

# **Trunk Highway Bridge Improvement Program Chapter 152**

January 2015



#### Prepared by

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#### Legislative Request

This report is issued to comply with Minnesota Statute, section 165.14, subdivision 6.

#### 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. Bridges that are not originally included in the program and additional bridges identified for contract after the trunk highway bridge improvement program concludes on June 30, 2018, must be prioritized according to subdivision 7.
- (d) All bridge projects funded under this section in fiscal year 2012 or later must include bicycle and pedestrian accommodations if both sides of the bridge are located in a city or the bridge links a pedestrian way, shared-use path, trail, or scenic bikeway.

Bicycle and pedestrian accommodations would not be required if:

- (1) a comprehensive assessment demonstrates that there is an absence of need for bicycle and pedestrian accommodations for the life of the bridge; or
- (2) there is a reasonable alternative bicycle and pedestrian crossing within one-quarter mile of the bridge project.

All bicycle and pedestrian accommodations should enable a connection to any existing bicycle and pedestrian infrastructure in close proximity to the bridge. All pedestrian facilities must meet or exceed federal accessibility requirements as outlined in Title II of the Americans with Disabilities Act, codified in United States Code, title 42, chapter 126, subchapter II, and Section 504 of the Rehabilitation Act of 1973, codified in United States Code, title 29, section 794.

(e) 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.

#### 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.

The cost of preparing this report is \$16,000.

#### Summary

#### Purpose and Scope of the Report

The Trunk Highway Bridge Improvement Program Report, the fifth since 2009, is submitted in accordance with the requirements of Minn. Stat. 165.14. The information in this report is current as of November 2014.

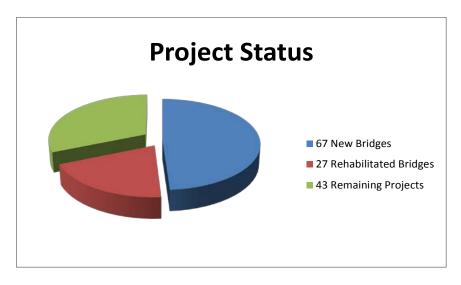
All of the bridge projects in this report are part of a master bridge list developed on March 1, 2008 (revised on April 23, 2008) identifying 172 bridges that met the criteria established in Laws of Minnesota 2008, Chapter 152. This program focuses on those bridges classified as either structurally deficient or fracture critical.

Of the 172 bridges identified as part of the Chapter 152 program, an estimated 120 bridges will be under contract to be replaced or rehabilitated by June 30, 2018. The remaining bridges were either under construction at the time the program was established; classified as "Tier 3" under the priority system and were not required to be funded as part of the program (although many were already programmed for work); privately owned; or deemed in good working order and only need routine maintenance until after June 30, 2018.

#### **Project Status**

The status of the 172 bridges is as follows:

- 94 bridges are substantially complete, 67 are new bridges and 27 are bridge rehabilitation projects
- 8 bridges will be complete by the end of the 2015 construction season and another 14 will be completed in 2016
- 38 bridges are scheduled to be under contract for repair or replacement in 2016-2018
- 32 bridges only need routine maintenance during the Chapter 152 program years
- 2 bridges are privately owned
- 1 bridge is closed to traffic and therefore will not receive any work under Chapter 152



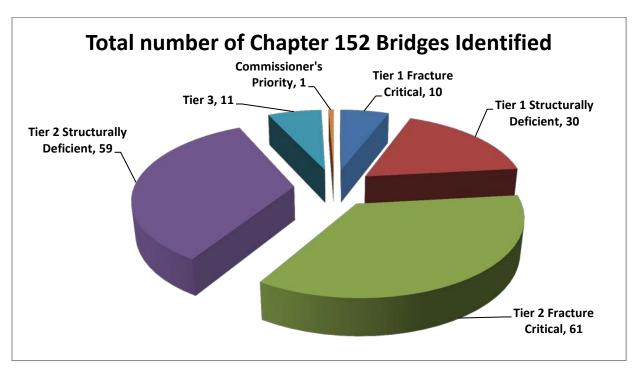
NOTE: The Project Status includes only the 137 bridges identified under the Chapter 152 program that need work

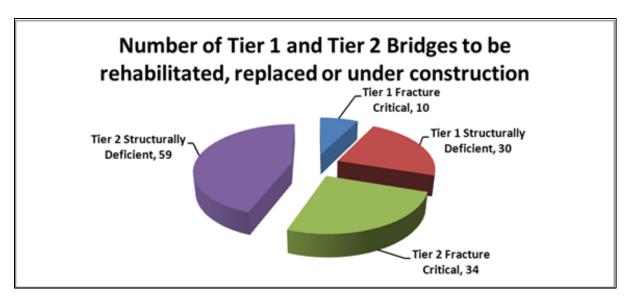
#### **Tier System**

The legislation created a tier system to prioritize bridges based on each bridge's overall condition and usability. All bridges inventoried are classified as a Tier 1, Tier 2 or Tier 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 beginning bridge projects in a lower tier. This can occur at any stage in the project development process—during bid solicitation, contract negotiations, construction or at completion.

- Tier 1: Any bridge with 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: 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: 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 Transportation System Management met with all MnDOT districts at the time the program was established to review their Tier 1 and Tier 2 bridge projects. Together they identified the improvements needed for each bridge (rehabilitation, redeck, minor maintenance or replacement). The outcome of those meetings provided information to the districts in order to determine project scopes, cost estimates and preliminary construction dates associated with the identified bridge improvements. The project scopes and cost estimates for the bridge projects were completed in December 2008 and are updated annually. There are several major bridges included in this program where ownership is shared with Canada, Wisconsin or North Dakota. For the purposes of this report, only Minnesota's cost share of those bridges is reported.





NOTE: Tier 3 bridges are not represented in above diagram

### Chapter 152 Bridge Inventory

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

- Bridge number
- County
- MnDOT district
- Route number
- Facility carried and feature crossed
- National Bridge Inspection Standards condition ratings (deck, superstructure, substructure)
- Bridge classification(s): 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 history of bridge maintenance and inspection report findings, engineering judgments about the safety or condition of the bridge, or any other factors specifically identified by the commissioner

Each project within the four-year STIP has a total project cost estimate associated with it. Projects planned for years beyond the STIP time frame have a total project cost estimate range identified.

In accordance with Minn. Stat. 165.14, MnDOT will accomplish the following by June 30, 2018:

- Tier 1: All 10 fracture critical bridges will be replaced, renovated or are already under construction.
- Tier 1: All 30 of the structurally deficient bridges that are not fracture critical will be replaced, renovated or are under construction.
- Tier 2: As of Nov. 30, 2013, of the 61 fracture critical bridges it is estimated that 13 will be replaced. Of the remaining fracture critical bridges, 24 will be repaired or renovated, two are currently under study to determine if they will be replaced or rehabilitated, two are privately owned, and one does not carry trunk highway traffic. 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, all will be replaced or repaired 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.
- Commissioner's Priority: One load-posted bridge (neither structurally deficient nor fracture critical) was added to this program as a commissioner's priority.
- Additional bridges that become structurally deficient during the next decade will be programmed for replacement or repair, as funding allows.

Assumptions which may affect the Chapter 152 Bridge Program include:

- The current appropriation schedule for bond funds during the 10-year program does not match the current schedule for bridge improvements, which creates a negative balance in the program. Redistribution of bond appropriations may be needed to match the current bridge schedule and estimates.
- The current projections of inflation rates were used to calculate cost estimates to the year of construction or the mid-year of construction for multi-year, large-scale bridges. (Large-scale bridges are defined as projects that have a construction cost exceeding 50 percent of the annual Area Transportation Partnership's federal funding target.) There were 13 large-scale bridges identified in the inventory. The inventory spreadsheet for these bridges is Appendix A. TH 99 over the Minnesota River in St. Peter and Sorlie Bridge, U.S. 2B over Red River in East Grand Forks will be rehabilitated in-place and is no longer considered a large-scale bridge project.
- Schedule changes for any individual large-scale bridge may require a shift in the overall bridge project schedule for one or more of the other large-scale 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.
- One-time, near-term funding allocations may affect the completion schedule of the Chapter 152 Bridge Improvement Program.

As better information is gathered regarding these assumptions, any negative change could adversely impact the bridge program and potentially delay MnDOT's ability to deliver this entire program by June 30, 2018.

### Scheduling

Scheduling of projects will occur according to the following priorities:

- 1. Bridge projects currently programmed in the 2015-18 STIP will be delivered as planned.
- 2. Large-scale bridges will be scheduled based on bond availability, project readiness, remaining bridge life, and condition.
- 3. Other bridge projects will be scheduled prior to the end of the program as follows:
  - a. Remaining bridges will be replaced in order of tiers.
  - b. Within the tiers, projects generally were ranked in the following priority:
    - i. Load posted
    - ii. History of maintenance issues or inspection findings
    - iii. Condition Code Four or less for superstructure
    - iv. Condition Code Four or less for substructure
    - v. Sufficiency rating less than 50
    - vi. Permit restricted
    - vii. Sufficiency rating less than 80
    - viii. Functional class (principal arterials before others)

#### Requirements and Recommendations for Changes

Per Minn. Stat. 165.14, subd. 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 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 (such 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.

#### **Newer Fracture Critical Bridges**

Only certain fracture critical bridges were 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 the American Association of State Highway and Transportation Officials 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 service if the reasons are documented.

#### **Historic Fracture Critical Bridges**

MnDOT has coordinated with the Federal Highway Administration to implement this program. Under Section 106 of the National Historic Preservation Act, older fracture critical bridges eligible for the National Register of Historic Places required an in-depth study of the feasibility of rehabilitating these bridges prior to moving forward with a replacement project. As a part of these rehabilitation feasibility studies, MnDOT examined the potential for retrofitting fracture critical structures in order to provide load path re-

dundancy. This is feasible for some types of fracture critical bridges. In other cases, such as truss bridges, the retrofit options examined did not provide designs that yield the 75-year service life expected from such a large investment. Additionally, some of the options examined would have created visual impacts that render the structure ineligible for the National Register. As with the newer fracture critical bridges described above, historic fracture critical bridges are also being considered as candidates for continued service.

#### **Tier System**

Prioritization parameters under Minn. Stat. 165.14, subd. 4 require the commissioner to classify all bridges in the program into Tier 1, Tier 2 or Tier 3, with Tier 1 as the highest priority tier. Before beginning a bridge project in Tiers 2 and 3, all bridge projects within Tier 1 must be funded in the approved STIP. The Tier 1 projects must be in some stage of the project development process, including bid solicitation, contract negotiation, under construction, or completed. The commissioner may identify projects within the lower tiers with special circumstances and decide to prioritize those projects ahead of Tier 1 bridges. The prioritizing criteria laid out in the legislation used much of the same criteria the commissioner used to prioritize bridges before the legislation was passed, except that the commissioner had not previously categorized bridges in tiers. Since the Chapter 152 program was implemented, MnDOT found the tier system workable and has no changes to suggest regarding its adequacy and efficacy.

#### **Other Factors Considered**

Due to MnDOT's large program and the complexities in 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. However, all Tier 1 bridge projects are currently in some stage of project development.

## Bicycle and Pedestrian Accommodations

During the 2010 session, legislation passed that requires all bridge projects funded under the Chapter 152 program in fiscal year 2012 or later to include bicycle and pedestrian accommodations. The requirement applies if both sides of the bridge are located within a municipality or if the bridge links a pedestrian way, shared-use path, trail or scenic bikeway. Bicycle and pedestrian accommodations are not required if a comprehensive assessment demonstrates there is no need or there is a reasonable alternative within one-quarter mile of the bridge project. Bicycle and pedestrian accommodations are being implemented in accordance with the requirements of the legislation.

## Prioritization of Subsequent Trunk Highway Bridge Projects

#### **Assessing Risk**

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 Improvement Program. The intent of introducing risk assessments is to provide a comprehensive look at factors that affect the likelihood of a service interruption and impacts of an interruption to the traveling public. The 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.

MnDOT developed a process called Bridge Replacement and Improvement Management to incorporate the risk assessment tool. BRIM was developed and calibrated for use in the planning of bridge improvements and replacements. The BRIM process consists of three steps: identifying improvement needs, ranking each bridge based on the bridge planning index and conducting an expert review.

Improvement needs are developed based on bridge inspection and inventory data for each individual bridge using the expected deterioration of each bridge. The result is a draft list of bridge needs, including cost and schedule.

The next step incorporates the bridge planning index, or BPI, which applies the principles of risk assessment to the planning process and includes the factors mentioned previously. The BPI rates each individual bridge from 0 (highest priority) to 100 (lowest priority).

The last step in the BRIM process is the expert review with the MnDOT district offices. This step provides an opportunity for local experts with a more intimate knowledge of their bridges to ensure projects are programmed appropriately based on the local transportation needs, scope and schedule.

The expert review process is further refined by meeting with the MnDOT districts and making final changes based on the feedback collected. The updated bridge improvement needs will be used as a basis for planning investments in state trunk highway bridges.

## **Statewide Performance Program and District Risk Management Program**

For many years, MnDOT allocated a large portion of revenue to its eight districts to progress towards performance targets and key objectives, and to address district-specific risks. With the passage of MAP-21, federal policy and performance requirements direct the majority of federal funds to the National Highway System. Continuing to allocate most revenue to the eight districts might not meet NHS targets in an optimal way. Further, MnDOT must carefully manage the risk that the condition of state highways might negatively affect Minnesota's bond rating. MnDOT developed the Statewide Performance Program and District Risk Management Program to respond to these changes.

Project selection in both programs, SPP and DRMP, will continue to require coordination with local and regional units of government and the eight Area Transportation Partnerships, as well as outreach and information sharing with other stakeholders and the general public.

The SPP focus will be on federal performance requirements identified in MAP-21, which require MnDOT to make progress towards pavement, bridge, safety, and congestion performance targets. A failure to do so may result in the loss of some federal funding flexibility. MnDOT's functional and district offices will work collaboratively to select appropriate projects. These projects will focus on existing pavement conditions; bridges, road-side infrastructure rehabilitation and replacement, and it will include some lower cost, high-benefit projects to improve safety and mobility.

The DRMP will focus on non-NHS highways and address unique conditions at the district level. Revenue will be allocated to the districts to identify and prioritize projects in this program; however, project selections will be evaluated across districts in a collaborative process to ensure each district is balancing district-level risks and making progress towards statewide goals. Projects will focus on pavement, bridge, roadside infrastructure, safety, and mobility.

## Appendix A: Status of Large-Scale Bridge Projects

Name/Location	County	District	Bridge No.	Status
DeSoto, in St. Cloud	Stearns	3	6748	Replacement com-
TH23 over Mississippi River &				plete
Riverside Dr.	1.00			
Robbin-Drayton	Kittson	2	6690	Replacement com-
TH11 over Red River of the				plete
North Hastings	Dakota	Metro	5895	Ponlocoment com
US61 over the Mississippi River,	Dakola	IVIELIO	3693	Replacement com- plete
RR, Streets				picto
Lafayette	Ramsey	Metro	9800	Replacement under-
US52 over the Mississippi River,	l tainesy	l l l l l l l l l l l l l l l l l l l		way
RR & Streets				,
Dresbach	Winona	6	9320	Replacement under-
I-90 over the Mississippi River				way
St. Peter	Le Sueur	7	4930	Rehabilitation planned
TH99 over the Minnesota River*				for FY 2014*
Cayuga	Ramsey	Metro	6515	Replacement under-
I-35 over Cayuga Street & BNSF				way
RR	100		10-1	
St. Croix River Crossing in	Washington	Metro	4654	Replacement under-
Stillwater				way
TH36 over the St. Croix River Winona	Winona	6	5900	Rehabilitate old
TH43 over the Mississippi River,	VVIIIONA	0	3900	bridge; new bridge
RR, Streets				construction also
Tax, Subside				underway
Sorlie Bridge, E Grand Forks	Polk	2	4700	Rehabilitation planned
US 2B over the Red River of the				for FY 2018*
North*				
TH72 over the Rainy River in	Lake of the	2	9412	Rehabilitation or re-
Baudette	Woods			placement planned for
				FY 2018
Red Wing	Goodhue	6	9040	Replacement planned
US63 over Mississippi River &				for FY 2018
CP Rail		_	0000	
New Ulm	Brown	7	9200	Replacement planned
TH14 over the Minnesota River				for FY 2018

<sup>\*</sup> TH 99 over the Minnesota River in St. Peter and Sorlie Bridge, US 2B over Red River in E Grand Forks will be rehabilitated inplace and are no longer considered a large-scale bridge project.

## Appendix B: Abbreviations and Definitions

Abbreviation	Definition
ADT	Average daily traffic
Bridge length	Length of bridge from abutment to abutment
Bridge number	Unique 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 Summary or Minn. Stat. 165.14, subd. 4
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	MnDOT construction district; there are eight MnDOT districts
Facility/feature crossed	Facility carried by the bridge/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

Abbreviation	Definition
Functionally obsolete continued	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 of a bridge as functionally obsolete also indicates 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.
Load posting	The term "load posting" means the placement of regulatory signs at a bridge indicating the safe load carrying capacity 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
Substructure	Structural parts of the bridge that support the

Abbreviation	Definition
Substructure continued	superstructure and distributes all traffic and bridge loads into the ground. Substructures are typically referred to as piers or abutments.
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 take on water 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.
SP#	State project number
SUB	Substructure rating
Substantially complete	Bridge is open to traffic
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

Abbreviation	Definition
Superstructure	"Structural parts of the bridge that provides the horizontal span.", for example the portion that directly supports the traffic and spans from one support to another support. Typical superstructure types include beams/girders, arches, trusses, suspension bridge, etc
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)
Value in ( )	Current value, updated from the 2008 value
Year built	Year the bridge was originally constructed
Year of substantial completion	Year the bridge is open to traffic after construction of the planned Chapter 152 work

## Appendix C: Fracture Critical and Structurally Deficient Bridges

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

			1	1	1	Fracture	Critica	al and Structura	ily Deficie	nt Irunk	Highway	Bridges as	of March				1		, ,		_			
									<u> </u>					(NB	IS RATI	NG)				ado)				
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA			STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
1	6496	2	Hwy. 1	6901-27	HWY. 1 OVER FLINT CREEK	ST LOUIS	1952	\$976,370	2009	YES	2009	RPL	500	4	5	6	113		STEEL BEAM SPAN	HS 28.3	Y (N)	N	N	76.6
	Notes: Struc	ture replace	ed with new	Bridge 69043	LIMIN O OVER OT	1					1	1			1				IOTEEL I		1			
1	69100	2	Hwy. 2	6937.69100D	HWY. 2 OVER ST LOUIS RIVER, HWY. 35. & RR (BONG)	ST LOUIS	1982	\$8,300,000	2014	NO	2014	OL & PT	19,400	5	7	7	8,320	687,25 7	STEEL TIED ARCH	HS 40.6	N	N	Υ	80.6 (79.5) (79.2)
1	Notes: Borde	er bridge wi	Hwy. 2		HWY. 2 WB OFF RAMP OVER HWY. 35 RAMP, IRR, LAKE	ST LOUIS	1983	\$2,640,000	2018	NO	2018	RDK	4,500	7	7	7	1,426	36,796	CSTL BEAM SPAN	HS 45.2	N	N	Υ	97.7
	Notes: Cost	included wi	th Bridge 69	100 Project.		<u> </u>	<u>l</u>				<u>I</u>	ļ	<u> </u>		<u> </u>				ISPAIN I		<u> </u>			
1	69102	2	Hwy. 2	6937-101	HWY. 2 EB ON RAMP OVER HWY. 35, RR, LAKE	ST LOUIS	1983	\$2,640,000	2018	NO	2018	RDK	4,500	7	6	8 (7)	2,642	85,872	CSTL BEAM SPAN	HS 37.1	N	N	Υ	97.7
	Notes: Costs	included w	rith Bridge 6			<del></del>			<del></del> _		<del></del>	<del></del>								ПС				<u> </u>
1	5470	2	Hwy. 23		HWY. 23 OVER BNSF RR	CARLTON	1936	\$5,000,000	2015	NO	2015	RPL	730 (710)	4	4	5	201	6,757	STEEL BEAM SPAN	HS 24.9 (HS	Y	N	N	54.2 (45.0) (45.3)
	Notes:		1			<u> </u>	Γ					1							STEEL			I		
1	5554	3	Hwy. 23	0901-75	HWY. 23 OVER N FORK NEMADJI RIVER	CARLTON		\$1,836,699	2015	NO	2015	RPL	550 (610)	4	7 (6)	6 (5)	107	3,620	BEAM SPAN	HS 27.0	Y	N	N	83.3 (83.2)
	Notes: Her 3	Briage - co	ost not inclu I	ded in Chapter	r 152 Program. To be repla T	acea with new	/ Bridge C	J9018.											CSTL	1.10				
1	9782	2	Hwy. 23	5880-179 Bridge 58819	HWY. 23 OVER I 35	PINE	1959	\$1,990,409	2010	YES	2010	RPL	4,550	4	5	7	206		BEAM SPAN	HS 43.5	Y (N)	N	N	67.0
	Notes. Struc	ture replace	with new	Dridge 30019	I 35 SB OVER DM&IR								21,500	6	6	6			CSTL	HS				82.2
1	69831	2 ture replace	I 35	6982-290 Bridge 69865	RY & BNSF RR	ST LOUIS	1967	\$88,582,087	2011	YES	2011	RPL	(24,000)	6 (5)	6 (5)	6 (5)	1,105	39,431	DECK GIRD	30.4	N	N	Υ	(81.6) (69.1)
1	69832	2	I 35	0000 000	I 35 NB OVER DM&IR RY & BNSF RR	ST LOUIS	1967	see note	2010	YES	2010	RPL	21,500 (24,000)	6	5	6 (5)	1,171	41,787	CSTL DECK GIRD	HS 31.4	N	N	Υ	71.1 (70.9)
	Notes: Cost	included wi	th Bridge 69	831 project. S	tructure replaced with new	Bridge 6986	6						,						•					
1	69847	3	l 35	6982-285	I 35 SB OVER HWY. 2 EB	ST LOUIS		\$6,587,553	2009	YES	2009	RPL	14,500	4	6	6	134	5,367	CSTL BEAM SPAN	HS 37.0	Y (N)	N	N	91.8
_	Notes: Tier 3	Bridge - co	ost not inclu	ded in Chapter	r 152 Program. Structure r	eplaced with I	new Brido	ge 69861			1	I			1		1 1		CSTL		ı			
1	69848	3	135	6982-285	I 35 NB OVER HWY. 2 EB	ST LOUIS		see note	2009	YES	2009	RPL	14,500	4	7	6	132	5,310	BEAM SPAN	HS 37.8	Y (N)	N	N	91.8
	Notes: Her 3	Briage - co	osi not inclu 	ueu in Chapter	152 Program. Part of Brid	uge 69847 pro	oject.⊔ I	1				I							CSTL					00 :
1	69880 Notes: Part of	2 of Bridge 69	l 35 831 project	6982-290 Structure repl	I 35 OVER RECYCLE WAY & ONETA ST. laced with new Bridge 698	ST LOUIS	1968	see note	2010	YES	2011	RPL	44,000	4	5	7	1,163	95,840	BEAM SPAN	HS 44.0	Y (N)	N	Υ	86.4 (74.8)
				. Chaolaro ropi	HWY. 39; RR OVER ST							None -	1,900						STEEL	HS				69.6
1	6544 Notes: RR ov	2 wned. Reha	Hwy. 39 ab in 2009		LOUIS RIVER	ST LOUIS	1916					Privately Owned	(2,150)	8	6	6	1,889	47,218	MOVE ABLE	33.0	N	Y	Υ	(69.3)
1	69004	2	Hwy. 53	6918-80	HWY. 135 OVER HWY. 53 NB, SB ON RAMP	ST LOUIS	1961	\$90,000,000	2015	NO	2016	RPL	8,300	4	6	6	140	6,905	PREST R BEAM	HS 39.0 (HS	Y	N	N	62.9 (90.3) (88.2)
-	Notes: Bridge	e 69004 wil	l be abando	ned/removed i	n 2015+/- as part of the U	S53 realignm	ent proje	ect.			•		,		1						1			
1	69029	2	Hwy. 53		HWY. 33 NB OVER HWY. 53 SB	ST LOUIS	1966	\$2,537,858	2012	YES	2012	RPL	1,450	4	5	6	126	3,228	CSTL BEAM SPAN	HS 42.1	Y (N)	N	N	79.9
	Notes: Struc	ture replace	ed with new	Bridge 69065	1	I	Г				ı	None -					<del>                                     </del>		ISTEEL I	HS	<u> </u>	ı		62.8
1	90249	2	Hwy. 53		HWY. 53 SB OVER RAINY RIVER	KOOCHIC HING	1912					Privately Owned	1,575 (3724)	6	5	5	941	31,560		50.0 (HS	N (Y)	Y (N)	Υ	(62.6) (36.9)
	Notes: Privat	tely owned.	1	1		1/002:::					<u> </u>	l							IRON			I		
1	5721	1	Hwy. 65		HWY. 65 OVER LITTLE FORK RIVER	KOOCHIC HING	1877	\$829,913	2009	YES	2009	RPL	6,804	5	4	5	378		HIGH TRUSS	HS 16.2	Y (N)	N	Υ	20.2
	INUICS. SIIUC	ture replace	a will HeW	Diluge 30023																				

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

_	1	1	1	1		Fracture	Critic	al and Structura	ally Delicie	nt Irunk	піgnway	Bridges as	of March					,		-		,		<del>,                                    </del>
									ס					(NBI	S RATI	NG)				(OPE				
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA	MAIN SPAN TYPE	LO RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
1	6736	2	Hwy. 65	3110-12	HWY. 65 OVER SWAN RIVER	ITASCA	1950	\$1,518,662	2009	YES	2009	RPL	880	3	5	5	128	4,416	STEEL BEAM SPAN	HS 29.7	Y (N)	N	N	77.7
	Notes: Struc	cture replace	ed with new	Bridge 31002				_			•	•							OTEE	1				_
1	6767	2	Hwy. 65	3609-34	HWY. 65 OVER HAY CREEK	KOOCHIC HING	1951	\$1,047,298	2013	YES	2013	RPL	90 (115)	6	6	4	27	810	STEEL BEAM SPAN	HS 25.1	Y (N)	N	N	64.9 (63.9)
	Notes: Struc	cture replace	ed with new	Culvert 36X11				Т			I	ı	1		1		Ī		CSTL	1				1
1	5718	2		5802-5718A	HWY. 123 OVER KETTLE RIVER & ST	PINE	1948	\$2,426,242	2013	YES	2013	OL & PT	2,050	6 (8)	5 (6)	7 (6)	403	15,951	DECK TRUSS	HS 20.4	N	N	Y	78.6 (62.3)
	Notes: Since	e truss nas p	репогтеа w 	/eii, briage wiii	continue to function safely	with repair pi	oject ar	na continuea mainter	nance. Bridg	e 5718 IS F	115 TORIC an	on the Pres		ement	liSt.⊔				CSTL	0				50.4
1	69003 Notes: Rem	2 loved not re	Hwy. 169	6934-113	HWY. 169 OVER BN RR (ABAN) & TRAIL	ST LOUIS	1961	\$3,403,817	2009	YES	2009	See note	14,400 (15,100)	6	4	6	198	13,312	BEAM SPAN	HS 31.2	Υ	N	N	59.1 (58.8)
					NB MICHIGAN ST							RPR &	4,200		7	6			CSTL	HS				77.6
1	69839	2	Hwy. 194	6933-	OVER HWY. 194 SB	ST LOUIS	1969	2-2.5 million	2017	NO	2018	Retrofit	(5,500)	5	(6) (5)	(7)	318	10,700	BEAM SPAN	46.8	N	Υ	Y	(76.4) (65.3)
	Notes: Curre	ently FC due	to pier cap	configuration,	which will be modified to b	e redundant	as part	of rehabilitation proje	ect.	I.		!												100.07
1	69840	2	Hwy. 194	6933-	HWY. 194 NB OVER SUPERIOR ST	ST LOUIS			2017	NO	2018	RPR & Retrofit	9,250	7 (6)	6	8 (7) (6)	300	10,093	CSTL BEAM SPAN	HS 38.1	N	Y (N)	Υ	78.1 (80.1)
	Notes: Curre	ently FC due	to pier cap	configuration,	which will be modified to b	e redundant	as part (	of rehabilitation proje	ect. 🗆		<u> </u>	1	1		1					ППС				51.7
1	09001	2	Hwy. 210	0916-11	HWY. 210 OVER ST LOUIS RIVER	CARLTON	1961	\$3,265,179	2012	YES	2012	RPR & Retrofit	1,350 (1,300)	5 (4) (8)	5 (6)	6 (5) (6)	223	7,850	STEEL HIGH TRUSS	HS 23.0 (HS 13.0)	N (Y) (N)	N	Y	(48.7) (39.6) (56.9)
	Notes: Since	e truss has p	performed w	vell, bridge will	continue to function safely	with complet	ed proje	ect and continued ma	aintenance.							7	1		ССТІ					
1	9030	2	l 535	6981-9030E	R; RR,STREET (Blatnik)	ST LOUIS		\$11,311,829	2012	YES	2013	Deck Seal & Paint	28,000	8 (6)	6 (5) (4)	(6) (5)	7,980	594,18 7	HIGH TRUSS	HS 21.6	N (Y)	Y (N)	Υ	72.3 (53.8) (42.8)
	Notes: Bord	ler bridge wit	th Wisconsi I	n. Good condi I	ition, rehabilitated in 1993. II 535 SB ON RAMP	With recent	paint, aı	nd hanger cable repa I	airs bridge wil T	I continue t	o function sa	ifely with conti T	inued mainten I	ance.			Ī		CSTL	l HS I		Υ		1
1	69824	2	I 535		OVER I 535 NB & I 35 NB	ST LOUIS			2019-2027	NO		RPL	5,625	6 (7)	(6)	6	1,430	36,754		25.9 (HS	N	(N) (Y)	Υ	86.6 (82.0)
	Notes: FC b	oriage, aistric	t plans to p I	rogram a serie I	s of bridges within the "Car II 535 NB OFF RAMP	n of vvorms"	ntercna	nge, this bridge is in	iciuded. Piani	ned replace	ement is beyo	ona 2021.Rep <b>1</b>	air work done	with Bri	age 6983	1 project.			CSTL	HS				84.4
1	69825	2	l 535	rogram a garia	OVER BNSF RAILROAD as of bridges within the "Car	ST LOUIS		ngo this bridge is in	2019-2027	NO	amont is how	RPL	5,625	(6) (8)	(6)	7	877	22,534		23.7 (HS	N	N	Y	(85.4) (83.9)
	Notes. FC b	lage, distric	pians to p	logram a sene	I 535 SB OFF RAMP	1 OI VVOITIS	песпа	rige, triis bridge is iri	Tidued. Flam	печ геріасі	ement is beyo	)	Work done	WILLI DII	uge 6963	i project.			CSTL	HS	V			95.0
1	69801A	3	I 535		OVER FILL	ST LOUIS	1969		2019-2027	NO		RPL	2,200	(7)	7	8	229		BEAM SPAN	23.2 (HS 28)	(N)	N	N	85.0 (97.1)
	Notes: FC b	oridge, distric	t plans to p	rogram a serie	s of bridges within the "Car	n of Worms"	intercha	nge, this bridge is in	cluded. Plan	ned replace	ement is beyo	ond 2021.Rep	air work done	with Bri	dge 6983	1 project.			OI: AIN					
1	69801C	2	I 535		I 535 SB ON RAMP OVER RAILROAD & FILL	ST LOUIS			2019-2027	NO		RPL	3,300	7 (6) (7)	7 (6) (7)	6 (5)	666	17,108	CSTL BEAM SPAN	HS 25.7 (HL-93 0.91)	N (Y)	N	Υ	89.4 (78.4) (78.3) (36.1)
	Notes: FC b	oridge, distric	t plans to p	rogram a serie	s of bridges within the "Car	n of Worms"	intercha	nge, this bridge is in	cluded. Plan	ned replace	ement is beyo	ond 2021.Rep	air work done	with Bri	dge 6983	1 project.			ССТІ	<u></u>				
1	69801F	2	I 535		I 535 SB SEG 1 OVER I 35 & RAMP TO I 35 SB	ST LOUIS			2019-2027	NO		RPL	6,625	7	7 (6)	5 (6)	576	21,139	BEAM SPAN	22.9 (HL-93	N	N (Y)	Υ	63.9 (64.9) (75.0)
	Notes: FC b	oridge, distric T	ct plans to p	rogram a serie I	s of bridges within the "Car	n of Worms" i	intercha	nge, this bridge is in I	cluded. Plan	ned replace	ement is beyo	ond 2021.Rep	air work done	with Bri	dge 6983 T	1 project.	ī		CSTL	HS				
1	69801J	2	l 535	rogress = see	1 535 NB SEG 1 OVER I 35 NB & SB OFF RAMP	ST LOUIS		ngo this builder 'e'	2019-2027	NO	mont:- F	RPL	6,625	(6) (7)	7	6	489	12,562		25.0 (HS	N	N	Y	87.2 (79.5)
	Notes: FC b	oriage, distric	τ pians to p	rogram a serie	es of bridges within the "Car	1 OT VVORMS"	ntercha	nge, this bridge is in	ciuded. Plani	ned replace	ement is beyo	ona 2021.Rep 	air work done	with Bri	age 6983	project.	Ī		CSTL	HS		K I		88.6
1	69801K	2	l 535	rogram a saria	OVER I 35 SB	ST LOUIS		ngo this heider is in	2019-2027	NO	mont is been	RPL	3,300	6 (7)	(7)	(6) 1 proinct	597	15,343		26.7 (HL-93	N	N (Y)	Υ	(89.6) (35.1)
	inotes: FC b	niage, distric	ι pians to p	rogram a serie	s of bridges within the "Car	I OT VVORMS"	ntercha	rige, this bridge is in	ciuded. Plan	ned replace	ement is beyo	ona 2021.Kep 		with Bri	uge 6983	ı project.	Ī		CSTL	HS				88.4
1	69801N	2	l 535		CP RAIL	ST LOUIS		and their both	2019-2027			RPL	4,400 (7,750)	7	(6)	7	296	7,607	BEAM SPAN	25.0 (HS	N	N	Υ	(88.1) (88.7)
	Notes: FC b	oriage, distric	τ pians to p	rogram a serie	s of bridges within the "Car	1 OT VVORMS"	ntercha	nge, this bridge is in	ciuded. Plani	ned replace	ement is beyo	ona 2021.Rep 	air work done	with Bri	age 6983 		Ī		PRECS	HS				74 7
2	04001	2	Hwy. 1	0401-08	HWY. 1 OVER OVERFLOW CHANNEL	BELTRAMI		\$2,611,091	2015	NO	2015	RPL	55 (45)	5	4	6 (5)	217	7,566		50.0	Υ	N	N	71.7 (71.0)
	Notes: Proje	ect letting da	ite is pendin	ig as per contra	acting and right of way disc	ussions with	the Rec	ı ∟ake Tribe. To br r	epiaced with i	new Bridae	04029.													

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

	<del></del>	1	1	1	1	Fracture	Critic	al and Structura	ily Deficie	nt Irunk	Hignway	Bridges as	of March					1	<u> </u>	_		Ī		
									ם ד					(NB	IS RATI	NG)	<u> </u>			(OPE				
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA			STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
2	4561	2	Hwy. 1	0401-11	HWY. 1 OVER DITCH	BELTRAMI	1926	\$2,936,879	2009	YES	2009	RPL W/	55	5	1	1	25		STEEL   BEAM	HS	Υ	N	N	54.4
		_	,			BELTIVAIVII	1920	Ψ2,930,079	2009	123	2009	CULVERT	33	3	4	7	23		SPAN	19.0	(N)	IN	IN	34.4
	Notes: Struc	cture replace	ed with new	Culvert 04X02								1					I I	<b>1</b>	CONC	HS				
2	5581	1	Hwy. 1		HWY. 1 OVER SANDY RIVER	CLEARWA TER	1936	\$985,006	2010	YES	2010	RPL	3,000 (2,900)	4	5	5	49	1,470		28.2 (HS	Y (N)	N	N	46.1 (48.9)
	Notes: Struc	ture replace	ed with new	Bridge 15007	IHWY. 1 OVER RED		· ·				ı		I		1		1 1	1	STEEL I					
2	9100	2	Hwy. 1		RIVER OF THE NORTH	MARSHALL	1959	See Note		NO		REHAB	1,400 (1,350)	7	5	6	792	25,905	_	HS 27.1	N	N	Υ	55.6 (54.8)
	Notes: Notes	s: Border br	idge with No	orth Dakota. P	Project was let in 2014 as a	rehab. Beca	ause of h	igh bid prices projec	was not aw	arded. Dis	cussions on	next step to be	e done in ea	rly 2015.	ı		T T		1					<del></del>
2	9090	2	Hwy. 2	6018-02	HWY. 2 OVER RED RIVER & CITY ST (Kennedy)	POLK	1963	\$18 - \$20	2016	NO	2018	Redeck & Paint	21,500 (20,740)	6 (7) (5)	7 (6)	5 (4)	1,261	81,965	STEEL HIGH TRUSS	HS 26.8	N (Y)	N	Υ	73.2 (61.2) (63.4) (48.2)
	Notes: Borde	er bridge wi	th North Dal	kota. Historic	bridge. MnDOT is lead age	ncy for this b	order br	dge project. Project	s rehab with	deck repla	cement, repl	ace one pier,	railing replac	cement a	nd paintir	g. Letting	g planned	for April	2016.		•			
2	5557	2	Hwy. 11		HWY. 11 OVER RAPID RIVER	LAKE OF THE WOODS	1950	\$3,414,358	2009	YES	2010	RPL	760 (784)	5	4	6	216	8,942	CONC ARCH	HS 18.0	Υ	N	N	49.1 (48.8)
	Notes:			1	LUMY 44 OVER RED. I														COTI I			-		
2	6690	1	Hwy. 11	3501-13	HWY. 11 OVER RED RIVER OF THE NORTH (ROBBIN)	KITTSON	1954	\$16,477,611	2009	YES	2010	RPL	1,400 (1,451)	5 (4)	5 (4)	7 (6)	1,058	31740	CSTL HIGH TRUSS	HS 20.6	N (Y)	N	Υ	48.5 (32.9)
	Notes: Borde	er bridge wi	th North Dal	kota.	1						1		T		1			•	OTEEL I					
2	9412	1	Hwy. 72	3303 03	HWY. 72 OVER RAINY RIVER	WOODS	1333	\$40,000,000	2018	NO	2020	REHAB or RPL	2,100 (1,950)	5	5	5	1,285	34,053	STEEL HIGH TRUSS	HS 22.5	N	Y (N)	Υ	40.3 (48.8)
	Notes: Notes	s: Border br	idge with Or	ntario, Canada T	. Historic bridge. MnDOT I	_ead. Prelimi	inary Des	sign began Decembe	r 2014.		ı	RPL	Ι		1		1	-	CONC					
2	6730	1	Hwy. 75		HWY. 75 OVER DITCH	NORMAN	1949	\$1,424,455	2010	YES	2010	W/CULVER T	1,050	4	4	7	22	941	SLAB SPAN	HS 23.2	Y (N)	N	N	40.4
	Notes: Repla	aced with C	ulvert 54X06	6 I	1						1	I RPL			1		1 1		CONC					
2	6731	1	Hwy. 75	5409-26	HWY. 75 OVER DITCH	NORMAN	1949	see note	2010	YES	2010	W/CULVER T	1,050	4	4	6	22	941	SLAB SPAN	HS 23.5	Y (N)	N	N	40.4
	Notes: Repla	aced with C	ulvert 57X07		Br 6730 project.		· ·				1		I		1		1 1	1	CSTL					
2	6734	3	Hwy .75	5409-28	HWY. 75 OVER MARSH RIVER	NORMAN		\$1,600,000	2010	YES	2010	RPL	1,050	4	6	6	225	7,695		HS 25.6	Y (N)	N	N	83.3 (82.1)
	Notes: Tier 3	3 Bridge - co T	ost not inclu	ded in Chapter	r 152 Program. Structure re	placed with i	new Brid I	ge 54010							1		ı ı	1	CSTL	HS				
2	35007	2	Hwy. 171	NA	HWY. 171 OVER RED RIVER OF THE NORTH	KITTSON	1982	\$903,972	2009	YES	2009	RPR	800 (701)	6	7	4 (8)	2,080	115,02	BEAM SPAN	34.0 (HS	Y (N)	N	N	68.3 (96.7)
	Notes: Borde	er bridge wi	th North Dal	kota.			<u> </u>				<u> </u>		<u> </u>		1		<del>-</del>		STEELI					
2	6522	2	Hwy. 200		HWY. 200 FRNT RD OVER MARSH RIVER	NORMAN	1924	\$344,334	2014	YES	2014	RPL	4	6	5	6 (5)	41	826	LOW TRUSS	HS 20.7	N	N	Υ	70.6
	Notes: Repla	aced with sl	ab span BR I		HWY. 317 OVER RED						Г	<u> </u>	Ι		I		<del>                                     </del>	1	STEEL	1	I	1		52.7
2	5872	2	Hwy. 317	4514-03	RIVER OF THE NORTH (Grafton)			\$1,335,262	2013	YES	2013	Repair & PNT	320 (285)	7	5	7 (5)	412	10,712		HS 20.7	N	N	Υ	(52.9) (51.9)
	Notes: Borde	er bridge wi T	th North Dal I	kota. Overlay	in 2005; paint and repairs v [HWY. 2B (BUSINESS)	were needed	to maint	ain condition, which	should be ac	lequate for	the next 20 y	years with low	ADT.				<u> </u>	Ī	STEEL		I	I		50.6
2	4700	2	Hwy. 2B	6015-07	OVER RED RIVER (Sorlie)	POLK	1929	\$4,500,000	2015	NO	2016	REHAB	12,700	6	5	6	603	24,887		HS 23.2	N	N (Y)	Υ	(48.4) (50.4)
	Notes: Borde	er bridge wi <b>I</b>	th North Dal I	kota. Project is T	s a rehab consisitng of pair	nting and min	or repair	s. North Dakota DO	is lead age	ncy for this	border bridg	je project.					<u> </u>	I	CONC			ı		
3	3622	1	Hwy. 12		HWY. 12 OVER S FK CROW RIVER	WRIGHT	1922	\$28,342,274	2008	YES	2008	RPL	15,500	4	4	4	178	6,568		HS 28.2	Y (N)	N	N	43.4
	Notes: SP 8	602-40 (MA T	IN PROJ.) \$ T	\$16,435,565; P T	PLUS R/W \$11,906,709. St 	ructure repla	ced with	new Bridge 86012				<u> </u>					<u> </u>		CSTL	-		ı		
3	6748	1	Hwy. 23		& RIVERSIDE DR (DESOTO)	STEARNS		\$21,737,384	2008	YES	2009	RPL	31,000	7	4	5		62,710	DECK TRUSS		Y (N)	N	Υ	66.4
	Notes: SP 0	503-78 (MA <b>T</b>	.IN PROJ.) \$ T		LUS SP 0503-73014A (BRI	IDGE STEEL	_) \$7,136 	5,574; SP 0503-79 (H	OUSING RE	-MOVAL C	ONTRACT)   	\$23,332; SP 0 T	)503-81 (LE <i>)</i> I	ad Pain <sup>-</sup>	TREMO\ T	/AL) \$296	6,000; R/\ 		211. Struc STEEL I		laced wit	h new Br	idge 730	)14
3	9086	2	Hwy. 23	7306-93	HWY. 23 OVER 10TH AVE	STEARNS		\$14,748,529	2009	YES	2009	RPL	29,000	4	4	4	189	15,015		HS 54.9	Y (N)	N	N	55.0
	Notes: SP 7	306-93 (MA	IN PROJ.)	\$14,032,579 PI	LUS SP 7306-93A (SIGNA	L SYS.) \$272	2,418; R	W \$443,532. Structu	re replaced	with new B	ridge 73011													

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

-				1	T	Fracture	Critic	al and Structur	ally Deficie	nt Trunk	k Highway	Bridges as	of March					,						<del></del>
									_ ₽				<u> </u>	(NB	S RATI	NG)				(OPE				
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA	MAIN SPAN TYPE	LOAD PERATING) RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
3	5790	1	Hwy. 71	7318-36	HWY. 71 OVER N FK	STEARNS	1937	\$734,302	2009	YES	2009	RPL	2,100	6	6	4	55		STEEL BEAM	HS	Y	N	N	29.7
	Notes: Rep	laced with n	·		CROW RIVER			, ,					,						SPAN	18.5	(N)			<u> </u>
3	86813	3	I 94	8680-142	I 94 WB OVER COUNTY ROAD 75 & RR	WRIGHT	1971	\$11,610,930	2009	YES	2010	RPL	25,500	4	5	7	480	21,443	CSTL BEAM SPAN	HS 32.0	Y (N)	N	N	81.3
	Notes: SP 8	3680-142 \$1 <sup>4</sup>	1,502,938 P	LUS R/W \$10	7,992; TIER 3 BRIDGE - C	OST NOT IN	CLUDE	D IN CHAPTER 15	2 PROGRAM.	Structure	replaced with	new Bridge 8	36819						CSTI					
3	86814	3	194	8680-142	I 94 EB OVER COUNTY ROAD 75 & RR	WRIGHT	1972	SEE NOTE	2009	YES	2010	RPL	25,500	4	5	6	493	22,019	CSTL BEAM SPAN	HS 33.7	Y (N)	N	N	81.7
	Notes: Cost	included W	/ Br 86813 p	oroject. Her 3 t	Bridge - cost not included i	n Chapter 15	2 Progra	am. Structure replac	ed with new E	ridge 8682	20 								CONC	110	V			
3	91049	2	Hwy. 169	0115-41	HWY. 169 OVER RIPPLE RIVER  D. Structure replaced with r	AITKIN	1964	\$1,004,562	2009	YES	2009	RPL	3,950	N	N	N	27		BOX CULV	HS 24.0	Y (N)	N	N	58.1
_					HWY. 169 OVER			0==::0==	2005	\/= a	2222	55:							CONC	HS	Y			
3	91050	2	Hwy. 169	0115-41	RIPPLE RIVER	AITKIN	1964	SEE NOTE	2009	YES	2009	RPL	3,950	N	N	N	27	0	BOX CULV	24.0	(N)	N	N	58.1
	Notes: Cost	incl w/ Br 9 <sup>-</sup>	1049 projec <sup>.</sup>	t. Structure rep	placed with new Culvert 01	X06	ı	1	<u> </u>										CONC	HS		<u> </u>		76.3
4	6456	2	Hwy. 12	0602-24	HWY. 12 OVER MINNESOTA RIVER	BIG STONE	1953	\$1,672,758	2012	YES	2012	RPL	4,300 (4200)	4	7	7	63		DECK GIRD	28.3 (HS	Y (N)	N	N	(73.0) (72.9)
	Notes. Struc	lure replace	a with new	Bridge 06002	HWY. 29 OVER				Τ				3,900						CONC	HS	V			49.3
4	3067	1 cture replace	Hwy. 29	6105-25 Bridge 61004	OUTLET CREEK	POPE	1920	\$1,073,858	2012	YES	2012	RPL	(3,344)	4	5	6	28	1,098	DECK GIRD	20.8	(N)	N	N	(49.0) (49.8)
4	6552	2	Hwy. 29	7607-29	HWY. 29 OVER DITCH	SWIFT	1948	\$8,850,000	2014	YES	2014	RPL	1,200 (1,299)	7	7	7	92		CONC SLAB	HS 20.6	Y (N)	N	N	54.1 (53.1)
	Notes: Struc	cture replace	ed with new	Bridge 76015									(1,299)						SPAN	20.6	(IN)			(52.9)
4	5186	2	Hwy. 75	8408-44	HWY. 75 OVER WHISKEY CREEK	WILKIN	1932	\$12,560,000	2015	NO	2016	RPL	1,300 (1,150)	5	5	6	42	1,429	STEEL BEAM SPAN	HS 17.9	Υ	N	N	53.3 (54.3)
-	Notes: Cost	not included	in Chapter	152 Program.		ı		1	1		1						1		CCTI			1		1 00 2
4	21805	3	I 94	2180-104	I 94 WB OVER LATOKA LAKE	DOUGLAS		\$4,500,000	2018	NO	2018	RPL	7,900 (7,750)	4 (5)	6	6	126	5,179	CSTL BEAM SPAN	HS 31.8	Y (N)	N	N	88.2 (88.4) (90.5)
	Notes: Tier :	3 Bridge - co	ost not inclu I	ded in Chapter I	r 152 Program. Structure t	o be replaced	d with ne T	ew Bridge 21829	Τ		<u> </u>								CSTL	110				70.0
4	21813	2	Hwy. 29	2102-58	HWY. 29 SB OVER I 94	DOUGLAS	1965	SEE NOTE	2015	NO	2016	RPL	10,400	4	5	5	235	10,099		HS 44.1	Υ	N	N	79.0 (78.0)
	Notes: Cost	included in	Bridge 2181	4 project	•	1		· 1	1	-	•		· · ·				<u> </u>		<del>-                                    </del>	ПС				
4	21814	2	Hwy. 29	2102-58	HWY. 29 NB OVER I 94	DOUGLAS	1965	\$22,500,000	2015	NO	2016	RPL	10,400	4	6	5	235	8,404	CSTL BEAM SPAN	HS 44.1 (HS	Υ	N	N	66.7
	Notes: Cost	includes Bri	dges 21813	8 & 21814.	1		1		1				<u> </u>							(110		I		
6	5337	1	Hwy. 3	6612-95	HWY. 3 OVER UP RR	RICE	1940	\$3,883,406	2008	YES	2008	RPL	7,300	5	4	5	296	9,956	STEEL BEAM SPAN	HS 26.5	Y (N)	N	N	30.7
	Notes: Struc	cture replace	ed with new	Bridge 66002	· ·	I	<u> </u>		<u> </u>				<del>-</del>				ī		CONC					
6	6842	1	Hwy. 3	6612-95	HWY. 3 OVER CANNON RIVER	RICE	1955	see note	2008	YES	2008	RPL	7,300	4	4	3	176		DECK GIRD	HS 35.0	Y (N)	N	N	25.9
	Notes: Cost	s included w	rith Bridge 5	ವರ Project. S	tructure replaced with new	Puage 6600	ა 	I					4.500						CONC	HS	V			55.0
6	5234	2	Hwy. 14	8501-62	HWY. 14 OVER STREAM am years. Replacement w	WINONA	1932	\$2.01 - \$2.27	2023-2028	NO		RPL	4,500 (4459)	6	6	6	46		DECK GIRD	68.6 (HS	Y (N)	N	N	(56.0) (96.6)
		nai maintena			HWY. 14 OVER								7,400						CONC	HS	٧			47.1
6	6036	1	Hwy. 14	2001+34	STREAM	DODGE	1930	\$283,000	2012	YES	2012	RPL	(7,750)	N	N	N	22	0	BOX CULV	24.0 (HS	(N)	N	N	(37.8)
	Notes: Sturc	cture replace	ed with new	Culvert 20X20	)														CSTL	110	\ <u>'</u>			
6	74820	2	Hwy. 14	7401-34	HWY. 14 EB OVER I 35	STEELE	1965	\$1,900,000	2010	YES	2011	RPL	6,050	4	5	5	202	5,191	BEAM SPAN	HS 35.7	Y (N)	N	N	74.4
	Notes: Bridg	ge replaceme	ent is small	portion of over	rall project costs. Structure	replaced with	n new B	riage /4832																

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

## 1   Fig. 12   Part	1	1	T	1	1	1	Fracture	Critic	al and Structura	Illy Deficie	nt Irunk	Highway	Bridges as	s of March				1 1							
Part				_						_ P					(NB	IS KAT	ING)	<b>↓</b> _			<b>P</b>				
Section   1   May 42   Test 44   Test 45   T	DISTRICT	BRIDGE NUMBER	152	ROUTE NUMBER	SP#	FEATURE	COUNTY	AR	PROJECT COST	5 7	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	E C		U	LENG	K ARE	<b>SPAN</b>	LOAD PERATING) RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
Note: Separate values with ready Separate valu						HWY. 42 OVER N								2.000						CONC					45.0
Part	6	5968	1	Hwy. 42	7901-43		WABASHA	1941	\$2,154,534	2012	YES	2012	RPL	(3,200)	6	4	4	96	3,168			Υ	N	N	(41.6)
Second   1		Notes: Sture	cture replace	L ed with new	Bridge 79007	IRIVER							ļ	, , ,						GIRD	(HS				(41.4)
Column   Transmitted and at one parameter large and the fact are upto the little state and state and the fact the fact and state and the fact the fact and the fact and the fact the fact and the fact	6	5900	1	Hwy. 43	8503-46	RVR, RR, STREETS	WINONA	1941	\$158,580,000	2014	NO	2019		11,900	6 (5)		6	2,289	78,724	HIGH	HS 21.6		N	Y	(23.7) (26.3)
Column   C	· · · · · · · · · · · · · · · · · · ·	Notes: Trus	s will be reh	abilitated ar	nd a new parall	el bridge will be built along	side it. Histo	oric bridg	e. The New Bridge	construction	s underwa	y though the	rehab work or	n existing brid	ge woul	d start in	2017			ATEE:					
Fig.	6						FILLMORE	1931	\$2,958,530	2012	YES	2012	RPL	540 (484)	_	(3) (4)		78	2,184	LOW	HS 20.0		N	Υ	(31.3) (45.3)
6   4448   2   my, rd   230626   STEPLAN   FILLIAGRE   1923   \$240,000   2013   YES   2013   WCULVER   7.540   N   N   N   25   0 DOX,   26,0   N   N   N   96,041		Notes: Stur	cture replace	ed with new	Bridge 23025	1	ı					<u> </u>	I RPI			I	I			CONC	HS				T 66 9 T
B	6			-		STREAM		1923	\$240,000	2013	YES	2013		2,300 (1,745)	N	N	N	23	0	BOX	24.0	Y (N)	N	N	(60.4) (59.4)
6   4590   2   Hey, 44   2396-20   STREAM   FILLMORE   19/20   \$244,000   2013   YES   2013   WCULVER   (1544)   N   N   N   2   0   80X   240   N   N   N   8/022		Notes: Bridg	ge (Cuivert)	Costs only. 3	Sturcture repia								RPL	2.100						CONC	HS	V			67.2
Notes: Bridge (Curver), costs only. Surctive replaced with new Curver) 2013 of 151 (1,844) in N N N 23 of 1500 (1,844) in N N N 1 (1,844) in N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N 1 (1,844) in N N N N N N N 1 (1,844) in N N N N N N N N N 1 (1,844) in N N N N N N N 1 (1,844) in N N N N N N N N N 1 (1,844) in N N N N N N N N N N N N N N N N N N	6	4150	2	Hwy. 44	2308-26		FILLMORE	1923	\$240,000	2013	YES	2013	W/CULVER		Ν	N	N	23	0		24.0	Y (N)	N	N	(60.2)
B		Notes: Bride	ge (Culvert)	costs only. S			2													CULV	(HS	( )			(59.2)
Notes: Structure replaced with new Bridge 2004.  8	6				·	HWY. 44 OVER		1923	\$240,000	2013	YES	2013		2,100 (1,844)	N	N	N	23		BOX	24.0	Y (N)	N	N	67.2 (60.2) (59.2)
6   1973   1   Hwy, 69   200829   PMY. S. DUER AULINE OF CONCER LAUREN OF CONCERN OF CO		Notes: Brido	ge (Culvert)	costs only.	Sturcture repla	ced with new Culvert 23X1	3					1	1			1	1	1 1		OTEE					
Fig.	6		1	-			DODGE	1937	\$1,351,101	2011	YES	2012	RPL		5	5	4 (5)	65	1,820	BEAM	31.3	Y (N)	N	N	45.8 (61.4)
6 \$505 2 htwy, 56 \$005-58 OVER NR UPPER MOWER 1940 \$106-\$1.20 2015 NO RPL \$ 7 6 4 38 858PAM 25.4 Y N N R08-3 NOTES.  Notes:  1 Hwy, 58 \$250-37   htwy, 50 OVER N FORK ZUMBKO RIVER   GOODHUE 1932 \$2,553.831 2010 YES 2010 RPL 6,700 (6,600) 4 4 5 113 4,660 \$858PAM 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-200 SPA SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-200 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-200 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-200 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-2000 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-2000 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-2000 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-2000 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-2000-2000 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-2000-2000 SPAN 15.5 (7) N N 18.4 NOTES: Structure replaced with new Bridge 2000-2000-2000-2000-2000-2000 SPAN 2000-2000-2000-2000-2000-2000-2000-200		Notes: Sture	cture replace	ed with new	Bridge 20003	IHWY, 56 FARM ENT	<u> </u>					I				<u> </u>	I			STEEL	HS				T
Street   Hay 58   2510-37   Hay 58   2510-37   Hay 50   Street   Hay 58   Street	6		2	Hwy. 56	5005-58	OVER N BR UPPER	MOWER	1940	\$1.06 - \$1.20	2015	NO		RPL	5	7	6	4	38	825	BEAM	25.4	Υ	N	N	66.3 (68.9)
Notes: Structure replaced with new Bridge 25025    Notes: Structure replaced with new Bridge 25025   Notes: Structure replaced with new Bridge 250	6		1	Hwy. 58	2510-37		GOODHUE	1932	\$2,553,831	2010	YES	2010	RPL		4	4	5	113	4,956	BEAM		Y (N)	N	N	18.4
Fig.		Notes: Struc	cture replace	ed with new	Bridge 25025	<u> </u>							1							SPAIN					
Notes: Structure replaced with new Bridge 79011   Hwy. 60   6606-34   HWY. 60 OVER CANNON RIVER   RICE   1952   \$1,797,266   2009   YES   2009   RPL   5,050   4   3   7   95   3,307   DECK   HS   (N)   N   N   N   N   N   N   N   N   N	6		1	-		STRAIGHT R.RR.STREET		1937	\$10,800,000	2009	YES	2009	REHAB	10,500	_	4 (7)	4 (7)	951				Y (N)	N	N	49.4 (77.2)
6 5397 2 Hwy. 60 7903-45 BROOK WABASHA 1935 \$2.30 - \$2.60 2014 YES 2014 RPL 630 7 6 7 6 7 6 7 1,908 THRU 19.0 N N Y 7.30 (72.0)  Notes: Structure replaced with new Bridge 79011  6 6770 1 Hwy. 60 6606-34 HWy. 60 OVER RICE 1952 \$1.797,266 2009 YES 2009 RPL 5.050 4 3 7 95 3,307 DECK 1952 (RNON RIVER RICE 1952 \$1.797,266 2009 YES 2009 RPL 5.050 4 3 7 95 3,307 DECK 1952 (RNON RIVER RICE 1952 \$1.797,266 2009 YES 2009 RPL 5.050 4 3 7 95 3,307 DECK 1952 (RNON RIVER RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 2009 YES 2009 RPL 6.300 5 4 4 115 3,965 DECK 1952 (RICE 1952 \$1.797,266 YIN N N N N N N N N N N N N N N N N N N		Notes: Histo	oric bridge. \	With major i	rehabilitation, o		d. I	<u> </u>				<u> </u>				1	I			STEEL					
Rice   1962   S1,797,266   2009   YES   2009   RPL   5,050   4   3   7   95   3,307   DECK   HS   Y   N   N   N   18.7	6	5397	2	Hwy. 60	7903-45		WABASHA	1935	\$2.30 - \$2.60	2014	YES	2014	RPL	630	7	6		67		THRU		Ν	N	Υ	73.0 (72.0)
Notes: Structure replaced with new Bridge 66004   Notes: Structure replaced with new Bridge 66004   Notes: Structure replaced with new Bridge 66004   Notes: Structure replaced with new Bridge 66005   Notes: Structure replaced with new Bridge 79014   Notes: Structure replaced with new Bridge 79014   Notes: Structure replaced with new Bridge 79014   Notes: Structure replaced with new Bridge 70014   Notes: Structure replaced with new Bridge 70		Notes: Struc	cture replace	ed with new	Bridge 79011	1								<del></del>		_ <del></del>	_ <del></del>	_ <del></del>		CONC					
6 6771 1 Hwy. 60 666-34 HWY. 60 OVER CANNON RIVER RICE 1952 \$606.302 2009 YES 2009 RPL 6,300 5 4 4 1 115 3,965 DECK GIRD 15. 1 15 3,965 DECK GIRD	6		1	-			RICE	1952	\$1,797,266	2009	YES	2009	RPL	5,050	4	3	7	95		DECK		Y (N)	N	N	18.7
Notes: Structure replaced with new Bridge 66005  6 9798 2 Hwy. 60 7903-41 HWY. 60 OVER STREAM WABASHA 1961 \$1,996,439 2011 YES 2012 RPL 630 5 4 5 94 2,948 BEAM 27.0 (N) N N N 70.1 (47.7)  Notes: Structure replaced with new Bridge 79014  6 79000 2 Hwy. 60 WER MISS R, RR, & STS  Notes: FC bridge built in 1987. All NBIS condition ratings are good. Only normal maintenance planned during program years. Paint and overlay will be needed beyond 2018. See endnote 1.  6 6 6773 1 Hwy. 61 OVER MISS CONCIDENT REEK GOODHUE 1954 \$4,989,983 2011 YES 2012 RPL 7.500 (8,800) 5 4 5 114 4,164 DECK 32.0 (N) N N N 37.6 (27.1)  Notes: Structure replaced with new Bridge 25024  6 9450 1 Hwy. 61 2513-86 HWY. 61 OVER NY N N N 36.0	6		1				RICE	1952	\$606,302	2009	YES	2009	RPL	6,300	5	4	4	115		DECK		Y (N)	N	N	37.8
6 9798 2 Hwy. 60 7903-41 HWY. 60 OVER STREAM WABASHA 1961 \$1,996,439 2011 YES 2012 RPL 630 5 4 5 94 2,948 BAAM 27.0 7 (N) N N N 70.1 (47.7)  Notes: Structure replaced with new Bridge 79014  6 79000 2 Hwy. 60 OVER MISS R, RR, & STS  Notes: FC bridge built in 1987. All NBIS condition ratings are good. Only normal maintenance planned during program years. Paint and overlay will be needed beyond 2018. See endnote 1.  6 6 773 1 Hwy. 61 2513-70 HWY. 61 OVER GILBERT CREEK GOODHUE 1954 \$4,989,983 2011 YES 2012 RPL 7,500 (8,800) 5 4 5 114 4,164 DECK 32.0 (N) N N N 37.6 (27.1)  Notes: Structure replaced with new Bridge 25024  6 9450 1 Hwy. 61 2513-86 HWY. 61 OVER NYMPHARA LANE GOODHUE 1962 \$5.48 - \$6.20 2014 YES 2014 RPL 8,000 4 4 5 (4) 100 6,350 R VD 64.0 Y N N N 36.0		Notes: Struc	cture replace	d with new	Bridge 66005	1	<u>I</u>	I		I		l .	ļ	1		<u> </u>	<u> </u>			GIKD	<u> </u>	` '			
6 79000 2 Hwy. 60 WABASHA 1987	6	9798	2	Hwy. 60	7903-41		WABASHA	1961	\$1,996,439	2011	YES	2012	RPL	630	5	4 (3)	5	94	2,948	BEAM	27.0	Y (N)	N	N	70.1 (47.7)
6 79000 2 Hwy. 60 Wash 1987 WABASHA 1987 WAB		Notes: Struc	cture replace	ed with new	Bridge 79014		<del></del>			<del></del>			IOnly Normal			I	I	_ <del></del>		STEEL					
6 6 6773 1 Hwy. 61 2513-70 HWY. 61 OVER GILBERT CREEK GOODHUE 1954 \$4,989,983 2011 YES 2012 RPL 7,500 (8,800) 5 4 5 114 4,164 CONC HS 32.0 (N) N N N 37.6 (27.1)  Notes: Structure replaced with new Bridge 25024  6 9450 1 Hwy. 61 2513-86 HWY. 61 OVER NYMPHARA LANE GOODHUE 1962 \$5.48 - \$6.20 2014 YES 2014 RPL 8,000 4 4 5 (4) 100 6,350 R VD 64.0 Y N N 36.0	6			•	NDIO : ""	R, RR, & STS						alas 202	Maintenanc e Needed		•	7	7	2,462	106,60	HIGH	HS 39.2	N	N	Y	73.5
6 6773 1 Hwy. 61 2513-70 GILBERT CREEK GOODHUE 1954 \$4,989,983 2011 YES 2012 RPL 7,500 (8,800) 5 4 5 114 4,164 DECK GIRD (HS (N) N N (27.1) Notes: Structure replaced with new Bridge 25024  8 9450 1 Hwy. 61 2513-86 HWY. 61 OVER NYMPHARA LANE GOODHUE 1962 \$5.48 - \$6.20 2014 YES 2014 RPL 8,000 4 4 5 (4) 100 6,350 R VD 64.0 Y N N 36.0		Notes: FC b	oridge built in	1987. All	NRIS condition	T	ormal maintei	nance pl	anned during progra	m years. Pa T	int and ove	riay will be n	eeded beyond		ndnote	7. 	1			CONC	HS				
6 9450 1 Hwy. 61 2513-86 HWY. 61 OVER NYMPHARA LANE GOODHUE 1962 \$5.48 - \$6.20 2014 YES 2014 RPL 8,000 4 4 5 (4) 100 6,350 R VD 64.0 Y N N 36.0	6		1				GOODHUE	1954	\$4,989,983	2011	YES	2012	RPL		5	4	5	114	4,164	DECK	32.0	Y (N)	N	N	37.6 (27.1)
6 9450 1 Hwy. 61 2513-86 HWY. 61 OVER NYMPHARA LANE GOODHUE 1962 \$5.48 - \$6.20 2014 YES 2014 RPL 8,000 4 4 5 100 6,350 R VD 64.0 Y N N 36.0		Notes: Struc	cture replace	ea with new	Briage 25024	LIMY C4 OVED														PREST	HS				$\overline{}$
Notes: Structure replaced with new Bridge 25028	6		<u> </u>			NYMPHARA LANE	GOODHUE	1962	\$5.48 - \$6.20	2014	YES	2014	RPL	8,000	4	4		100	6,350	R VD	64.0	Y	N	N	36.0

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

	•	1	1	1	-	Fracture	Critic	al and Structura	illy Deficie	nt irunk	підпwау	Bridges as	s of March						1	_		1	1	
									<b>7</b>					(NB	S RATI	NG)				(OPE				<b> </b>
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA	MAIN SPAN TYPE	LOAD PERATING) RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
6	9040	1	Hwy. 63	2515-21	HWY. 63 OVER MISS RIVER & CP RAIL (RED WING)	GOODHUE	1958	\$85M-\$100M	2017	NO		REHAB or RPL	11,500 (11,400)	6 (5)	6	5	1,631	60,829	CSTL HIGH TRUSS	HS 34.0	N	N	Y	44.8 (43.8)
	Notes:		T	T			1	1	1			·	1 1				-		DDECT		1	1	1	
6	6808	2	1 90	5080-153	8 TURTLE CRK	MOWER	1959	\$3,945,382	2009	YES	2010	RPL	7,700	5	4	5	243	10,741	PREST R BEAM	HS 33.0	Υ	N	N	65.5
	Notes: Brido	ges of Mowe	er County - C	Combined. Stru I	ucture replaced with new Br	ridge 50806		T					1						CONC					
6	8929	1	I 90	5080-150	I 90 OVER DOBBINS CREEK blaced with Culvert BR 50X	MOWER	1957	\$4,542,515	2009	YES	2010	RPL	18,800	N	N	N	31	0	BOX CULV	HS 24.0	Υ	N	N	41.3
	Notes. Blidg	ges of Mowe	County - C	Johnsmed, Kep		30									0			475.00	CSTL	110				77.0
6	9320 Notes:	2	I 90	8580-149	I 90 OVER MISSISSIPPI RIVER (DRESBACH)	WINONA	1967	\$212,800,000	2012	NO	2016	RPL	26,000	5	6 (5)	6	2,490	175,89 4	DECK GIRD	HS 33.0	N	N	Y	(66.0) (65.0)
6	85807	2	I 90	8580-157	I 90 WB OVER TWP 323	WINONA	1963	\$5,012,266	2009	YES	2009	RPL	10,600	4	4	6	119	5,045	PREST R VD SLAB	HS 44.0	Υ	N	N	63.7
	Notes: Thes	se 4, I-90 Bri	idges were l	et under one p	project (Bridges 85807 - 858	810). Structui	re replac	ced with new Bridge	85835							· · · · · · · · · · · · · · · · · · ·								
6	85808	2	I 90	8580-157	I 90 EB OVER TWP 323	WINONA	1963	\$1,862,967	2010	YES	2010	RPL	10,600	4	4 (5)	6	119	5,045	PREST R VD SLAB	HS 44.0	Υ	Ν	Ν	63.7
	Notes: Struc	cture replace	ed with new	Bridge 85836			I	<b>T</b>	T								I		DDECT					
6	85809	2	I 90		I 90 WB OVER TWP 312	WINONA	1963	\$1,680,872	2009	YES	2009	RPL	10,600	4	4	5	95	4,038	PREST R VD SLAB	HS 46.0	Υ	N	N	61.6
	Notes: Struc	cture replace	ed with new	Bridge 85837	<u> </u>		I	I				1	1 1						PREST					
6	85810	2	1 90	8580-157	I 90 EB OVER TWP 312	WINONA	1963	\$1,774,254	2010	YES	2010	RPL	10,600	4	4 (5)	5 (6)	95	4,038		HS 46.0	Υ	N	N	61.6
6	4867	CP	Hwy. 105	Bridge 85838 5007-25	HWY. 105 OVER WOODBURY CREEK	MOWER	1931	\$1,994,952	2010	YES	2010	RPL	275	5	5	5	53	1420	STEEL BEAM	HS 18.4	N	N	N	53.6
	Notes: Bride	ne included i	n Chanter 1	52 as a "Comr	missioner Priority" (CP) pro	iect due to h	ridae he	ing load posted. Stru	icture renlace	ad with new	/ Bridge 5001	<u> </u> 10							SPAN	10.4				
	Notes. Dilaç			32 a3 a COIIII	HWY 250 OVED S BD			ling load posted. Oth		ed with hev	bridge 300 i			7		6			STEEL	HS				57.5
6	6975 Notes:	2	Hwy. 250	2319-16	ROOT RIVER	FILLMORE	1931	\$11,000,000	2016	NO		RPL	840 (787)	(6)	7	(5) (6)	104		HIGH TRUSS	17.0	N	Y	Υ	(57.6) (47.1)
6	6977	2	Hwy. 250	2319-16	HWY. 250 OVER N BR ROOT RIVER	FILLMORE	1924	see note	2016	NO		RPL	380 (413)	7 (6)	6	6 (5) (6)	144	3,456	STEEL HIGH TRUSS	HS 15.0 (HS	N	Y	Y	50.6 (47.0) (65.1)
	Notes: Cost	incl w/ Br 6	975 project.	ı	·		1	Т	4			F	1 1			1	-		STEEL	ЦС				
7	6749	2	Hwy. 4	0801-31	HWY. 4 OVER LITTLE COTTONWOOD RIVER	BROWN	1951	\$2,324,929	2011	YES	2011	RPL	1,250 (1,400)	7	4	5	98	3,381	BEAM SPAN	HS 32.0 (HS	Υ	N	N	66.4 (60.9)
	NOTES. STIM	lure replace	with new	Bridge 08006	LIMV 4 OVED	\\/ \ T \\\\							1				]		STEEL	HS				00.0
7	6762 Notes: Struc	3 cture replace	Hwy. 4	8302-33 Bridge 83039	HWY. 4 OVER WATONWAN RIVER	WATONW AN	1951	\$2,972,439	2012	YES	2012	RPL	970 (880)	4	5	5	56	1,932	BEAM SPAN	34.0 (HS	Υ	N	N	82.6 (82.7)
7	9200	1	Hwy. 14	0804-81	HWY. 14 OVER MINNESOTA RIVER	BROWN	1963	\$42,700,000	2017	NO		RPL	8,600 (8,700)	5	6 (5)	4 (5)	566	20,107	PREST R BEAM	HS 70.0 (HS	Y (N)	N	N	38.0 (54.6)
	Notes:							•												,, ,,				
7	4014	2	Hwy. 22	5205-31	HWY. 22 OVER ROBARTS CREEK	NICOLLET	1923	\$998,716	2013	YES	2013	RPL	1,200 (939)	N	N	N	23		CONC BOX CULV	HS 24.0	Υ	N	N	68.2
	Notes:		T	Ι	<del>                                     </del>		I	I	T			Γ	<del>                                     </del>			Г	1		STEEL	HS		-	-	
7	5834	2	Hwy. 30	1702-10	HWY. 30 OVER BR OF WATONWAN R	COTTONW OOD	1939	\$1,019,930	2011	YES	2011	RPL	740 (850)	4	5	5	32	1,072	BEAM SPAN	30.0 (HS	Υ	N	N	79.1 (74.5)
	Notes: Repl	aced with C	uivert BR 17	Z XU'I		5		Ι	Ι										CONC	HS				45.7
7	5513 Notes:	1	Hwy. 68	0710-30	HWY. 68 OVER UP RR	BLUE EARTH	1936	\$1,394,114	2013	YES	2013	RPL	3,150 (2,699)	4	3	5	115	4,497	DECK GIRD	HS 30.6 (HS	Υ	N	N	(34.8) (25.8)
	110163.																							

			I	I	ī	Fracture	Critica	al and Structura		ent Trunk	Highway	Bridges as	of March		IS RATII	NG)				<u> </u>				T
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA		LOAD OPERATING) RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
7	6889	2	Hwy. 71	1705-11	HWY. 71 OVER DES MOINES RIVER	COTTONW OOD	1956	\$3,210,447	2010	YES	2010	RPL	2,350	4	4	4	143		STEEL BEAM SPAN	HS 48.0	Y	N	N	58.2
	Notes: Repla	aced with Br	ridge numbe		HWY. 75 OVER								9,500						CONC	HS				52.8
7	6245	2	Hwy. 75	6704-19	POPLAR CREEK	ROCK	1932	\$853,080	2013	YES	2014	RPL	(6,900)	N	N	N	23	0	BOX CULV	24.0	Y	N	N	(53.2)
	Notes: Struc	ture replace	ed with new	Culvert 67X03	HWY. 99 OVER		<b>[</b>			I			1						CSTL			N	1	56.0
7	4930	2	Hwy. 99	4008-25	MINNESOTA RIVER	LE SUEUR	1931	\$3,457,175	2017	NO		REHAB	7,000 (5,077)	5	5	5 (6)	402	12,512		HS 23.6	N	(Y)	Υ	(48.5) (50.5)
	Notes: Histo	ric bridge. (	Currently st	udying rehabili	tation. Decision was made	to rehab brid	ge. The	oroject would be re-le	et.							<u> </u>			,			(IN)	1	1 (30.3)
7	6535	2	Hwy. 258	0809-12	HWY. 258 OVER COTTONWOOD RIVER	BROWN	1949	\$3,381,311	2012	YES	2012	RPL	700 (470)	4	5	4	163	4,564	STEEL HIGH	HS 22.7	Y	N	Υ	45.2 (45.6)
	Notes: Repla	I aced with Br	<u>l</u> ridge numbe	l er BR 08007	100110111100011111211												ļ		TRUSS					(10.0)
7	6821	2	Hwy. 270	6706-13	HWY. 270 OVER MUD CREEK	ROCK	1953	\$1,369,237	2011	YES	2011	RPL	740 (840)	4	5	5	38	1,251	STEEL BEAM SPAN	HS 29.1	Y	N	N	78.6 (74.6)
	Notes: Repla	aced with Co	ulvert numb 	er 67X02	LIMOV 7 OVER							<u> </u>	4.050						STEEL	HS	N.		1	63.7
8	9114 Notes: Struc	2 cture replace	Hwy. 7 ed with new	1201-32 Bridge 12015	HWY. 7 OVER CHIPPEWA RIVER	CHIPPEWA	1932	\$5,500,000	2014	YES	2014	RPL	1,850 (2,200)	5	5 (4)	5	182	5,951	HIGH TRUSS	24.1 (HS	N (Y)	N	Y	(43.6) (43.8)
8	4667	2	Hwy. 19	J	HWY. 19 ACCESS RD OVER SULPHER L	REDWOOD	1927				N/A	Only Normal Maintenanc e Needed	50 (5)	4	4 (3)	4 (3)	122	3,416	STEEL HIGH TRUSS	HS 17.2	Y	N	Y	44.0 (33.0)
	Notes: Only	normal mair	ntenance pl	anned to maint	tain condition. Hwy. 19 alig	gnment has c	nanged,	bridge no longer on t	trunk highwa	ay. I		· 				1			ISTEEL I				I	<u> </u>
8	5388	1	Hwy. 24	4711-20	HWY. 24 OVER N FK CROW RIVER	MEEKER	1935		2009	YES	2009	RPL	1,650	4	5	5	105	2,919	LOW TRUSS	HS 16.2	Y	N	Υ	47.0
	Notes: New	bridge in pla	ace, Historio	Bridge moved	to Lake Louise State Parl	k. Ch. 152 fu	nds not	used on this project.	Structure re	placed with	new Bridge	47006	· · · · · · · · · · · · · · · · · · ·		<del></del>	·			-				!	<del></del>
8	5380	2	Hwy. 40	1209-22	HWY. 40 OVER LAC QUI PARLE L	CHIPPEWA		\$2,500,000	2015	NO	2015	REHAB	610 (540)	4	4	5	221	6,284	STEEL HIGH TRUSS	HS 18.0	Y	N	Y	38.9 (39.3)
		ric bridge. I	Bridge will d		ction safely wil rehab projed							<u> </u>				Τ			STEEL	HS				T
8	6962	2	Hwy. 68	6407-28	HWY. 68 OVER DITCH	REDWOOD	1900	\$400,525	2009	YES	2009	RPL	1,350	5	5	4	26	905	BEAM SPAN	24.1	Y	Ν	N	48.5
	Notes: Bridg	je replaced v	with Culvert	BR 64X09	HWY. 274 OVER			1		<u> </u>		Only Normal	I I			-			[PREST]				l	66.9
8	87005	2	Hwy. 274		YELLOW MEDICINE	YELLOW MEDICINE	1968				N/A	Maintenanc e Needed	920 (1,042)	8 (7)	(7)	5	187	8,186		HS 45.4	(N)	N	N	(83.0) (88.1)
	Notes: No w	ork needed.	. Condition	ratings were re	e-evaluated - bridge no lon	ger structural	ly deficie	ent. Only using maint	tenance doll	ars, not ca	oital funds.	e Needed	!!		<u> </u>									[ (88.1)
8	6816	2	Hwy. 277	1213-12	HWY. 277 OVER CO DITCH # 22	CHIPPEWA	1952	\$1,300,000	2017	NO		RPL	310 (365)	6	6	4	29	1,015	STEEL BEAM	HS 30.3	Y	N	N	67.9 (70.8)
	Notes:	<u> </u>	<u> </u>		511 511 11 22							<u> </u>							SPAN	50.0				(, 0.0)
М	6654	1	Hwy. 5	1002-89	HWY. 5 OVER RECREATION TRAIL	CARVER	1952	\$9,010,101	2012	YES	2012	RPL	16,000 (19,200)	4	5	5	160	6,136	CONC DECK GIRD	HS 28.5	Υ	N	N	49.1
	Notes: Bridg	e replaced	with Bridge	BR 10003	HWY. 5 WEST 7TH ST		_ <del></del>												CSTL					67.0
М	9300 Notes: FC bi	2	Hwy. 5	6201-86	OVER MISSISSIPPI RIVER  . Historic bridge. Bridge v	RAMSEY	1961	\$12,127,500	2014	NO	2015	RDK	56,000 (28,500)	5 (4)	5 (4) (5)	5	1,199	87,850	DECK GIRD	HS 37.0	N (Y)	N	Y	(66.0) (64.0)
8.4		nage built iii			HWY. 7 (COUNTY			i Jaioty With Fehab Pi			anticrianice.	DD!	20.222	4			400	15.000	CONC	HS	V	K I	N.I	74.0
M	5462	otrusture ( : )	Hwy. 7	2734-33	ROAD 25) OVER HWY.		1939		2014	NO		RPL	36,000	4	5	5	190	15,080	GIRD	38.5	Ť	IN	N	71.2
		Structure to			ge 27305. Cost included w HWY. 10 (PRESCOTT)	WASHING		<b>.</b>					13,500					a-:	STEEL	HS				
M	82010	2	Hwy. 105		OVER ST CROIX RIVER	TON	1990	\$1,077,327	2024	NO		OL	(15,700)	6	7	6	684	35131	MOVE ABLE	50.0	N	N	Y	61.9
	Notes: Built i	in 1986 (see	e endnote 1	) and built with	a redundant system for FO	l	isconsir/	leading the effort.				Ι	<del>                                     </del>			T			CSTL				<u> </u>	75.0
M	82815	2	Hwy. 35	8280-47	HWY 8 WB OVER I 35	WASHING TON	1967	\$45,400,000	2018	NO		RPL	10,500	<i>(</i> 5)	(6)	7 (6)	356	12,706		HS 26.6	N	N	Υ	75.9 (74.9)
	Notes: FC bi	ridge built in	1967. All l	NBIS condition	ratings are fair. Normal m		lanned fo	or the program years		_ <del></del>					6				STEEL					32.8
М	4654	1	Hwy. 36	8221-01	HWY. 36 OVER ST CROIX RIVER pedestrain bridge, taken o	WASHING TON	1930	\$361,739,213	2013	NO	2016	RPL	18,000	8	(4) (3)	5	1,053		MOVE ABLE	HS 20.0	Υ	N	Y	(17.8)
	110163. 111510	no bridge.	i iuoo Will Di	o convented to	podostiani biluge, taken 0	ıı iii əyət <del>c</del> iil.	THETTE	· replacement bridge	o io unidei Ul	ภาอถนับเป็นไ	ana would lik	ory be open to	o namo III ZU	ι Ο.										

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

-	ı	T	T		<del>,</del>	Fracture	Critic	al and Structur	ally Deficie	nt Irunk	Hignway	Bridges as	of March				1		ī	_		-	,	
									٦					(NB	IS RATI	NG)				<u>0</u>				
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA	MAIN SPAN TYPE	LOAD (OPERATING) RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
М	5723	2	Hwy. 36	6212-148	HWY. 36 OVER LEXINGTON AVE(COUNTY ROAD	RAMSEY	1938	\$16,100,000	2015	NO	2016	RPL	85,000	4	4	5	64	10,115	CONC RIGID FRAM	HS 55.0 (HS	Υ	N	N	61.0
	Notes: To b	e replaced v	T new Brid	age 62731.	LULUY 00 ED 01/ED														CONC		.,			
М	9115	1	Hwy. 36	8214-114 oix River Cross	HWY. 36 EB OVER HWY. 95	/ASHINGTO	1959	\$53,600,000	2015	NO	2016	RPL	9,750	3 (6)	3 (5)	5	401	14,957		HS 59.1	(N)	N (Y)	N	28.3 (66.8)
	Notes. Cost	I INCI W/ DI 4	654 (St. Cit	NX RIVEL CLOSS	HWY. 52 (LAFAYETTE)									-		_		05405	CSTL	110				49.5
M	9800 Notes:	1	Hwy. 52	6244-30	OVER MISS R, RR & STREETS	RAMSEY	1968	\$213,913,984	2011	NO	2015	RPL	81,000	5 (4)	4	7 (6)	3,366	254,25 1	DECK GIRD	HS 31.7	Υ	N	Y	(47.5) (50.3)
М	62026	2	Hwy. 52	6244-36	LAFAYETTE (HWY. 52) OVER UP RR & EATON ST	RAMSEY	1965	\$7,725,836	2011	YES		RDK	74,000	6 (5) (7)	4	5 (7)	580	59,017	CSTL BEAM SPAN	HS 34.8 (HS 31.2)	Υ	N	N	59.1 (56.9) (57.0) (58.2)
М	Notes: 94277	2	Hwy. 55	2751-51	HWY. 55 OVER BASSETT CREEK	HENNEPIN	1939	\$2,026,276	2017	NO		RPL	27,500 (20,500)	N	N	N	20	0	CONC BOX CULV	HS 18.0	Y (N)	N	N	36.9 (38.4) (55.1) (54.3)
	Notes: The	structure to	be replaced	with new Culv																				
М	5895	1	Hwy. 61	1913-64	HWY. 61 OVER MISS RIVER, RR, STREET (HASTINGS)	DAKOTA	1950	\$215,152,000	2010	YES	2013	RPL	32,500	5 (4)	4	5	1,857	74,292	CSTL HIGH TRUSS	HS 24.6 (HS	Υ	N	Υ	38.1 (43.4) (41.1)
M	Notes: 6688	1	Hwy. 61	6222-160	HWY. 61 OVER BNSF RR	RAMSEY	1952	\$6,745,095	2010	YES	2010	RPL	24,500	4	4	5	180	11,934	CONC DECK GIRD	HS 38.1	Υ	N	N	42.3 (43.7)
	Notes: Repl	laced with B	ridge numbe T	er BR 62092	IHWY. 77 SB COLL RD		1				1	<u> </u>	1						ICSTL					95.6
M	27046	2	Hwy. 77	2758-75	OVER KILLEBREW DRIVE	HENNEPIN		\$823,068	2017	NO	2017	RE-OL	5,000	6	7 (6)	7	505	23,170		HS 62.0	N	N	Υ	(96.6) (97.6)
	Notes: FC D	Tiage built in	1 1988. All I	ARIS condition	ratings are satisfactory to IHWY. 77 SB OFF	good. Only a	an overia	ay wiii be needed by	7 2018. See e	nanote 1.		T 55 01 0			_				CSTL					0.4.7
М	27048	2	Hwy. 77		RAMP OVER 81ST STREET	HENNEPIN			2028-2034	NO		RE-OL & Paint	3,450	7	(6)	7	526	24,170	BEAM SPAN	HS 94.0	N	N	Y	94.7 (95.7)
	Notes: FC b	oridge built ir T	n 1988. All I T	NRIS condition	ratings are good. Normal HWY. 77 NB COLL RD	maintenance	planned	d for the program ye	ears. Paint an	d overlay v I	vill be needed	beyond 2018	3. See endnot	te 1.					CSTL	1	1			65.
М	27052C	2	Hwy. 77		OVER 79TH ST & EB 494/5 RAMPS	HENNEPIN			2028-2034			RE-OL	10,000	7	7	7	603	25,253		HS 46.0	N	N	Y	96.2 (97.2)
	Notes: FC b	oridge built ir T	n 1989. All I T	NBIS condition	ratings are good. Normal IHWY. 77 NB OVER	maintenance	planned	d for the program ye	ears. Paint an	d overlay v I	vill be needed I	beyond 2018	3. See endnot	te 1.				_	ISTFFI	HS	ı			1
М	9600N	2	Hwy. 77	1925-52	MINNESOTA R & BLACK DOG	HENNEPIN		\$2,140,000	2014	NO	2015	Paint	47,000	6	6	7 (6)	5,159	308,51 4	STEEL TIED ARCH	34.0 (HS	N	N	Υ	91.5
	Notes: FC b	oridge built ir	n 1978. All I	NBIS condition	ratings are satisfactory to HWY. 77 SB OVER	good. Paint	will be n	eeded 2015-18. Se	ee endnote 1.	Γ	Ι	T					-	-	ISTEEL	HS	1			
М	9600S	2	Hwy. 77		MINNESOTA R & BLACK DOG	HENNEPIN		SEE NOTE	2014	NO	2015	Paint	47,000	6	6	7 (6)	5,185	310,04 5	TIED	34.0 (HS	N	N	Υ	91.5
	Notes: FC b	oridge built ir	n 1978. All I	NBIS condition	ratings are satisfactory to	good. Paint v	vill be ne	eeded by 2015-18.	See endnote	1. (Cost inc	l w Br 9600N	l) 								ı	ı			98.5
М	27728	2	I 94		AVE & RR	HENNEPIN		\$1,700,000	2017	NO		RE-OL	7,100	6 (5)	6	6 (5)	1,475	64,614	CSTL BEAM SPAN	HS 42.5	N	N	Y	98.5 (99.5) (98.5) (87.4)
	Notes: FC b	oridge built ir	1978. All I	NBIS condition	ratings are satisfactory. N	lormal mainte	enance p	lanned for the prog	ram years. Se	e endnote	1.	1	<u> </u>							ПС				<del>-</del>
М	27842	2	I 94	2782-327	I 94 WB ON RAMP OVER I 94 & HWY. 65	HENNEPIN	1966	\$313,600,000	2018	NO		RPL	20,000	4 (5)	4 (5)	6	534	13,566	CCON C BOX GIRD	HS 36.0 (HS	Υ	N	N	64.8 (64.4)
	Notes:																		ICCTI					
М	27861	2	I 94		ST	HENNEPIN	1968	\$930,936	2010	YES	2010	RDK	11,000	4 (8)	5 (6)	4 (7)	268	6,888	CSTL BEAM SPAN	HS 31.6	Υ	N	N	65.0
	Notes: Ecor	nomic stimul	us (ARRA) f	unding used to	o advance project II 94 SB OFF RAMP		_ <del></del>												ГССТІ					
М	27726B	2	I 94		OVER LYNDALE AVE N & RR			\$1,700,000	2016	NO	2017	RE-OL	10,900	6	6	7	1,100	28,919	CSTL BEAM SPAN	HS 44.0	N	Υ	Υ	93.3 (94.3)
	Notes: FC b	oridge built in	1979. All	NBIS condition	n ratings are satisfactory to	good. Overl	lay will b	e needed by 2018.	See endnote	1.		1								ЦС				04.4
М	27727B	2	I 94		OVER GLENWOOD AVE & RR'S	HENNEPIN		\$1,700,000	2016	NO	2017	RE-OL	8,000	6	6 (5)	6 (5)	1,896	54,542	PREST R BEAM	HS 40.0 (HS	N	Y (N)	Υ	94.4 (95.4) (86.3)
	Notes: FC b	oridge built in	n 1978. All	NBIS condition	n ratings are satisfactory. (	Overlay will b	e neede	d by 2018. See end	dnote 1.															

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

1			1				Fracture	Critica	al and Structura	1	ent irunk	Hignway	Briages as	ot March			NG)				<u> </u>				
May	DISTRICT	BRIDGE NUMBER	152	NUMBE	SP#	FEATURE CROSSED	COUNTY	EAR	PROJECT COST	20	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C	s U	s U	GE	S	MAIN SPAN TYPE	LOAD RATING) RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
Math	М		2			OVER LYNDALE AVENUE SB										7 (6)	7	784	29,470	BEAM	42.0	N	N	Y	85.8
10   10   10   10   10   10   10   10		Notes: FC br	ridge built ii I	n 1989, remo	odeled in 198 <i>7</i> . T		re satisfactory	y. Norma	al maintenance plani	ned for the p	rogram yea	irs. Paint and	d re-deck will b	oe needed b	eyond 20	)18. 				ICONC I	HS				
1	М		2	-		OVER HWY. 100	HENNEPIN	1939	\$83,884,993	2014	NO	2016	REHAB	19,100	4	4	5	164	12,794		40.1 (HS	Υ	N	N	63.0
Mary   Cap   War			INCI W/ BI S														7								90.0
March   1977   1978   1979	M		_	-		SB CD RP & FRNT RD			langed for the progr			orlov will bo r			6	6	(6)	967	38,228			N	N	Υ	(91.0)
March   Marc						HWY. 100 SB ON			latified for the progra			enay wiii be i			enunote	7					HS				97.0
March   Marc	M		ridge built i			GLENWOOD AVE TO			I for the program yea			vill he needed			7 ote 1	(6)	7	495	13,910			N	N	Y	(98.0)
Net	М				6223-20	HWY. 149 (SMITH AVE) OVER MISSISSIPPI R &								18,000	6	7 (6)	7	2,770	150,39	TIED		N	N	Y	85.1 (91.1)
March   Safe   1		Notes: Built i	<u>l</u> in 1986 (se	e endnote 1	) and built with	a redundant system for FO	L C tie girder. H	ligh bridg	je					(11,000)	(0)	(0)				IARCH I	12.0				(90.7)
Note:   Part	М					HWY. 243 (OSCEOLA) OVER ST CROIX				2010	YES	2010	OL & PT		7 (6)	6		674	23,051	DECK	19.5	N	N	Υ	65.6 (72.4)
Main		Notes: Borde	er bridge w	th Wisconsi	n. With repairs	=	d steel repairs	s, bridge	will perform safely for	or next 20 ye	ars.					<u> </u>					(ПЗ				<u> </u>
March   Fig.   March	М	6630	1	Hwy. 280			RAMSEY	1954	\$2,122,057	2009	YES	2009	RPL	16,000	4	4	5	97	6,388	SLAB		Υ	N	N	36.8
March   Marc		Notes: Repla	aced with B	ridge BR 62 I	049	II ARPENTELIR/COLINT				1			<u> </u>							ICONC I					
March   1988   1984   1986	M		1			Y ROAD30) OVER HWY. 280	RAMSEY	1954	\$2,526,258	2009	YES	2009	RPL	13,500	4	4	4	150	10,259			Υ	N	N	49.0
Maries FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and provided by the program years. Paint and overlay will be needed beyond 2018. See ## and prov	М				New Bridge B	I 394R RAMP OVER NB		1989		2028-2034	NO		RE-OL	7,600	7	7 (6)	7	520	13,572	BEAM		N	N	Y	97.0 (98.0)
M   27788   2   1394   OVER HWY-100 NB   HENNEPIN   1989   2028-2034   NO   RE-OL   4.500   7   7   60   7   289   7.500   GEAM   56.0   N   N   V   97.0   (36.0   N   N   N   N   N   N   97.0   (36.0   N   N   N   N   N   N   N   N   N		Notes: FC br	ridge built i	n 1988. All I	NBIS condition		ctory. Norma	al mainte	enance planned for th	ne program y	ears. Pain	t and overlay	will be neede	d beyond 20	18. See	endnote	1.								
Notes: FC   Note	М	27788	2	I 394		OVER HWY. 100 NB	HENNEPIN	1989		2028-2034	NO		RE-OL	4,500	7	7 (6)	7	289	7,590	BEAM		N	N (Y)	Υ	94.0 (95.0) (36.0)
M   27753A   2   1394   334 HOV WB TO NB   HENNEPIN   1989   2028-2034   NO   RE-OL   3,800   7   6   7   360   9,40   BEAM   430   N   N   N   V   930   940   PACK   1984   1984   1985   N   N   N   V   930   PACK   1984   1985   N   N   N   V   940   PACK   1984   PACK   N   N   N   V   940   PACK   N   N   N   N   N   N   N   N   N		Notes: FC br	ridge built ii I	n 1988. All I	NBIS condition		ctory. Norma	al mainte	enance planned for the	ne program y	rears. Pain	t and overlay	will be neede	d beyond 20	18. See	endnote 1	1.			ICSTI I					
Notes: FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endrote 1.    Notes: FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endrote 1.	М		2			394 HOV WB TO NB HWY. 100									7	7 (6)	7	360	9,404	BEAM		N	N	Υ	97.0 (98.0)
M   27776A   2   1394     1394   1394   1394   1394   1394   1401   1987   2028-2034   NO   RE-OL   7,600   7   7   6   7   2,738   1394   1504   1		Notes: FC br	ridge built ii I	n 1988. All I T	NBIS condition	1	ctory. Norma	al mainte	enance planned for the	ne program y I	rears. Pain I	t and overlay	will be neede	d beyond 20	18. See	endnote	1. 			ICSTL I					T
M   27776B   2   1394   1394   1394 RED OVER 1394 &   HENNEPIN   1987   2028-2034   NO   RE-OL   2,175   7   7   7   538   25,078   REAM   HS   N   N   Y   94.7   (95.7   Notes: FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.    M   27789A   2   1394   1394 RED OF RAMP OVER SB HWY. 100   HENNEPIN   1989   2019-2027   NO   RE-OL   6,000   7   7   7   6   0   162   1,877   REAM   NO   N   N   Y   94.7   (95.7   NOTES: FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.    M   9197   2   1694   6280-304   1694 WB OVER BNSF   RAMSEY   1960   2007   YES   2009   Unweave/W   51,500   4   6   5   123   9,211   R   57.0   Y   N   N   71.0   REAM   N   N   N   95.0   REAM   N   N   N   N   95.0   REAM   N   N   N   N   95.0   REAM   N   N   N   N   95.0   REAM   N   N   N   N   95.0   REAM   N   N   N   95.0   REAM   N   N   N   95.0   REAM   N   N   N   N   95.0   REAM   N   N   N   N   95.0   REAM   N	M		2			DUNWOODY BLVD									•	(6)	7	2,738	154,40 3	BEAM		N	N	Y	93.8 (94.8)
M 27776B 2 1394   DOWNTOWN RAMPS   HENNEPIN 1987   2028-2034   NO   RE-OL   2,175   7   (6)   7   538   25,078   BEAM   A3.0   N   N   Y   95.078   No   Notes: FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.  M 27789A 2 1394   1394 EB OFF RAMP   1989   2019-2027   NO   RE-OL   6,000   7   7   6   (6)   (6)   (6)   (6)   (16)   162   1,877   BEAM   70.0   N   N   Y   95.078   No   N   N   Y   95.078   No   Notes: FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.  M 9197 2 1694   6280-304   1694 WB OVER BNSF   RAMSEY   1960   2007   YES   2009   Unweave/W   51,500   4   6   5   123   9,211   REAM   57.0   Y   N   N   71.08   N   N   N   71.09   Notes: RPL W/ Unweave/Weave Project  M 82805 3 1694   8286-64   1694 SB OVER UP RR   TON   1967   2010   YES   2010   RDK   35,000   (8)   6   7   145   6,257   BEAM   41.9   (N)   N   N   95.08   95.09   Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 82806 3 1694   8286-64   1694 NB OVER UP RR   TON   1967   2010   YES   2010   RDK   35,000   4   6   5   145   6,257   BEAM   41.9   (N)   N   N   95.08   1694 NB OVER UP RR   TON   N   N   95.09   1695   NOTES		Notes: FC br	ridge built ii	n 1988. All I	NBIS condition	1	, and the second	al mainte	enance planned for th	ne program y	ears. Pain	t and overlay	will be neede	d beyond 20	18. See	endnote	1. 				ПС				047
Marting   1994   1994   1995   1994   1995	M		2		NDIC aandition	DOWNTOWN RAMPS	HENNEPIN		and a place of for the			t and aversa		,	7	(6)	7	538	25,078	BEAM		N	N	Y	(95.7)
Notes: FC bridge built in 1988. All NBIS condition ratings are good or satisfactory. Normal maintenance planned for the program years. Paint and overlay will be needed beyond 2018. See endnote 1.    M   9197   2   1694   6280-304   1694 WB OVER BNSF   RAMSEY   1960   2007   YES   2009   RPL   W   Unweave/W   eave Project   Read   1694 WB OVER UP RR   Read   1694 WB OVER UP RR   1960   2010   YES   2010   RDK   35,000   4   6   5   123   9,211   Read   170   READ   170   N   N   N   N   N   171.00   170			nage built li		NOIJIDITUU CIONI		·		mance planned for tr	1		t and overlay			710. See	7	7 T				_				99.0
M 9197 2 1694 6280-304 1694 WB OVER BNSF RR MSEY 1960 2007 YES 2009 Unweave/W 51,500 4 6 5 123 9,211 REST HS 57.0 Y N N 71.0 eave Project  M 82805 3 1694 8286-64 1694 SB OVER UP RR TON 1967 2010 YES 2010 RDK 35,000 4 6 6 7 145 6,257 BEAM 71.9 (N) N N 95.0 (98.0 PRO)  Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 82806 3 1694 8286-64 1694 NB OVER UP RR TON 1967 2010 YES 2010 RDK 35,000 4 6 6 7 145 6,257 BEAM 41.9 (N) N N 9 (93.7 RDK)  Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 82806 3 1694 8286-64 1694 NB OVER UP RR TON 1967 2010 YES 2010 RDK 35,000 4 6 6 5 145 6,257 BEAM 41.9 (N) N N 9 (93.7 RDK)  Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 6513 2 135E 6280-353 MARYLAND (COUNTY ROAD 31) OVER 135E RAMSEY 1958 \$14,546,185 2012 YES 2012 RPL 22,500 (27,900) 4 5 5 199 19,930 BEAM 32.0 Y N N N 77.0 RAMSEY RAMSEY 1958 \$14,546,185 2012 YES 2012 RPL 22,500 (27,900) 4 5 5 199 19,930 BEAM 32.0 Y N N N 77.0 RAMSEY RAMSEY RAMSEY RAMSEY RAMSEY 1958 \$14,546,185 2012 YES 2012 RPL 22,500 (27,900) 4 5 5 5 199 19,930 BEAM 32.0 Y N N N 77.0 RAMSEY RA	M		2		NRIS condition	OVER SB HWY. 100			enance planned for the			t and overlay			7	(6)	, (6)	162	1,877			N	N	Y	(100.0)
M			ľ				•		mance planned for th	<u> </u>			RPL w/		, 10. SEE	- FIGURE			_		HS				
M 82805 3 1694 8286-64 1694 SB OVER UP RR TON 1967 2010 YES 2010 RDK 35,000 4 6 7 145 6,257 BEAM 41.9 (N) N N N 95.0 (98.0 Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 82806 3 1694 8286-64 1694 NB OVER UP RR TON 1967 2010 YES 2010 RDK 35,000 4 6 6 7 145 6,257 BEAM 41.9 (N) N N N 95.0 (98.0 Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 6513 2 135E 6280-353 MARYLAND (COUNTY ROAD 31) OVER 135E RAMSEY 1958 \$14,546,185 2012 YES 2012 RPL 22,500 (27,900) 4 5 5 199 19,930 BEAM 32.0 Y N N N 77.0 (145) RAMSEY 1958 \$14,546,185 2012 YES 2012 RPL 22,500 (27,900) 4 5 5 5 199 19,930 BEAM 32.0 Y N N N 77.0 (145) RAMSEY RAM	M						RAMSEY	1960		2007	YES	2009		51,500	4	6	5	123	9,211			Y	N	N	71.0
M 82805 3 1 694 8286-64 1 694 SB OVER UP RR TON 1967 1967 2010 YES 2010 RDK 33,000 (4 6 7 145 6,257 BEAM 41.9 (N) N N 95.0 (98.0 Notes: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 82806 3 1 694 8286-64 1 694 NB OVER UP RR TON 1967 1967 1967 2010 YES 2010 RDK 35,000 4 6 6 7 145 6,257 BEAM 41.9 (N) N N 95.0 (98.0 RDK 1967) NOTES: Tier 3 Bridge - cost not included in Chapter 152 Program. Economic stimulus (ARRA) funding used.  M 6513 2 1 35E 6280-353 MARYLAND (COUNTY ROAD 31) OVER 1 35E RAMSEY 1958 \$14,546,185 2012 YES 2012 RPL 22,500 (27,900) 4 5 5 199 19,930 BEAM 32.0 Y N N 77.0 ROAD 31) OVER 1 35E RAMSEY 1958 \$14,546,185 2012 YES 2012 RPL 22,500 (27,900) 4 5 5 199 19,930 BEAM 32.0 Y N N N 77.0 ROAD 31,000 RDK 35,000		Notes: RPL	w/ Unweav 	e/Weave Pr T	oject 	<u> </u>	\\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			<u> </u>				05.000	4		1			CSTL I	110				05.0
M 82806 3 I 694 8286-64 I 694 NB OVER UP RR TON 1967 2010 YES 2010 RDK 35,000 4 6 (7) 6 145 6,257 BEAM 41.9 (N) N N N (93.7 (96.7 (9	М						TON			2010	YES	2010	RDK		(8)	6	7	145	6,257	BEAM		Y (N)	N	N	95.0 (98.0)
M 82806 3 1 694 8286-64 1 694 NB OVER UP RR TON 1967 2010 YES 2010 RDK 35,000 4 6 6 7 (7)		Notes: Tier 3	3 Bridge - c	ost not inclu	ded in Chapter	r 152 Program. Economic s	,	RA) fundi □	ng used.	1			<u> </u>	05.000	4					CSTL	HS				84.0
M 6513 2   135E 6280-353   MARYLAND (COUNTY ROAD 31) OVER 135E   RAMSEY   1958   \$14,546,185   2012   YES   2012   RPL   22,500 (27,900)   4   5   5   199   19,930   BEAM   32.0   Y   N   N   77.0	М						TON		ing upo d	2010	YES	2010	RDK		(7)			145	6,257	BEAM	41.9	Y (N)	N	N	(93.7) (96.7)
M 6513 2 135E 6280-353 ROAD 31) OVER 135E RAMSEY 1958 \$14,546,185 2012 RPL (27,900) 4 5 5 199 19,930 BEAM 32.0 Y N N N N 77.0			s Buage - c		İ		Ì							22 500											
	M				6280-353	ROAD 31) OVER I 35E	RAMSEY	1958	\$14,546,185	2012	YES	2012	RPL		4	5	5	199	19,930			Υ	N	N	77.0

Fracture Critical and Structurally Deficient Trunk Highway Bridges as of March 1, 2008

		ı			T	Tracture	Critic	al and Structura	ily Delicie	ent Trunk	Tignway	bridges as	or March		S RAT	NC)			1-					
			70						PL/	ω	- 10			(IAD	IS KAT	NG)				OPF				
DISTRICT	BRIDGE NUMBER	CHAP. 152 TIER	ROUTE NUMBER	SP#	FACILITY - FEATURE CROSSED	COUNTY	YEAR BUILT	TOTAL PROJECT COST ESTIMATE	PLANNED YEAR OF CONSTRUCTION	SUBSTANTIALLY COMPLETE	YEAR OF SUBSTANTIAL COMPLETION	CH 152 WORK PLANNED	ADT	D E C K	S U P	S U B	BRIDGE LENGTH	DECK AREA		LOAD RATING) RATING	STRUCTURALLY DEFICIENT	FUNCTIONALLY OBSOLETE	FRACTURE CRITICAL	SUFFICIENCY RATING
М	6515	1	I 35E	6280-308	I 35E OVER CAYUGA ST & BNSF RR	RAMSEY	1965	\$161,980,647	2014	NO	2016	RPL	148,000	5	4	4	1,285	120, 10 BI	STL	HS 29.0	Υ	N	N	40.8
	Notes:					1					1									1	ļ			
М	6517	2	I 35E	6280-308	I 35E OVER BNSF RR	RAMSEY	1963		2014	NO	2016	RPL	148000 (149,000)	4	4	4	298	34,992 BI	EAM	HS 31.3 (HS	Υ	N	N	53.0 (51.8)
	Notes: Cost	incl w/ Br 6	515 (Cayuga	a) project.	ı	T	ı			ı	1							IS-	TEEL					
М	9265	2	I 35E	6280-308	I 35E OVER PENNSYLVANIA AVE	RAMSEY	1964		2014	NO	2016	RPL	144,000 (154,000)	4	4	4	165	19,166 BI	EANA I	HS 44.0	Υ	N	N	64.0
	Notes: Cost	Inci W/ Br 6			W 94TH ST OVER I								12,800						REST	HS				48.7
М	9053 Notes: Histo	1 pric bridge	I 35W	2782-320	35W	HENNEPIN	1957	\$8,900,627	2014	YES		RPL	(11,000)	5	4	6	199	12,815 R BI	EAM	53.8 (HS	Y	N	N	(49.1)
M	9570	2	I 35W	6284-163	COUNTY ROAD E2 (COUNTY ROAD 73) OVER I 35W	RAMSEY	1964	\$13,617,140	2016	NO	2016	RPL	5,700 (10,100)	7	4	5	214	8,284 R	REST	HS 55.0 (HS	Y	N	N	52.0
M	Notes: The s	structure wil	l be replace	d with new Bri 2782-288	dge 62873. W 76TH ST OVER I 35W	HENNEPIN	1959		2008	YES	2009	RPL	23,800	4	4	7	187	12,037 BI	⊏/AIVI	HS 49.3	Y	N	N	44.5
	Notes: Repla	aced with ne	<u>I</u> ew Bridge Bl	L R 27V98	155.													ISI	PAN					
М	27871	1	I 35W	2792 227	I 35W SB OVER HWY. 65 NB	HENNEPIN	1967	\$26,509,477	2017	NO	2018	RPL	48,500	5	5	4	363	12,973 C	CON BOX IRD	HS 67.0	Υ	N	N	44.1
	Notes: The	structure wo	ould be repla	ced with new	Bridge 27W05.	Ī	I				I							IC:	STL					<u> </u>
М	27930	2	I 35W	2782-281	HWY. 121 NB OVER I 35W SB	HENNEPIN	1964		2007	YES	2009	RPL	6,000	4	5	6	307	10,254 BI	EANA I	HS 31.5	Υ	N	N	62.4
М	Notes: Replacement 27932	1	I 35W	2782-281	HWY. 62 EB OVER I 35W	HENNEPIN	1964		2007	YES	2009	RPL w/ Crosstown Project	50,000	4	4	6	376	12,558 C		HS 36.0	Υ	N	N	37.0
	Notes: Repla	aced with N	ew Bridge B	R 27V68		1					1													<u> </u>
М	27937	2	I 35W	2782-281	HWY. 62 WB OVER I 35W NB	HENNEPIN	1964		2007	YES	2009	RPL w/ Crosstown Project	49,000	4	4	6	224	5,720 C		HS 38.5	Υ	N	N	55.4
	Notes: Repla	aced with N	ew Bridge B I	R 27V76	T		I				ı	RPL w/						ICO	CON					
М	27938	2	I 35W	2782-281	35W SB TO EB HWY. 62 OVER I 35 NB	HENNEPIN	1964		2007	YES	2009	Crosstown Proiect	22,750	4	4	7	290	7,382 C	BOX	HS 45.2	Υ	N	N	64.2
	Notes: Repla	aced with N	ew Bridge B I	R 27V79	LOEW CD OVED E COTI	,						RPL w/						C	STL	110				
М	27939 Notes: Repla	2	I 35W	2782-281	I 35W SB OVER E 60TH ST	HENNEPIN	1963		2007	YES	2009	Crosstown Project	85,000	4	4	7	127			HS 33.7	Y	N	N	58.1
М	27940	2	I 35W	2782-281	I 35W NB OVER E 60TH ST	HENNEPIN	1963		2007	YES	2009	RPL w/ Crosstown Project	85,000	4	4	7	127	7,786 BI		HS 33.7	Υ	N	N	58.1
	Notes: Struc	cture replace	ed with new	Bridge under (	Cross-town project	1	1				!								•		,			-
М	27941	2	I 35W	2782-281	35W SB TO HWY. 62 EB OVER HWY. 62 WB	HENNEPIN	1964		2007	YES	2009	RPL w/ Crosstown Proiect	22,750	4	4	5	244	6,212 C		HS 62.1	Υ	N	N	64.2
	Notes: Struc	cture replace	ed with new	Bridge under	Cross-town project	1	l			1	1							IC:	STL		1			<del></del>
М	62853	2	1 35W	IDIO accessor	36 EB OVER HWY. 280 NB		1970	John of farth -	2019-2027	NO	المرازي والمرازي والمرازي والمرازي	RPL	10,000	6	6	6	294	12,777 BI	- A K A	HS 37.0	N	N	Υ	97.3
М	27776C	pridge built in	1970. All N	Condition	ratings are satisfactory. I 394R WB OVER I 394 WB ON RAMP	Normal mainte		planned for the progra	am years. R 2028-2034	eplacemen NO	t will be need	ed beyond 20 RE-OL	2,175	dnote 1. 7	7 (6)	7	626	32,446 BI	EAW	HS 43.0	N	N	Y	95.7 (96.7)
	Notes: FC b	<u> </u>	1 n 1989. All N	NBIS condition	ratings are good. Norma	I I maintenance	<u>l</u> planned	l d for the program yea	ırs. Paint an	<u>I</u> id overlay v	ı vill be needed	l beyond 2018	I 3. See endn	ote 1.		<u></u> _	<u> </u>		PAN I					
М	27776F	2	I 394		394R EB RAMP OVER I 94 EB (ST. PAUL)		[		2028-2034			RE-OL	1,087	7	7 (6)	7	1,200	31,403 BI		HS 43.0	N	N	Y	95.8 (96.8)
L	Notes: FC b	ridae built ir	1989. All N	NBIS condition	ratings are good. Norma	I maintenance	planne	d for the program yea	rs. Paint an	d overlav v	vill be needed	beyond 2018	B. See endn	ote 1.		1	<u> </u>	101	. / N.N.	<u> </u>				

**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. Purple cells denote that the bridge has been replaced by a new structure and the values in parantesis are updated information based on newer inspections.