

Application

Name:

04774 - 2016 Roadway Modernization 05194 - CSAH 23 Reconstruction Regional Solicitation - Roadways Including Multimodal Elements Status: Submitted Submitted Date: 07/15/2016 8:36 AM **Primary Contact** Mr. Richard Jacob Rezac Name:* Salutation First Name Middle Name Last Name Title: Project Manager **Department:** Email: jacob.rezac@co.dakota.mn.us Address: Transportation Dept. 14955 Galaxie Ave. Apple Valley 55124 Minnesota City State/Province Postal Code/Zip 952-891-7100 Phone:* Phone Ext. Fax: Regional Solicitation - Roadways Including Multimodal What Grant Programs are you most interested in? Elements **Organization Information**

DAKOTA COUNTY

Jurisdictional Agency (if different): County Government Organization Type: **Organization Website:** Address: TRANSPORTATION DEPT 14955 GALAXIE AVE APPLE VALLEY Minnesota 55124 City State/Province Postal Code/Zip County: Dakota 952-891-7100 Phone:* Ext. Fax:

Project Information

PeopleSoft Vendor Number

Project Name Reconstruction of CSAH 23 from Eveleth Ave. to CSAH 86 in

Greenvale Township

0000002621A15

Primary County where the Project is Located Dakota

Jurisdictional Agency (If Different than the Applicant):

The project involves the reconstruction of CSAH 23 (Foliage Ave) from CSAH 86 (280th St.) to 0.75 miles east of the west CSAH 23/CR 96 intersection in Greenvale Township. This project will address roadway safety concerns and geometric deficiencies by: reducing the number & severity of run off roadway type crashes with the addition of an 8' bituminous shoulder; provide increased safety for pedestrians/bicyclists; and adding turn lanes at intersections to improve roadway operations/safety through the area.

Brief Project Description (Limit 2,800 characters; approximately 400 words)

The specific improvements proposed as part of this project fit well with the overall transportation system in the area. These improvements include reconstructing the existing 2-lane roadway, adding 8' bituminous shoulders, flattening out side slopes/ditches, adding turn lanes at major intersections and by-pass lanes at "T" intersections. This project includes intersection modification to address safety. Aligning, consolidating and removing access along the corridor will increase safety along the corridor.

Include location, road name/functional class, type of improvement, etc.

<u>TIP Description Guidance</u> (will be used in TIP if the project is selected for funding)

Project Length (Miles)

CSAH 23, from CSAH 86 to CR 96 in Greenvale Twp, reconstruct roadway and widen shoulders

4.75

Yes

Project Funding

Are you applying for funds from another source(s) to implement this project?

If yes, please identify the source(s)

To be determined

Federal Amount \$5,488,000.00

Match Amount \$1,372,000.00

Minimum of 20% of project total

Project Total \$6,860,000.00

Match Percentage 20.0%

Minimum of 20%

Compute the match percentage by dividing the match amount by the project total

State Aid

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

Preferred Program Year

Select one: 2020

For TDM projects, select 2018 or 2019. For Roadway, Transit, or Trail/Pedestrian projects, select 2020 or 2021.

Additional Program Years:

2019

Select all years that are feasible if funding in an earlier year becomes available.

Specific Roadway Elements

| CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES | Cost |
|--|----------------|
| Mobilization (approx. 5% of total cost) | \$312,000.00 |
| Removals (approx. 5% of total cost) | \$312,000.00 |
| Roadway (grading, borrow, etc.) | \$2,350,000.00 |
| Roadway (aggregates and paving) | \$1,867,000.00 |
| Subgrade Correction (muck) | \$0.00 |
| Storm Sewer | \$750,000.00 |
| Ponds | \$0.00 |
| Concrete Items (curb & gutter, sidewalks, median barriers) | \$0.00 |
| Traffic Control | \$40,000.00 |
| Striping | \$25,000.00 |
| Signing | \$10,000.00 |
| Lighting | \$50,000.00 |
| Turf - Erosion & Landscaping | \$10,000.00 |
| Bridge | \$0.00 |
| Retaining Walls | \$0.00 |
| Noise Wall (do not include in cost effectiveness measure) | \$0.00 |
| Traffic Signals | \$0.00 |
| Wetland Mitigation | \$0.00 |
| Other Natural and Cultural Resource Protection | \$0.00 |
| RR Crossing | \$0.00 |
| Roadway Contingencies | \$0.00 |
| Other Roadway Elements | \$0.00 |
| Totals | \$5,726,000.00 |

Specific Bicycle and Pedestrian Elements

| CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES | Cost |
|--|----------------|
| Path/Trail Construction | \$0.00 |
| Sidewalk Construction | \$0.00 |
| On-Street Bicycle Facility Construction | \$1,134,000.00 |
| Right-of-Way | \$0.00 |
| Pedestrian Curb Ramps (ADA) | \$0.00 |
| Crossing Aids (e.g., Audible Pedestrian Signals, HAWK) | \$0.00 |
| Pedestrian-scale Lighting | \$0.00 |
| Streetscaping | \$0.00 |
| Wayfinding | \$0.00 |
| Bicycle and Pedestrian Contingencies | \$0.00 |
| Other Bicycle and Pedestrian Elements | \$0.00 |
| Totals | \$1,134,000.00 |

Specific Transit and TDM Elements

| ESTIMATES | Cost |
|---|--------|
| Fixed Guideway Elements | \$0.00 |
| Stations, Stops, and Terminals | \$0.00 |
| Support Facilities | \$0.00 |
| Transit Systems (e.g. communications, signals, controls, fare collection, etc.) | \$0.00 |
| Vehicles | \$0.00 |
| Contingencies | \$0.00 |
| Right-of-Way | \$0.00 |
| Other Transit and TDM Elements | \$0.00 |
| Totals | \$0.00 |

Transit Operating Costs

Substotal \$0.00

Other Costs - Administration, Overhead, etc. \$0.00

Totals

Total Cost \$6,860,000.00

Construction Cost Total \$6,860,000.00

Transit Operating Cost Total \$0.00

Requirements - All Projects

All Projects

1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan, the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).

Check the box to indicate that the project meets this requirement. Yes

2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan objectives and strategies that relate to the project.

List the goals, objectives, strategies, and associated pages:

This project serves as investment to preserve and maintain a regional transportation facility in a state of good repair (page 2.6), allows for a safer, more secure roadway by implementing measures to reduce crashes, particularly run-off-the-road (page 2.7), and will allow for more multi-modal use as the County intends to provide wider shoulders on CSAH 23.

3. The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.

List the applicable documents and pages:

This project is included in Dakota County's 2016-2020 Transportation Capital Improvement Plan.

4. The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of bicycle/pedestrian projects, transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

Check the box to indicate that the project meets this requirement. Yes

5.Applicants that are not cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

Check the box to indicate that the project meets this requirement. Yes

6.Applicants must not submit an application for the same project elements in more than one funding application category.

Check the box to indicate that the project meets this requirement. Yes

7. The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.

Roadway Expansion: \$1,000,000 to \$7,000,000

Roadway Reconstruction/ Modernization: \$1,000,000 to \$7,000,000

Roadway System Management \$250,000 to \$7,000,000

Bridges Rehabilitation/ Replacement: \$1,000,000 to \$7,000,000

Check the box to indicate that the project meets this requirement. Yes

8. The project must comply with the Americans with Disabilities Act.

Check the box to indicate that the project meets this requirement. Yes

9. The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes

10.The owner/operator of the facility must operate and maintain the project for the useful life of the improvement.

Check the box to indicate that the project meets this requirement. Yes

11. The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match. Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

Check the box to indicate that the project meets this requirement. Yes

12. The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.

Check the box to indicate that the project meets this requirement. Yes

13. The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.

Check the box to indicate that the project meets this requirement. Yes

Roadways Including Multimodal Elements

1.All roadway and bridge projects must be identified as a Principal Arterial (Non-Freeway facilities only) or A-Minor Arterial as shown on the latest TAB approved roadway functional classification map.

Check the box to indicate that the project meets this requirement. Yes

Roadway Expansion and Reconstruction/Modernization projects only:

2. The project must be designed to meet 10-ton load limit standards.

Check the box to indicate that the project meets this requirement. Yes

Bridge Rehabilitation/Replacement projects only:

3.Projects requiring a grade-separated crossing of a Principal Arterial freeway must be limited to the federal share of those project costs identified as local (non-MnDOT) cost responsibility using MnDOTs Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

Check the box to indicate that the project meets this requirement.

4.The bridge must carry vehicular traffic. Bridges can carry traffic from multiple modes. However, bridges that are exclusively for bicycle or pedestrian traffic must apply under one of the Bicycle and Pedestrian Facilities application categories. Rail-only bridges are ineligible for funding.

Check the box to indicate that the project meets this requirement.

5. The length of the bridge must equal or exceed 20 feet.

Check the box to indicate that the project meets this requirement.

6. The bridge must have a sufficiency rating less than 80 for rehabilitation projects and less than 50 for replacement projects. Additionally, the bridge must also be classified as structurally deficient or functionally obsolete.

Check the box to indicate that the project meets this requirement.

Requirements - Roadways Including Multimodal Elements

Project Information-Roadways

County, City, or Lead Agency **Dakota County**

Functional Class of Road A Minor Connector

Road System CSAH

TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET

Road/Route No. 23

i.e., 53 for CSAH 53

Name of Road Foliage Ave.

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55057

(Approximate) Begin Construction Date 04/10/2019 (Approximate) End Construction Date 10/25/2019

TERMINI:(Termini listed must be within 0.3 miles of any work)

From:

0.75 miles east of the west CSAH 23/CR 96 intersection (Intersection or Address)

CSAH 86 (Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Primary Types of Work GRADE, AGG BASE, BIT SURF, GUARDRAIL, CULVERT

Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER, STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

Structure is Over/Under (Bridge or culvert name):

Expander/Augmentor/Connector/Non-Freeway Principal Arterial

Select one:

 Area
 39.205

 Project Length
 4.754

 Average Distance
 8.2467

Upload Map 1468518388437_Roadway Defn Map.pdf

Reliever: Relieves a Principal Arterial that is a Freeway Facility

Facility being relieved

Number of hours per day volume exceeds capacity (based on the Congestion Report)

Reliever: Relieves a Principal Arterial that is a Non-Freeway Facility

Facility being relieved

Number of hours per day volume exceeds capacity (based on the table below)

Non-Freeway Facility Volume/Capacity Table

| Hour | NB/EB Volume | SB/WB Volume | Capacity | Volume exceeds capacity |
|------------------|--------------|--------------|----------|-------------------------|
| 12:00am - 1:00am | | | 0 | |
| 1:00am - 2:00am | | | 0 | |
| 2:00am - 3:00am | | | 0 | |
| 3:00am - 4:00am | | | 0 | |
| 4:00am - 5:00am | | | 0 | |
| 5:00am - 6:00am | | | 0 | |
| 6:00am - 7:00am | | | 0 | |
| 7:00am - 8:00am | | | 0 | |
| 8:00am - 9:00am | | | 0 | |
| 9:00am - 10:00am | | | 0 | |
| | | | | |

| 10:00am - 11:00am | 0 |
|-------------------|---|
| 11:00am - 12:00pm | 0 |
| 12:00pm - 1:00pm | 0 |
| 1:00pm - 2:00pm | 0 |
| 2:00pm - 3:00pm | 0 |
| 3:00pm - 4:00pm | 0 |
| 4:00pm - 5:00pm | 0 |
| 5:00pm - 6:00pm | 0 |
| 6:00pm - 7:00pm | 0 |
| 7:00pm - 8:00pm | 0 |
| 8:00pm - 9:00pm | 0 |
| 9:00pm - 10:00pm | 0 |
| 10:00pm - 11:00pm | 0 |
| 11:00pm - 12:00am | 0 |
| | |

Measure B: Project Location Relative to Jobs, Manufacturing, and Education

Existing Employment within 1 Mile: 98

Existing Manufacturing/Distribution-Related Employment within 1

Existing Students: 0

Upload Map 1468518477671_Reg Econ.pdf

Measure C: Current Heavy Commercial Traffic

Location: CSAH 23 from 0.75 miles east of the western CSAH 23/CR 96

intersection to CSAH 86

Current daily heavy commercial traffic volume: 693

Date heavy commercial count taken: 10/27/2014

Measure D: Freight Elements

Response (Limit 1,400 characters; approximately 200 words)

The existing roadway consists of two 12' lanes and 2' gravel shoulders. The proposed project will upgrade CSAH 23 to a 10-ton roadway and will also provide 8' paved shoulders. Turn lanes will be added at intersections with county or township roads.

Measure A: Current Daily Person Throughput

Location CSAH 23

Current AADT Volume 2900

Existing Transit Routes on the Project N/A

For New Roadways only, list transit routes that will be moved to the new roadway

Upload Transit Map 1468518561703_Transit.pdf

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership 0

Current Daily Person Throughput 3770.0

Measure B: 2040 Forecast ADT

Use Metropolitan Council model to determine forecast (2040) ADT volume

If checked, METC Staff will provide Forecast (2040) ADT volume 0

OR

Identify the approved county or city travel demand model to determine forecast (2040) ADT volume

Projection of 2030 Metropolitan Council model

Forecast (2040) ADT volume 5400

Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):

Project located in Area of Concentrated Poverty:

Projects census tracts are above the regional average for population in poverty or population of color:

Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly:

Yes

Response (Limit 2,800 characters; approximately 400 words)

The project will enhance safety and mobility in an agricultural area. The project will provide turn lanes at intersections with other county and township roads, which will improve the safety of the corridor. In addition, shoulders will be widened and rumble strips will be added, which will also improve safety for motorists by reducing run-off-the-road crashes and allow for larger agricultural equipment to more safely share the highway with other motorists.

The response should address the benefits, impacts, and mitigation for the populations affected by the project.

Upload Map 1468518504937_Socio.pdf

Measure B: Affordable Housing

City/Township Segment Length in Miles (Population)

Greenvale Township 4.75

5

Total Project Length

Total Project Length (Total Population) 4.75

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

City/Township Segment Total Length Length (Miles) (Miles) Score Segment Length/Total Length

O 0 0 0 0 0

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles) 4.75

Total Housing Score 0

Measure A: Year of Roadway Construction

Year of Original Roadway Construction

or Most Recent

Reconstruction

Segment Length

Calculation

Calculation 2

| 1955 | 4.75 | 9286.25 | 1955.0 |
|------|------|---------|--------|
| | 5 | 9286 | 1955 |

Average Construction Year

Weighted Year 1955

Total Segment Length (Miles)

Total Segment Length 4.75

Measure B: Geometric, Structural, or Infrastructure Improvements

Improving a non-10-ton roadway to a 10-ton roadway: Yes

Currently, this highway does not have a 10-ton structural capacity. This project will upgrade CSAH

23 to a 10-ton road.

Improved clear zones or sight lines: Yes

existing ditches, and address any features in the clear zone. Side slopes/ditches will be flattened, trees and other fixed objects will be removed or addressed, and roadside hardware improvements

will be made where needed.

Improved roadway geometrics: Yes

Response (Limit 700 characters; approximately 100 words)

No paved shoulders, except at Bridge 19517, or turn lanes exist on the highway. This project will add paved shoulders with rumble strips to the highway. Turn lanes at intersections will also be

The project will add 8' paved shoulders, re-grade

added to improve safety.

Access management enhancements: Yes

Response (Limit 700 characters; approximately 100 words)

Accesses will be removed, consolidated, or realigned along the CSAH 23 roadway.

Vertical/horizontal alignments improvements: Yes

Vertical alignment will be improved to increase sight distance for motorized/non-motorized

roadway users.

Improved stormwater mitigation:

Yes

Response (Limit 700 characters; approximately 100 words)

The project involves the addition of impervious surface area. Stormwater mitigation measures will be implemented to provide treatment and improve water quality along the corridor. Best Managemment Practices such as bioretention cells, permeable ditch blocks & bioswale ditch bottoms will also be implemented.

Signals/lighting upgrades:

Yes

Response (Limit 700 characters; approximately 100 words)

Lighting will be provided at major intersections. Highway signage and pavement markings will be upgraded.

Other Improvements

Yes

Response (Limit 700 characters; approximately 100 words)

Existing metal culverts (1947), guardrail, and signage will be replaced. Recommendations from Dakota County Roadway Safety Plan will also be included(MnDOT approved, see p.10, segment ID 86.02 Center Line Rumble Strip & Rumble Stripe reduce injury/roadway departure crashes).

Measure A: Congestion Reduction/Air Quality

| Total Peak Hour Delay Per Vehicle Without The Project | Total Peak Hour Delay Per Vehicle With The Project | Total Peak Hour Delay Per Vehicle Reduced by Project | Volume (Vehicles per hour) | Total Peak Hour Delay Reduced by the Project: | N of methodology used to calculate railroad crossing delay, if applicable. | Synchro or HCM Reports |
|---|--|--|----------------------------------|--|--|---------------------------|
| 0 | 0 | 0 | | 0 | | Synchro justification.pdf |

Total Delay

Measure B:Roadway projects that do not include new roadway segments or railroad grade-separation elements

| and VOC) Peak Hour Emissions Per Vehicle without the Project (Kilograms): | and VOC) Peak Hour Emissions Per Vehicle with the Project (Kilograms): | and VOC) Peak Hour Emissions Reduced Per Vehicle by the Project (Kilograms): | Volume (Vehicles Per Hour): | and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): | |
|---|--|--|--------------------------------|--|--|
| 0 | 0 | | 0 | 0 | |

Total

Total Emissions Reduced:

Upload Synchro Report 1467995750598_Synchro justification.pdf

Measure B: Roadway projects that are constructing new roadway segments, but do not include railroad grade-separation elements (for Roadway Expansion applications only):

0

| 0 | 0 | , | 0 | 0 |
|--|---|--|--------------------------------|---|
| Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle without the Project (Kilograms): | Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle with the Project (Kilograms): | Total (CO, NOX, and VOC) Peak Hour Emissions Reduced Per Vehicle by the Project (Kilograms): | Volume (Vehicles Per Hour): | Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): |

Total Parallel Roadways

Emissions Reduced on Parallel Roadways

Upload Synchro Report 1467995750583_Synchro justification.docx

New Roadway Portion:

Cruise speed in miles per hour with the project:

0

Vehicle miles traveled with the project:

0

Total delay in hours with the project:

0

Total stops in vehicles per hour with the project:

0

Fuel consumption in gallons:

0

| Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms): | 0 |
|---|-----|
| EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words) | |
| Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): | 0.0 |

Measure B:Roadway projects that include railroad grade-separation elements

| Cruise speed in miles per hour without the project: | 0 |
|--|---|
| Vehicle miles traveled without the project: | 0 |
| Total delay in hours without the project: | 0 |
| Total stops in vehicles per hour without the project: | 0 |
| Cruise speed in miles per hour with the project: | 0 |
| Vehicle miles traveled with the project: | 0 |
| Total delay in hours with the project: | 0 |
| Total stops in vehicles per hour with the project: | 0 |
| Fuel consumption in gallons (F1) | 0 |
| Fuel consumption in gallons (F2) | 0 |
| Fuel consumption in gallons (F3) | 0 |
| Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): | 0 |
| EXPLANATION of methodology and assumptions used:(Limit | |

Transit Projects Not Requiring Construction

If the applicant is completing a transit or TDM application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Yes

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment

1,400 characters; approximately 200 words)

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred

100%

Stakeholders have been identified

40%

| Stakeholders have not been identified or contacted | | |
|--|-------------------|----------------|
| 0% | | |
| 2)Layout or Preliminary Plan (5 Percent of Points) | | |
| Layout or Preliminary Plan completed | | |
| 100% | | |
| Layout or Preliminary Plan started | Yes | |
| 50% | | |
| Layout or Preliminary Plan has not been started | | |
| 0% | | |
| Anticipated date or date of completion | 08/31/2017 | |
| 3)Environmental Documentation (5 Percent of Points) | | |
| EIS | | |
| EA | | |
| РМ | Yes | |
| Document Status: | | |
| Document approved (include copy of signed cover sheet) | 100% | |
| Document submitted to State Aid for review | 75% | date submitted |
| Document in progress; environmental impacts identified; review request letters sent | | |
| 50% | | |
| | | |
| Document not started | Yes | |
| Document not started 0% | Yes | |
| | Yes 12/31/2017 | |
| 0% | 12/31/2017 | |
| 0% Anticipated date or date of completion/approval | 12/31/2017 | |
| 0% Anticipated date or date of completion/approval 4)Review of Section 106 Historic Resources (10 Percent of No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and | 12/31/2017 | |
| O% Anticipated date or date of completion/approval 4)Review of Section 106 Historic Resources (10 Percent of No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge | 12/31/2017 | |
| Anticipated date or date of completion/approval 4)Review of Section 106 Historic Resources (10 Percent of No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge 100% Historic/archeological review under way; determination of no | 12/31/2017 | |
| Anticipated date or date of completion/approval 4)Review of Section 106 Historic Resources (10 Percent of No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge 100% Historic/archeological review under way; determination of no historic properties affected or no adverse effect anticipated | 12/31/2017 | |
| Anticipated date or date of completion/approval 4)Review of Section 106 Historic Resources (10 Percent of No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge 100% Historic/archeological review under way; determination of no historic properties affected or no adverse effect anticipated 80% Historic/archaeological review under way; determination of | 12/31/2017 | |

0%

Anticipated date or date of completion of historic/archeological review:

09/30/2017

Project is located on an identified historic bridge

5) Review of Section 4f/6f Resources (10 Percent of Points)

4(f) Does the project impacts any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or public private historic properties?
6(f) Does the project impact any public parks, public wildlife refuges, public golf courses, wild & scenic rivers or historic property that was purchased or improved with federal funds?

No Section 4f/6f resources located in the project area

Yes

100%

No impact to 4f property. The project is an independent bikeway/walkway project covered by the bikeway/walkway Negative Declaration statement; letter of support received

100%

Section 4f resources present within the project area, but no known adverse effects

80%

Project impacts to Section 4f/6f resources likely coordination/documentation has begun

50%

Project impacts to Section 4f/6f resources likely coordination/documentation has not begun

30%

Unsure if there are any impacts to Section 4f/6f resources in the project area

0%

6)Right-of-Way (15 Percent of Points)

Right-of-way, permanent or temporary easements not required

100%

Right-of-way, permanent or temporary easements has/have been acquired

100%

Right-of-way, permanent or temporary easements required, offers made

75%

Right-of-way, permanent or temporary easements required, appraisals made

50%

Right-of-way, permanent or temporary easements required, parcels identified

Yes

25%

Right-of-way, permanent or temporary easements required, parcels not identified

| Right-of-way, permanent | or temporary | easements | identification |
|-------------------------|--------------|-----------|----------------|
| has not been completed | | | |

0%

Anticipated date or date of acquisition 11/30/2018

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project Yes

100%

Railroad Right-of-Way Agreement is executed (include signature page)

100%

Railroad Right-of-Way Agreement required; Agreement has been initiated

60%

Railroad Right-of-Way Agreement required; negotiations have begun

40%

Railroad Right-of-Way Agreement required; negotiations not begun

0%

Anticipated date or date of executed Agreement

8)Interchange Approval (15 Percent of Points)*

*Please contact Karen Scheffing at MnDOT (Karen.Scheffing@state.mn.us or 651-234-7784) to determine if your project needs to go through the Metropolitan Council/MnDOT Highway Interchange Request Committee.

Project does not involve construction of a new/expanded interchange or new interchange ramps

Yes

100%

Interchange project has been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

100%

Interchange project has not been approved by the Metropolitan Council/MnDOT Highway Interchange Request Committee

0%

9)Construction Documents/Plan (10 Percent of Points)

Construction plans completed/approved (include signed title sheet)

100%

Construction plans submitted to State Aid for review

75%

Construction plans in progress; at least 30% completion

50%

| Construction plans have not been started | Yes |
|--|-----|
|--|-----|

0%

Anticipated date or date of completion 12/28/2018

10)Letting

Anticipated Letting Date 01/29/2019

Measure A: Roadway Projects that do not Include Railroad Grade-Separation Elements

Crash Modification Factor Used: 5409.0

Crash modification factors selected for this project, based on ID number, were 5409, 5650, 3445, and 3352. Paved shoulders are being added throughout the project and apply to all crashes. The project will also involve the addition of rumble strips, both on the shoulder and centerline. The audible nature of these has been proven to reduce the potential for head on, sideswipe, and run off the road crashes that have occurred on this corridor. The addition of turn lanes will reduce the risk of rear end crashes

involving stationary vehicles.

(Limit 1400 Characters; approximately 200 words)

Rationale for Crash Modification Selected:

Project Benefit (\$) from B/C Ratio \$0.27

Worksheet Attachment 1468518642484_benefit-cost-worksheet-CSAH 23-

aug2015.xls

Roadway projects that include railroad grade-separation elements:

Current AADT volume: 0

Average daily trains: 0

Crash Risk Exposure eliminated: 0

Measure A: Multimodal Elements and Existing Connections

Response (Limit 2,800 characters; approximately 400 words)

The scope of this project does not include the addition of trails, bike paths, or sidewalk. The project will widen shoulders to a width that would adequately accommodate bicycle traffic and examine potential future pedestrian facility connections and determining if accommodating future improvements is prudent.

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$6,860,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$6,860,000.00

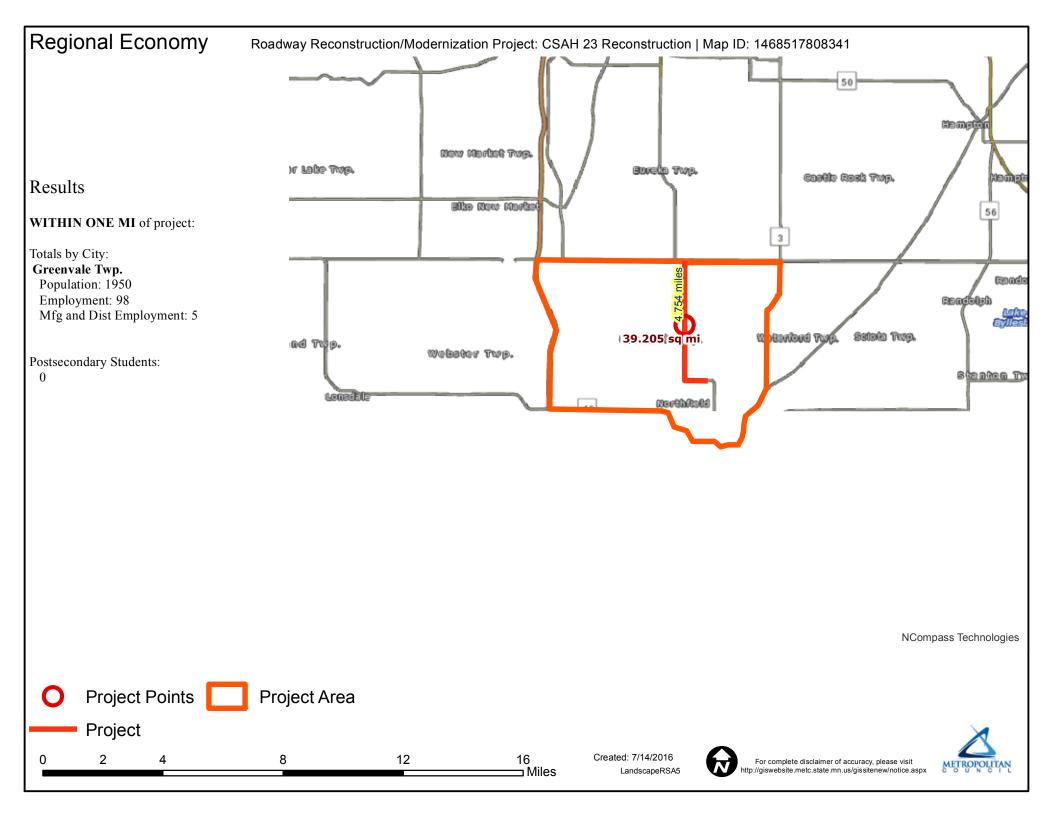
Points Awarded in Previous Criteria

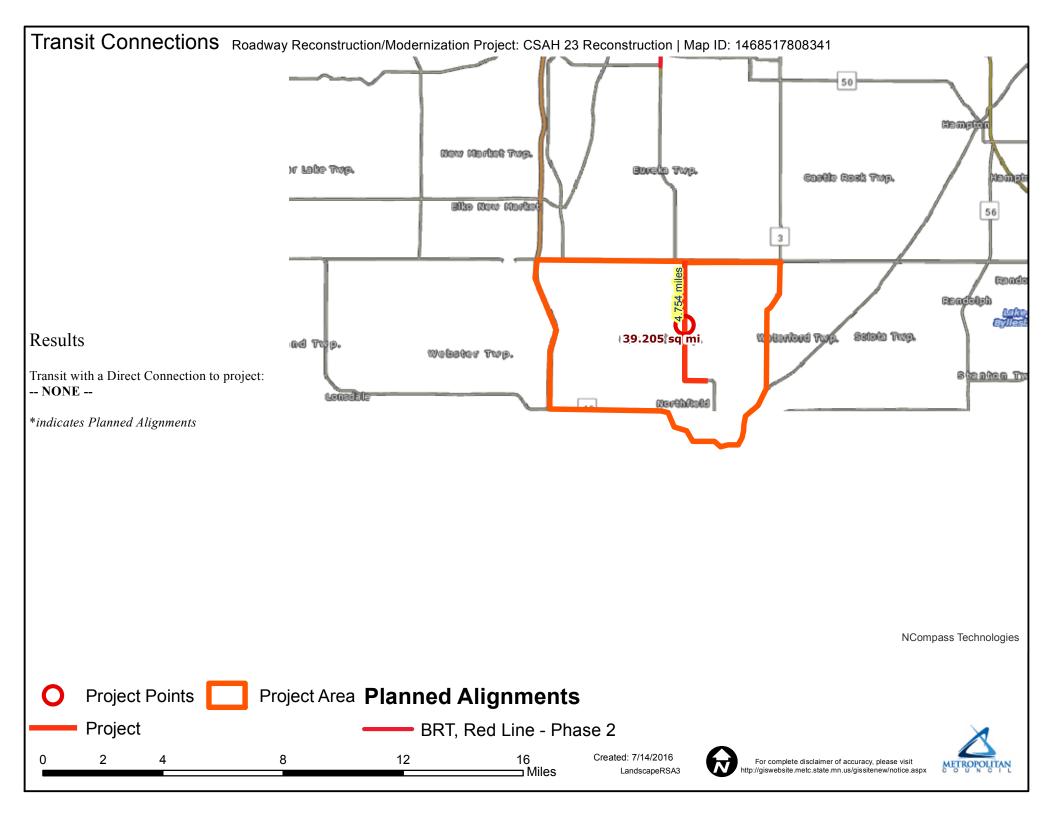
Cost Effectiveness \$0.00

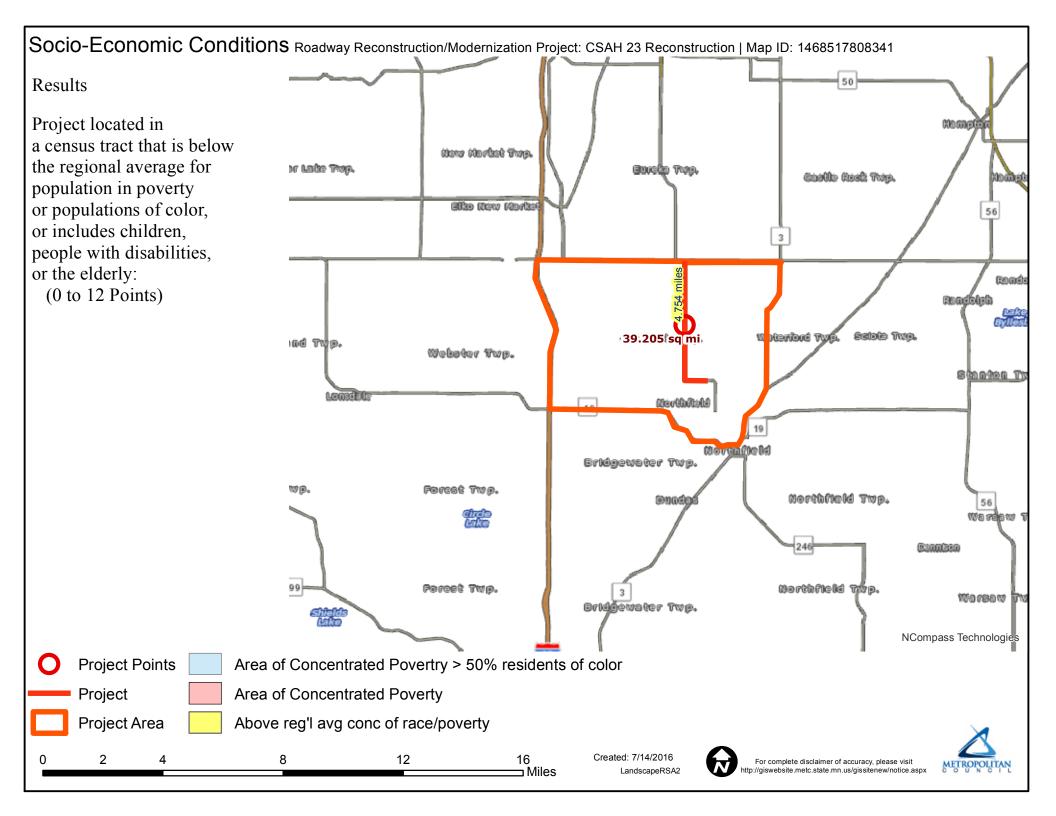
Other Attachments

| File Name | Description | File Size |
|---|-------------------------------|-----------|
| class count 23 from 96 to 86 (M and T).pdf | Vehicle Class Count - CSAH 23 | 68 KB |
| CSAH 23 (Foliage Ave) From CR 96 to CSAH 88 (2013 - 2015).xls | Crashes | 136 KB |
| CSAH 23 CMF.pdf | Crash Modification Factors | 180 KB |
| Dakota County Resolution June 21 2016.pdf | Dakota County Resolution | 178 KB |
| Project Location_CSAH23 (2).pdf | Project Location Map | 274 KB |
| Resolution.pdf | Local match resolution | 80 KB |

Roadway Area Definition Roadway Reconstruction/Modernization Project: CSAH 23 Reconstruction | Map ID: 1468517808341 50 Hampton Results New Market Twp. r Lake Twp. Eureka Twp. Castle Rock Twp. Hampton Project Length: 4.754 miles Elko New Market 56 Project Area: 39.205 sq mi Randol Randolph 39.205 sq mi Waterford Twp. Sciota Twp. tland Twp. Webster Twp. Stanto Northfield Bridgewater Twp. 56 Warsa Northfield Twp. Dundas Forest Twp Dennison 246 Bridgewater Twp. Northfield Twp. Warsaw Twp Forest Twp. Metropolitan Council Project Points **Project Area Project** Created: 7/14/2016 2 12 16 For complete disclaimer of accuracy, please visit ⊐ Miles http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx LandscapeRSA1







CSAH 23 from Eveleth Ave. to CSAH 86

The delay and congestion along this corridor is minimal. This project will not involve any intersection improvements or lane additions, with the exception of the addition of turn lanes at various intersections. As a result, there is no need to reduce delay or congestion, and the scope of this project will not significantly alter the delay in delay or emissions on this project.

CSAH 23 from Eveleth Ave. to CSAH 86

The delay and congestion along this corridor is minimal. This project will not involve any intersection improvements or lane additions, with the exception of the addition of turn lanes at various intersections. As a result, there is no need to reduce delay or congestion, and the scope of this project will not significantly alter the delay in delay or emissions on this project.

DAKOTA COUNTY TRANSPORTATION TRAFFIC UNIT TRAFFIC COUNT DATA

Road : CSAH 23

Location : From CR 96 to CSAH 86 Notes : Classification Count

Site: Classification Count

10/27/2014 Monday

24 Hour Classification

Combined Channels

| Interval Start | Total | Motor Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi |
|----------------|-------|----------------|--------------------|----------------|-------|------------------|------------------|------------------|-------------------|------------------|-------------------|------------------|-----------------|------------------|
| 10:00 AM | 106 | 2 | 73 | 22 | 0 | 6 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 11:00 AM | 89 | 3 | 61 | 13 | 1 | 5 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| 12:00 PM | 107 | 0 | 76 | 23 | 0 | 5 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 1:00 PM | 152 | 2 | 100 | 33 | 0 | 12 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| 2:00 PM | 151 | 6 | 103 | 26 | 1 | 11 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 3:00 PM | 245 | 4 | 169 | 49 | 0 | 20 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 4:00 PM | 264 | 0 | 191 | 53 | 0 | 16 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 266 | 1 | 216 | 37 | 0 | 9 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 6:00 PM | 187 | 0 | 146 | 33 | 0 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 7:00 PM | 91 | 0 | 67 | 16 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 PM | 77 | 0 | 60 | 9 | 1 | 5 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 9:00 PM | 63 | 0 | 52 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 PM | 32 | 0 | 25 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 PM | 23 | 0 | 17 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10/28/2014 | | | | | | | | | | | | | | |
| 12:00 AM | 18 | 0 | 11 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 6 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 AM | 18 | 0 | 11 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 AM | 92 | 1 | 68 | 22 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 AM | 188 | 1 | 147 | 30 | 0 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 265 | 0 | 195 | 48 | 2 | 18 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 172 | 0 | 134 | 22 | 1 | 9 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 9:00 AM | 105 | 0 | 78 | 17 | 1 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2728 | 20 | 2015 | 488 | 8 | 148 | 18 | 4 | 16 | 10 | 0 | 1 | 0 | 0 |
| % | | 0.7 | 73.9 | 17.9 | 0.3 | 5.4 | 0.7 | 0.1 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |

Passenger Cars: 2035 (75%) Trucks: 693 (25%) Total: 2728

: CSAH 23 Site: Classification Count Road 10/28/2014

Location : From CR 96 to CSAH 86 Notes : Classification Count

24 Hour Classification

Combined Channels

| Interval Start | Total | Motor Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi |
|------------------------|-------|----------------|--------------------|----------------|-------|------------------|------------------|------------------|-------------------|------------------|-------------------|------------------|-----------------|------------------|
| 10:00 AM | 99 | 0 | 81 | 12 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 11:00 AM | 111 | 0 | 77 | 22 | 1 | 5 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 |
| 12:00 PM | 113 | 0 | 77 | 16 | 1 | 11 | 1 | 1 | 4 | 1 | 1 | 0 | 0 | 0 |
| 1:00 PM | 122 | 0 | 90 | 18 | 0 | 7 | 2 | 2 | 0 | 3 | 0 | 0 | 0 | 0 |
| 2:00 PM | 176 | 0 | 133 | 28 | 0 | 9 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 3:00 PM | 216 | 1 | 145 | 52 | 1 | 13 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 4:00 PM | 271 | 0 | 205 | 49 | 1 | 14 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 266 | 1 | 208 | 44 | 0 | 9 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 |
| 6:00 PM | 179 | 0 | 133 | 34 | 0 | 8 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 |
| 7:00 PM | 116 | 0 | 87 | 24 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 8:00 PM | 73 | 0 | 54 | 13 | 1 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 9:00 PM | 63 | 0 | 46 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 PM | 37 | 0 | 27 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 PM | 25 | 0 | 20 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10/29/2014 12:00 AM | 12 | 0 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 7 | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 6 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 AM | 24 | 0 | 19 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 AM | 88 | 0 | 68 | 19 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00 AM | 171 | 0 | 128 | 32 | 1 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 254 | 0 | 190 | 42 | 1 | 16 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 |
| 8:00 AM | 159 | 0 | 126 | 20 | 2 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 AM | 124 | 0 | 89 | 28 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2718 | 2 | 2025 | 496 | 13 | 128 | 12 | 7 | 19 | 12 | 3 | 1 | 0 | 0 |
| % | | 0.1 | 74.5 | 18.2 | 0.5 | 4.7 | 0.4 | 0.3 | 0.7 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 |

Passenger Cars: 2027 (75%) Trucks: 691 (25%) Total: 2718

Tuesday



CMF / CRF Details

CMF ID: 3352

Install centerline rumble strips

Description:

Prior Condition: No centerline rumble strips

Category: Roadway

Study: NCHRP Report 641: Guidance for the Design and Application of Shoulder

and Centerline Rumble Strips, Torbic et al., 2009

| Crash Modification Factor (CMF) | | | | |
|---------------------------------|-------|--|--|--|
| Value: | 0.51 | | | |
| Adjusted Standard Error: | | | | |
| Unadjusted Standard Error: | 0.073 | | | |

Crash Reduction Factor (CRF)

| Value: | 49 (This value indicates a decrease in crashes) |
|-------------------------------|--|
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 7.3 |

| Applicability | | | | |
|-------------------------------|---|--|--|--|
| Crash Type: | Head on, Sideswipe | | | |
| Crash Severity: | All | | | |
| Roadway Types: | Not Specified | | | |
| Number of Lanes: | 2 | | | |
| Road Division Type: | Undivided | | | |
| Speed Limit: | | | | |
| Area Type: | Rural | | | |
| Traffic Volume: | 1336 to 13240 Average Daily Traffic (ADT) | | | |
| Time of Day: | All | | | |
| If coun | termeasure is intersection-based | | | |
| Intersection Type: | | | | |
| Intersection Geometry: | | | | |
| Traffic Control: | | | | |
| Major Road Traffic Volume: | | | | |

Minor Road Traffic Volume:

| | Development Details | | | |
|------------------------------|--|--|--|--|
| Date Range of Data Used: | 1997 to 2006 | | | |
| Municipality: | | | | |
| State: | MN | | | |
| Country: | U.S.A. | | | |
| Type of Methodology Used: | Before/after using empirical Bayes or full Bayes | | | |
| Sample Size Used: | Crashes | | | |
| Before Sample Size Used: | 99 Crashes | | | |
| After Sample Size Used: | 55 Crashes | | | |

| Other Details | | | | | | |
|---------------------------------------|---|--|--|--|--|--|
| Included in Highway Safety Manual? | No | | | | | |
| Date Added to Clearinghouse: | | | | | | |
| Comments: | The authors collected data on thru lanes and speed limits but did not provide those data in the report. | | | | | |

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.



CMF / CRF Details

CMF ID: 3445

Install shoulder rumble strips

Description:

Prior Condition: No Prior Condition(s)

Category: Shoulder treatments

Study: NCHRP Report 641: Guidance for the Design and Application of Shoulder

and Centerline Rumble Strips, Torbic et al., 2009

| Crash Modification Factor (CMF) | | | | |
|---------------------------------|--------|--|--|--|
| Value: | 0.56 | | | |
| Adjusted Standard Error: | | | | |
| Unadjusted Standard Error: | 0.0913 | | | |

Crash Reduction Factor (CRF)

| Value: | 44 (This value indicates a decrease in crashes) |
|-------------------------------|--|
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 9.13 |

| Applicability | |
|---|---|
| Crash Type: | Run off road |
| Crash Severity: | All |
| Roadway Types: | Not Specified |
| Number of Lanes: | 2 |
| Road Division Type: | Undivided |
| Speed Limit: | |
| Area Type: | Rural |
| Traffic Volume: | 948 to 9067 Average Daily Traffic (ADT) |
| Time of Day: | All |
| If countermeasure is intersection-based | |
| Intersection Type: | |
| Intersection Geometry: | |
| Traffic Control: | |
| Major Road Traffic Volume: | |

Minor Road Traffic Volume:

| Development Details | |
|------------------------------|--|
| Date Range of Data Used: | 1997 to 2006 |
| Municipality: | |
| State: | PA |
| Country: | U.S.A. |
| Type of Methodology Used: | Before/after using empirical Bayes or full Bayes |
| Sample Size Used: | Crashes |
| Before Sample Size Used: | 118 Crashes |
| After Sample Size Used: | 41 Crashes |

| Other Details | |
|---------------------------------------|---|
| Included in Highway Safety Manual? | No |
| Date Added to Clearinghouse: | |
| Comments: | The authors collected data on thru lanes and speed limits but did not provide those data in the report (see p. 50). |

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CMF / CRF Details

CMF ID: 5409

Upgrade narrow unpaved shoulder (< 5 ft) to wide paved shoulder (> 5 ft)

Description: Upgrade narrow unpaved shoulder (< 5 ft) to wide paved shoulder (>5 ft)

Prior Condition: Narrow (< 5 ft) unpaved shoulder

Category: Shoulder treatments

Study: Evaluation of Safety Effectiveness of Composite Shoulders, Wide Unpaved Shoulders, and Wide Paved Shoulders in Kansas, Zeng et al., 2013

Star Quality Rating:

*** [View score details]

| Crash Modification Factor (CMF) | |
|---------------------------------|-------|
| Value: | 0.58 |
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 0.054 |

Crash Reduction Factor (CRF)

| Value: | 42 (This value indicates a decrease in crashes) |
|-------------------------------|--|
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 5.4 |

| Applicability | |
|---|--|
| Crash Type: | All |
| Crash Severity: | All |
| Roadway Types: | Major Collector |
| Number of Lanes: | 2 |
| Road Division Type: | Undivided |
| Speed Limit: | |
| Area Type: | Rural |
| Traffic Volume: | 65 to 4950 Average Daily Traffic (ADT) |
| Time of Day: | All |
| If countermeasure is intersection-based | |
| Intersection Type: | |
| Intersection Geometry: | |
| Traffic Control: | |
| Major Road Traffic Volume: | |

Minor Road Traffic Volume:

| Development Details | |
|------------------------------|--------------------------|
| Date Range of Data Used: | 2000 to 2009 |
| Municipality: | |
| State: | KS |
| Country: | USA |
| Type of Methodology Used: | Regression cross-section |
| Sample Size Used: | 3135 Crashes |

| Other Details | |
|---------------------------------------|---|
| Included in Highway Safety Manual? | No |
| Date Added to Clearinghouse: | Jan-09-2014 |
| Comments: | The cross sectional model compares narrow unpaved shoulders to wide paved shoulders. There are more crashes included in the sample, specifically associated with the category "wide paved shoulders," that wasn't included in the summary statistics. |

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CMF / CRF Details

CMF ID: 5650

Install right-turn lane

Description:

Prior Condition: Unsignalized intersections or driveways without right turn lane

Category: Intersection geometry

Study: <u>Safety Impacts of Right-Turn Lanes at Unsignalized Intersections and</u> Driveways on Two-Lane Roadways: Crash Analysis, Ale et al., 2014

Crash Modification Factor (CMF)

Value: 0.7

Adjusted Standard Error:

Unadjusted Standard Error:

Crash Reduction Factor (CRF)

| Value: | 30 (This value indicates a decrease in crashes) |
|-------------------------------|--|
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | |

| Applicability | |
|---|---|
| Crash Type: | Rear end |
| Crash Severity: | All |
| Roadway Types: | Principal Arterial Other Freeways and Expressways |
| Number of Lanes: | 2 |
| Road Division Type: | Undivided |
| Speed Limit: | |
| Area Type: | All |
| Traffic Volume: | |
| Time of Day: | Not specified |
| If countermeasure is intersection-based | |
| Intersection Type: | Roadway/roadway (not interchange related) |
| Intersection Geometry: | |
| Traffic Control: | Uncontrolled |
| Major Road Traffic Volume: | |

Minor Road Traffic Volume:

| Development Details | |
|------------------------------|--------------------------|
| Date Range of Data Used: | 2000 to 2005 |
| Municipality: | |
| State: | MN |
| Country: | |
| Type of Methodology Used: | Regression cross-section |
| Sample Size Used: | |

| Other Details | |
|---------------------------------------|---|
| Included in Highway Safety Manual? | No |
| Date Added to Clearinghouse: | Jan-21-2015 |
| Comments: | This CMF is for rear-end crashes caused by right turn vehicles in right turn lanes. |

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

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use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.

BOARD OF COUNTY COMMISSIONERS DAKOTA COUNTY, MINNESOTA

June 21, 2016 Motion by Commissioner Workman Resolution No. 16-337 Second by Commissioner Holberg

Approval Of Grant Application Submittals For Transportation Advisory Board 2016 Federal Funding Solicitation Process

WHEREAS, the Transportation Advisory Board (TAB) is requesting project submittals for federal funding under the Fixing America's Surface Transportation (FAST) Act; and

WHEREAS, these federal programs fund up to 80 percent of project construction costs; and

WHEREAS, federal funding of projects reduces the burden local taxpayers for regional improvements; and

WHEREAS, non-federal funds must be at least 20 percent of the project costs; and

WHEREAS, project submittals are due on July 15, 2016; and

WHEREAS, all projects proposed are consistent with the adopted Dakota County Comprehensive Plan; and

WHEREAS, subject to federal funding award, the Dakota County Board of Commissioners would be asked to consider authorization to execute a grant agreement at a future meeting.

NOW, THEREFORE, BE IT RESOLVED, That the Dakota County Board of Commissioners hereby approves the following County led projects for submittal to the TAB for federal funding:

- 1. 179th Street Extension from ½ mile west of County State Aid Highway (CSAH) 31 to CSAH 31 and the existing 179th Street intersection with Flagstaff Avenue in Lakeville
- 2. CSAH 9 (Dodd Boulevard) from Heritage Way to CSAH 50 in Lakeville
- 3. CSAH 26 (Lone Oak Road/70th Street) from Trunk Highway (TH) 55 to TH 3 (Robert Street) in Eagan and Inver Grove Heights
- 4. CSAH 32 (Cliff Road) at its intersection with CSAH 31 (Pilot Knob Road) in Eagan
- 5. CSAH 23 (Foliage Avenue) from CSAH 86 (280th Street) to County Road 96 (320th Street) in Greenvale Township
- 6. CSAH 50 (202nd Street) from Holyoke Avenue to CSAH 23 (Cedar Avenue) in Lakeville
- 7. CSAH 86 (280th Street) from CSAH 23 (Galaxie Avenue) to TH 3 in Eureka, Greenvale, Castle Rock, and Waterford Townships
- 8. Minnesota River Greenway Eagan Gap Segment in Eagan
- 9. River to River Greenway TH 149 Underpass in Mendota Heights
- 10. River to River Greenway Robert Street Crossing Connections in West St Paul
- 11. North Creek Greenway CSAH 42 Underpass east of Flagstaff in Apple Valley; and

STATE OF MINNESOTA County of Dakota

| | VOTE |
|-------------|------|
| Slavik | Yes |
| Gaylord | Yes |
| Egan | Yes |
| Schouweiler | Yes |
| Workman | Yes |
| Holberg | Yes |
| Gerlach | Yes |

I, Jennifer Reynolds, Clerk to the Board of the County of Dakota, State of Minnesota, do hereby certify that I have compared the foregoing copy of a resolution with the original minutes of the proceedings of the Board of County Commissioners, Dakota County, Minnesota, at their session held on the 21st day of June, 2016, now on file in the County Administration Department, and have found the same to be a true and correct copy thereof.

Witness my hand and official seal of Dakota County this 23rd day of June, 2016.

Clerk to the Board

12. CSAH 14 - Southview Boulevard from 20th Avenue to 3rd Avenue and 3rd Avenue from Southview Boulevard to Marie Avenue in South St. Paul; and

BE IT FURTHER RESOLVED, That the Dakota County Board of Commissioners hereby supports the following submittals by others:

- 13. 117th Street from CSAH 71 (Rich Valley Boulevard) to TH 52 Lead Agency: Inver Grove Heights
- 14. Orange Line Extension Lead Agency: Metro Transit
- 15. CSAH 73 (Oakdale Avenue) from CSAH 14 (Mendota Road) to CSAH 8 (Wentworth Avenue) Lead Agency: West St. Paul
- 16. TH 149 (Dodd Road) from Mendota Heights Road to Decorah Lane and from Maple Street to Smith Avenue Lead Agency: Mendota Heights
- 17. North Creek Greenway Farmington Gap Lead Agency: Farmington
- 18. CSAH 8 (Wentworth Avenue) from CSAH 63 (Delaware Avenue) to Humboldt Avenue Lead Agency: West St. Paul
- 19. CSAH 8 (Wentworth Avenue) from TH 52 to 15th Avenue Lead Agency: South St Paul; and

BE IT FURTHER RESOLVED, That, subject to federal funding award of the city led projects, the Dakota County Board of Commissioners will provide the local match for regional greenway projects, and for non-greenway projects will provide Dakota County's share of the matching funds consistent with Dakota County transportation cost share policies.

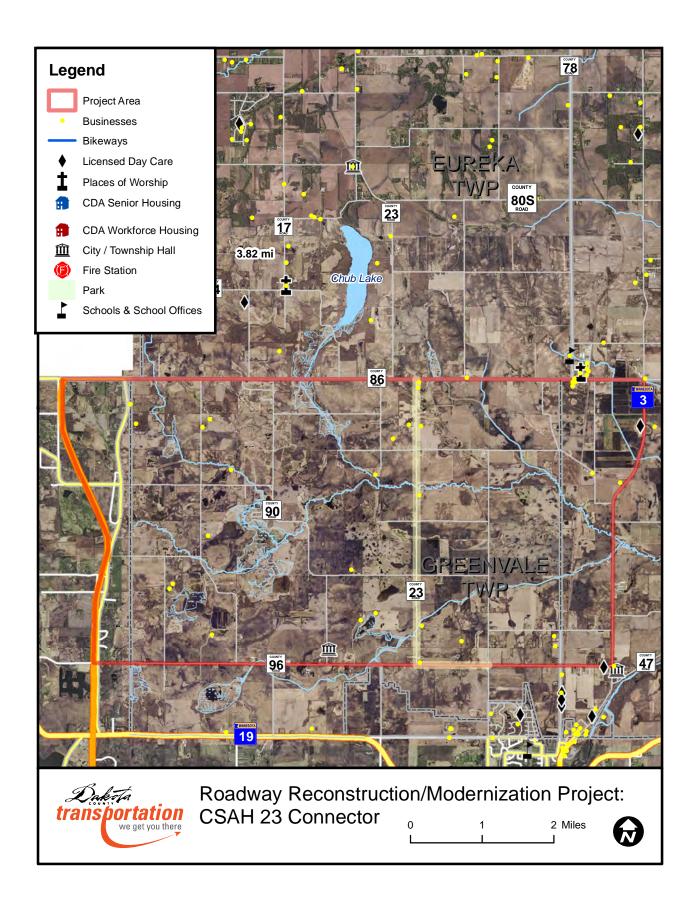
STATE OF MINNESOTA County of Dakota

| | VOTE |
|-------------|------|
| Slavik | Yes |
| Gaylord | Yes |
| Egan | Yes |
| Schouweiler | Yes |
| Workman | Yes |
| Holberg | Yes |
| Gerlach | Yes |

I, Jennifer Reynolds, Clerk to the Board of the County of Dakota, State of Minnesota, do hereby certify that I have compared the foregoing copy of a resolution with the original minutes of the proceedings of the Board of County Commissioners, Dakota County, Minnesota, at their session held on the 21st day of June, 2016, now on file in the County Administration Department, and have found the same to be a true and correct copy thereof.

Witness my hand and official seal of Dakota County this 23rd day of June, 2016.

Clerk to the Board



Approval Of Grant Application Submittals For Transportation Advisory Board 2016 Federal Funding Solicitation Process

WHEREAS, the Transportation Advisory Board (TAB) is requesting project submittals for federal funding under the Fixing America's Surface Transportation (FAST) Act; and

WHEREAS, these federal programs fund up to 80 percent of project construction costs; and

WHEREAS, federal funding of projects reduces the burden local taxpayers for regional improvements; and

WHEREAS, non-federal funds must be at least 20 percent of the project costs; and

WHEREAS, project submittals are due on July 15, 2016; and

WHEREAS, all projects proposed are consistent with the adopted Dakota County Comprehensive Plan; and

WHEREAS, subject to federal funding award, the Dakota County Board of Commissioners would be asked to consider authorization to execute a grant agreement at a future meeting.

NOW, THEREFORE, BE IT RESOLVED, That the Dakota County Board of Commissioners hereby approves the following County led projects for submittal to the TAB for federal funding:

- 1. 179th Street Extension from ½ mile west of County State Aid Highway (CSAH) 31 to CSAH 31 and the existing 179th Street intersection with Flagstaff Avenue in Lakeville
- 2. CSAH 9 (Dodd Boulevard) from Heritage Way to CSAH 50 in Lakeville
- 3. CSAH 26 (Lone Oak Road/70th Street) from Trunk Highway (TH) 55 to TH 3 (Robert Street) in Eagan and Inver Grove Heights
- 4. CSAH 32 (Cliff Road) at its intersection with CSAH 31 (Pilot Knob Road) in Eagan
- 5. CSAH 23 (Foliage Avenue) from CSAH 86 (280th Street) to County Road 96 (320th Street) in Greenvale Township
- 6. CSAH 50 (202nd Street) from Holyoke Avenue to CSAH 23 (Cedar Avenue) in Lakeville
- 7. CSAH 86 (280th Street) from CSAH 23 (Galaxie Avenue) to TH 3 in Eureka, Greenvale, Castle Rock, and Waterford Townships
- 8. Minnesota River Greenway Eagan Gap Segment in Eagan
- 9. River to River Greenway TH 149 Underpass in Mendota Heights
- 10. River to River Greenway Robert Street Crossing Connections in West St Paul
- 11. North Creek Greenway CSAH 42 Underpass east of Flagstaff in Apple Valley; and
- 12. CSAH 14 Southview Boulevard from 20th Avenue to 3rd Avenue and 3rd Avenue from Southview Boulevard to Marie Avenue in South St. Paul: and

BE IT FURTHER RESOLVED, That the Dakota County Board of Commissioners hereby supports the following submittals by others:

- 13. 117th Street from CSAH 71 (Rich Valley Boulevard) to TH 52 Lead Agency: Inver Grove Heights
- 14. Orange Line Extension Lead Agency: Metro Transit
- 15. CSAH 73 (Oakdale Avenue) from CSAH 14 (Mendota Road) to CSAH 8 (Wentworth Avenue) Lead Agency: West St Paul
- 16. TH 149 (Dodd Road) from Mendota Heights Road to Decorah Lane and from Maple Street to Smith Avenue Lead Agency: Mendota Heights
- 17. North Creek Greenway Farmington Gap Lead Agency: Farmington
- 18. CSAH 8 (Wentworth Avenue) from CSAH 63 (Delaware Avenue) to Humboldt Avenue Lead Agency: West St Paul
- 19. CSAH 8 (Wentworth Avenue) from TH 52 to 15th Avenue Lead Agency: South St Paul; and

BE IT FURTHER RESOLVED, That, subject to federal funding award of the city led projects, the Dakota County Board of Commissioners will provide the local match for regional greenway projects, and for non-greenway projects will provide Dakota County's share of the matching funds consistent with Dakota County transportation cost share policies.