

# 2024 Bridge Inspection Summary



# INTRODUCTION

- Mark Junker, PE , Banner Associates, Inc.
- 21 years bridge inspection experience
- Summary of 2024 bridge inspections
- Met with Rick regarding details of inspections

06/19/2024

# OVERVIEW OF BRIDGE INSPECTION PROGRAM

- Bridge = opening of more than 20'
- Federal requirement, every 2 years minimum
- SDDOT pays 80%, County pays 20%

## WHY ARE BRIDGES INSPECTED?

- Public Safety
- A Professional Engineer (PE) has an ethical responsibility to protect the welfare of the public



06/19/2024

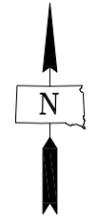
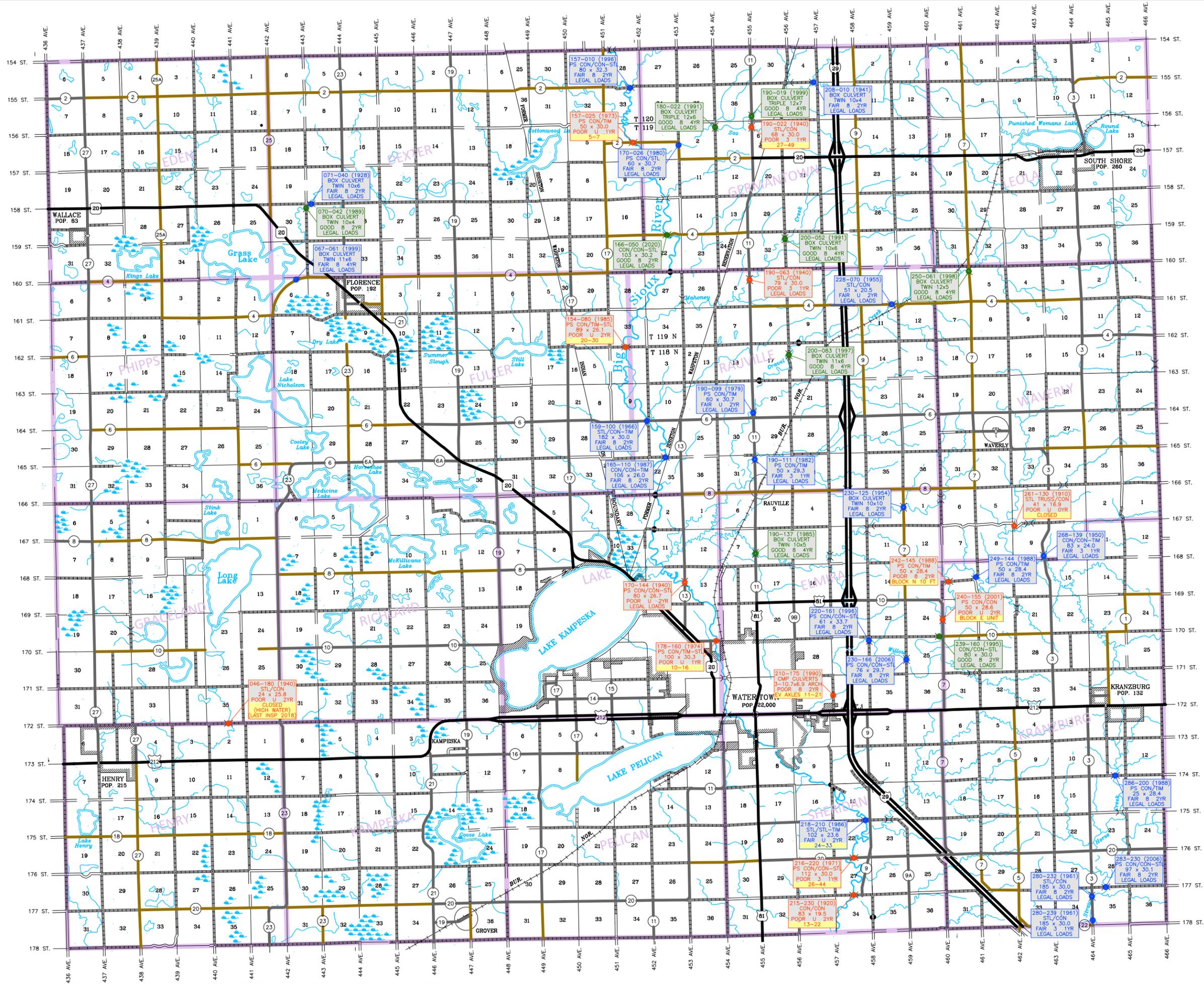
# OVERVIEW OF BRIDGE SYSTEM

- 42 Bridges
  - 13 poor condition (2 of these are closed)
  - 20 fair condition
  - 9 good condition
- 10 bridges have weight limit restrictions
  - 4 on county asphalt roads
  - 1 on county gravel road
  - 5 on township roads

# BRIDGE REPLACEMENT NEEDS

- 8 bridges within the next 10 years:
  - 3 on county asphalt roads
  - 1 on county gravel road
  - 4 on township roads
- 5 bridges in the next 10 to 20 years:
  - 4 on county asphalt roads
  - 1 on township road
- 13 bridges in 5 Year Plan = over \$21 million of work (over \$5.6 million local)

# 2024 CODINGTON COUNTY BRIDGE INSPECTION MAP



## LEGEND

STRUCTURE NUMBER	YEAR BUILT	SUBSTRUCTURE TYPE
SUPERSTRUCTURE TYPE	INSPECTION FREQUENCY	CLEAR ROADWAY WIDTH (FT)
STRUCTURE LENGTH (FT)	SCOUR RATING: 8 = STABLE U = UNKNOWN 3 = UNSTABLE	
CONDITION		
LOAD POSTING (TONS)		

178-160 (1974) PS CON/TIM-STL 100 x 30.3 POOR U 1YR	13
10-16	9
	42 TOTAL

PS CON	= PRESTRESSED PRECAST CONCRETE
PC CON	= PRECAST CONCRETE
CON	= CAST IN PLACE CONCRETE
TIM	= TIMBER
STL	= STEEL

[Red Box]	= POOR CONDITION	13
[Blue Box]	= FAIR CONDITION	20
[Green Box]	= GOOD CONDITION	9
		42 TOTAL

[Thick Black Line]	= STATE HIGHWAY
[Thin Black Line]	= COUNTY ASPHALT
[Yellow Line]	= COUNTY GRAVEL



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# 2024 Recommendations

- Install new and reduced load postings
  - 1 on county asphalt road
  - 1 on county gravel road
  - 1 on township road
- Barriers to keep traffic off areas of the bridge
  - 2 on county asphalt roads
  - 1 on township road
- Riprap installation
  - 1 on county asphalt road
- Concrete repair
  - 1 on county asphalt road
- Other riprap repairs
  - Various roads
- Clean Steel
  - 3 on county asphalt roads
- Many other repairs outlined in reports



06/19/2024

14<sup>th</sup> Ave NW



2022



2024



06/19/2024

10

Hwy 2



Hwy 2



06/1



06/1

12

31<sup>st</sup> St SE



06/18/2024 13

31<sup>st</sup> St SE



06/



06/

14

# Hwy 7



Hwy 7



06/18/2024

16

# Oak St



06/18/2024

17

Oak St



06/18/2024

Hwy 6



06/26/2024

19

Hwy 6



06/26/2024 20

Hwy 6



06/26/2024 21

# Hwy 13



06/19/2024

22

Hwy 13



06/19/2024

23

Hwy 13



06/19/2024

24

458<sup>th</sup> Ave



06/18/2024

25

Hwy 6



Hwy 3



Hwy 3





## BRIDGE FUNDING OPPURTUNITIES:

- BIG program through SDDOT
- Federal Funding through SDDOT
- Local Funding

Questions?

