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Trunk Highway Bridge Improvement Program Chapter 152

January 2011



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Cost of completing this report

The estimated costs associated with the preparation of this report are:

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EXECUTIVE SUMMARY

Purpose and Scope of the Report

This Trunk Highway Bridge Improvement Program Report is submitted by the commissioner of the Minnesota Department of Transportation in response to the requirements specified in Minn. Stat. 165.14. This is the third Trunk Highway Bridge Improvement Program Report submitted to the Minnesota Legislature. The Statewide Transportation Planning Report, as required in Subd. 5 of this statute, was submitted in August 2009. The information in this report is current as of November 2010.

All of the bridge projects in this report have been identified in a master bridge list that was developed on March 1, 2008 and revised on April 23, 2008. This list identified 172 bridges that met the criteria established in Minnesota Laws 2008, Chapter 152. Of the 172 bridges identified, an estimated 120 bridges will be under contract to be replaced or rehabilitated by June 30, 2018. The remaining bridges are either currently under construction, privately owned or have been determined to not need work until after June 30, 2018. This bridge program is intended to place an emphasis on those bridges classified as either structurally deficient or fracture critical.

Project Status Changes

As of January 2011, 59 of the Chapter 152 bridges are "Substantially Complete" (i.e., open to traffic) and 66 bridges are planned to be substantially complete by the end of the 2011 construction season.

The American Recovery and Reinvestment Act of 2009, passed in February 2009, funded two bridges on Interstate 694 over the Union Pacific Railroad in Oakdale that were to be re-decked in 2010.

Two fracture critical bridges on I-35 near Duluth are under contract for replacement instead of the original plan to repair and retrofit.

The Sorlie bridge on US 2B (business district) over the Red River in East Grand Forks, the Winona Bridge on TH 43 over the Mississippi River and the Baudette Bridge on TH 72 over the Rainy River are now being studied as potential rehabilitation projects due to their historic nature. The TH 40 Bridge over the Lac Qui Parle Lake in Chippewa County will also be studied for potential rehabilitation due to its location in a historic district.

Tier System

A Tier System to prioritize bridges was included in the legislation. All bridges inventoried have been classified as a Tier 1, 2 or 3 bridge, where Tier 1 is the highest priority tier. Unless the commissioner identifies a reason for proceeding otherwise, all bridge projects within a higher tier must to the extent feasible be selected and funded in the approved state transportation improvement program, before commencing bridge projects in a lower tier. This can occur at any stage in the project development process, solicited for bids, in contract negotiations, under construction, or completed.

- **Tier 1.** Consists of any bridge in the program that has an average daily traffic count greater than 1,000 and a sufficiency rating that is at or below 50; or is identified by the commissioner as a priority project.
- **Tier 2.** Consists of any bridge that is not a Tier 1 bridge, and is classified as fracture critical, or has a sufficiency rating that is at or below 80.
- **Tier 3**. Consists of any other bridge meeting the program criteria (structurally deficient) that is not a Tier 1 or Tier 2 bridge.

The Bridge Office and the Office of Capital Programs and Performance Measures have met with all of the districts to review their Tier 1 and Tier 2 bridge projects. They worked together to identify the needed improvement for each bridge (rehabilitation, re-deck, minor maintenance or replacement). The outcome of those meetings provided the districts with the ability to determine project scopes, cost estimates and preliminary construction dates associated with the identified bridge improvements. The scopes and cost estimates for the bridge projects were completed in December 2008 and updated in 2009 and 2010. There are several major bridges in this program for which ownership is shared with Canada, Wisconsin or North Dakota. For the purposes of this report, only Minnesota's cost share of those bridges has been reported.

CHAPTER 152 BRIDGE INVENTORY

A bridge inventory has been included in this report with the following information:

- Bridge Number
- County
- Mn/DOT District
- Route number
- Facility carried and feature crossed
- National Bridge Inspection Standards condition ratings (deck, superstructure, substructure)
- Bridge classification(structurally deficient, fracture-critical or functionally obsolete)
- Sufficiency rating
- Year built
- Average daily traffic count
- Load (operating) rating

- Length
- Deck area
- Main span type
- Brief description of the work planned
- Total project costs
- Year or range of years in which the work is planned
- Any notes on the bridge regarding the history of maintenance and inspection report findings, engineering judgments with respect to the safety or condition of the bridge or any other factors specifically identified by the commissioner

Projects that are within the four-year State Transportation Improvement Program have a Total Project Cost Estimate associated with them. Projects planned for outside of the STIP time frame have a Total Project Cost Estimate range identified.

In accordance with the legislative intent, Mn/DOT will accomplish the following by June 30, 2018:

- Tier 1: Of the 10 fracture critical bridges (as of 3/1/08), all will be replaced or were under construction with the exception of two bridges that are eligible for the National Register of Historic Places: the TH 43 Winona Bridge and the TH 72 Baudette Bridge, which are being evaluated for potential rehabilitation.
- Tier 1: All 30 of the structurally deficient bridges that are not fracture critical (as of 3/1/08) will be replaced, renovated or under construction.
- Tier 2: Of the 61 fracture critical bridges (as of 3/1/08), it is estimated that 31 will be renovated or replaced. Three of these bridges are privately owned or do not carry trunk highway traffic and the remaining Tier 2 fracture critical bridges that are not being repaired or replaced within this 10-year program have performed well and are only in need of routine maintenance at this time. Some of these bridges are planned for replacement just beyond 2018.
- Tier 2: Of the 59 structurally deficient bridges (as of 3/1/08) all will be scheduled for replacement or repair based on load posting status, maintenance history, condition and sufficiency ratings.
- Tier 3: Of the 11 structurally deficient bridges, replacements will be prioritized based on load posting status, maintenance history and condition ratings. *Tier 3*

bridges are not required to be addressed under Minnesota Laws 2008, Chapter 152 by June 30, 2018.

 Additional bridges that become structurally deficient during the next decade will be programmed for replacement or repaired as needed or as funding allows.

It is Mn/DOT's intent to deliver the Tier 1 and Tier 2 bridges identified in the Master List dated March 1, 2008 (revised 4-23-08), recognizing that as this program matures, additional bridges may need to be addressed.

Newer bridges were designed and fabricated with improved details for resistance to fatigue. Steel specifications in the mid-1970s have required steel "toughness" properties that provide resistance to fatigue. A Fracture Critical Plan published in 1978 by the American Association of State Highway and Transportation Officials was also used to fabricate bridges using improved welding techniques for assembly.

Assumptions that were made that may affect this program include:

- Current appropriation schedule over 10 years of bond funds does not match
 exactly the current schedule of bridge improvements, which creates a <u>negative</u>
 <u>balance</u> in the program. Redistribution of bond appropriation may be needed to
 match the current bridge schedule and estimates.
- Current projection of inflation rates were used to inflate current cost estimates
 to year of construction or mid-year of construction for multi-year large-scale
 bridges. Large-scale bridges are bridge projects which have a construction cost
 exceeding 50 percent of the annual Area Transportation Partnership's Federal
 funding target. There are 13 large-scale bridges identified in the inventory. The
 inventory spreadsheet for these bridges is shown on next page.
- Schedule changes of any individual major bridge may require a shift in schedule for one or more of the other major bridges.
- Current bridge conditions were used to develop this program. Significant changes in bridge conditions may affect the order and magnitude of funding needed to deliver this program.

As better information is provided on these assumptions, any negative change could adversely impact the bridge program and potentially delay Mn/DOT's ability to deliver this entire program by June 30, 2018.

(Projects in which the structure cost	152 Large So		•	,
Name/Location	County	District	Bridge No.	Replacement Status
DeSoto, in St. Cloud TH23 over Mississippi River & Riverside Dr.	Stearns	3	6748	Replacement Complete
Robbin-Drayton TH11 over Red River of the North	Kittson	2	6690	Replacement Complete
Hastings US61 over the Mississippi River, RR, Streets	Dakota	Metro	5895	Replacement underway
Lafayette US52 over the Mississippi River, RR & Streets	Ramsey	Metro	9800	Replacement underway
Dresbach I-90 over the Mississippi River	Winona	6	9320	Replacement planned for FY 2012
St. Peter TH99 over the Minnesota River	LeSueur	7	4930	Rehabilitation planned for FY 2013
St. Croix River Crossing in Stillwater TH36 over the St. Croix River	Washington	Metro	4654	Replacement planned for FY 2014
Winona TH43 over the Mississippi River, RR, Streets	Winona	6	5900	Rehabilitation or Replacement planned for FY 2015
Cayuga I-35 over Cayuga Street & BNSF RR	Ramsey	Metro	6515	Replacement planned for FY 2012
Sorlie Bridge, E Grand Forks US 2B over the Red River	Polk	2	4700	Rehabilitation or Replacement planned for FY 2018
TH72 over the Rainy River in Baudette	Lake of the Woods	2	9412	Rehabilitation or Replacement planned for FY 2018
Red Wing US63 over Mississippi River & CP Rail	Goodhue	6	9040	Rehabilitation or Replacement planned for FY 2018
New Ulm TH14 over the Minnesota River	Brown	7	9200	Replacement planned for FY 2018

SCHEDULING

Scheduling of projects will occur according to the following priorities:

- 1) Bridge projects currently programmed in the 2011-2014 STIP will be delivered as planned.
- 2) Large-scale bridges will be scheduled considering bond availability, project delivery, bridge remaining life and condition.
- 3) Other bridge projects will be scheduled in 2015-18 as follows:
 - Remaining bridges replaced generally in order of tiers. Within the tiers, projects generally were ranked in the following priority:
 - a) Load Posted
 - b) History of Maintenance Issues or Inspection Findings
 - c) Condition Code Four or less for Superstructure
 - d) Condition Code Four or less for Substructure
 - e) Sufficiency Rating less than 50
 - f) Permit Restricted
 - g) Sufficiency Rating less than 80
 - h) Functional Class: Principal Arterials before others

ANALYSIS OF REQUIREMENTS AND RECOMMENDATIONS FOR CHANGES

Per Minn. Stat. 165.14, subdivision 6, the commissioner is to report on the adequacy and efficacy of (1) the program requirements under subdivision 3, and (2) the prioritization requirements under subdivision 4.

The program requirements under subdivision 3 require the commissioner to develop an inventory of bridges on the trunk highway system in Minnesota that are classified as Fracture Critical or Structurally Deficient, or constitute a priority project. In determining whether a bridge is a priority project, the commissioner may consider national bridge inventory condition codes, bridge classification as Functionally Obsolete, the year in which the bridge was built, the history of bridge maintenance and inspection report findings, the average daily traffic count, and engineering judgments with respect to the safety or condition of the bridge.

Structurally Deficient Bridges

Prior to the enactment of this legislation, Structurally Deficient bridges were considered for replacement or rehabilitation as a part of programming and planning bridge projects. Prioritization occurred using the same criteria established in this legislation. Refer to "Scheduling" section above for further discussion on prioritization.

Newer Fracture Critical Bridges

Only certain Fracture Critical bridges have been considered by the commissioner to be programmed or planned for replacement within the time frame of this program. Many Fracture Critical bridges on the trunk highway system were built after the mid-1970s, when the engineering community came to know more about steel fatigue. These newer bridges were designed and fabricated with improved details for resistance to fatigue. Steel specifications in the mid-1970s required steel "toughness" properties that provide resistance to fatigue. A Fracture Control Plan published in 1978 by AASHTO also served as a guide for fabricating bridges using improved welding techniques for assembly. Many of these bridges need only regularly scheduled maintenance or minor repairs within the time frame of this program and are not recommended by the commissioner for replacement until they near the end of their usable life. For this reason, the commissioner has taken a broad interpretation of the legislation to allow specific bridges to remain in continued service if the reasons are documented.

Historic Fracture Critical Bridges

Mn/DOT has coordinated with the Federal Highway Administration to implement this program. Per the requirements of Section 106 of the National Historic Preservation Act, addressing older fracture critical bridges eligible for the National Register of Historic Places has required an in-depth study of the feasibility to rehabilitate these bridges, prior to moving forward with a replacement project. As a part of these rehabilitation feasibility studies, Mn/DOT has examined the potential of retrofitting fracture critical structures in order to provide load path redundancy which is feasible for some types of fracture critical bridges. In other cases, such as truss bridges, retrofit schemes examined have not provided designs that will yield the 75-year service life expected from such a large investment. Additionally, some of the schemes examined would provide visual impacts that render the structure ineligible for the National Register. As with newer fracture

critical bridges described above, historic fracture critical bridges are also being considered as candidates for the use of the legislation that would allow the commissioner to keep specific bridges in continued service.

Tier System

Prioritization parameters under subdivision 4 require the commissioner to classify all bridges in the program into Tier 1, 2, or 3 bridges, where Tier 1 is the highest priority tier. Unless the commissioner identifies a reason for proceeding otherwise, before starting bridge projects in a lower tier, all bridge projects within a higher tier must if feasible, be selected and funded in the approved state transportation improvement program, at any stage in the project development process, solicited for bids, in contract negotiation, under construction, or completed. The prioritizing criteria listed in the legislation for each tier is part of the criteria the commissioner has used to prioritize bridges prior to the legislation, with the exception that the commissioner has not categorized bridges in tiers. Since the Chapter 152 program has been implemented based on Mn/DOT's interpretation and understanding of the intent of the legislation, Mn/DOT has found the tier system workable and has no changes to suggest to its adequacy and efficacy. After further experience with the program, it may be determined that potential changes should be discussed with the Legislature.

Other Factors Considered in Delivering Projects

Due to the large program and complexities involved with delivering large bridge projects requiring engineering, public involvement, environmental process, right of way acquisition, permits, utilities relocation, etc., not all Tier 1 bridges will be under construction prior to addressing Tier 2 bridges, but they are all currently in some stage of project development.

PRIORITIZATION OF SUBSEQUENT TRUNK HIGHWAY BRIDGE PROJECTS

Legislation passed during the 2010 session requires expansion of the current planning process to include risk-based criteria for project identification outside of the Chapter 152 Bridge Program. The intent of introducing risk assessments is to provide a comprehensive look at factors that affect likelihood of a service interruption and impacts of the service interruption to the traveling public. Risk assessment process considers the following factors: condition of the deck, condition of the superstructure, condition of the substructures, age, fracture criticality, scour susceptibility, geometric factors, special vulnerabilities, traffic volume, heavy commercial traffic, detour length and highway classification.

Implementing a risk assessment tool will be challenging in that it is a new method of looking at the bridge replacement and rehabilitation program. The output may suggest different bridges for rehabilitation or replacement than those which have been previously considered as candidates. Since this tool will numerically rank the system of bridges based on risk, it will generate the need for Mn/DOT to provide an explanation as to why a higher ranked bridge is not addressed in the construction program before a lower ranked bridge.

A consultant has been hired to develop the risk assessment tool and communication tools to explain how the risk assessment tool will be used in programming replacement and rehabilitation projects. This tool is currently under development and calibration will include a comparison of suggested bridges to those suggested by the tier system and other Mn/DOT programming tools. The Bridge Programming Index (BPI) model is expected to be developed by February 2011, and it will likely become a national model. Final Bridge Programming Index rankings will also involve input and discussion provided by the District Bridge Management and Planning staff.

ABBREVIATIONS AND DEFINITIONS

ADT = Average Daily Traffic

Bridge Length = Length of Bridge (from abutment to abutment)

Bridge Number = Unique bridge number assigned to a specific bridge

CH 152 Work Planned = Type of work planned for bridge

Chap. 152 Tier = Classification created by the Legislature - See Executive

Summary

Condition (NBIS Rating) = National Bridge Inspection Standards Rating given to a

part of a bridge to identify its condition

Construction Year Planned = Estimated year construction is to begin

County = County

Deck Area = Total bridge deck area (square feet)

Deck = Deck rating

District = Mn/DOT Construction District

Feature Crossed = Feature being crossed by bridge

Fracture Critical (Y=Yes, N=No) = A fracture-critical bridge typically has a steel

superstructure with load (tension) carrying members arranged in a manner in which if one fails, the bridge would collapse. Examples of fracture critical bridges are two girder bridges or truss bridges. The classification of fracture critical does not mean the bridge is inherently

unsafe.

Functionally Obsolete (Y=Yes, N=No) = A functionally obsolete bridge is one that was

built to standards that no longer meet the minimum federal clearance requirements for a new bridge. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges include those that have sub-standard geometric features such as narrow lanes, narrow shoulders, poor approach alignment or inadequate vertical under clearance. The classification functionally obsolete is also a term used as a

priority status for federal funding eligibility.

Load (Operating) Rating = Load ratings based on the Operating rating level

generally describe the maximum permissible live load to which the structure may be subjected. Allowing unlimited numbers of vehicles to use the bridge at Operating level

may shorten the life of the bridge.

Main Span Type = Type of main span superstructure

Notes = Notes on a specific bridge

OL = Overlay

PT = Paint

RDK = Re-deck

Rehab = Rehabilitation

RE-OL = Re-Overlay

Route Number = Trunk Highway, US Highway or Interstate on which

project is located

RPL = Replace

Structurally Deficient (Y=Yes, N=No) = Bridges are classified as "structurally deficient" if

they have a general condition rating of 4 or less for the deck, superstructure, substructure or culvert or if the road approaches regularly overtop due to flooding. The fact that a bridge is structurally deficient does not imply that it is unsafe. For bridge owners, the classification is a reminder that the bridge may need further analysis that may result in load posting, maintenance, rehabilitation, replacement or closure. If unsafe conditions are identified during a physical inspection, the structure will be closed. Structurally deficient is a term used to indicate a priority

for federal funding eligibility.

SUB = Substructure rating

Sufficiency Rating = Sufficiency rating is a computed numerical value that is

used to determine eligibility for federal funding. The sufficiency rating formula result varies from 0 to 100. The formula includes factors for structural condition, bridge geometry, and traffic considerations. The sufficiency rating formula is contained in the December 1995 edition of the "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges." A bridge that is structurally deficient or functionally obsolete with a sufficiency rating of 80 or less is eligible for federal rehabilitation funding. Of those, a bridge with a sufficiency rating of less than 50 is eligible for federal replacement

funding.

SUP = Superstructure rating

Total Project Cost Estimate = All project costs associated with the construction,

engineering, and right-of-way acquisition (including inflation out to the mid-year of construction and

contingency)

Year Built = The year the bridge was constructed

Minnesota Statute 165.14, Subdivisions 1-7

Subdivision1. **Definition**

For purposes of this section, "program" means the trunk highway bridge improvement program established under this section.

Subd. 2. Program created

The commissioner shall develop a trunk highway bridge improvement program for accelerating repair and replacement of trunk highway bridges throughout the state. The program receives funding for bridge projects as specified by law.

Subd. 3. Program requirements

- (a) The commissioner shall develop an inventory of bridges included in the program. The inventory must include all bridges on the trunk highway system in Minnesota that are classified as fracture-critical or structurally deficient, or constitute a priority project, as identified by the commissioner. In determining whether a bridge is a priority project, the commissioner may consider national bridge inventory (NBI) condition codes, bridge classification as functionally obsolete, the year in which the bridge was built, the history of bridge maintenance and inspection report findings, the average daily traffic count, engineering judgments with respect to the safety or condition of the bridge, and any other factors specifically identified by the commissioner.
- (b) For each bridge included in the inventory, the commissioner must provide the following information: a summary of the bridge, including but not limited to, county and department district, route number, feature crossed, the year in which the bridge was built, average daily traffic count, load rating, bridge length and deck area, and main span type; the condition ratings for the deck, superstructure, and substructure; identification of whether the bridge is structurally deficient, functionally obsolete, or fracture-critical; the sufficiency rating; a brief description of the work planned for the bridge, including work type needed; an estimate of total costs related to the bridge, which may include general and planning cost estimates; and, the year or range of years in which the work is planned.

Subd. 4. Prioritization of bridge projects

(a) The commissioner shall classify all bridges in the program into tier 1, 2, or 3 bridges, where tier 1 is the highest tier. Unless the commissioner identifies a reason for proceeding otherwise, before commencing bridge projects in a lower tier, all bridge projects within a higher tier must to the extent feasible be selected

and funded in the approved state transportation improvement program, at any stage in the project development process, solicited for bids, in contract negotiation, under construction, or completed.

- (b) The classification of each tier is as follows:
- (1) tier 1 consists of any bridge in the program that (i) has an average daily traffic count that is above 1,000 and has a sufficiency rating that is at or below 50, or (ii) is identified by the commissioner as a priority project;
- (2) tier 2 consists of any bridge that is not a tier 1 bridge, and (i) is classified as fracture-critical, or (ii) has a sufficiency rating that is at or below 80; and
- (3) tier 3 consists of any other bridge in the program that is not a tier 1 or tier 2 bridge.
- (c) By June 30, 2018, all tier 1 and tier 2 bridges originally included in the program must be under contract for repair or replacement with a new bridge that contains a load-path-redundant design, except that a specific bridge may remain in continued service if the reasons are documented in the report required under subdivision 5.
- (d) The commissioner shall establish criteria for determining the priority of bridge projects within each tier, and must include safety considerations as a criterion.

Subd. 5. Statewide transportation planning report

In conjunction with each update to the Minnesota statewide transportation plan, or at least every six years, the commissioner shall submit a report to the chairs and ranking minority members of the House of Representatives and senate committees with jurisdiction over transportation finance. The report must include:

- (1) an explanation of the criteria and decision-making processes used to prioritize bridge projects;
- (2) a historical and projected analysis of the extent to which all trunk highway bridges meet bridge performance targets;
- (3) a summary of bridge projects (i) completed in the previous six years or since the last update to the Minnesota statewide transportation plan, and (ii) currently in progress under the program;
- (4) a summary of bridge projects scheduled in the next four fiscal years and included in the state transportation improvement program;
 - (5) a projection of annual needs over the next 20 years;

(6) a calculation funding necessary to meet the completion date under subdivision 4, paragraph (c), compared to the total amount of bridge-related funding available; and

(7) for any tier 1 fracture-critical bridge that is repaired but not replaced, an explanation of the reasons for repair instead of replacement.

Subd. 6. Annual report

Annually by January 15, the commissioner shall submit a report on the program to the chairs and ranking minority members of the House of Representatives and senate committees with jurisdiction over transportation finance. The report must include the inventory information required under subdivision 3, and an analysis, including any recommendations for changes, of the adequacy and efficacy of

- (1) the program requirements under subdivision 3, and
- (2) the prioritization requirements under subdivision 4.

History: 2008 c 152 art 6 s 5

Subd. 7. Prioritization of subsequent trunk highway bridge projects.

The trunk highway bridge improvement program described in subdivisions 1 through 6 concludes on June 30, 2018, and applies to bridge projects identified at the inception of the program. Additional bridges that did not qualify for the initial trunk highway bridge improvement program under the tiered classification system that may subsequently need repair or replacement must be prioritized as follows:

- (1) the commissioner shall develop a prioritization method for scheduling bridge repairs and replacements that will include consideration of the risk of service interruption resulting in temporary road closures or restrictions of existing bridges;
- (2) the prioritization system must consider factors including but not limited to bridge condition, age, load capacity, type of bridge, susceptibility to flood damage, fracture-critical design features, traffic volume, detour length, and functional classification of highway route;
- (3) the prioritization system must be utilized in conjunction with department knowledge of the bridge infrastructure to establish the repair and replacement program; and
- (4) the commissioner shall establish a risk-based prioritization system no later than February 1, 2011.

CHAPTER 152 BRIDGE INVENTORY REPORT

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008 (Revised April 23, 2008)

Values in "()" reflect updated information since 2008. INFLATED ONSTRUCTION TOTAL CHAP. **PROJECT** CALENDAR YEAR OF CH 152 SEE TRUCTUR, EFICIENT BRIDGE ROUTE FACILITY -YEAR 152 WORK COST SUBSTANTIALLY SUBSTANTIAL ALSO NUMBER TIER NUMBER FEATURE CROSSED COUNTY BUILT ESTIMATE (in PLANNED COMPLETE COMPLETION PLANNED NOTES PAGE Millions) Ν Ν 76.6 6496 Hwy. 1 HWY, 1 OVER FLINT CREEK ST LOUIS 1952 \$0.98 2009 YES 2009 RPL 23 80.6 Cost included with Bridge 69831 project. 69100 HWY. 2 OVER ST LOUIS RIVER, HWY. 35, & RR ST LOUIS 1982 \$41.64 NO OL & PT 23 69101 Hwy. 2 HWY. 2 WB OFF RAMP OVER HWY. 35 RAMP, RR, LAKE ST LOUIS 1983 2015 NO Cost included with Bridge 69100 Project. 23 69102 2 Hwy. 2 HWY. 2 EB ON RAMP OVER HWY. 35, RR, LAKE ST LOUIS 1983 N N 97.7 2015 NO Costs included with Bridge 69100 Project. 23 54.2 5470 Hwy. 23 HWY. 23 OVER BNSF RR CARLTON 1936 (45.0)\$6.18 2015 NO RPI 23 83.3 Fier 3 Bridge - cost not included in Chapter 152 Program Hwy. 23 HWY. 23 OVER N FORK NEMADJI RIVER CARLTON RPL 23 5554 2015 NO PINE Ν 67.0 \$2.05 RPL 9782 Hwy. 23 HWY. 23 OVER I 35 1959 2010 23 2010 YES 82 2 Ν 69831 35 SB OVER DM&IR RY & BNSF RR ST LOUIS 1967 (81.6) \$91.24 2011 NO 2011 RPL 23 71.1 ST LOUIS RPL 69832 135 35 NB OVER DM&IR RY & BNSF RR 1967 (70.9)2010 YES 2010 Cost included with Bridge 69831 project. 23 91.8 Fier 3 Bridge - cost not included in Chapter 152 Program. 69847 I 35 SB OVER HWY. 2 EB ST LOUIS 1964 2009 YES 2009 RPL Part of Bridge 69847 project 23 1.35 Ν 91.8 ier 3 Bridge - cost not included in Chapter 152 Program 69848 135 I 35 NB OVER HWY. 2 EB ST LOUIS 1964 2009 YES 2009 Part of Bridge 69847 project. 23 86.4 ST LOUIS (74.8) RPL 23 69880 35 OVER RECYCLE WAY & ONETA ST. 1968 Part of Bridge 69831 project. 135 2010 NO 2011 69.6 Hwy. 39 HWY. 39; RR OVER ST LOUIS RIVER ST LOUIS 1916 (69.3) None - Privately Owned RR owned. Rehab in 2009 23 62.9 (90.3) 69004 HWY. 135 OVER HWY. 53 NB, SB ON RAMP STIQUIS 1961 \$4.94 2015 NO RPI 23 79.9 69029 2 Hwy, 53 HWY, 33 NB OVER HWY, 53 SB ST LOUIS 1966 \$2.33 2012 NO RPL 23 62.8 KOOCHICHING 90249 HWY. 53 SB OVER RAINY RIVER 1912 (62.6) None - Privately Owned Privately owned 23 20.2 5721 HWY. 65 OVER LITTLE FORK RIVER KOOCHICHING 1877 2009 YES 2009 Has been RPL 23 77 7 6736 2 Hwy. 65 HWY. 65 OVER SWAN RIVER ITASCA 1950 N N \$1.52 2009 YES 2009 RPL 23 64.9 6767 Hwy. 65 HWY. 65 OVER HAY CREEK KOOCHICHING 1951 \$4.19 2013 NO RPL 23 78.6 (62.3)Since SR = 62.3 and truss has performed well, bridge will continue to function safely with continued maintenance. Planned OL & paint will raise SR above 80. 5718 PINE OL & PT Hwy. 123 HWY. 123 OVER KETTLE RIVER & ST 1948 \$2.59 - \$2.92 2013 NO 23 59.1 Removed, not replaced 69003 Hwy. 169 HWY. 169 OVER BN RR (ABAN) & TRAIL ST LOUIS 1961 (58.8 \$3.40 2009 YES 2009 23 77.6 (76.4) Currently FC due to pier cap configuration, which will be 2015-2018 23 69839 Hwy. 194 NB MICHIGAN ST OVER HWY. 194 SB ST LOUIS 1969 \$2.88 - \$3.26 NO RPR & Retrofit nodified to be redundant as part of rehabilitation project. 78.1 (80.1 Currently FC due to pier cap configuration, which will be modified to be redundant as part of rehabilitation project. 69840 Hwy. 194 HWY. 194 NB OVER SUPERIOR ST ST LOUIS 1968 \$2.75 - \$3.11 2015-2018 NO RPR & Retrofit Cost incl w/ Br 69839 project) 23 51.7 CARLTON (Y) 09001 Hwy. 210 HWY. 210 OVER ST LOUIS RIVER 1961 (48.7) \$6.70 NO RPL 23 2012 72.3 Border bridge with Wisconsin. Good condition, rehabilitated (53.8)n 1993. With planned paint, and hanger cable repairs, 9030 I 535 I 535 OVER ST LOUIS R; RR, STREET (Blatnik) ST LOUIS 1961 \$12.50 2012 NO Deck Seal & Paint eplacement not needed for 20 years. 23 86.6 FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021. ST LOUIS 69824 I 535 I 535 SB ON RAMP OVER I 535 NB & I 35 NB 1969 2019-2027 NO RPL Repair work done with Bridge 69831 project. 84.4 FC bridge, district plans to program a series of bridges within (85.4) the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021. ST LOUIS 69825 1 535 I 535 NB OFF RAMP OVER BNSF RAILROAD 1969 2019-2027 NO Repair work done with Bridge 69831 project. 23 85.0 N FC bridge, district plans to program a series of bridges within

89 4

2019-2027

2019-2027

NO

NO

69801A

1 535

I 535 SB OFF RAMP OVER FILL

I 535 SB ON RAMP OVER RAILROAD & FILL

ST LOUIS

ST LOUIS

1969

1969

Ν N the "Can of Worms" interchange, this bridge is included.

FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included.

23

Planned replacement is beyond 2021.

Planned replacement is beyond 2021.

Repair work done with Bridge 69831 project

Repair work done with Bridge 69831 project.

RPI

RPI

D I S T	BRIDGE NUMBER	CHAP. 152 TIER		FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING	INFLATED TOTAL PROJECT COST ESTIMATE (in Millions)	CONSTRUCTION CALENDAR YEAR PLANNED	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	NOTES	SEE ALSO PAGE
							N	N	Υ	63.9 (64.9)						FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included.	
1	69801F	2	I 535	I 535 SB SEG 1 OVER I 35 & RAMP TO I 35 SB	ST LOUIS	1969						2019-2027	NO		RPL	Planned replacement is beyond 2021. Repair work done with Bridge 69831 project.	24
							N	N	Y	87.2						FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021.	
1	69801J	2	I 535	I 535 NB SEG 1 OVER I 35 NB & SB OFF RAMP	ST LOUIS	1969	N	N	Y	88.6		2019-2027	NO		RPL	Repair work done with Bridge 69831 project. FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included.	24
1	69801K	2	I 535	I 535 NB OFF RAMP OVER I 35 SB	ST LOUIS	1969						2019-2027	NO		RPL	Planned replacement is beyond 2021. Repair work done with Bridge 69831 project.	24
							N	N	Y	88.4 (88.1)						FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021.	
1	69801N 4001	2	I 535 Hwy. 1	I 535 NB SEG 3 OVER CP RAIL HWY. 1 OVER OVERFLOW CHANNEL	ST LOUIS BELTRAMI	1969 1962	Y	N	N	71.7	\$2.78 - \$3.15	2019-2027 2013	NO NO		RPL RPL	Repair work done with Bridge 69831 project.	24 24
2	4561	2		HWY. 1 OVER DITCH	BELTRAMI	1926	Y	N	N	54.4	\$2.94	2009	YES	2009	RPL W/ CULVERT		24
2	5581	1	Hwy. 1	HWY. 1 OVER SANDY RIVER	CLEARWATER	1936	Y	N	N	46.1 (48.9)	\$1.01	2010	YES	2010	RPL		24
2	9100	2	Hwy. 1	HWY. 1 OVER RED RIVER OF THE NORTH (Oslo)	MARSHALL	1959	N	N	Y	55.6	\$11.32 - \$12.79	2013	NO		RPL	Border bridge with North Dakota.	24
2	9090	2	Hwy. 2	HWY. 2 OVER RED RIVER & CITY ST (Kennedy)	POLK	1963	N	N	Y	73.2 (61.2)	\$12.8-\$17.4	2016	NO		Redeck & Paint	Border bridge with North Dakota. Since SR = 61.2 and truss has performed well, new deck and paint will remove deficiencies.	24
2	5557	2	Hwy. 11	HWY. 11 OVER RAPID RIVER	LAKE OF THE WOODS	1950	Y	N	N	49.1 (48.8)	\$3.50	2009	YES	2010	RPL		24
2	6690	1	Hwy. 11	HWY. 11 OVER RED RIVER OF THE NORTH (ROBBIN)	KITTSON LAKE OF THE	1954	(Y)	N	Y	48.5 (32.9) 40.3	\$16.60	2009	YES	2010	RPL	Border bridge with North Dakota.	24
2	9412	1	Hwy. 72	HWY. 72 OVER RAINY RIVER	WOODS	1959	.,	·	,	(48.8)	\$52.4-\$70.8	2018	YES		REHAB or RPL	Border Bridge with Ontario, Canada.	24
2	6730	1		HWY. 75 OVER DITCH	NORMAN	1949	Y	N	N	40.4 40.4	\$1.47	2010	YES	2010	RPL W/CULVERT	Outline (D. 6700 miles)	24
2	6731 6734	1		HWY. 75 OVER DITCH	NORMAN NORMAN	1949 1951	Y	N N	N N	83.3 (82.1)		2010	YES	2010	RPL W/CULVERT	Cost incl w/ Br 6730 project.	24
2		3		HWY. 75 OVER MARSH RIVER			Y (N)	N	N	68.3 (96.7)	40.00				RPR	Tier 3 Bridge - cost not included in Chapter 152 Program.	
2	35007 6522	2	Hwy. 171 Hwy. 200	HWY. 171 OVER RED RIVER OF THE NORTH HWY. 200 FRNT RD OVER MARSH RIVER	KITTSON NORMAN	1982 1924	N N	N	Υ	70.6	\$0.90 \$0.38 - \$0.43	2009 2014	YES NO	2009	RPL	Border bridge with North Dakota.	24 24
			,				N	N	Υ	52.7 (52.9)						Border bridge with North Dakota. OL in 2005; paint and repairs needed to maintain condition, which should be	
2	5872	2	Hwy. 317	HWY. 317 OVER RED RIVER OF THE NORTH (Grafton)	MARSHALL	1939	N	N	Y	50.6	\$1.42 - \$1.61	2013	NO		Repair & PNT	adequate for the next 20 years with low ADT.	24
2	4700	2	Hwy. 2B	HWY. 2B (BUSINESS) OVER RED RIVER (Sorlie)	POLK	1929				(48.4)	\$47.5-\$61.5	2018	NO		REHAB or RPL	Border bridge with North Dakota.	24
3	3622 6748	1	Hwy. 12 Hwy. 123	HWY. 12 OVER S FK CROW RIVER HWY. 23 OVER MISS R & RIVERSIDE DR (DESOTO)	WRIGHT STEARNS	1922 1957	Y	N N	N Y	43.4 66.4	\$20.43 \$21.10	2008 2008	YES YES	2008 2009	RPL RPL		24 24
3	9086	2	Hwy. 23	HWY. 23 OVER 10TH AVE	STEARNS	1958	Y	N	N	55.0	\$17.30	2009	YES	2009	RPL		24
3	5790	1	Hwy. 71	HWY. 71 OVER N FK CROW RIVER	STEARNS	1937	Y	N	N	29.7	\$0.71	2009	YES	2009	RPL		24
3	86813	3	I 94	I 94 WB OVER COUNTY ROAD 75 & RR	WRIGHT	1971	Y	N N	N N	81.3	\$13.20	2009	YES		RPL	Tier 3 Bridge - cost not included in Chapter 152 Program. Cost included W/ Br 86813 project. Tier 3 Bridge - cost not	24
3	86814	3	194	I 94 EB OVER COUNTY ROAD 75 & RR	WRIGHT	1972						2009	YES		RPL	included in Chapter 152 Program.	24
3	91049	2	Hwy. 169	HWY. 169 OVER RIPPLE RIVER HWY. 169 OVER RIPPLE RIVER	AITKIN AITKIN	1964	Y	N N	N N	58.1 58.1	\$0.98	2009	YES	2009	RPL RPL	Cost include De 04040 project	24
3	91050	2	Hwy. 169			1964	Y	N	N	76.3 (73.0)	Ø2 45	2009	YES			Cost incl w/ Br 91049 project.	24
4	6456	2	Hwy. 12	HWY. 12 OVER MINNESOTA RIVER	BIG STONE	1953	Y	N	N	49.3	\$3.45	2012	NO		RPL		24
4	3067	1		HWY. 29 OVER OUTLET CREEK	POPE	1920	Y	N	N	(49.0) 54.1	\$1.46	2012	NO		RPL		24
4	6552 5186	2		HWY. 29 OVER DITCH HWY. 75 OVER WHISKEY CREEK	SWIFT	1948 1932	Y	N	N	(53.1) 53.3 (54.3)	\$1.53 - \$1.74 \$1.68 - \$1.90	2015-2018	NO NO		RPL RPL		24
4	21805	3	194	I 94 WB OVER LATOKA LAKE	DOUGLAS	1967	Y	N	N	88.2 (88.4)	\$1.67	2015-2018	NO NO		RPL	Tier 3 Bridge - cost not included in Chapter 152 Program.	24
4	21813	2	194	HWY. 29 SB OVER I 94	DOUGLAS	1965	Y	N	N	79.0 (78.0)	\$19.3-\$33.7	2015-2018	NO		RPL		24
4	21814	2	194	HWY. 29 NB OVER I 94	DOUGLAS	1965	Υ	N	N	66.7	\$10.0 \$00.7	2015-2018	NO		RPL	Cost included W/ Br 21813 project.	24
6	5337	1		HWY. 3 OVER UP RR	RICE	1940	Υ	N	N	30.7	\$3.88	2008	YES	2008	RPL	Costs included with Bridge 5337 Project.	24
6	6842 5234	2	Hwy. 3	HWY. 3 OVER CANNON RIVER HWY. 14 OVER STREAM	RICE WINONA	1955 1932	Y	N N	N N	25.9 55.0	\$2.01 - \$2.27	2008 2015	YES NO	2008	RPL RPL		24 24
							Y	N	N	47.1							
6	6036	1	Hwy. 14	HWY. 14 OVER STREAM	DODGE	1930		l		(37.8)	\$1.61 - \$1.82	2014	NO		RPL		24

CHAPTER 152 BRIDGE INVENTORY REPORT

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008 (Revised April 23, 2008)

Values in "()" reflect updated information since 2008. INFLATED TTIING STRUCTURALLY CONSTRUCTION TOTAL CHAP. PROJECT CALENDAR YEAR OF CH 152 SEE S BRIDGE 152 ROUTE FACILITY -WORK COST YEAR SUBSTANTIALLY SUBSTANTIAL ALSO ESTIMATE (in T NUMBER TIER NUMBER FEATURE CROSSED COUNTY PLANNED COMPLETE COMPLETION PLANNED NOTES PAGE Millions) Bridge replacement is small portion of overall project costs. Construction underway. Hwy. 14 HWY. 14 EB OVER I 35 STEELE \$2.23 - \$2.52 RPL 25 1965 2010 45.0 (41.6)

6	5968	1	Hwy. 42	HWY. 42 OVER N FORK WHITEWATER RIVER	WABASHA	1941	·	.,		(41.6)	\$2.15	2012	NO		RPL		25
6	5900	1	Hwy 43	HWY. 43 OVER MISS RVR, RR, STREETS (WINONA)	WINONA	1941	N (Y)	N	Υ	49.8 (23.7)	\$185.24	2014	NO		RPL		25
	23004	2		HWY. 43 OVER S FORK ROOT RIVER	FILLMORE	1931	N (Y)	N	Υ	65.5 (31.3)	\$2.96	2012	NO		RPL		25
	23004		Пwy. 43	HWY. 43 OVER S FORK ROOT RIVER	FILLWORE	1931	(1) Y	N	N	66.9	\$2.90	2012	NO		KFL		25
6	4148	2	Hwy. 44	HWY. 44 OVER STREAM	FILLMORE	1923	Y			(60.4)	\$3.98	2013	NO		RPL W/CULVERT		25
6	4150	2	Hwy. 44	HWY. 44 OVER STREAM	FILLMORE	1923		N	N	67.2 (60.2)	\$0.83	2013	NO		RPL W/CULVERT		25
6	4151	2	Hwy. 44	HWY. 44 OVER STREAM	FILLMORE	1923	Y	N	N	67.2 (60.2)	\$0.24	2013	NO		RPL W/CULVERT		25
							Y	N	N	45.8							
6	5713	1	Hwy. 56	HWY. 56 OVER MID FORK ZUMBRO RIVER	DODGE	1937	(N) Y	N	N	(61.4) 66.3	\$1.35	2011	NO		RPL		25
6	5905	2	Hwy. 56	HWY. 56 FARM ENT OVER N BR UPPER IOWA RIVER	MOWER	1940		.,		(68.9)	\$1.06 - \$1.20	2015	NO		RPL		25
6	5188	1	Hwy. 58	HWY. 58 OVER N FORK ZUMBRO RIVER	GOODHUE	1932	Υ	N	N	18.4	\$2.55	2010	YES	2010	RPL		25
6	5370	1	Hwv. 60	HWY. 60 OVER STRAIGHT R,RR,STREET	RICE	1937	Y (N)	N	N	49.4 (77.2)	\$10.80	2009	YES	2009	REHAB	Historic bridge. With major rehabilitation, deficiencies were addressed.	25
	5397	2		HWY. 60 OVER TROUT BROOK	WABASHA	1935	N	N	Υ	73.0	\$2.30 - \$2.60	2014	NO	2003	RPL	addi occodi.	25
	6770	1		HWY. 60 OVER CANNON RIVER	RICE	1952	Υ	N	N	18.7	\$1.80	2009	YES	2009	RPL		25
	6771	1	Hwy. 60	HWY. 60 OVER CANNON RIVER	RICE	1952	Υ	N	N	37.8	\$0.61	2009	YES	2009	RPL		25
T T			,				Υ	N	N	70.1							
6	9798	2	Hwy. 60	HWY. 60 OVER STREAM	WABASHA	1961				(47.7)	\$2.00	2011	NO	2011	RPL		25
1							N	N	Υ	73.5						FC bridge built in 1987. All NBIS condition ratings are good.	
1															Only Normal Maintenance	Only normal maintenance planned during program years. Paint and overlay will be needed beyond 2018. See endnote	
6 7	79000	2	Hwy. 60	HWY. 60 OVER MISS R, RR, & STS	WABASHA	1987									Needed	1.	25
	6773	1		HWY. 61 OVER GILBERT CREEK	GOODHUE	1954	Υ	N	N	37.6	\$4.99	2011	NO	2011	RPL		25
6	9450	1	Hwy. 61	HWY. 61 OVER NYMPHARA LANE	GOODHUE	1962	Υ	N	N	36.0	\$5.48 - \$6.20	2013	NO		RPL		25
i l							N	N	Υ	44.8							
	9040	1	Hwy. 63	HWY. 63 OVER MISS RIVER & CP RAIL (RED WING)	GOODHUE	1958				(43.8)	\$150.06	2018	NO		RPL		25
	6808	2	I 90	I 90 EB OVER TWP RD & TURTLE CRK	MOWER	1959	Υ	N	N	65.5	\$3.95	2009	YES	2010	RPL	Bridges of Mower County - Combined	25
	8929	1	190	I 90 OVER DOBBINS CREEK	MOWER	1957	Υ	N	N	41.3	\$4.54	2009	YES	2010	RPL	Bridges of Mower County - Combined	25
	9320	2	I 90	I 90 OVER MISSISSIPPI RIVER (DRESBACH)	WINONA	1967	N	N	Y	77.0	\$204.85	2012	NO		RPL		25
	35807	2	190	I 90 WB OVER TWP 323	WINONA	1963	Y	N	N	63.7	\$5.01	2009	YES	2009	RPL		25
	35808	2	190	I 90 EB OVER TWP 323	WINONA WINONA	1963	Y	N N	N N	63.7 61.6	\$1.86	2010 2009	YES YES		RPL RPL		25 25
	35809 35810	2	I 90	I 90 WB OVER TWP 312 I 90 EB OVER TWP 312	WINONA	1963 1963	Y	N	N	61.6	\$1.68 \$1.77	2010	YES		RPL		25
	01000		190	190 EB OVER TWF 312	WINONA	1903	N	N	N	53.6	Φ1.77	2010	TES		IXI L	Bridge included in Chapter 152 as a "Commissioner Priority"	23
6	4867	CP	Hwy. 105	HWY. 105 OVER WOODBURY CREEK	MOWER	1931					\$1.99	2010	YES	2010	RPL	(CP) project, due to bridge being load posted.	25
6	6975	2	Hwy. 250	HWY. 250 OVER S BR ROOT RIVER	FILLMORE	1931	Z	Y	Y	57.5 (57.6)	\$13.9-\$18.9	2018	NO		RPL		25
6	6977	2	Hwy 250	HWY. 250 OVER N BR ROOT RIVER	FILLMORE	1924	N	Υ	Υ	50.6 (47.0)	\$8.27 - \$9.35	2018	NO		RPL	Cost incl w/ Br 6975 project.	25
							Υ	N	N	66.4						Cook mar in Di cor o project.	
7	6749	2	Hwy. 4	HWY. 4 OVER LITTLE COTTONWOOD RIVER	BROWN	1951	Y	N	N	(60.9) 82.6	\$2.46	2011	NO	2011	RPL		25
7	6762	3	Hwy. 4	HWY. 4 OVER WATONWAN RIVER	WATONWAN	1951		IN	IN	(82.7)	\$3.10	2012	NO		RPL		25
7	9200	1	Hwy. 14	HWY. 14 OVER MINNESOTA RIVER	BROWN	1963	Υ	N	N	38.0 (54.6)	\$44.1-\$51.4	2015-2018	NO		RPL		25
	4014	2		HWY. 22 OVER ROBARTS CREEK	NICOLLET	1923	Υ	N	N	68.2	\$1.23	2013	NO		RPL		25
					COTTONWOO		Υ	N	N	79.1							
\vdash	5834	2	Hwy. 30	HWY. 30 OVER BR OF WATONWAN R	D	1939	Υ	N	N	(74.5) 45.7	\$1.19	2012	NO		RPL		25
7	5513	1	Hwy. 68	HWY. 68 OVER UP RR	BLUE EARTH COTTONWOO	1936	Y	N	N	(34.8) 58.2	\$1.29	2012	NO		REHAB		25
7	6889	2	Hwy. 71	HWY. 71 OVER DES MOINES RIVER	D	1956					\$3.21	2010	YES	2010	RPL		25
7	6245	2	Hwy. 75	HWY. 75 OVER POPLAR CREEK	ROCK	1932	Y	N	N	52.8 (53.2)	\$0.85 - \$0.96	2015-2018	NO		RPL		25
7	4930	2	Huar 00	LIMY OF OVER MININESOTA BIVER (ST. BETER)	I E CLIEUD	1021	N	N (Y)	Υ	56.0 (48.5)	\$44.2 \$E0.9	2012	NO		DELIAR or PRI	Historia bridge. Currently studying rehabilitation	
		2		HWY. 99 OVER MINNESOTA RIVER (ST. PETER)	LE SUEUR	1931	Y	N N	Υ	45.2	\$44.2-\$50.8	2013	NO		REHAB or RPL	Historic bridge. Currently studying rehabilitation.	25
7	6535	2	Hwy. 258	HWY. 258 OVER COTTONWOOD RIVER	BROWN	1949	Y	N	N	(45.6) 78.6	\$3.37	2012	NO		RPL		25
7	6821	2	Hwy. 270	HWY. 270 OVER MUD CREEK	ROCK	1953	Ĺ <u>'</u>		.,	(74.6)	\$1.36	2011	NO	2011	RPL		25
8	9114	2	Hwv. 7	HWY. 7 OVER CHIPPEWA RIVER	CHIPPEWA	1932	(Y)	N	Y	63.7 (43.6)	\$6.63	2014	NO		RPL		25
	9114																
	9114				•					, , ,	70.00						

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D I S T	BRIDGE NUMBER	CHAP. 152 TIER		FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING	INFLATED TOTAL PROJECT COST ESTIMATE (in Millions)	CONSTRUCTION CALENDAR YEAR PLANNED	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	NOTES	SEE ALSO PAGE
8	4667	2	Hwy. 19	HWY. 19 ACCESS RD OVER SULPHER L	REDWOOD	1927	Υ	N	Y	44.0 (33.0)				N/A	Only Normal Maintenance Needed	Only normal maintenance planned to maintain condition. Low ADT - does not carry Trunk Highway traffic - will load post when needed.	25
8	5388	1	Hwy. 24	HWY. 24 OVER N FK CROW RIVER	MEEKER	1935	Υ	N	Y	47.0		2009	YES		RPL	New bridge in place, Historic Bridge to be moved to Lake Louise State Park.	25
8	5380	2	Hwy 40	HWY. 40 OVER LAC QUI PARLE L	CHIPPEWA	1938	Υ	N	Υ	38.9 (39.3)	\$8.55	2014	NO		RPL		25
8	6962	2		HWY. 68 OVER DITCH	REDWOOD	1900	Υ	N	N	48.5	\$0.40	2009	YES	2009	RPL		26
	87005	2	Lhan 274	HWY. 274 OVER YELLOW MEDICINE RIVER	YELLOW MEDICINE	1968	(N) Y	N	N	66.9 (83.0)				N/A	Only Normal Maintenance Needed	No work needed. Condition ratings were re-evaluated - bridge no longer structurally deficient.	26
0	87003		,			1900	Y	N	N	67.9				IN/A		no longer structurary dencient.	20
8 M	6816 6654	2		HWY. 277 OVER CO DITCH # 22 HWY. 5 OVER RECREATION TRAIL	CHIPPEWA CARVER	1952 1952	Y	N	N	(70.8) 49.1	\$1.62 - \$1.83 \$2.57 - \$2.90	2017 2015-2018	NO NO		RPL RPL		26 26
IVI	6654	,	•				N	N	Y	67	φ2.57 - φ2.90					FC bridge built in 1961, remodeled in 1986. NBIS condition ratings are fair. Normal maintenance planned for the program	
M	9300 5462	2		HWY. 5 WEST 7TH ST OVER MISSISSIPPI RIVER HWY. 7 (COUNTY ROAD 25) OVER HWY. 100	RAMSEY HENNEPIN	1961 1939	Υ	N	N	71.2	\$2.43 - \$2.75	2019-2027 2015-2018	NO NO		RPL RPL	years. Replacement will be needed beyond 2018.	26 26
IVI	3462		пwy. 7	HWT. 7 (COUNTY ROAD 25) OVER HWT. 100	HEININEFIIN	1939	N	N	Y	61.9	\$2.43 - \$2.75	2013-2016				Built in 1986 (see endnote 1) and built with a redundant	
М	82010	2	Hwy. 105	HWY. 10 (PRESCOTT) OVER ST CROIX RIVER	WASHINGTON	1990	N	N	Y	75.9	\$1.29 - \$1.46	2015-2018	NO		OL	system for FC tie girder.	26
M	82815	2		HWY 8 WB OVER I 35	WASHINGTON	1967	Y		'		0.400 TO . 0.400 OO	2028-2034	NO NO		RPL	FC bridge built in 1967. All NBIS condition ratings are good. Normal maintenance planned for the program years. Replacement will be needed beyond 2018.	26
M	4654 5723	2	,	HWY. 36 OVER ST CROIX RIVER HWY. 36 OVER LEXINGTON AVE(COUNTY ROAD 51)	WASHINGTON RAMSEY	1930 1938	Y	N N	N N	32.8 61.0	\$433.73 - \$490.30 \$24.9-\$33.6	2015-2018 2015-2018	NO NO		RPL RPL		26 26
М	9115	1		HWY. 36 EB OVER HWY. 95	WASHINGTON	1959	Y	N	N	28.3 (66.8)		2015-2018	NO		RPL	Cost incl w/ Br 4654 (St. Croix) project.	26
М	9800	1	Hwy. 52	HWY. 52(LAFAYETTE) OVER MISS R, RR & STREETS	RAMSEY	1968	Υ	N	Y	49.5 (47.5)	\$260.60	2010	YES	2010	RPL		26
М	62026	2		LAFAYETTE (HWY. 52) OVER UP RR & EATON ST	RAMSEY	1965	Y	N N	N N	59.1 (56.9) 36.9	\$8.28	2011	NO	2011	RDK		26
М	94277	2	Hwy. 55	HWY. 55 OVER BASSETT CREEK	HENNEPIN	1939	1	Z	IN	(38.4)	\$2.43 - \$2.75	2015-2018	NO		RPL		26
М	5895	1	Hwy. 61	HWY. 61 OVER MISS RIVER, RR, STREET (HASTINGS)	DAKOTA	1950	Y	N	Y	38.1 (43.4) 42.3	\$227.60	2010	YES	2010	RPL		26
М	6688	1	Hwy. 61	HWY. 61 OVER BNSF RR	RAMSEY	1952	•	.,	.,	(43.7)	\$6.95	2010	YES	2010	RPL		26
							N	N	Y	95.6 (96.6)						FC bridge built in 1988. All NBIS condition ratings are satisfactory to good. Only an overlay will be needed by 2018.	
М	27046	2	Hwy. 77	HWY. 77 SB COLL RD OVER KILLEBREW DRIVE	HENNEPIN	1988	N	N		94.7	\$0.99 - \$1.12	2015-2018	NO		RE-OL	See endnote 1.	26
М	27048	2	Hwy. 77	HWY. 77 SB OFF RAMP OVER 81ST STREET	HENNEPIN	1988	1	17	'	(95.7)		2028-2034	NO		RE-OL & Paint	FC bridge built in 1988. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	26
							N	N	Y	96.2 (97.2)						FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint	
М	27052C	2	Hwy. 77	HWY. 77 NB COLL RD OVER 79TH ST & EB 494/5 RAMPS	HENNEPIN	1989			.,	04.5		2028-2034	NO		RE-OL	and overlay will be needed beyond 2018. See endnote 1.	26
М	9600N	2	Hwy. 77	HWY. 77 NB OVER MINNESOTA R & BLACK DOG	HENNEPIN	1978	N	N	Y	91.5	\$15.57 - \$17.60	2015-2018	NO		RE-OL	FC bridge built in 1978. All NBIS condition ratings are satisfactory to good. Overlay will be needed 2015-18. See endnote 1.	26
М	9600S	2	Hwy. 77	HWY. 77 SB OVER MINNESOTA R & BLACK DOG	HENNEPIN	1978	N	N	Y	91.5	\$8.92 - \$10.08	2015-2018	NO		RE-OL	FC bridge built in 1978. All NBIS condition ratings are satisfactory to good. Overlay will be needed by 2015-18. See endnote 1. (Cost incl w Br 9600N)	26
							N	N	Ÿ	98.5 (99.5)						FC bridge built in 1978. All NBIS condition ratings are satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See	
М	27728	2	I 94	I 94 NB ON RAMP OVER GLENWOOD AVE & RR	HENNEPIN	1978	V	N1	N	64.8		2028-2034	NO		RE-OL	endnote 1.	26
М	27842	2	I 94	I 94 WB ON RAMP OVER I 94 & HWY. 65	HENNEPIN	1966	Y	Z	N	(64.4)	\$90.16-\$101.92	2015-2018	NO		RPL		26
М	27861	2	I 94	I 94 WB OFF RAMP OVER CP RAIL & CITY ST	HENNEPIN	1968	Y	N Y	N Y	65.0 93.3	\$1.00	2010	YES	2010	RDK	FC bridge built in 1979. All NBIS condition ratings are	26
М	27726B	2	I 94	I 94 SB OFF RAMP OVER LYNDALE AVE N & RR	HENNEPIN	1979	N	'	'	(94.3)	\$0.64 - \$0.73	2015-2018	NO		RE-OL	satisfactory to good. Overlay will be needed by 2018. See endnote 1.	26
М	27727B	2	I 94	I 94 SB ON RAMP OVER GLENWOOD AVE & RR'S	HENNEPIN	1978	N	Y	Y	94.4 (95.4)	\$1.38 - \$1.56	2015-2018	NO		RE-OL	FC bridge built in 1978. All NBIS condition ratings are satisfactory. Overlay will be needed by 2018. See endnote 1.	26
М	27799R	2	I 94	I 94 EB ON RAMP OVER LYNDALE AVENUE SB	HENNEPIN	1969	Ν	N	Y	85.8		2028-2034	NO		RDK	FC bridge built in 1989, remodeled in 1987. NBIS condition ratings are satisfactory. Normal maintenance planned for the program years. Paint and re-deck will be needed beyond 2018.	26

D I S	BRIDGE	CHAP. 152		FACILITY -		YEAR	TURALLY ENT	TONALLY LETE	'URE 'AL	SUFFICIENCY	INFLATED TOTAL PROJECT COST	CONSTRUCTION CALENDAR YEAR	SUBSTANTIALLY		CH 152 WORK		SEE ALSO
Т	NUMBER	TIER	NUMBER	FEATURE CROSSED	COUNTY	BUILT	STRUCTUR DEFICIENT	FUNCTIONA OBSOLETE	FRACTURE CRITICAL	SUFFIC	ESTIMATE (in Millions)	PLANNED	COMPLETE	COMPLETION	PLANNED	NOTES	PAGE
M	5598	2	Hwy. 100	MINNETONKA BLVD OVER HWY. 100	HENNEPIN	1939	Υ	N	N	63.0	\$106.91 - \$120.86	2015-2018	NO		REHAB	Cost incl w/ Br 5462 project.Condition is satisfactory	26
							N	N	Y	90.0 (91.0)						FC bridge built in 1989. All NBIS condition ratings are fair to good. Normal maintenance planned for the program years.	
М	27789	2	Hwy. 100	HWY. 100 SB CD OVER SB CD RP & FRNT RD	HENNEPIN	1989						2019-2027	NO		RE-OL	Paint and overlay will be needed beyond 2018. See endnote 1.	26
							N	N	Y	97.0 (98.0)							
М	27791	2	Hwy. 100	HWY. 100 SB ON RAMP OVER GLENWOOD AVE TO SB 10	HENNEPIN	1989			V			2028-2034	NO		RE-OL	FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
М	62090	2	Hwv. 149	HWY. 149 (SMITH AVE) OVER MISSISSIPPI R & RAILROAI	RAMSEY	1986	N	N	Y	85.1 (91.1)	\$21.58 - \$24.39	2015-2018	NO		RDK	Built in 1986 (see endnote 1) and built with a redundant system for FC tie girder.	27
				, , , , , , , , , , , , , , , , , , , ,			N	N	Y	65.6						Border bridge with Wisconsin. With planned repairs of deck	
м	6347	2	Hwy 243	HWY. 243 (OSCEOLA) OVER ST CROIX RIVER	CHISAGO	1953				(72.4)	\$0.94	2010	YES	2010	OL & PT	overlay, paint and steel repairs, bridge will perform safely for next 20 years.	27
M	6630	1		HENNEPIN AVENUE OVER MT RAIL	RAMSEY	1954	Υ	N	N	36.8	\$2.12	2009	YES	2009	RPL		27
М	6738	1	Hwy. 280	LARPENTEUR(COUNTY ROAD30) OVER HWY. 280	RAMSEY	1954	Y	N	N	49.0	\$2.53	2009	YES	2009	RPL	Cost incl w/ Br 6630 project.	27
М	27753	2	I 394	I 394R RAMP OVER NB HWY. 100 TO 394 HOV EB	HENNEPIN	1989	N	N	Y	97.0 (98.0)		2028-2034	NO		RE-OL	FC bridge built in 1988. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
							N	N	Υ	94.0 (95.0)							
										(33.0)						FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint	
М	27788	2	I 394	I 394 EB ON RAMP OVER HWY. 100 NB ON RAMP	HENNEPIN	1989			.,			2028-2034	NO		RE-OL	and overlay will be needed beyond 2018. See endnote 1.	27
м	27753A	2	I 394	I 394R RAMP OVER 394 HOV WB TO NB HWY. 100	HENNEPIN	1989	N	N	Y	97.0 (98.0)		2028-2034	NO		RE-OL	FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
IVI	21133A		1 334	1 354K KAIMIF GVER 354 HOV WIB TO NO HWYT. 100	TILIVIALITIN	1303	N	N	Υ	93.8		2020-2004	NO		RE GE	and overlay will be needed beyond 2010. Gee chariote 1.	- 21
М	27776A	2	I 394	I 394R OVER I 394 WB, DUNWOODY BLVD	HENNEPIN	1987				(94.8)		2028-2034	NO		RE-OL	FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
							N	N	Υ	94.7 (95.7)							
										(95.7)						FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint	
М	27776B	2	1 394	I 394R EB OVER I 394 & DOWNTOWN RAMPS	HENNEPIN	1987						2028-2034	NO		RE-OL	and overlay will be needed beyond 2018. See endnote 1.	27
							N	N	Υ	99.0 (100.0)						EC heiden heilt in 4007. All NIDIC annulities setimen and	
										(100.0)						FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint	
М	27789A	2	I 394	I 394 EB OFF RAMP OVER SB HWY. 100	HENNEPIN	1989		L	L	74.0		2019-2027	NO		RE-OL	and overlay will be needed beyond 2018. See endnote 1.	27
М	9197	2	1 694	I 694 WB OVER BNSF RR	RAMSEY	1960	Y	N	N	71.0		2007	YES	2009	RPL w/ Unweave/Weave Proj.		27
							Υ	N	N	95.0						Tier 3 Bridge - cost not included in Chapter 152 Program.	
М	82805	3	I 694	I 694 SB OVER UP RR	WASHINGTON	1967		N	N	84.0		2010	YES	2010	RDK	Economic stimulus (ARRA) funding used. Tier 3 Bridge - cost not included in Chapter 152 Program.	27
М	82806	3	I 694	I 694 NB OVER UP RR	WASHINGTON	1967	,			(93.7)		2010	YES	2010	RDK	Economic stimulus (ARRA) funding used.	27
М	6513	2		MARYLAND (COUNTY ROAD 31) OVER I 35E	RAMSEY	1958	Y	N	N	77.0	\$11.0-\$14.7	2014	NO		RPL		27
М	6515	1	I 35E	I 35E OVER CAYUGA ST & BNSF RR	RAMSEY	1965	Y	N N	N N	40.8 53.0	\$156.8-\$213.2	2014	NO		RPL		27
М	6517	2	I 35E	I 35E OVER BNSF RR	RAMSEY	1963				(51.8)		2014	NO		RPL	Cost incl w/ Br 6515 (Cayuga) project.	27
М	9265	2	I 35E	I 35E OVER PENNSYLVANIA AVE	RAMSEY	1964	Y	N	N	64.0		2014	NO		RPL	Cost incl w/ Br 6515 (Cayuga) project.	27
М	9053	1	I 35W	W 94TH ST OVER I 35W	HENNEPIN	1957	, i	N	N	48.7 (49.1)	\$10.67 - \$12.06	2015-2018	NO		RPL		27
М	9570	2	I 35W	COUNTY ROAD E2 (COUNTY ROAD 73) OVER I 35W	RAMSEY	1964	Υ	N	N	52.0	\$19.3-\$26.1	2015-2018	NO		RPL		27
M	9796	1		W 76TH ST OVER I 35W	HENNEPIN	1959	Y	N	N	44.5		2008	YES	2009	RPL		27
M	27871 27930	1 2	I 35W	I 35W SB OVER HWY. 65 NB HWY. 121 NB OVER I 35W SB	HENNEPIN HENNEPIN	1967 1964	Y	N N	N N	44.1 62.4	\$45.4-\$61	2015-2018 2007	NO YES		RPL RPL		27 27
		_					Y	N	N	37.0							
М	27932	1	I 35W	HWY. 62 EB OVER I 35W	HENNEPIN	1964	Y	N	N	55.4		2007	YES		RPL w/ Crosstown Project		27
М	27937	2	I 35W	HWY. 62 WB OVER I 35W NB	HENNEPIN	1964	Y	N	N N	64.2		2007	YES		RPL w/ Crosstown Project		27
М	27938	2	I 35W	35W SB TO EB HWY. 62 OVER I 35 NB	HENNEPIN	1964						2007	YES		RPL w/ Crosstown Project		27
М	27939	2	I 35W	I 35W SB OVER E 60TH ST	HENNEPIN	1963	Y	N	N	58.1		2007	YES		RPL w/ Crosstown Project		27
М	27940	2	I 35W	I 35W NB OVER E 60TH ST	HENNEPIN	1963	Y	N	N	58.1		2007	YES		RPL w/ Crosstown Project		27
М	27941	2	I 35W	35W SB TO HWY. 62 EB OVER HWY. 62 WB	HENNEPIN	1964	Y	N	N	64.2		2007	YES		RPL w/ Crosstown Project		27

CHAPTER 152 BRIDGE INVENTORY REPORT

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008 (Revised April 23, 2008)

Values in "()" reflect updated information since 2008.

1	BRIDGE		ROUTE	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	п ш	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING	INFLATED TOTAL PROJECT COST ESTIMATE (in Millions)	CONSTRUCTION CALENDAR YEAR PLANNED	SUBSTANTIALLY	YEAR OF 'SUBSTANTIAL COMPLETION		NOTES	SEE ALSO PAGE
N	62853	2	I 35W	I35W RAMP TO HWY. 36 EB OVER HWY. 280 NB	RAMSEY	1970	N	N	Y	97.3		2019-2027	NO		RPL	FC bridge built in 1970. All NBIS condition ratings are satisfactory. Normal maintenance planned for the program years. Replacement will be needed beyond 2018.	27
N	27776C	2	I 394	I 394R WB OVER I 394 WB ON RAMP	HENNEPIN	1987	N	N	Y	95.7 (96.7)		2028-2034	NO		RE-OL	FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
	27776F	2	1 394	394R EB RAMP OVER I 94 EB (ST. PAUL)	HENNEPIN	1987	N	N	Y	95.8 (96.8)		2028-2034	NO		RE-OL	FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27

Note 1: Newer bridges were designed and fabricated with improved details for resistance to fatigue. Steel specifications in the mid-1970's required steel "toughness" properties that provide resistance to fatigue. A Fracture Control Plan published in 1978 by AASHTO was also utilized to fabricate bridges using improved welding techniques for assembly.

D							۲	ιLΥ			INFLATED TOTAL	CONSTRUCTION					
S		CHAP. 152		FACILITY -	COUNTY	YEAR	STRUCTURAL DEFICIENT	FUNCTIONAL! OBSOLETE	TURE	SUFFICIENCY RATING	PROJECT COST	CALENDAR YEAR	SUBSTANTIALLY		CH 152 WORK	Nexts	SEE ALSO
Т	NUMBER	TIER	NUMBER	FEATURE CROSSED	COUNTY	BUILT	STRU	FUNC	FRACTURE	SUFFI	ESTIMATE (in Millions)	PLANNED	COMPLETE	COMPLETION	PLANNED	NOTES	PAGE
1	6496	2	Hwy. 1	HWY. 1 OVER FLINT CREEK	ST LOUIS	1952	Υ	N	N	76.6	\$0.98	2009	YES	2009	RPL		23
_	00400	٠	11	LIMAN 2 OVER CT LOUIS BIVER LIMAN 25 & DR	ST LOUIS	4000	N	N	Υ	80.6	C44 C4	2045	NO		OL & PT	Cost included with Bridge 69831 project.	22
1	69100 69101	2	Hwy.2 Hwy. 2	HWY. 2 OVER ST LOUIS RIVER, HWY. 35, & RR HWY. 2 WB OFF RAMP OVER HWY. 35 RAMP, RR, LAKE	ST LOUIS	1982 1983	N	N	Y	97.7	\$41.64	2015 2015	NO NO	1	OL & PI	Cost included with Bridge 69100 Project.	23 23
1	69102	2		HWY. 2 EB ON RAMP OVER HWY. 35, RR, LAKE	ST LOUIS	1983	N	N	Y	97.7		2015	NO	†		Costs included with Bridge 69100 Project.	23
					OADI TON		Υ	N	N	54.2 (45.0)					200		
1	5470	2	Hwy. 23	HWY. 23 OVER BNSF RR	CARLTON	1936	Y	N	N	83.3	\$6.18	2015	NO	1	RPL		23
																Tier 3 Bridge - cost not included in Chapter 152 Program.	
1	5554	3		HWY. 23 OVER N FORK NEMADJI RIVER	CARLTON PINE	1940	Y	N	N	67.0	\$2.05	2015	NO VEO	2010	RPL RPL		23
+	9782	2	Hwy. 23	HWY. 23 OVER I 35	FINE	1959	N	N	Y	82.2	\$2.05	2010	YES	2010	NFL		23
1	69831	2	I 35	I 35 SB OVER DM&IR RY & BNSF RR	ST LOUIS	1967				(81.6)	\$91.24	2011	NO	2011	RPL		23
1	69832	2	I 35	I 35 NB OVER DM&IR RY & BNSF RR	ST LOUIS	1967	N	N	Y	71.1 (70.9)		2010	YES	2010	RPL	Cost included with Bridge 69831 project.	23
<u> </u>	09032		133	1 33 NB OVER DIMBIN INT & BINST INI	01 20010	1907	Υ	N	N	91.8		2010	11.5	2010	IXI E	Cost moladed with Bridge 65661 project.	23
	000.47		1.05	LOS OD OVED LIMAY OF D	CT LOUIC	4004						0000	\/F0	2000	RPL	Tier 3 Bridge - cost not included in Chapter 152 Program.	00
1	69847	3	I 35	I 35 SB OVER HWY. 2 EB	ST LOUIS	1964	Y	N	N	91.8		2009	YES	2009	KPL	Part of Bridge 69847 project	23
																Tier 3 Bridge - cost not included in Chapter 152 Program.	
1	69848	3	I 35	I 35 NB OVER HWY. 2 EB	ST LOUIS	1964		N	V	86.4		2009	YES	2009	RPL	Part of Bridge 69847 project.	23
1	69880	2	135	I 35 OVER RECYCLE WAY & ONETA ST.	ST LOUIS	1968				(74.8)		2010	NO	2011	RPL	Part of Bridge 69831 project.	23
	0544	2	I home 20	LIMAN, 20, DD OVED ST LOUIS DIVED	CT LOUIC	4046	N	Υ	Υ	69.6 (69.3)					Name Drivetsky Owned	DD arrand Dahah in 2000	23
-	6544		Hwy. 39	HWY. 39; RR OVER ST LOUIS RIVER	ST LOUIS	1916	Υ	N	N	62.9					None - Privately Owned	RR owned. Rehab in 2009	
1	69004	2		HWY. 135 OVER HWY. 53 NB, SB ON RAMP	ST LOUIS	1961				(90.3)	\$4.94	2015	NO		RPL		23
1	69029	2	Hwy. 53	HWY. 33 NB OVER HWY. 53 SB	ST LOUIS	1966	Y	N	N	79.9 62.8	\$2.33	2012	NO		RPL		23
1	90249	2	Hwy. 53	HWY. 53 SB OVER RAINY RIVER	KOOCHICHING	1912	N		'	(62.6)					None - Privately Owned	Privately owned.	23
							Υ	N	Y	20.2							
1	5721 6736	2		HWY. 65 OVER LITTLE FORK RIVER HWY. 65 OVER SWAN RIVER	KOOCHICHING ITASCA	1877 1950	Y	N	N	77.7	\$1.52	2009 2009	YES YES	2009 2009	Has been RPL RPL		23 23
<u> </u>	0730		11Wy. 03	TIWE OF OVER SWAN RIVER		1930	Y	N	N	64.9	ψ1.52	2009		2009			
1	6767	2	Hwy. 65	HWY. 65 OVER HAY CREEK	KOOCHICHING	1951	NI.	NI NI	V	70.0	\$4.19	2013	NO		RPL		23
							N	N	'	78.6 (62.3)						Since SR = 62.3 and truss has performed well, bridge will	
																continue to function safely with continued maintenance.	
1	5718	2	Hwn/ 123	HWY. 123 OVER KETTLE RIVER & ST	PINE	1948					\$2.59 - \$2.92	2013	NO		OL & PT	Planned OL & paint will raise SR above 80.	23
<u> </u>	3710		11Wy. 123	TIWE 123 OVER RETTEE RIVER & 31	1 1142	1340	Υ	N	N	59.1	Ψ2.39 - Ψ2.92	2013	NO	†	OL WIT	Removed, not replaced	
1	69003	2	Hwy. 169	HWY. 169 OVER BN RR (ABAN) & TRAIL	ST LOUIS	1961	NI.	V	V	(58.8)	\$3.40	2009	YES	2009			23
							N	ľ	T T	77.6 (76.4)						Currently FC due to pier cap configuration, which will be	
1	69839	2	Hwy. 194	NB MICHIGAN ST OVER HWY. 194 SB	ST LOUIS	1969					\$2.88 - \$3.26	2015-2018	NO		RPR & Retrofit	modified to be redundant as part of rehabilitation project.	23
							N	Υ	Y	78.1 (80.1)						Currently FC due to pier cap configuration, which will be	
										()						modified to be redundant as part of rehabilitation project.	
1	69840	2	Hwy. 194	HWY. 194 NB OVER SUPERIOR ST	ST LOUIS	1968	N.	NI NI	V	F4 7	\$2.75 - \$3.11	2015-2018	NO		RPR & Retrofit	(Cost incl w/ Br 69839 project)	23
1	09001	2	Hwv. 210	HWY. 210 OVER ST LOUIS RIVER	CARLTON	1961	(Y)	N	Y	51.7 (48.7)	\$6.70	2012	NO		RPL		23
							N	Y	Y	72.3						Border bridge with Wisconsin. Good condition, rehabilitated	
1	9030	2	I 535	I 535 OVER ST LOUIS R; RR,STREET (Blatnik)	ST LOUIS	1961				(53.8)	\$12.50	2012	NO		Deck Seal & Paint	in 1993. With planned paint, and hanger cable repairs, replacement not needed for 20 years.	23
<u> </u>	3030		1333	1 333 OVER 31 EGGIS IX, IXX,STREET (Blattlik)	01 20010	1901	N	Υ	Υ	86.6	ψ12.30	2012	NO	†	Deck deal a Failt	FC bridge, district plans to program a series of bridges within	
																the "Can of Worms" interchange, this bridge is included.	
1	69824	2	1 535	I 535 SB ON RAMP OVER I 535 NB & I 35 NB	ST LOUIS	1969						2019-2027	NO		RPL	Planned replacement is beyond 2021. Repair work done with Bridge 69831 project.	23
							N	N	Υ	84.4						FC bridge, district plans to program a series of bridges within	
										(85.4)						the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021.	
1	69825	2	1 535	I 535 NB OFF RAMP OVER BNSF RAILROAD	ST LOUIS	1969						2019-2027	NO		RPL	Repair work done with Bridge 69831 project.	23
							Υ	N	N	85.0						FC bridge, district plans to program a series of bridges within	
																the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021.	
1	69801A	3	I 535	I 535 SB OFF RAMP OVER FILL	ST LOUIS	1969						2019-2027	NO		RPL	Repair work done with Bridge 69831 project.	23
							N	N	Y	89.4						FC bridge, district plans to program a series of bridges within	
																the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021.	
1	69801C	2	I 535	I 535 SB ON RAMP OVER RAILROAD & FILL	ST LOUIS	1969		<u> </u>	<u> </u>			2019-2027	NO		RPL	Repair work done with Bridge 69831 project.	23

D I S T	BRIDGE NUMBER	CHAP. 152 TIER		FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE	SUFFICIENCY RATING	INFLATED TOTAL PROJECT COST ESTIMATE (in Millions)	CONSTRUCTION CALENDAR YEAR PLANNED	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	NOTES	SEE ALSO PAGE
							N	N	Y	63.9 (64.9)						FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021.	
1	69801F	2	I 535	I 535 SB SEG 1 OVER I 35 & RAMP TO I 35 SB	ST LOUIS	1969	N	N	Y	87.2		2019-2027	NO		RPL	Repair work done with Bridge 69831 project.	24
1	69801J	2	1 535	I 535 NB SEG 1 OVER I 35 NB & SB OFF RAMP	ST LOUIS	1969				07.12		2019-2027	NO		RPL	FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021. Repair work done with Bridge 69831 project.	24
							N	N	Y	88.6						FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021.	
1	69801K	2	I 535	I 535 NB OFF RAMP OVER I 35 SB	ST LOUIS	1969	N	N		88.4		2019-2027	NO		RPL	Repair work done with Bridge 69831 project.	24
1	69801N	2	1 535	I 535 NB SEG 3 OVER CP RAIL	ST LOUIS	1969				(88.1)		2019-2027	NO		RPL	FC bridge, district plans to program a series of bridges within the "Can of Worms" interchange, this bridge is included. Planned replacement is beyond 2021. Repair work done with Bridge 69831 project.	24
2	4001	2	Hwy. 1	HWY. 1 OVER OVERFLOW CHANNEL	BELTRAMI	1962	Y	N	N	71.7	\$2.78 - \$3.15	2013	NO		RPL		24
2	4561	2	Hwy. 1	HWY. 1 OVER DITCH	BELTRAMI	1926	Y	N N	N N	54.4 46.1	\$2.94	2009	YES	2009	RPL W/ CULVERT		24
2	5581	1	Hwy. 1	HWY. 1 OVER SANDY RIVER	CLEARWATER	1936				(48.9)	\$1.01	2010	YES	2010	RPL		24
2	9100	2	Hwy. 1	HWY. 1 OVER RED RIVER OF THE NORTH (Oslo)	MARSHALL	1959	N N	N N	Y	55.6 73.2	\$11.32 - \$12.79	2013	NO		RPL	Border bridge with North Dakota. Border bridge with North Dakota. Since SR = 61.2 and truss	24
2	9090	2	Hwy. 2	HWY. 2 OVER RED RIVER & CITY ST (Kennedy)	POLK	1963	Y	N	N	(61.2)	\$12.8-\$17.4	2016	NO		Redeck & Paint	has performed well, new deck and paint will remove deficiencies.	24
2	5557	2	Hwy. 11	HWY. 11 OVER RAPID RIVER	LAKE OF THE WOODS	1950	1	IN	IN	(48.8)	\$3.50	2009	YES	2010	RPL		24
2	6690	1	Hwy. 11	HWY. 11 OVER RED RIVER OF THE NORTH (ROBBIN)	KITTSON LAKE OF THE	1954	N (Y) N	N	Y	48.5 (32.9) 40.3	\$16.60	2009	YES	2010	RPL	Border bridge with North Dakota.	24
2	9412	1	Hwy. 72	HWY. 72 OVER RAINY RIVER	WOODS	1959		, i	·	(48.8)	\$52.4-\$70.8	2018	YES		REHAB or RPL	Border Bridge with Ontario, Canada.	24
2	6730 6731	1		HWY. 75 OVER DITCH HWY. 75 OVER DITCH	NORMAN NORMAN	1949 1949	Y	N N	N N	40.4 40.4	\$1.47	2010 2010	YES YES	2010 2010	RPL W/CULVERT RPL W/CULVERT	Cost incl w/ Br 6730 project.	24 24
			-				Y	N	N	83.3							
2	6734 35007	3	Hwy .75	HWY. 75 OVER MARSH RIVER	NORMAN	1951 1982	Y (N)	N	N	(82.1) 68.3 (96.7)	\$0.90	2010	YES YES	2010	RPL RPR	Tier 3 Bridge - cost not included in Chapter 152 Program. Border bridge with North Dakota.	24
2	6522	2		HWY. 171 OVER RED RIVER OF THE NORTH HWY. 200 FRNT RD OVER MARSH RIVER	NORMAN	1982	N N	N	Υ	70.6	\$0.38 - \$0.43	2014	NO NO	2009	RPL	Border Bridge with North Dakota.	24
2	5872	2	Hwy. 317	HWY. 317 OVER RED RIVER OF THE NORTH (Grafton)	MARSHALL	1939	N	N	Y	52.7 (52.9)	\$1.42 - \$1.61	2013	NO		Repair & PNT	Border bridge with North Dakota. OL in 2005; paint and repairs needed to maintain condition, which should be adequate for the next 20 years with low ADT.	24
2	4700 3622	2	Hwy. 2B Hwy. 12	HWY. 2B (BUSINESS) OVER RED RIVER (Sorlie) HWY. 12 OVER S FK CROW RIVER	POLK WRIGHT	1929 1922	N Y	N N	Y N	50.6 (48.4) 43.4	\$47.5-\$61.5 \$20.43	2018 2008	NO YES	2008	REHAB or RPL RPL	Border bridge with North Dakota.	24 24
3	6748	1	Hwy. 123	HWY. 23 OVER MISS R & RIVERSIDE DR (DESOTO)	STEARNS	1957	Y	N	Y	66.4	\$20.43	2008	YES	2008	RPL		24
3	9086	2	Hwy. 23	HWY. 23 OVER 10TH AVE	STEARNS	1958	Y	N	N	55.0	\$17.30	2009	YES	2009	RPL		24
3	5790 86813	3	Hwy. 71	HWY. 71 OVER N FK CROW RIVER I 94 WB OVER COUNTY ROAD 75 & RR	STEARNS WRIGHT	1937 1971	Y	N N	N N	29.7 81.3	\$0.71 \$13.20	2009	YES YES	2009	RPL RPL	Tier 3 Bridge - cost not included in Chapter 152 Program.	24
3	86814	3	194	I 94 EB OVER COUNTY ROAD 75 & RR	WRIGHT	1972	Y	N	N	81.7		2009	YES		RPL	Cost included W/ Br 86813 project. Tier 3 Bridge - cost not included in Chapter 152 Program.	24
3	91049 91050	2	Hwy. 169 Hwy. 169	HWY. 169 OVER RIPPLE RIVER HWY. 169 OVER RIPPLE RIVER	AITKIN AITKIN	1964 1964	Y	N N	N N	58.1 58.1	\$0.98	2009 2009	YES YES	2009	RPL RPL	Cost incl w/ Br 91049 project.	24 24
4	6456	2		HWY. 12 OVER MINNESOTA RIVER	BIG STONE	1953	Ÿ	N	N	76.3 (73.0)	\$3.45	2012	NO NO		RPL	ооз по м вточе ројест.	24
4	3067	1	Hwy 29	HWY. 29 OVER OUTLET CREEK	POPE	1920	Y	N	N	49.3 (49.0)	\$1.46	2012	NO		RPL		24
4	6552	2	-	HWY. 29 OVER DITCH	SWIFT	1948	Y	N	N	54.1 (53.1)	\$1.53 - \$1.74	2015-2018	NO		RPL		24
4	5186	2	Hwy. 75	HWY. 75 OVER WHISKEY CREEK	WILKIN	1932	Y	N	N	53.3 (54.3)	\$1.68 - \$1.90	2015-2018	NO		RPL		24
4	21805	3	I 94	I 94 WB OVER LATOKA LAKE	DOUGLAS	1967	Y	N N	N N	88.2 (88.4) 79.0	\$1.67	2015-2018	NO		RPL	Tier 3 Bridge - cost not included in Chapter 152 Program.	24
4	21813	2	I 94	HWY. 29 SB OVER I 94	DOUGLAS	1965				(78.0)	\$19.3-\$33.7	2015-2018	NO		RPL		24
4	21814	2	194	HWY. 29 NB OVER 194	DOUGLAS	1965	Y	N N	N N	66.7 30.7	\$2.00	2015-2018	NO VES	2000	RPL RPL	Cost included W/ Br 21813 project. Costs included with Bridge 5337 Project.	24
6	5337 6842	1	Hwy. 3 Hwy. 3	HWY. 3 OVER UP RR HWY. 3 OVER CANNON RIVER	RICE RICE	1940 1955	Y	N N	N	25.9	\$3.88	2008 2008	YES YES	2008 2008	RPL RPL	Costs included with bridge 5337 Project.	24 24
6	5234	2		HWY. 14 OVER STREAM	WINONA	1932	Υ	N	N	55.0	\$2.01 - \$2.27	2015	NO		RPL		24
6	6036	1	Hwy. 14	HWY. 14 OVER STREAM	DODGE	1930	Υ	N	N	47.1 (37.8)	\$1.61 - \$1.82	2014	NO		RPL		24

CHAPTER 152 BRIDGE INVENTORY REPORT

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008 (Revised April 23, 2008)

Values in "()" reflect updated information since 2008.

INFLATED TOTAL ONSTRUCTION CHAP. **PROJECT** CALENDAR YEAR OF CH 152 SEE TRUCTUR BRIDGE ROUTE FACILITY -YEAR 152 WORK COST SUBSTANTIALLY SUBSTANTIAL ALSO NUMBER TIER NUMBER FEATURE CROSSED COUNTY BUILT ESTIMATE (in PLANNED COMPLETE COMPLETION PLANNED NOTES PAGE Millions) 74.4 N Bridge replacement is small portion of overall project costs. Hwy. 14 HWY. 14 EB OVER I 35 STEELE 74820 1965 \$2.23 - \$2.52 2010 YES 2010 RPI Construction underway 25 Ν 45.0 5968 HWY. 42 OVER N FORK WHITEWATER RIVER WABASHA (41.6) \$2.15 2012 NO RPL 25 49.8 WINONA (Y) (23.7) RPL 25 5900 HWY. 43 OVER MISS RVR, RR, STREETS (WINONA) 1941 \$185.24 2014 NO 65.5 23004 Hwy. 43 HWY. 43 OVER S FORK ROOT RIVER FILLMORE 1931 (Y) \$2.96 2012 NO RPL 25 66.9 HWY. 44 OVER STREAM FILLMORE 1923 (60.4) \$3.98 NO RPL W/CULVERT 25 4148 Hwv. 44 2013 67.2 4150 HWY. 44 OVER STREAM **FILLMORE** 1923 (60.2)\$0.83 2013 NO RPL W/CULVERT 25 67.2 HWY. 44 OVER STREAM FILLMORE (60.2) 25 4151 1923 \$0.24 2013 NO RPL W/CULVERT 45.8 Hwy. 56 HWY. 56 OVER MID FORK ZUMBRO RIVER DODGE (N) 25 5713 1937 \$1.35 2011 NO 66.3 5905 HWY. 56 FARM ENT OVER N BR UPPER IOWA RIVER MOWER 1940 (68.9)\$1.06 - \$1.20 2015 NO RPL 25 6 5188 Hwy. 58 HWY, 58 OVER N FORK ZUMBRO RIVER GOODHUE 1932 N Ν 18.4 \$2.55 2010 YES 2010 RPL 25 49.4 Historic bridge. With major rehabilitation, deficiencies were HWY. 60 OVER STRAIGHT R,RR,STREET RICE (N) YES REHAR 25 1937 (77.2)\$10.80 2009 2009 6 5397 Hwy. 60 HWY. 60 OVER TROUT BROOK WABASHA 1935 Ν 73.0 \$2.30 - \$2.60 2014 NO RPL 25 N 18.7 9 6770 Hwy. 60 HWY. 60 OVER CANNON RIVER RICE 1952 N \$1.80 2009 YES 2009 RPL 25 N 6 6771 Hwy, 60 HWY, 60 OVER CANNON RIVER 1952 Ν 37.8 2009 YES 2009 RPL 25 70.1 9798 Hwy. 60 HWY. 60 OVER STREAM WABASHA 1961 (47.7)\$2.00 2011 NO 2011 RPL 25 73.5 FC bridge built in 1987. All NBIS condition ratings are good. Only normal maintenance planned during program years. Only Normal Maintenance Paint and overlay will be needed beyond 2018. See endnote 79000 HWY. 60 OVER MISS R, RR, & STS WABASHA 1987 Needed 25 6773 Hwy. 61 HWY. 61 OVER GILBERT CREEK GOODHUE 1954 Ν \$4.99 2011 NO 2011 RPL 25 N 36.0 6 9450 Hwy. 61 HWY. 61 OVER NYMPHARA LANE GOODHUE 1962 N \$5.48 - \$6.20 2013 NO RPL 25 44.8 (43.8)9040 HWY, 63 OVER MISS RIVER & CP RAIL (RED WING) GOODHUE 1958 \$150.06 2018 NO RPL 25 65.5 6 6808 2 1 90 I 90 EB OVER TWP RD & TURTLE CRK MOWER 1959 \$3.95 2009 YES 2010 RPL Bridges of Mower County - Combined 25 6 8929 190 I 90 OVER DOBBINS CREEK MOWER 1957 N Ν \$4.54 2009 YES 2010 RPL Bridges of Mower County - Combined 25 I 90 OVER MISSISSIPPI RIVER (DRESBACH) Ν N 77.0 6 9320 190 WINONA 1967 \$204.85 2012 NO RPI 25 N N 63.7 RPL 85807 190 1 90 WB OVER TWP 323 WINONA 1963 \$5.01 2009 YES 2009 25 63.7 N N 6 85808 2 1.90 190 EB OVER TWP 323 WINONA 1963 \$1.86 2010 YES RPL 25 85809 190 190 WB OVER TWP 312 WINONA 1963 61.6 \$1.68 2009 YES RPL 25 L90 FB OVER TWP 312 WINONA N N 61.6 RPL 6 85810 2 190 1963 \$1.77 2010 YES 25 53.6 ridge included in Chapter 152 as a "Commissioner Priority 4867 Hwy. 105 HWY. 105 OVER WOODBURY CREEK MOWER \$1.99 YES RPL 1931 2010 2010 (CP) project, due to bridge being load posted 57.5 FILLMORE (57.6) 6975 Hwy. 250 HWY. 250 OVER S BR ROOT RIVER 1931 \$13.9-\$18.9 2018 NO RPI 25 50.6 6977 Hwy. 250 HWY. 250 OVER N BR ROOT RIVER FILLMORE 1924 (47.0)\$8.27 - \$9.35 2018 NO RPL Cost incl w/ Br 6975 project. 25 66.4 Ν Ν 6749 HWY. 4 OVER LITTLE COTTONWOOD RIVER BROWN (60.9) RPL 25 1951 \$2.46 2011 NO 2011 82.6 HWY. 4 OVER WATONWAN RIVER 25 6762 Hwy. 4 WATONWAN 1951 (82.7) \$3.10 2012 NO 38.0 BROWN (54.6) \$44.1-\$51.4 RPI 9200 HWY, 14 OVER MINNESOTA RIVER 1963 2015-2018 NO 25 7 4014 Hwy, 22 HWY, 22 OVER ROBARTS CREEK NICOLLET 1923 Ν 68.2 \$1,23 2013 NO RPL 25 COTTONWOO 79.1 5834 HWY. 30 OVER BR OF WATONWAN R (74.5)\$1.19 2012 NO RPL 25 45.7 5513 Hwy. 68 HWY. 68 OVER UP RR BLUE EARTH 1936 (34.8)\$1.29 2012 NO REHAB 25 COTTONWOO 58.2 6889 Hwy. 71 HWY. 71 OVER DES MOINES RIVER 1956 \$3.21 2010 YES 2010 RPL 25 6245 Hwy 75 HWY, 75 OVER POPLAR CREEK ROCK 1932 (53.2) \$0.85 - \$0.96 2015-2018 NO RPL 25 56.0 4930 HWY. 99 OVER MINNESOTA RIVER (ST. PETER) LE SUEUR 1931 (Y) (48.5) \$44.2-\$50.8 2013 NO REHAB or RPL Historic bridge. Currently studying rehabilitation. 25 45.2 Hwy. 258 HWY. 258 OVER COTTONWOOD RIVER BROWN (45.6) RPL 25 6535 1949 \$3.37 2012 NO 78.6 6821 Hwy. 270 HWY. 270 OVER MUD CREEK ROCK 1953 (74.6) \$1.36 2011 NO 2011 RPL 25 63.7 HWY, 7 OVER CHIPPEWA RIVER CHIPPEWA (Y) (43.6) RPL 9114 1932 \$6.63 NO 2014

D I S T	BRIDGE NUMBER	CHAP. 152 TIER		FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING	INFLATED TOTAL PROJECT COST ESTIMATE (in Millions)	CONSTRUCTION CALENDAR YEAR PLANNED	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	NOTES	SEE ALSO PAGE
8	4667	2	Hwy. 19	HWY. 19 ACCESS RD OVER SULPHER L	REDWOOD	1927	Y	N	Y	44.0 (33.0)				N/A	Only Normal Maintenance Needed	Only normal maintenance planned to maintain condition. Low ADT - does not carry Trunk Highway traffic - will load post when needed.	25
8	5388	1	Hwy. 24	HWY. 24 OVER N FK CROW RIVER	MEEKER	1935	Y	N	Y	47.0		2009	YES		RPL	New bridge in place, Historic Bridge to be moved to Lake Louise State Park.	25
	5380	٠		HWY. 40 OVER LAC QUI PARLE L	CHIPPEWA	1938	Υ	N	Υ	38.9 (39.3)	\$8.55	2014	NO		RPL		25
8	6962	2		HWY. 68 OVER DITCH	REDWOOD	1900	Υ	N	N	48.5	\$0.40	2009	YES	2009	RPL		26
	07005	2	Lh 074	HWY. 274 OVER YELLOW MEDICINE RIVER	YELLOW MEDICINE	4000	Y (N)	N	N	66.9 (83.0)				NI/A		No work needed. Condition ratings were re-evaluated - bridge no longer structurally deficient.	200
8	87005		пwy. 274	HWY. 274 OVER YELLOW MEDICINE RIVER	MEDICINE	1968	Y	N	N	67.9				N/A	Needed	no longer structurally delicient.	26
8 M	6816	2		HWY. 277 OVER CO DITCH # 22 HWY. 5 OVER RECREATION TRAIL	CHIPPEWA CARVER	1952	Y	N	N	(70.8) 49.1	\$1.62 - \$1.83 \$2.57 - \$2.90	2017 2015-2018	NO NO		RPL RPL		26
М	6654	1	Hwy. 5	HWY. 5 OVER RECREATION TRAIL	CARVER	1952	N	N	Y	67	\$2.57 - \$2.90	2015-2018	NO		KPL		26
М	9300	•	16 5	HWY. 5 WEST 7TH ST OVER MISSISSIPPI RIVER	RAMSEY	1961						2019-2027	NO		RPL	FC bridge built in 1961, remodeled in 1986. NBIS condition ratings are fair. Normal maintenance planned for the program years. Replacement will be needed beyond 2018.	26
M	5462	2		HWY. 7 (COUNTY ROAD 25) OVER HWY. 100	HENNEPIN	1939	Υ	N	N	71.2	\$2.43 - \$2.75	2015-2018	NO		RPL	years. Replacement will be needed beyond 2016.	26
м	00040	2	Lh 405	LIMAY 40 (PRESCOTT) OVER ST CROIX DIVER	WASHINGTON	1990	N	N	Υ	61.9	£4.20 £4.40	2045 2040	NO		OL	Built in 1986 (see endnote 1) and built with a redundant	26
IVI	82010	2	HWY. 105	HWY. 10 (PRESCOTT) OVER ST CROIX RIVER	WASHINGTON	1990	N	N	Y	75.9	\$1.29 - \$1.46	2015-2018	NO			system for FC tie girder. FC bridge built in 1967. All NBIS condition ratings are good. Normal maintenance planned for the program years.	20
M	82815 4654	2		HWY 8 WB OVER I 35 HWY. 36 OVER ST CROIX RIVER	WASHINGTON WASHINGTON	1967 1930	Y	N	Y	32.8	\$433.73 - \$490.30	2028-2034 2015-2018	NO NO		RPL RPL	Replacement will be needed beyond 2018.	26 26
M	5723	2		HWY. 36 OVER ST CROIX RIVER HWY. 36 OVER LEXINGTON AVE(COUNTY ROAD 51)	RAMSEY	1930	Y	N	N	61.0	\$24.9-\$33.6	2015-2018	NO		RPL		26
М	9115	1		HWY. 36 EB OVER HWY. 95	WASHINGTON	1959	Y	N	N	28.3 (66.8)		2015-2018	NO		RPL	Cost incl w/ Br 4654 (St. Croix) project.	26
м	9800	1	Hwy. 52	HWY. 52(LAFAYETTE) OVER MISS R, RR & STREETS	RAMSEY	1968	Y	N	Y	49.5 (47.5)	\$260.60	2010	YES	2010	RPL		26
М	62026	2		LAFAYETTE (HWY. 52) OVER UP RR & EATON ST	RAMSEY	1965	Y	N	N	59.1 (56.9)	\$8.28	2011	NO	2011	RDK		26
м	94277	2	Hwy. 55	HWY. 55 OVER BASSETT CREEK	HENNEPIN	1939	Y	N	N	36.9 (38.4)	\$2.43 - \$2.75	2015-2018	NO		RPL		26
М	5895	1		HWY. 61 OVER MISS RIVER, RR, STREET (HASTINGS)	DAKOTA	1950	Y	N	Y	38.1 (43.4)	\$227.60	2010	YES	2010	RPL		26
М	6688	1	Hwv. 61	HWY. 61 OVER BNSF RR	RAMSEY	1952	Y	N	N	42.3 (43.7)	\$6.95	2010	YES	2010	RPL		26
							N	N	Y	95.6 (96.6)						FC bridge built in 1988. All NBIS condition ratings are satisfactory to good. Only an overlay will be needed by 2018.	
М	27046	2	Hwy. 77	HWY. 77 SB COLL RD OVER KILLEBREW DRIVE	HENNEPIN	1988	N	N	Y	94.7	\$0.99 - \$1.12	2015-2018	NO		RE-OL	See endnote 1.	26
м	27048	2	Hwy. 77	HWY. 77 SB OFF RAMP OVER 81ST STREET	HENNEPIN	1988				(95.7)		2028-2034	NO		RE-OL & Paint	FC bridge built in 1988. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	26
							N	N	Υ	96.2 (97.2)						FC bridge built in 1989. All NBIS condition ratings are good.	
М	27052C	2	Hwy. 77	HWY. 77 NB COLL RD OVER 79TH ST & EB 494/5 RAMPS	HENNEPIN	1989						2028-2034	NO			Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	26
м	9600N	2	Hwv. 77	HWY. 77 NB OVER MINNESOTA R & BLACK DOG	HENNEPIN	1978	N	N	Y	91.5	\$15.57 - \$17.60	2015-2018	NO		RE-OL	FC bridge built in 1978. All NBIS condition ratings are satisfactory to good. Overlay will be needed 2015-18. See endnote 1.	26
					HENNEDIN		N	N	Y	91.5					RE-OL	FC bridge built in 1978. All NBIS condition ratings are satisfactory to good. Overlay will be needed by 2015-18. See	
М	9600S	2	r1wy. //	HWY. 77 SB OVER MINNESOTA R & BLACK DOG	HENNEPIN	1978	N	N	Y	98.5 (99.5)	\$8.92 - \$10.08	2015-2018	NO		RE-OL	endnote 1. (Cost incl w Br 9600N) FC bridge built in 1978. All NBIS condition ratings are satisfactory. Normal maintenance planned for the program	26
М	27728	2	I 94	I 94 NB ON RAMP OVER GLENWOOD AVE & RR	HENNEPIN	1978		N	N	64.8		2028-2034	NO		RE-OL	years. Paint and overlay will be needed beyond 2018. See endnote 1.	26
М	27842	2	I 94	I 94 WB ON RAMP OVER I 94 & HWY. 65	HENNEPIN	1966	Y	Z	N	64.8 (64.4)	\$90.16-\$101.92	2015-2018	NO	<u></u>	RPL		26
М	27861	2	I 94	I 94 WB OFF RAMP OVER CP RAIL & CITY ST	HENNEPIN	1968	Y	N Y	N Y	65.0 93.3	\$1.00	2010	YES	2010	RDK	FOLISHED WINDOWS AND RES	26
М	27726B	2	I 94	I 94 SB OFF RAMP OVER LYNDALE AVE N & RR	HENNEPIN	1979	N		'	(94.3)	\$0.64 - \$0.73	2015-2018	NO		RE-OL	FC bridge built in 1979. All NBIS condition ratings are satisfactory to good. Overlay will be needed by 2018. See endnote 1.	26
М	27727B	2	194	I 94 SB ON RAMP OVER GLENWOOD AVE & RR'S	HENNEPIN	1978	N	Y	Y	94.4 (95.4)	\$1.38 - \$1.56	2015-2018	NO		RE-OL	FC bridge built in 1978. All NBIS condition ratings are satisfactory. Overlay will be needed by 2018. See endnote 1.	26
М	27799R	2		I 94 EB ON RAMP OVER LYNDALE AVENUE SB	HENNEPIN	1969	N	N	Y	85.8		2028-2034	NO			FC bridge built in 1989, remodeled in 1987. NBIS condition ratings are satisfactory. Normal maintenance planned for the program years. Paint and re-deck will be needed beyond 2018.	26

D I S T	BRIDGE NUMBER	CHAP. 152 TIER		FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE		SUFFICIENCY RATING	INFLATED TOTAL PROJECT COST ESTIMATE (in	CONSTRUCTION CALENDAR YEAR PLANNED	SUBSTANTIALLY COMPLETE	YEAR OF 'SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	NOTES	SEE ALSO PAGE
									F.R.	SURA	Millions)						
М	5598	2	Hwy. 100	MINNETONKA BLVD OVER HWY. 100	HENNEPIN	1939	Y	N N	N	63.0 90.0	\$106.91 - \$120.86	2015-2018	NO		REHAB	Cost incl w/ Br 5462 project.Condition is satisfactory	26
							N	IN	T	(91.0)						FC bridge built in 1989. All NBIS condition ratings are fair to good. Normal maintenance planned for the program years.	
															P.F. 01	Paint and overlay will be needed beyond 2018. See endnote	
М	27789	2	Hwy. 100	HWY. 100 SB CD OVER SB CD RP & FRNT RD	HENNEPIN	1989	N	N	Y	97.0		2019-2027	NO		RE-OL	1.	26
М	27791	2	Hwy. 100	HWY. 100 SB ON RAMP OVER GLENWOOD AVE TO SB 10	HENNEPIN	1989				(98.0)		2028-2034	NO		RE-OL	FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
м	62090	2	Hwv 149	HWY. 149 (SMITH AVE) OVER MISSISSIPPI R & RAILROAL	RAMSEY	1986	N	N	Y	85.1 (91.1)	\$21.58 - \$24.39	2015-2018	NO		RDK	Built in 1986 (see endnote 1) and built with a redundant system for FC tie girder.	27
141	02030		11Wy. 143	TWY: 143 (GMITTING) OVER MIGGIOGII TITI & TOTIERONE	10 11102 1	1300	N	N	Υ	65.6	ψ21.00 ψ24.00	2010 2010	110		No.	Border bridge with Wisconsin. With planned repairs of deck	
	6347	2	11 040	HWY. 243 (OSCEOLA) OVER ST CROIX RIVER	CHISAGO	1953				(72.4)	\$0.94	2040	YES	2010	OL & PT	overlay, paint and steel repairs, bridge will perform safely for next 20 years.	27
M	6630	1		HENNEPIN AVENUE OVER MT RAIL	RAMSEY	1953	Υ	N	N	36.8	\$0.94	2010 2009	YES	2010	RPL	next 20 years.	27
М	6738			LARPENTEUR(COUNTY ROAD30) OVER HWY. 280	RAMSEY	1954	Υ	N	N	49.0	\$2.53	2009	YES	2009	RPL	Cost incl w/ Br 6630 project.	27
М	27753	2	I 394	I 394R RAMP OVER NB HWY. 100 TO 394 HOV EB	HENNEPIN	1989	N N	N	Y	97.0 (98.0)		2028-2034	NO		RE-OL	FC bridge built in 1988. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
М	27788	2	I 394	I 394 EB ON RAMP OVER HWY. 100 NB ON RAMP	HENNEPIN	1989	N	N	r	(95.0)		2028-2034	NO		RE-OL	FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
М	27753A	2	I 394	I 394R RAMP OVER 394 HOV WB TO NB HWY. 100	HENNEPIN	1989	N	N	Y	97.0 (98.0)		2028-2034	NO		RE-OL	FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
М	27776A	2	I 394	I 394R OVER I 394 WB, DUNWOODY BLVD	HENNEPIN	1987	Z	N	Y	93.8 (94.8)		2028-2034	NO		RE-OL	FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
м	27776B	2	1394	I 394R EB OVER I 394 & DOWNTOWN RAMPS	HENNEPIN	1987	N	N	Y	94.7 (95.7)		2028-2034	NO		RE-OL	FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
М	27789A	2	I 394	I 394 EB OFF RAMP OVER SB HWY. 100	HENNEPIN	1989	Z	Ν	Y	99.0 (100.0)		2019-2027	NO		RE-OL	FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
м	0407	2	1.004	LOCALIND OVER PRIOR DD	DAMOEY	4000	Υ	N	N	71.0		2227	VE0	2000	RPL w/ Unweave/Weave		27
IVI	9197		I 694	I 694 WB OVER BNSF RR	RAMSEY	1960	Υ	N	N	95.0		2007	YES	2009	Proj.	Tier 3 Bridge - cost not included in Chapter 152 Program.	21
М	82805	3	I 694	I 694 SB OVER UP RR	WASHINGTON	1967						2010	YES	2010	RDK	Economic stimulus (ARRA) funding used.	27
M	82806	3	I 694	I 694 NB OVER UP RR	WASHINGTON	1967	Υ	N	N	84.0 (93.7)		2010	YES	2010	RDK	Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.	27
M	6513	2		MARYLAND (COUNTY ROAD 31) OVER I 35E	RAMSEY	1958	Υ	N	N	77.0	\$11.0-\$14.7	2014	NO	2010	RPL	Economic sumulus (ARTA) funding used.	27
M	6515	1	I 35E	I 35E OVER CAYUGA ST & BNSF RR	RAMSEY	1965	Υ	N	N	40.8	\$156.8-\$213.2	2014	NO		RPL		27
м	6517	2	1.35E	I 35E OVER BNSF RR	RAMSEY	1963	Υ	N	N	53.0 (51.8)		2014	NO		RPL	Cost incl w/ Br 6515 (Cayuga) project.	27
M	9265	2	1 35E	I 35E OVER PENNSYLVANIA AVE	RAMSEY	1964	Υ	N	N	64.0		2014	NO		RPL	Cost incl w/ Br 6515 (Cayuga) project.	27
							Υ	N	N	48.7							
M	9053 9570	2	I 35W	W 94TH ST OVER I 35W COUNTY ROAD E2 (COUNTY ROAD 73) OVER I 35W	HENNEPIN RAMSEY	1957 1964	Y	N	N	(49.1) 52.0	\$10.67 - \$12.06 \$19.3-\$26.1	2015-2018 2015-2018	NO NO		RPL RPL		27 27
M	9796	1		W 76TH ST OVER I 35W	HENNEPIN	1959	Y	N	N	44.5	\$10.0 \$20.1	2008	YES	2009	RPL		27
М	27871	1		I 35W SB OVER HWY. 65 NB	HENNEPIN	1967	Υ	N	N	44.1	\$45.4-\$61	2015-2018	NO		RPL		27
M	27930 27932	1		HWY. 121 NB OVER I 35W SB HWY. 62 EB OVER I 35W	HENNEPIN	1964 1964	Y	N N	N N	62.4 37.0		2007	YES		RPL w/ Crosstown Project		27
М	27937	2	135W	HWY. 62 WB OVER I 35W NB	HENNEPIN	1964	Υ	N	N	55.4		2007	YES		RPL w/ Crosstown Project		27
М	27938	2	135W	35W SB TO EB HWY. 62 OVER I 35 NB	HENNEPIN	1964	Υ	N	N	64.2		2007	YES		RPL w/ Crosstown Project		27
М	27939	2	1 35W	I 35W SB OVER E 60TH ST	HENNEPIN	1963	Υ	N	N	58.1		2007	YES		RPL w/ Crosstown Project		27
м	27940	2	1 35W	I 35W NB OVER E 60TH ST	HENNEPIN	1963	Υ	N	N	58.1		2007	YES		RPL w/ Crosstown Project		27
М	27941	2		35W SB TO HWY. 62 EB OVER HWY. 62 WB	HENNEPIN	1964	Υ	N	N	64.2		2007	YES		RPL w/ Crosstown Project		27

CHAPTER 152 BRIDGE INVENTORY REPORT

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008 (Revised April 23, 2008)

Values in "()" reflect updated information since 2008.

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:	BRIDGE	CHAP. 152 TIER	ROUTE	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING	INFLATED TOTAL PROJECT COST ESTIMATE (in Millions)	CONSTRUCTION CALENDAR YEAR PLANNED	SUBSTANTIALLY	YEAR OF SUBSTANTIAL COMPLETION		NOTES	SEE ALSO PAGE
							N	N	Y	97.3						FC bridge built in 1970. All NBIS condition ratings are satisfactory. Normal maintenance planned for the program	
1	62853	2	I 35W	I35W RAMP TO HWY. 36 EB OVER HWY. 280 NB	RAMSEY	1970						2019-2027	NO		RPL	years. Replacement will be needed beyond 2018.	27
	27776C	2	1394	I 394R WB OVER I 394 WB ON RAMP	HENNEPIN	1987	N	N	Y	95.7 (96.7)		2028-2034	NO			FC bridge built in 1989. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.	27
							N	N	Υ	95.8							
										(96.8)						FC bridge built in 1987. All NBIS condition ratings are good. Normal maintenance planned for the program years. Paint	
1	27776F	2	1394	394R EB RAMP OVER I 94 EB (ST. PAUL)	HENNEPIN	1987						2028-2034	NO			and overlay will be needed beyond 2018. See endnote 1.	27

Note 1: Newer bridges were designed and fabricated with improved details for resistance to fatigue. Steel specifications in the mid-1970's required steel "toughness" properties that provide resistance to fatigue. A Fracture Control Plan published in 1978 by AASHTO was also utilized to fabricate bridges using improved welding techniques for assembly.