multi-use path, replaced a traffic signal and lighting and constructed a turn lane.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$600,000
Pavement Design Methodology	
New MnPAVE software yielded a thinner pavement section of 5 inches compared to 6 inches in the scoping report. The thinner section reduced grading in the reconstruct areas.	\$250,000
Performance-Based Practical Design	
Total pavement width was reduced from 60 feet to 48 feet in the urban areas. Previous driving lanes were 20 feet wide with 10-foot parking lanes. This was reduced to 12-foot driving lanes and 12-foot shoulders. The reduction in width allowed the addition of a boulevard between the roadway and the sidewalk. It also helped with the construction of new ADA compliant ramps. The roadway shoulders were narrowed from 12 feet to 10 feet near the school in order to install a new trail along the school property without right of way impacts.	\$350,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Developing a segmented staging plan for detours and coordinating the routes with local agencies was key to successful completion of this project. This project resulted in significant pedestrian improvements through town along with ADA compliance for the corridor. A strong coordination effort between the MnDOT project manager, the ADA office and local officials was needed to develop a complete and detailed plan that all interested parties found acceptable. 	

Highway 2 Concrete Pavement Reconstruction, Bridge Rehab - Design/Build

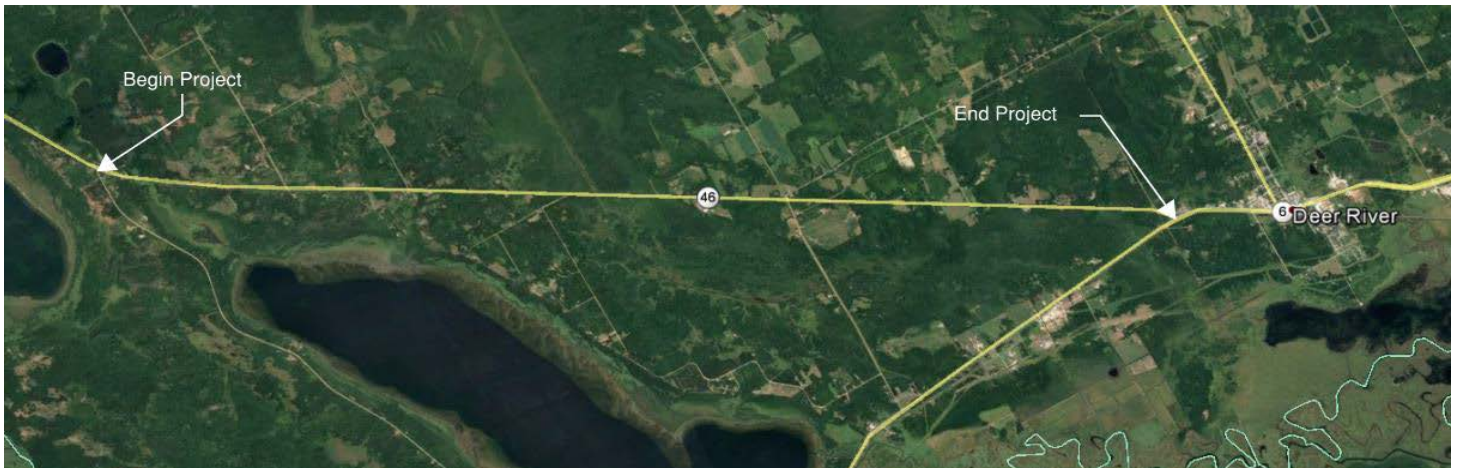
Highway 2	SP 6004-24	District 2	City of Erskine	Project Cost: \$12.9M
Project Manager: Jim Bittman	Project Length: 5.5 miles		Letting Date: 4/18/18	
PROJECT SUMMARY:				
The project replaced 5.5 miles of concrete pavement and curb and gutter, replaced or repaired failing drainage infrastructure, constructed an auxiliary lane at the railroad crossing and rehabilitated two bridges.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$1,200,000
Pavement Design Methodology	
The original concrete was 8 inches thick. The new MnPAVE software design yielded a 6-inch pavement section. 7 inches was chosen to accommodate a minimum thickness for dowels.	\$350,000
Innovative Construction Staging	
Allowing for an unbonded overlay improved traffic staging and the schedule realized actual savings.	\$400,000
Used temporary crossing arms at the railroad in the head-to-head traffic control stage. This eliminated the need to cross traffic back over to the opposite side before and after the railroad tracks.	\$100,000
Alternative Technical Concepts	
The roadway profile was revised to accommodate using recycled materials.	\$175,000
Allowing for an unbonded overlay in reconstruct areas.	\$175,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Used design-build to deliver project within needed timeframe. Close coordination with the State Patrol on its weigh station to coordinate closures and active management during construction. The design team also worked with them on improving ingress and egress for trucks. 	

Highway 46 Pavement Rehabilitation - Itasca County

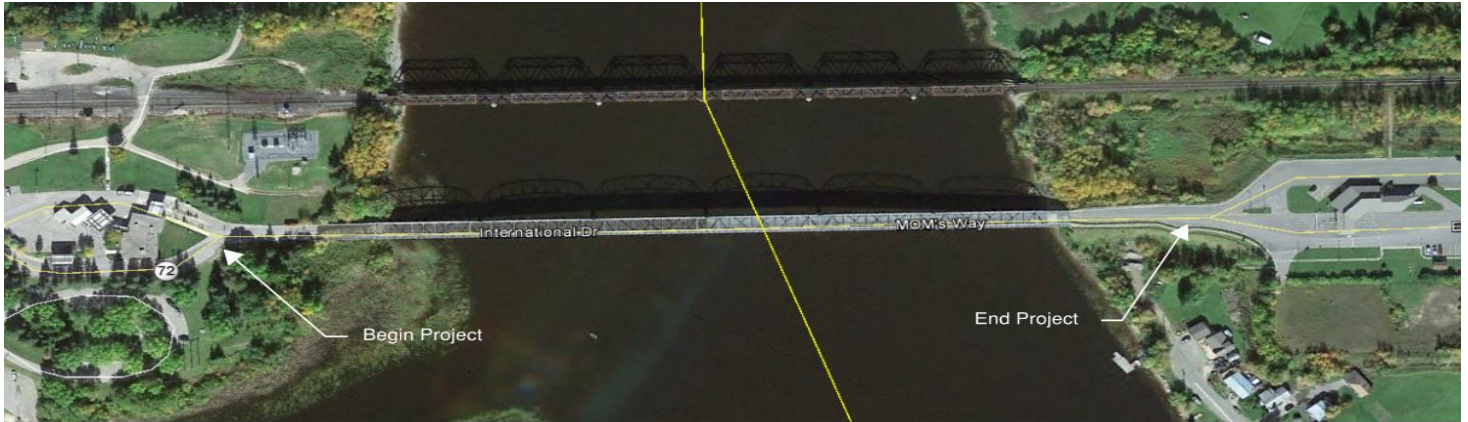
Highway 46	SP 3109-41M	District 2	Itasca County	Project Cost: \$8.3M
Project Manager: Rachel Miller	Project Length: 10.1 miles		Letting Date: 12/15/17	
PROJECT SUMMARY:				
The project consists of reclaiming 10.1 miles of pavement, replacing one box culvert bridge, replacing 53 failing culverts, constructing four turn lanes, constructing a truck pull off area and replacing signs.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$350,000
Pavement Design Methodology	
New MnPAVE software yielded a more efficient pavement section with full depth reclamation,	\$350,000

Highway 72 Baudette Bridge Replacement

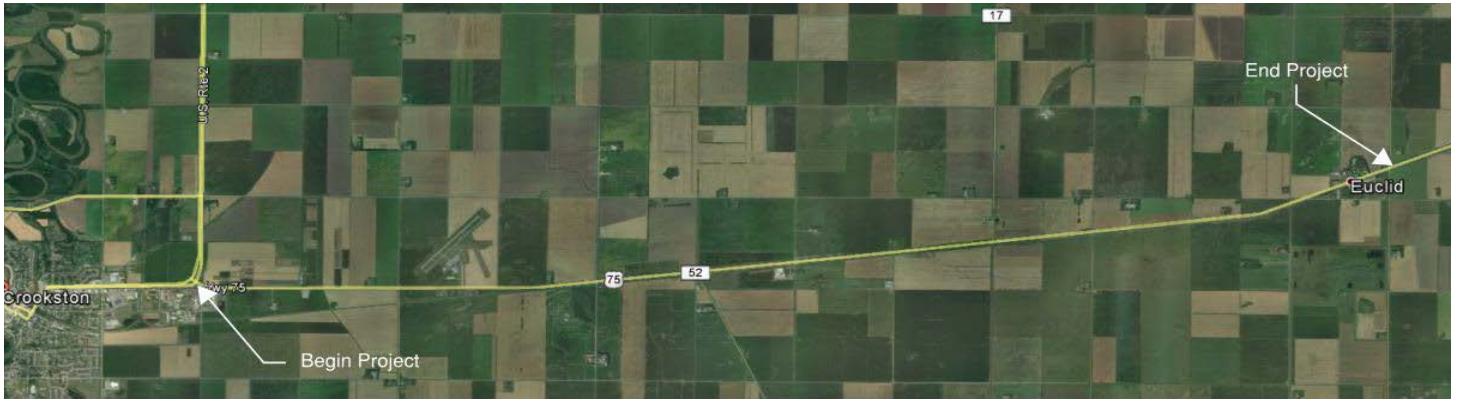
Highway 72	SP 3905-09	District 2	City of Baudette	Project Cost: \$40.3M
Project Manager: Joe McKinnon	Project Length: 0.5 miles		Letting Date: 2/23/18	
PROJECT SUMMARY:				
This project replaces the bridge over the Rainy River between Minnesota and Ontario, Canada in Baudette.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$3,250,000
Innovative Construction Staging	
The replacement bridge was located 3 feet from the existing bridge allowing construction to occur without impacting the border crossing and minimizing bridge staging. Alignments were designed at the bridge ends to accommodate the tie-ins.	\$1,000,000
Developing construction administration process with Ontario to maximize administration efficiencies and delivery methods.	\$500,000
Value Engineering	
Use 11.5-inch lanes on bridge and approach roadways to reduce overall bridge width.	\$650,000
A 6-foot pedestrian walkway was used on the bridge. Traditionally this would be 8-10 feet. Bikes will use roadway shoulder to allow narrower walkway.	\$1,100,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> A construction standards report was developed to document the design standard differences between Ontario and Minnesota. An extensive bridge alternative analysis was completed to determine the correct approach; rehab or new bridge. Four alternatives we studied. In addition, 12 bridge types were studied for the new bridge. Due to the tight construction area, alternative construction techniques were analyzed to determine their project cost impacts and feasibility. Coordination with Ontario was key to project delivery. Although it doesn't show up as a tangible dollar amount in this report, it saved MnDOT and Ontario significant money by both parties coming to the table together. The environmental document was coordinated in conjunction with both agencies to ensure compliance in both countries. Project delivery methods were analyzed to determine the most economical and feasible way to build a bridge that is half in the US and half in Canada. Traditional design-bid-build was chosen. 	

Highway 75 Pavement Rehabilitation - Polk County

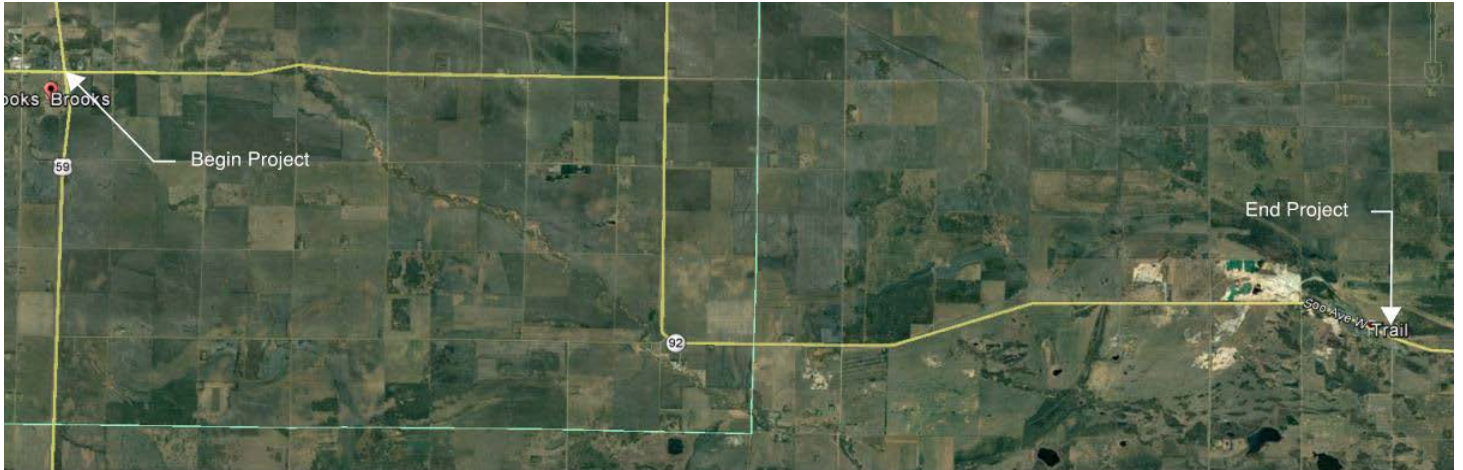
Highway 75	SP 6011-29	District 2	Polk County	Project Cost: \$6.8M
Project Manager: Ray Gust	Project Length: 12 miles		Letting Date: 2/23/18	
PROJECT SUMMARY:				
The project consists of resurfacing 12 miles of highway, replacing two box culvert bridges and 29 failing culverts and constructing a new storm sewer system and pedestrian ramps in Euclid.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$225,000
Pavement Design Methodology	
New MnPAVE software yielded a thinner mill and overlay section from previous version.	\$225,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Use of intelligent compaction for the bituminous proved successful on the project. MnDOT designers provided the necessary data for the contractor to use during construction. Culverts were replaced based on need determined by a hydraulic analysis. 	

Highway 92 Pavement Rehabilitation from Brooks to Trail

Highway 92	SP 6305-18	District 2	Red Lake County	Project Cost: \$5.2M
Project Manager: Brandy Pemberton		Project Length: 21 miles		Letting Date: 12/15/17
PROJECT SUMMARY:				
The project consists of resurfacing 21 miles of highway and replacing three culvert crossings.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$750,000
Pavement Design Methodology	
New MnPAVE software yielded a thinner mill and overlay section and a thinner widening section.	\$275,000
Performance-Based Practical Design	
Shoulders were maintained at existing widths with 14-foot paved top and varying aggregate shouldering.	\$275,000
Value Engineering	
Conducted hydraulics analysis to determine which culverts needed replacement and ones that could be lined.	\$200,000

Highway 10 Pavement Rehabilitation Clear Lake to Big Lake

Highway 10	SP 7102-133	District 3	Sherburne County	Project Cost: \$11.3M
Project Manager: Eric Schiller	Project Length: 4 miles		Letting Date: 4/27/18	
PROJECT SUMMARY:				
The project repairs pavement with a full depth reclamation of the eastbound direction of the four-lane expressway between Clear Lake and Big Lake. A reduced conflict intersection will be constructed to improve safety at the intersection of Sherburne County Hwy 23 in Becker.				
PROJECT MAP:				



EFFICIENCIES SUMMARY:	\$625,000
Pavement Design Methodology	
New MnPAVE software yielded more efficient full-depth reclamation section instead of a mill and overlay.	\$175,000
The full depth reclamation allowed the use of preservation standards targeting the needs for the project and avoided the railroad.	\$200,000
Value Engineering	
Reduced conflict intersection installed instead of signal system that would have required the realignment of side streets.	\$250,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Money from 2017 bituminous savings was used on this project to improve the service life. Railroad coordination was instrumental in coordinating the permit process, allowing a faster delivery and reducing overall risk with the railroad right of way. The crossovers were built under traffic to avoid temporary signal work at Hwy 24 in Clear Lake and County Road 81 in Big Lake. 	

Highway 106 Pavement Rehabilitation Deer Creek

Highway 106	SP 5622-16	District 4	City of Deer Creek	Project Cost: \$8.4M
Project Manager: Brian Bausman	Project Length: 7.5 miles		Letting Date: 5/18/18	
PROJECT SUMMARY:				
The project consists of grading, cold in-place recycle, turn lanes, shoulder widening, pedestrian ramps and sidewalks on Hwy 106 from Hwy 10 to Hwy 29 in Deer Creek.				
PROJECT MAP:				



EFFICIENCIES SUMMARY:	\$915,000
Pavement Design Methodology	
New MnPAVE software yielded more efficient bituminous section after cold-in-place recycle.	\$275,000
Performance-based Practical Design	
Roadway and shoulder widths were optimized to reduce overall pavement areas. Reduced shoulders from 8 feet to 6 feet in areas of wetlands to minimize impacts.	\$390,000
Eliminated a split roadway section up the hill to minimize pavement areas and maintenance costs.	\$200,000
Value Engineering	
A drainage analysis was completed to determine what culverts needed replacing or lining.	\$50,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Originally a 3-inch mill and fill went to cold in-place recycling of pavement, which extended the service life and allowed a wider shoulder width for safety. Used ground penetrating radar to determine existing pavement thickness to optimize the pavement rehabilitation method. 	

Highway 27 Pavement Rehabilitation Wheaton to Dumont

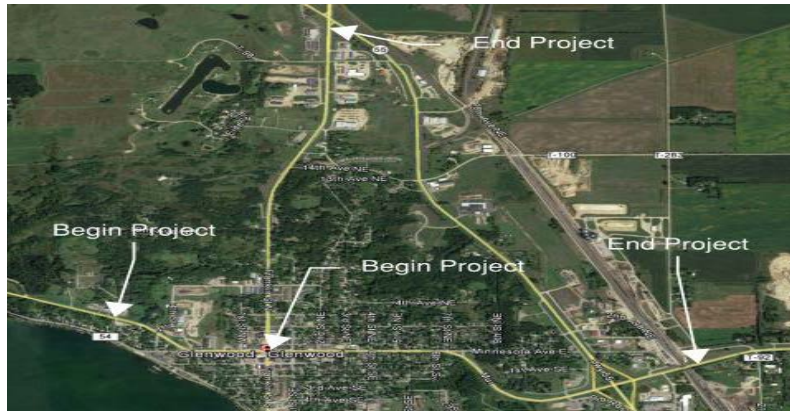
Highway 27	SP 7802-33	District 4	City of Wheaton	Project Cost: \$9.8M
Project Manager: Tom Pace	Project Length: 17.3 miles		Letting Date: 4/27/18	
PROJECT SUMMARY:				
Pavement will be rehabilitated for 10 miles on Hwy 27 from County Road 6 to western city limits of Wheaton and 7 miles on Hwy 75 from Dumont to the Mustinka River bridge, excluding urban curb and gutter section in Wheaton.				
PROJECT MAP:				



EFFICIENCIES SUMMARY:	\$1,025,000
Pavement Design Methodology	
New MnPAVE software yielded a more efficient pavement section.	\$350,000
Performance-based Practical Design	
The shoulder and parking lane width was reduced in areas to minimize the grading impacts due to pavement rehabilitation.	\$375,000
Innovative Construction Staging	
Combined lettings of similar work type resulted in efficient bidding. City of Wheaton project with different work type and schedule was kept as a separate project.	\$300,000

Highway 28 Pavement Rehabilitation and ADA Improvements Glenwood

Highway 28	SP 6103-32	District 4	City of Glenwood	Project Cost: \$10.4M
Project Manager: Tom Pace	Project Length: 4 miles		Letting Date: 11/17/17	
PROJECT SUMMARY:				
Four miles of bituminous rehabilitation on Hwy 28, Hwy 29 and Hwy 104 in the city of Glenwood. The project also includes: ADA pedestrian ramps, sidewalk, signal system, six blocks of improvements and a realignment to address a flooding issue on Hwy 28 near the fairgrounds. In Glenwood this includes improvements and facilities for bicycles and pedestrians.				
PROJECT MAP:				



EFFICIENCIES SUMMARY:	\$725,000
Pavement Design Methodology	
New MnPAVE software yielded a more efficient section through the corridor.	\$225,000
Performance-based Practical Design	
Overall pavement widths were optimized to allow ADA improvements without major right of way impacts.	\$150,000
Innovative Construction Staging	
A detailed traffic management plan was developed to allow segments of roadway to be closed, eliminating the need to stage the entire project under traffic.	\$350,000

Highway 59 Pavement Rehabilitation Turn Lanes

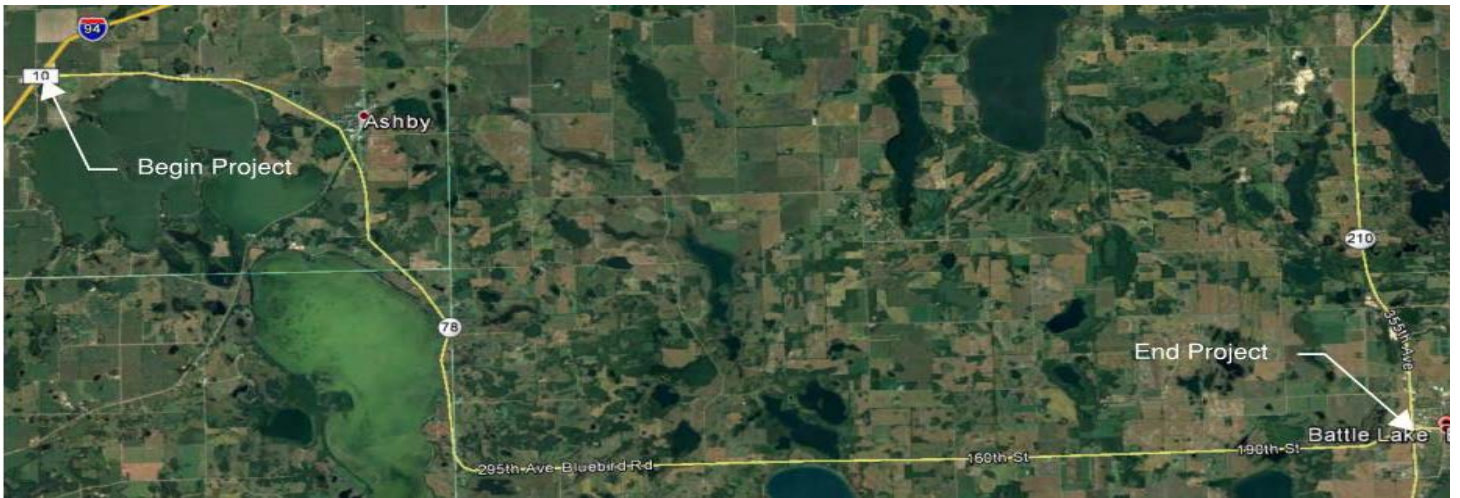
Highway 59	SP 0304-37	District 4	Detroit Lakes	Project Cost: \$6.9M
Project Manager: Brian Bausman	Project Length: 9 miles		Letting Date: 5/18/18	
PROJECT SUMMARY:				
Resurfacing and safety improvement project from County Road 20 in Otter Tail County to Willow Street in Detroit Lakes. Left turn lanes will be added at County Road 17 in Becker County.				
PROJECT MAP:				



EFFICIENCIES SUMMARY:	\$250,000
Pavement Design Methodology	
New MnPAVE software yielded a more efficient pavement section.	\$250,000
Analyzed the base during construction and determined the base was better than originally investigated. This allowed a certain portion to be left in place.	
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Originally designed with a thick mill and overlay; 4-inch mill and 5-inch overlay. The project was changed to a reclaim using dollars from Chapter 3 funds from 2017 and gives it a longer service life. Portions of the project were left as a mill and overlay to help with the staging. Close coordination with Becker County was required for detour routes. Started after the WE Fest music festival to avoid conflicts with major concert event. Coordinated with nearby wedding reception facility to help with traffic to and from the facility on the weekends to ensure people could get to the weddings. 	

Highway 78 Pavement Rehabilitation Mill and Overlay

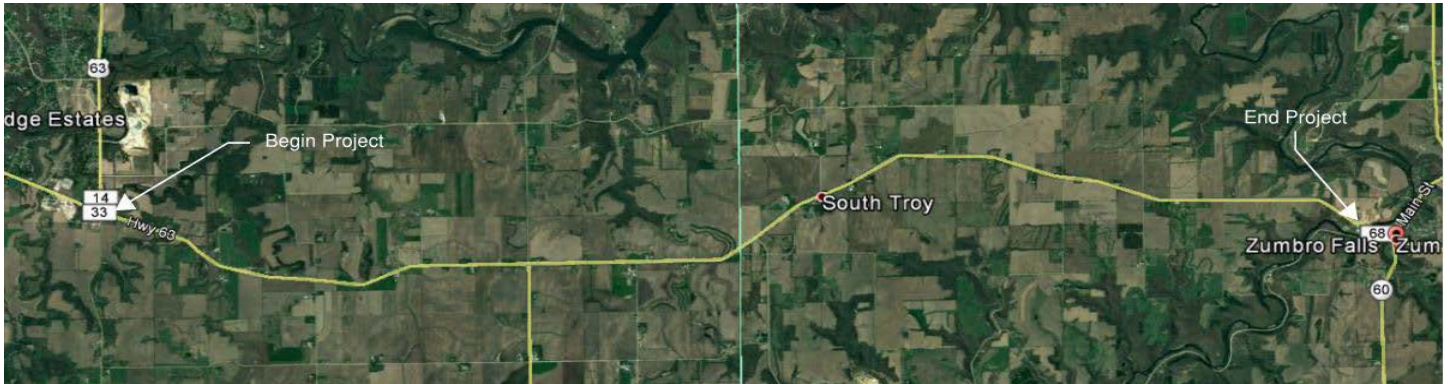
Highway 78	SP 5619-11	District 4	Otter Tail County	Project Cost: \$9.9M
Project Manager: Tom Lundberg	Project Length: 21 miles		Letting Date: 4 11/1/17	
PROJECT SUMMARY:				
Mill and overlay project on Hwy 78 from I-94 to Battle Lake.				
PROJECT MAP:				



EFFICIENCIES SUMMARY:	\$450,000
Pavement Design Methodology	
New MnPAVE software yield more efficient pavement section.	\$450,000

Highway 63 Pavement Rehabilitation and Concrete Overlay

Highway 63	SP 5510-84	District 6	Olmsted County	Project Cost: \$13.1M
Project Manager: Heather Lukes	Project Length: 7 miles		Letting Date: 2/23/18	
PROJECT SUMMARY:				
Pavement rehabilitation of Hwy 63 from County Road 33 to Hwy 60 with a 5-inch fiber reinforced concrete overlay and the replacement of bridges over streams in Olmsted and Wabasha counties.				
PROJECT MAP:				



EFFICIENCIES SUMMARY:	\$350,000
Pavement Design Methodology	
5-inch overlay with fiber reinforced concrete, otherwise known as whitetopping, to maximize service life without major reconstruction. An initial milling was performed to correct cross-slopes before placing concrete.	\$350,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> • This is a test project for the 5-inch fiber reinforced concrete overlay. • Originally scoped with bituminous overlay before being changed to 5-inch concrete overlay. • Future box culvert replacements were added to this project. The designers did not want to tear up the new concrete in a few years for the box culvert project. • 3D milling was used on this project to accurately mill the pavement cross-slope correction. • The existing pavement was scanned with LIDAR to get an accurate representation of the existing cross slopes and super elevation. The super elevation was designed to be corrected by the 3D milling to the extent possible within the limits of the milling parameters. This allowed the super elevation to be corrected and it also minimized the concrete quantities since the corrections were made with milling and not concrete fill. • Project manager worked on a public outreach specification that required the contractor to have an independent public involvement coordinator to work with the residents and businesses to address their access during construction. 	

I-35 Pavement Rehabilitation, Bridge Repair and Ramp Reconstruction

Interstate 35	SP 6680-113	District 6	Rice County	Project Cost: \$9.8M
Project Manager: Paul Zager	Project Length: 4 miles		Letting Date: 4/27/18	
PROJECT SUMMARY:				
The project includes the I-35 SB lanes from south of Highway 21 to north of County Road 9. The project consists of an unbonded concrete overlay, improvements to ramp geometrics, culvert improvements, signs and signing revisions to both sides.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$225,000
Pavement Design Methodology	
<ul style="list-style-type: none"> New MnPAVE software and permeable stress relief course yielded more efficient unbonded overlay section. 	\$225,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Project started as a mill and overlay but was converted to an unbonded overlay using money saved from low bituminous prices from the previous year. Intelligent work zones were used to manage the head to head traffic on the Interstate. Project merged with a separate deceleration lane project to simplify the staging and construction. Went through Federal Aviation Administration review because of the airport's proximity to the project. Extended project limits further south to better match an upcoming project in 2023 so there will be no gaps after the completion of the project in 2023. 	

Highway 52 Pavement Rehabilitation Mill and Overlay Hwy 63 to I-90

Highway 52	SP 5507-69	District 6	Olmsted County	Project Cost: \$8.9M
Project Manager: Heather Lukes	Project Length: 11.8 miles		Letting Date: 3/23/18	
PROJECT SUMMARY:				
This project is an 11.8 mile bituminous overlay of Hwy 52 from Hwy 63 to I-90 in Olmsted County. It includes an overlay of the ramps at County Road 1, County Road 11 and hydraulic improvements.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$325,000
Pavement Design Methodology	
New MnPAVE software yielded a reduced overlay section.	\$325,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Savings from previous year projects were applied to this project so it could be advanced in the schedule by two years. By advancing the project, a safety project to install cable median barrier was bundled with this one. The project was originally programmed for 2018 and the savings was minimal, but it limited the traffic impacts to one construction season. 	

I-90 Pavement Rehabilitation from Highway 13 to County Road 46

Interstate 90	SP 2482-74	District 6	Freeborn County	Project Cost: \$21.8M
Project Manager: Jai Kalsy	Project Length: 12 miles		Letting Date: 5/18/18	
PROJECT SUMMARY:				
This project resurfaces 12 miles of the westbound lanes on I-90 from Hwy 13 to County Road 46. The resurfacing consists of an unbonded concrete overlay. The project also includes guardrail replacements, culvert repairs and improvements and re-decking of a bridge.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$750,000
Pavement Design Methodology	
New MnPAVE software yielded a more efficient concrete pavement section.	\$350,000
Innovative Construction Techniques	
Minimized crossovers on the project by using existing interchanges. At least two crossovers were eliminated from the project and a temporary signal was added at a ramp junction to handle the higher volumes. This also minimized detour lengths.	\$400,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Used intelligent work zones for head to head traffic. This project was upgraded from a bituminous overlay project using money saved from the 2017 projects. The project team went through an extensive coordination process with the county regarding the detour routes. This coordination was instrumental for the success of the project and ensured the detour routes met the necessary standards to handle the additional traffic. 	

Highway 169 Pavement Rehabilitation County Road 6 to County Road 12

Highway 169	SP 2208-113	District 7	Freeborn County	Project Cost: \$6M
Project Manager: Forrest Hasty	Project Length: 7.74 miles		Letting Date: 4/27/18	
PROJECT SUMMARY:				
This project included an overlay on Hwy 169 from just south of County Road 6 to just north of Winnebago, for a distance of 7.74 miles. The rural section of this project received an ultra-thin bonded wear course over the bituminous overlay. The project also improved sidewalks and curb ramps in Winnebago to bring them up to ADA standards and installed lighting upgrades to two county road intersections.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$550,000
Pavement Design Methodology	
New MnPave software with full depth reclamation yielded a more efficient pavement section. The project was scoped as 4-inch bituminous overlay but the final section was 1.75 inches with a 5/8 inch ultra-thin bonded wearing course.	\$175,000
Performance-based Practical Design	
The shoulders were 10 feet paved but this project reduced the shoulder to 6-foot bituminous and 4-inch aggregate.	\$200,000
Value Engineering	
Existing curb and gutter in Winnebago was only replaced if the condition warranted replacement.	\$175,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Bump-outs were added in Winnebago to help meet the ADA standards without major reconstruction. The 6-foot paved shoulder was included to accommodate bikes in the corridor. 	

Highway 14 Reconstruction and Bridge Replacement- New Ulm

Highway 14	SP 0804-81	District 7	City of New Ulm	Project Cost: \$39M
Project Manager: Zach Tess	Project Length: 1.25 miles		Letting Date: 10/27/17	
PROJECT SUMMARY:				
This project constructed two-lane bridges over the Minnesota River and Front St., reconstructed the in-town section of Hwy 14 from Front St. to the signal at Broadway St., and constructed an interchange at the junction of Hwy 14/ Hwy 15/ County Road 21 east of New Ulm.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$7,510,000
Pavement Design Methodology	
New MnPave software yielded 6.5 inches of bituminous instead of 7 inches under old methodology.	\$110,000
New MnPave software yielded 7.5 inches of concrete instead of 8 inches under old methodology.	\$140,000
Performance-based Practical Design	
Used a 4.6% grade instead of 4% standard to minimize impacts and limits.	\$2,000,000
Reduced ramp shoulders to 2 feet instead of the 4-6 feet standard to reduce impacts.	\$400,000
Increased ramp grades to 6.39% instead of 5% standard.	\$600,000
Value Engineering	
A roadway and bridge alignment study was completed that determined constructing the new bridge on the existing alignment reduced environmental impact, avoided poor soil areas and reduced costs.	\$4,100,000
Reduced 10 foot painted buffer median to 4 feet.	\$160,000

Highway 14 Pavement Rehabilitation - Mill and Overlay from Mankato to North Mankato

Highway 14	SP 0702-125	District 7	City of Mankato	Project Cost: \$12M
Project Manager: Glen Coudron	Project Length: 6 miles		Letting Date: 3/23/18	
PROJECT SUMMARY:				
This resurfacing project included a mill and overlay of the existing blacktop pavement from west of Lookout Drive in North Mankato to Hwy 22 in Mankato. Resurfacing included westbound and eastbound lanes. Repairs were also made to a large metal culvert at Thompson Creek.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$295,000
Pavement Design Methodology	
New MnPave software yielded a more efficient mill and overlay section and some of the shoulders were only fog-sealed with a light coating of asphalt to restore the pavement surface because ride quality was the primary goal of the project.	\$295,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Project was moved forward from a 2020 letting due to the poor condition of pavement in the project area. Project was completed under live traffic to minimize impacts and used intelligent work zones. A large, metal, in-place 40-foot deep culvert was lined with traditional reinforced concrete pipe, which was a unique approach to use at this scale. 	

Highway 169 Pavement Rehabilitation Unbonded Overlay St. Peter to LeSueur

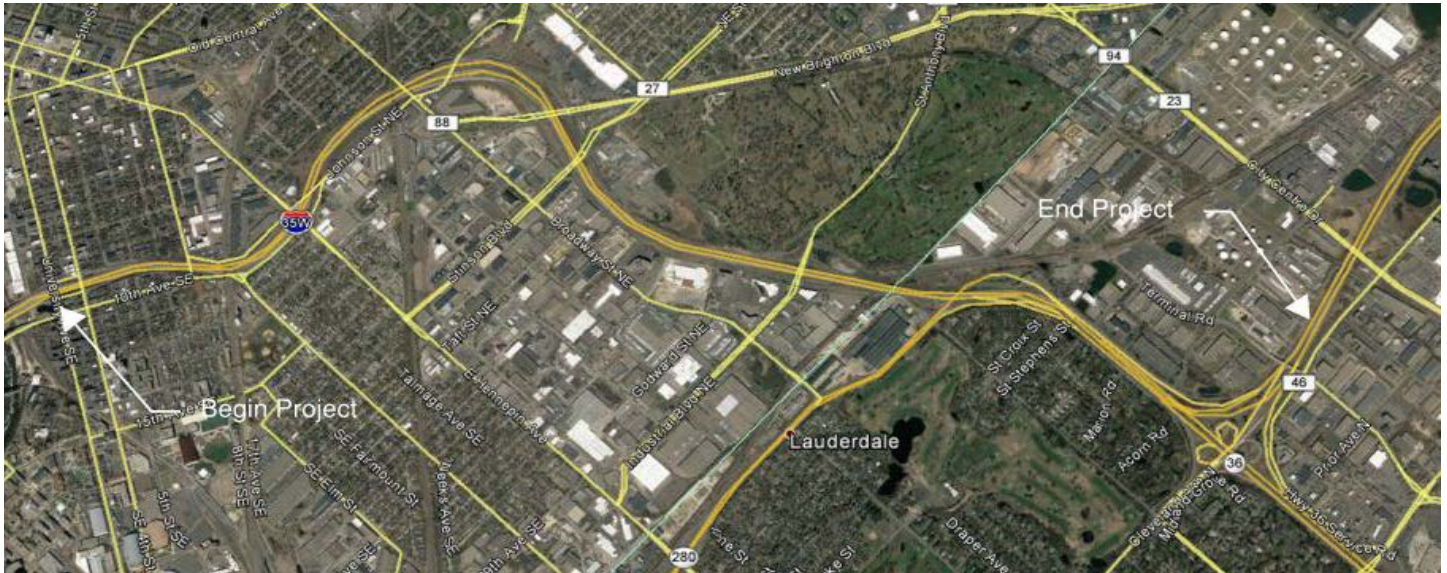
Highway 169	SP 5209-74	District 7	LeSueur County	Project Cost: \$20M
Project Manager: Peter Harff	Project Length: 6 miles		Letting Date: 11/17/17	
PROJECT SUMMARY:				
This project consisted of an unbonded concrete overlay on the northbound lanes of Hwy 169 for about 10 miles from Hwy 22 to the north junction of Hwy 93 in Le Sueur. The project also included the replacement of a bridge and construction of a new bridge. Bridge rail and guardrail improvements on one bridge were included on this project along with culvert rehabilitation and lighting.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$1,200,000
Pavement Design Methodology	
New MnPave software yielded a more efficient pavement section from 8 inches to 7.5 inches.	\$200,000
Existing outside shoulder was reclaimed and a new drainage layer installed next to the existing concrete pavement to extend the service life at a reduced cost.	\$400,000
A segment of road near the Highway 93 bridge was completed with a bituminous overlay instead of concrete due to a future project.	\$250,000
Innovative Construction Staging	
Existing crossovers for head to head traffic were used on this project and coordinated with previous projects to maximize efficiency.	\$100,000
Medians were closed in certain locations to minimize left turn lanes.	\$100,000
Used Old Minnesota Avenue as a detour route for Hwy 22. Broke the project into pieces to minimize the head-to-head traffic. This reduced the cost for the detour agreement.	\$150,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Intelligent work zones were used within the corridor. This improved safety and mobility. Sediment traps were added to minimize future sediment cleanouts in box culverts. In areas of roadway low points, the milling depth was reduced to bring the road up a few inches and give the roadway an additional height above the flood level. 3D milling was used to better control concrete quantities. 	

Interstate 35W Pavement Rehabilitation - Mill and Overlay: Minneapolis to Roseville

I-35W	SP 2783-166	Metro District	City of Minneapolis	Project Cost: \$21M
Project Manager: Jerome Adams		Project Length: 4.5 miles		Letting Date: 4/27/18
PROJECT SUMMARY:				
The project included a bituminous mill and overlay with ADA improvements along I-35W from 4th Street in Minneapolis to Rosegate in Roseville.				
PROJECT MAP:				



EFFICIENCIES SUMMARY		\$1,975,000
Pavement Design Methodology		
The use of an ultra-thin bonded overlay in conjunction with concrete joint repair of the existing concrete allowed the service life of the pavement to be extended until the full reconstruct happens in 2024. This also allowed the construction to be completed faster minimizing traffic impacts.		\$1,525,000
The concrete pavement rehabilitation work was minimized to only the areas needed to extend service life until the next project.		\$200,000
Innovative Construction Staging		
Used nighttime/weekend closures to accelerate the construction and minimize traffic impacts.		\$250,000
BEST PRACTICES SUMMARY		
<ul style="list-style-type: none"> Understanding the production schedule is important to committing to a timeframe for the unbonded overlay. Existing guardrail was analyzed for actual safety concerns. Some guardrail was not re-built based on the very low crash history. 		

Highway 149 Smith Ave High Bridge Re-Decking in St. Paul

Highway 149	SP 6223-20	Metro District	City of St. Paul	Project Cost: \$47M
Project Manager: Dale Gade		Project Length: 0.8 miles		Letting Date: 8/2/17
PROJECT SUMMARY:				
The project involved re-decking the Smith Avenue High Bridge over the Mississippi River. Associated miscellaneous work, such as replacing the approach panels, was included. ADA facilities adjacent to the bridge were upgraded to comply with the current standards.				
PROJECT MAP:				



EFFICIENCIES SUMMARY		\$6,150,000
Performance-based Practical Design		
The through lanes were reduced from 12 feet to 11 feet and the shoulders were reduced to allow installation of pedestrian barriers between the roadway and the sidewalk. This allowed the re-decking to stay within the same cross-section width.		\$4,750,000
Value Engineering		
MnDOT used the construction manager/general contractor process to realize the schedule and design efficiencies detailed in the value engineering study. The project was also disconnected from the Hwy 13 resurfacing project.		\$1,400,000

Highway 169 Pavement Rehabilitation - Unbonded Overlay from Highway 19 to Belle Plaine

Highway 169	SP 7007-34	Metro District	City of Belle Plaine	Project Cost: \$23M
Project Manager: Nicole Peterson		Project Length: 7.5 miles		Letting Date: 1/26/18
PROJECT SUMMARY:				
The project was an unbonded concrete overlay of US Highway 169 from Highway 19 to Ash Street in Belle Plaine. It also included some minor concrete pavement rehabilitation work and minor drainage repairs.				
PROJECT MAP:				



EFFICIENCIES SUMMARY	\$1,600,000
Pavement Design Methodology	
New MnPAVE software and unbonded overlay yielded a more efficient pavement design. This included an innovative design that widened the pavement section to move the dowel bars away from the wheel path, allowing the pavement depth to be reduced.	\$600,000
Performance-based Practical Design	
Reduced shoulder width from 10 feet to 8 feet to keep the roadway within the same footprint as the existing roadway and to minimize grading.	\$750,000
Innovative Construction Staging	
Combined letting with SP 7008-111 due to similar scope and location. This saved letting costs, construction administration costs and brought production efficiencies.	\$250,000
BEST PRACTICES SUMMARY	
<ul style="list-style-type: none"> Originally scoped as a two-year project. Construction staff determined the combined project could be delivered in one construction season. This contributed to the bids being \$3 million below the original estimate. Combining projects reduced unit costs on concrete. The low bidder was \$10/SQ YD lower than the engineers estimate. \$24.26/SQ YD vs \$34.77/SQ YD 	

Highway 169 Pavement Rehabilitation - Unbonded Overlay from Highway 25 to Highway 282

Highway 169	SP 7008-111	Metro District	City of Jordan	Project Cost: \$20M
Project Manager: Nicole Peterson		Project Length: 6.5 miles		Letting Date: 1/26/18
PROJECT SUMMARY:				
This project was an unbonded concrete overlay, included median closures, added U-turns and installed cable guardrails on Highway 169 from Highway 25 in Belle Plaine to Highway 282 in Jordan.				
PROJECT MAP:				



EFFICIENCIES SUMMARY		\$1,500,000
Pavement Design Methodology		
New MnPAVE software and an unbonded overlay yielded a more efficient pavement design. This included an innovative design that widened the pavement section to move the dowel bars away from the wheel path, allowing the pavement depth to be reduced.		\$550,000
Performance-based Practical Design		
Reduced shoulder width from 10 feet to 8 feet to keep the roadway within the same footprint as the existing roadway and to minimize grading.		\$700,000
Innovative Construction Staging		
Combined letting with SP 7007-34 due to similar scope and location. This saved letting costs, construction administration costs and brought production efficiencies.		\$250,000
BEST PRACTICES SUMMARY		
<ul style="list-style-type: none"> Originally scoped as a two-year project. Construction staff determined the combined project could be delivered in one construction season. This contributed to the bids being \$3 million below the original estimate. Combining projects reduced unit costs on concrete. The low bidder was \$10/SQ YD lower than the engineers estimate. \$24.26/SQ YD vs \$34.77/SQ YD Managing business access and communication was important. This project involved some high profile and high traffic generating businesses in a rural setting. 		

Interstate 35W Bridge Replacement, Roadway Reconstruction and Interchange

I-35W	SP 1981-124	Metro District	City of Burnsville	Project Cost: \$162M
Project Manager: Scott Pedersen		Project Length: 2.5 miles		Letting Date: 5/9/18
PROJECT SUMMARY:				
This project included bridge replacements, pavement reconstruction, auxiliary lanes, signing, lighting, traffic management systems, trails, drainage and guardrail on I-35W from the Cliff Road interchange to the 106th Street interchange in the cities of Burnsville and Bloomington within Hennepin and Dakota counties. An off-road trail was also added for pedestrian and bicycle crossing of the Minnesota River.				
PROJECT MAP:				



EFFICIENCIES SUMMARY		\$28,070,000
Pavement Design Methodology		
Use of new MnPAVE program resulted in 6 inches of bituminous instead of 7 inches on ramps.		\$275,000
Performance Based Practical Design		
Reduction of lane widths from 12 feet to 11 feet for select through lanes.		\$1,950,000
Inside shoulder width reduced from 12 feet to 4 feet.		\$11,600,000
Outside shoulder reduced from 12 feet to 10 feet.		\$1,200,000
Value Engineering		
Pavement section revised from 13 inch concrete to 9 inch stone matrix asphalt.		\$450,000
Used alternative wall types for the fill sections of I-35W.		\$4,500,000
Revised Black Dog Road alignment to reduce river bridge width.		\$2,350,000
Alternative Technical Concepts		
Optimized deck drainage system and eliminated 23 deck drains.		\$975,000
Revised barrier type on bridge to accommodate more efficient maintenance of traffic during construction. This also reduces overall schedule.		\$750,000
Used surface of reinforced soil slopes for snow storage reducing section width and wetland impacts.		\$375,000
Used soil settlement criteria for the retaining walls developed specifically for this project instead of using the boiler plate specification.		\$245,000
Used 1:3 slopes in front of certain walls rather than the 1:4 allowed by standards. This resulted in less grading and a reduction in the wetland impacts.		\$325,000
Reduced the reaction distance from 4 feet to 2 feet to barrier during construction in summer months only. This allowed 6 lanes during construction in all phases.		\$1,950,000
Consolidated dynamic message sign structures along corridor to reduce maintenance and construction.		\$325,000
Used wire mesh stepped face on reinforced soil slopes rather than straight face, which is more efficient and allows for more effective vegetation establishment.		\$150,000
I-35W mainline alignment modification to reduce roadway embankment, construction schedule and long-term maintenance.		\$650,000