

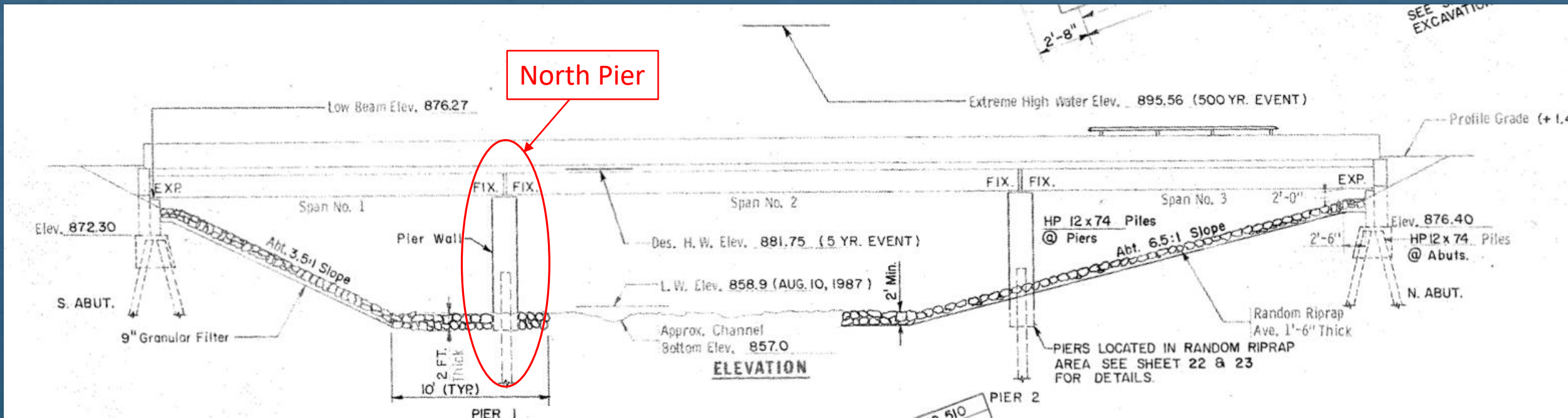
An aerial photograph of a concrete bridge spanning a river. The river is dark and calm, reflecting the sky. The banks are lined with dense trees in various shades of green, yellow, and brown, indicating autumn. The bridge has a simple design with a flat deck and low railings. The overall scene is peaceful and scenic.

N Broadway Bridge Update

11.29.2021



Update on North Broadway Bridge - History



Update on North Broadway Bridge - Closure

Recommended closure by
Bridge Engineer on
February 10, 2021.

Originally we anticipated a
'rehab' option, but that has
been reconsidered. Now
it's either remove or fully
replace.



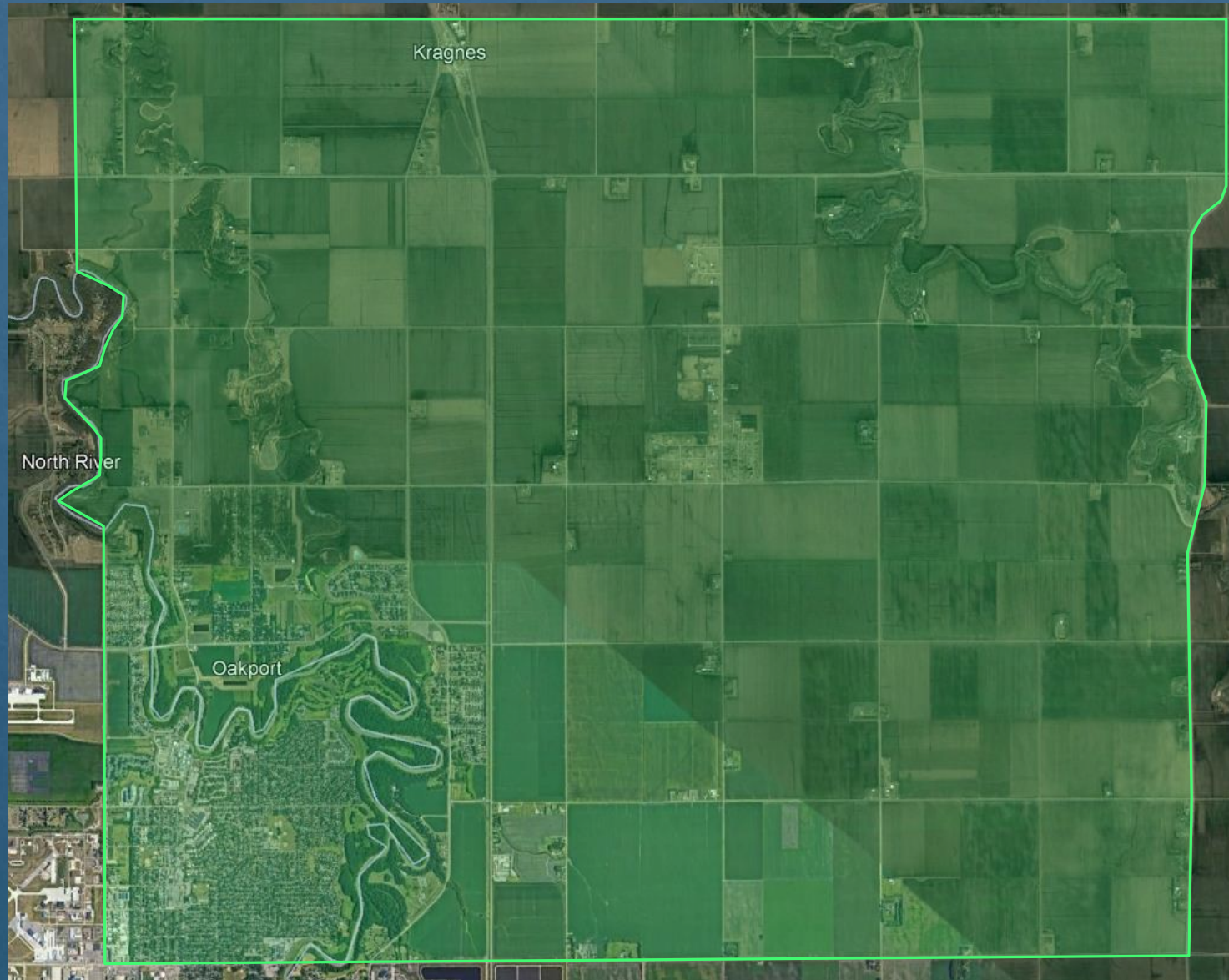
Broadway Bridge – What we've done since closure

- Conducted Online Survey
- Cost Estimates on Reconstruction Concepts
- Further examined Road Stability (Fargo side)
- Examined Traffic Calming Concepts (if bridge isn't replaced)

Online Survey Information

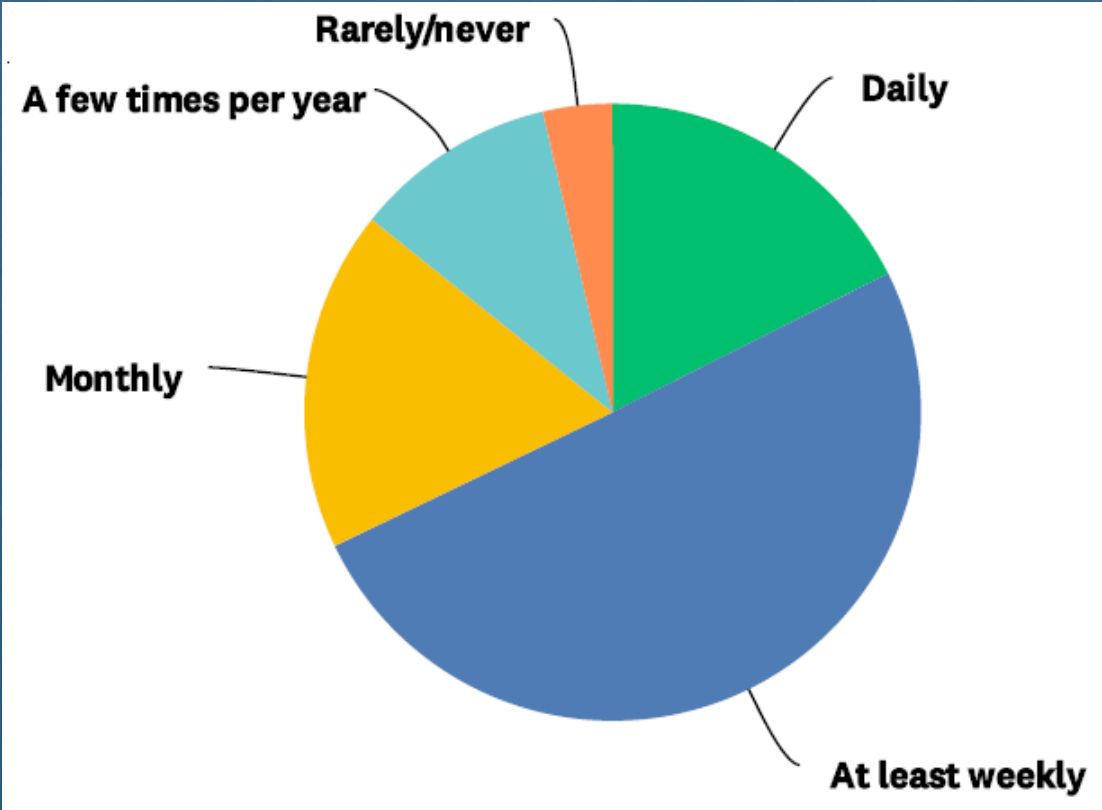
- 3,200 postcards to N Fargo residents
- 800 postcards to Clay County residents
- 690 Fargo responded – **22%** response rate
- 248 Clay County responded – **31%** response rate

Online Survey Information – Boundary Postcards

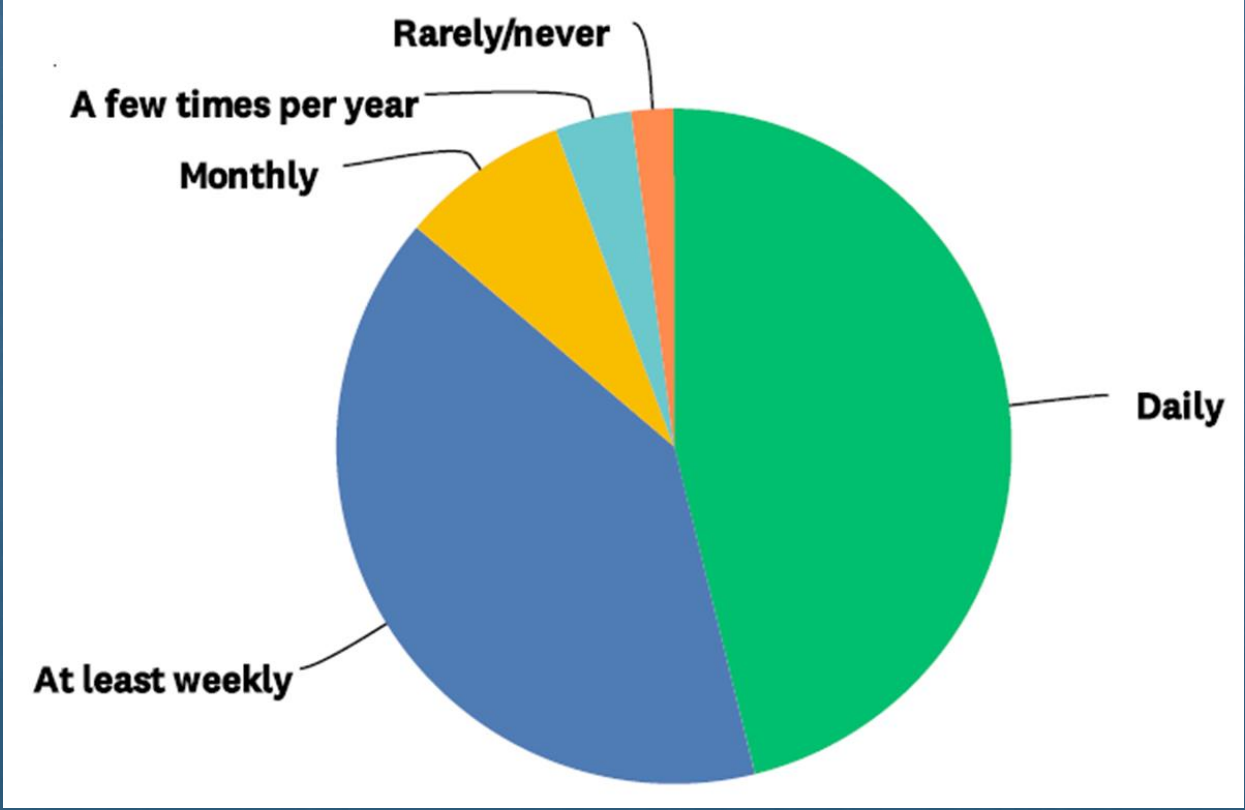


Online Survey Results

Before the Bridge was closed, how often did you use it?



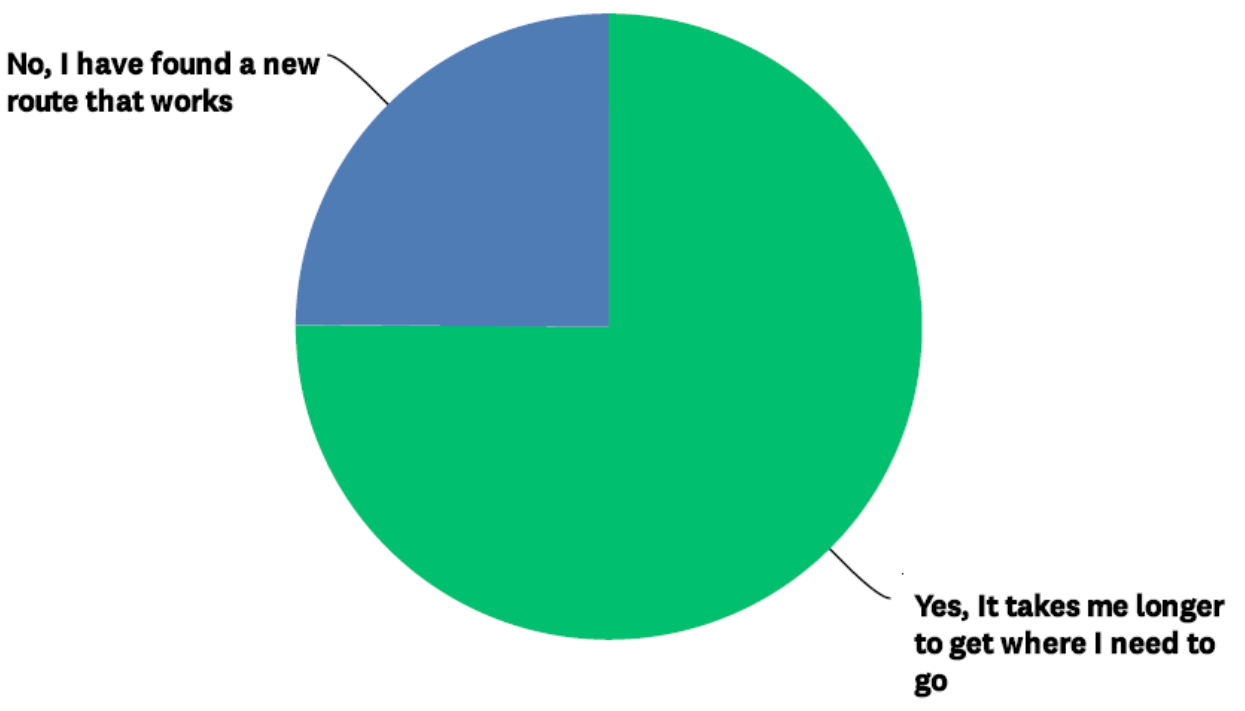
Fargo



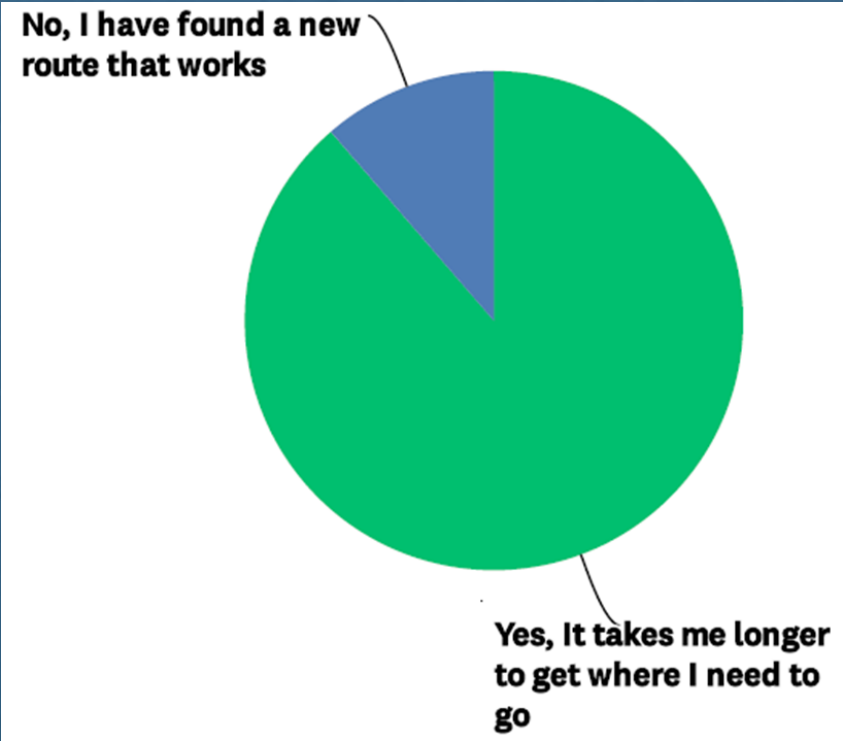
Clay County

Online Survey Results

Has the bridge closure affected your travels?



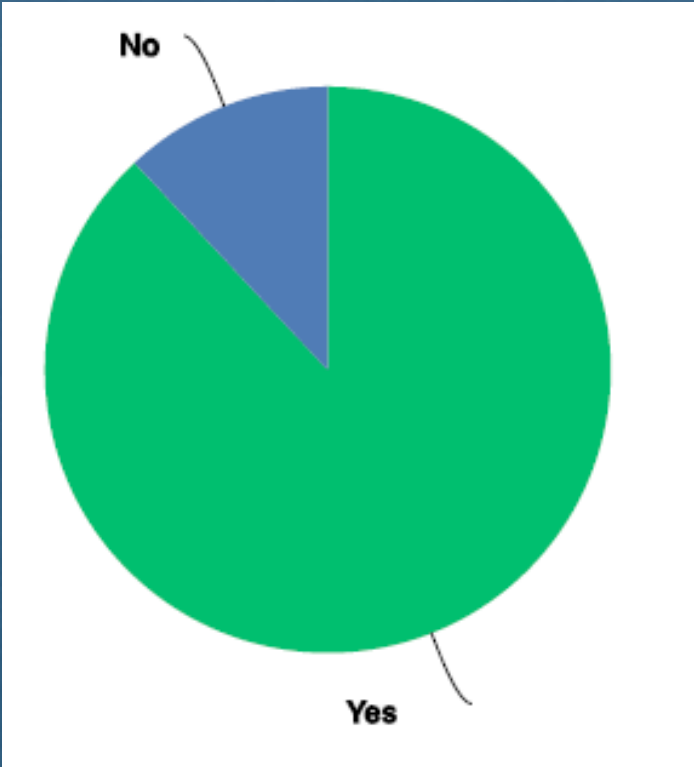
Fargo



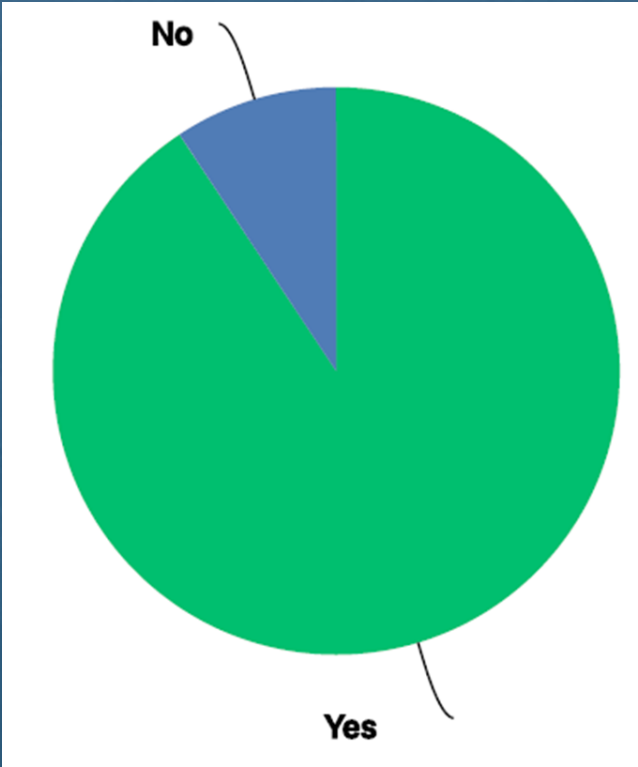
Clay County

Online Survey Results

Do you support rebuilding a new bridge?



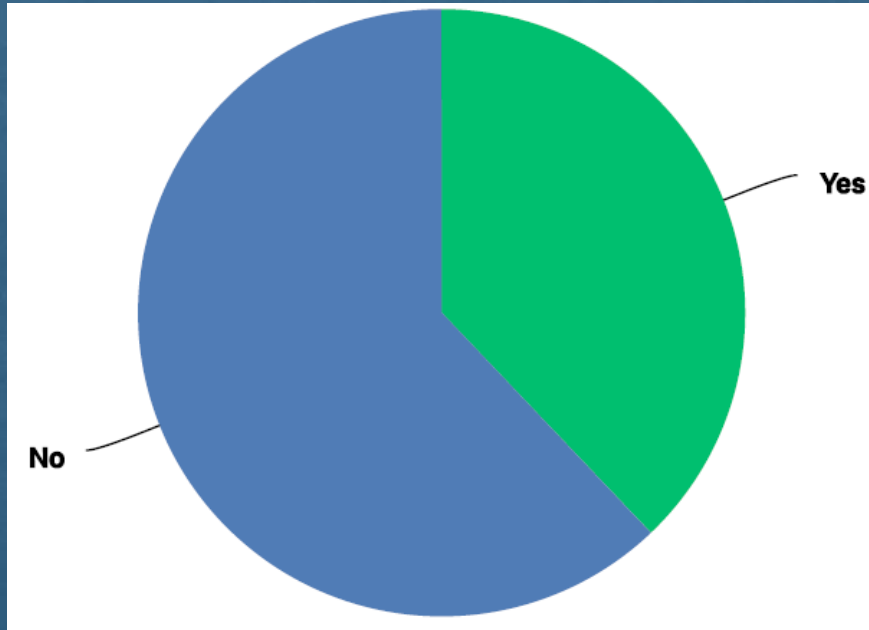
Fargo



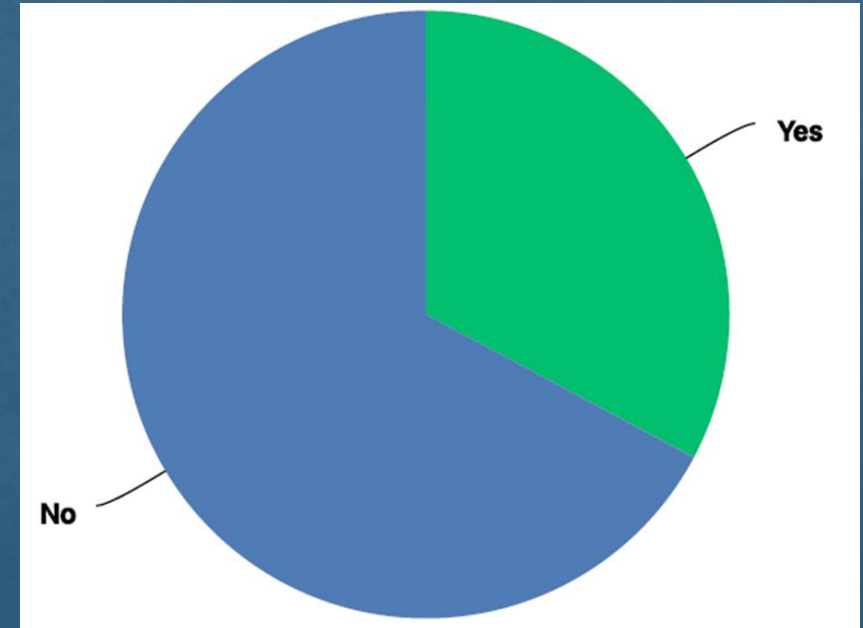
Clay County

Online Survey Results

Do you feel that the nearby bridge can fulfill the needs of travel in this area if the Broadway Bridge is not reconstructed?



Fargo

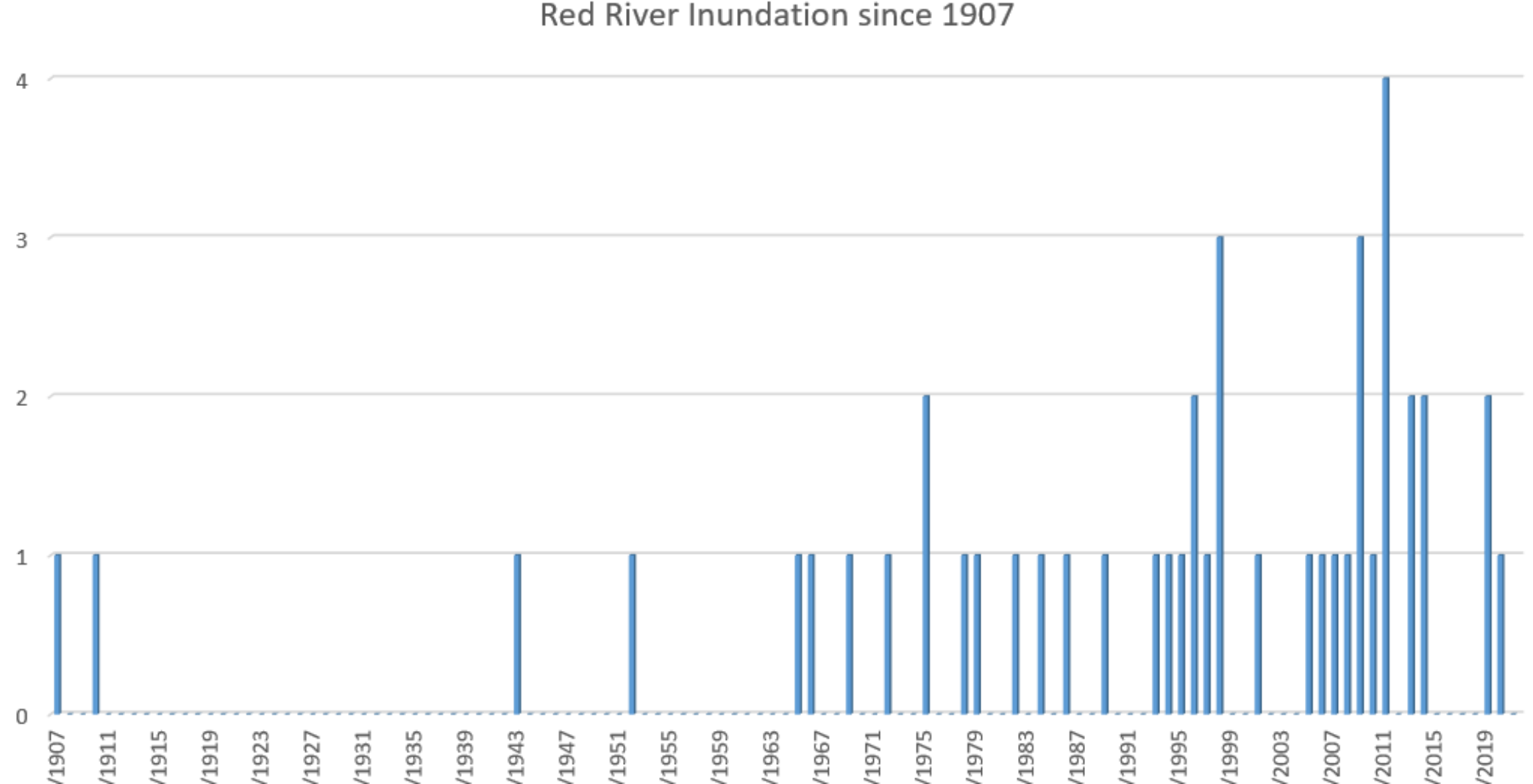


Clay County

Broadway Bridge Flooding History



Historical Inundation for Broadway Bridge – 1907 to present



Historical Inundation for Broadway Bridge – 1907 to present

- Since 1907, the Red River has been over 23' flood stage for 608 days.



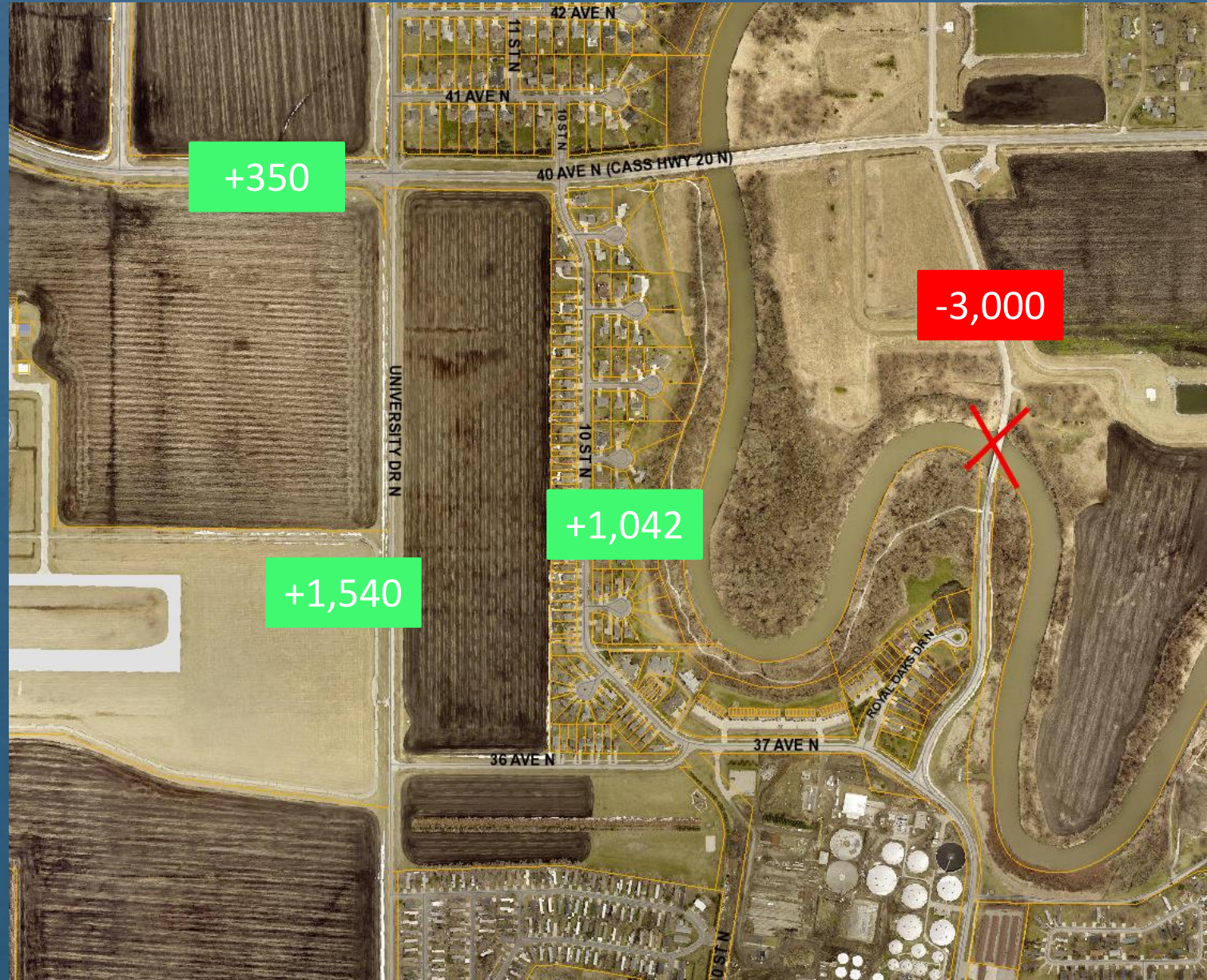
Historical Inundation Info for Broadway Bridge since 1991

- Types of Inundations
 - Spring Floods
 - Number of times = 17
 - Average duration = 18.3 days over 23' flood stage
 - Rainfall Floods
 - Number of times = 15 times
 - Average duration = 7.6 days over 23' flood stage

Detour Route when Broadway gets Closed

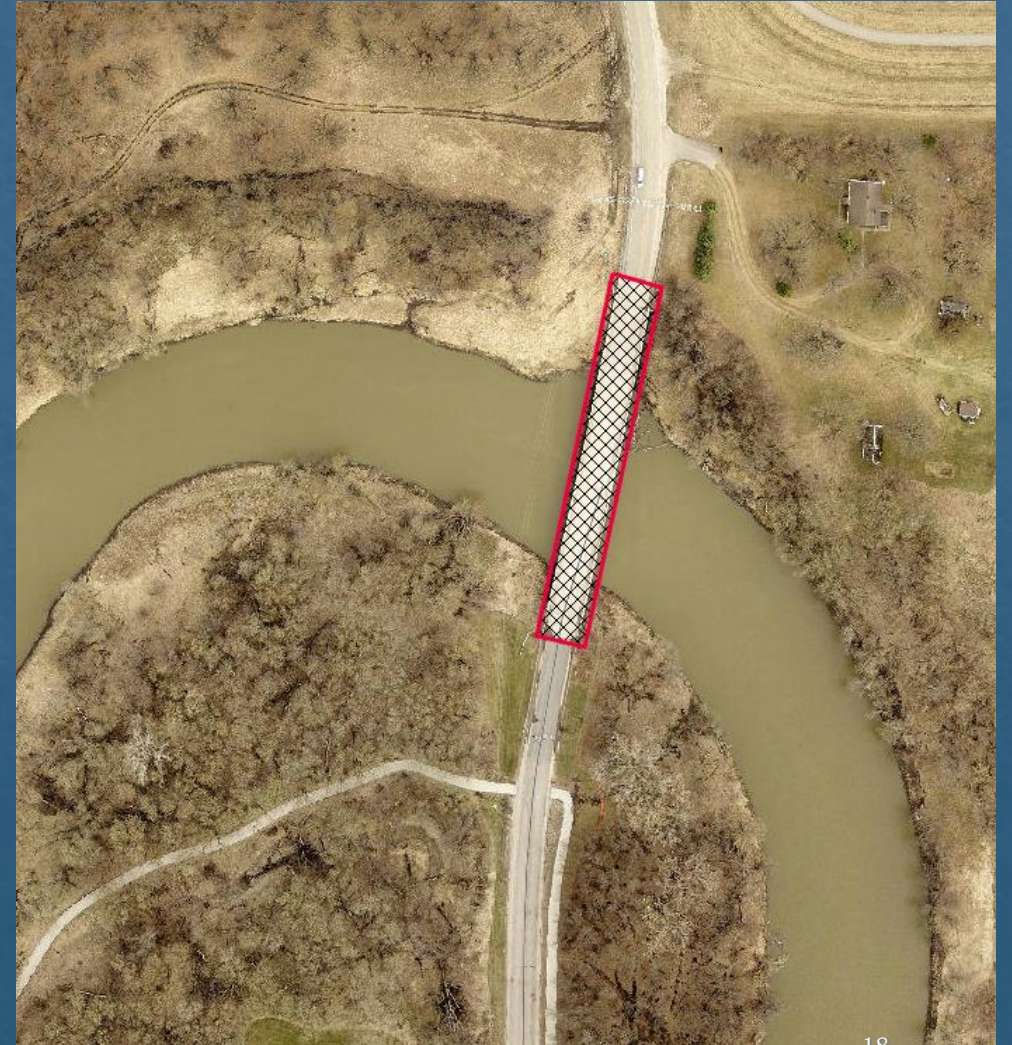


Traffic re-routed during Detour



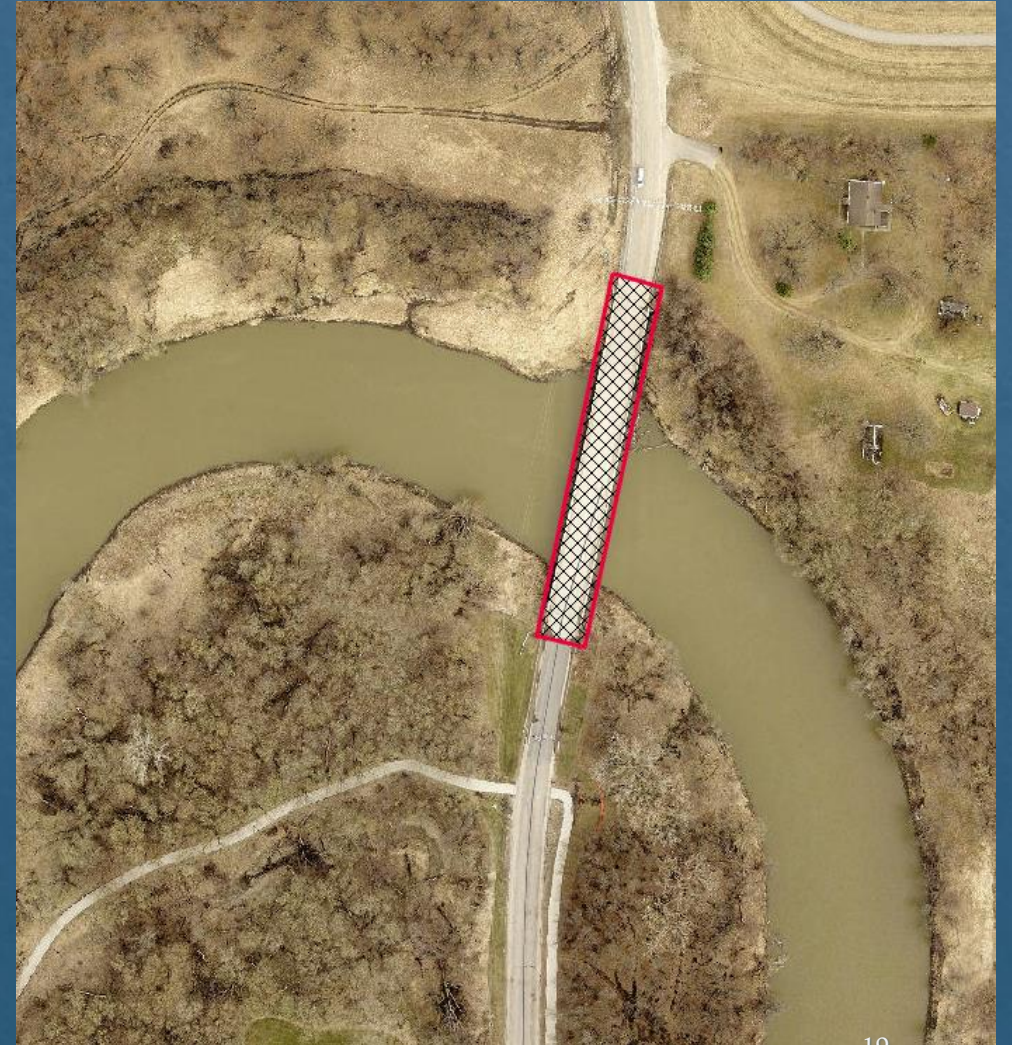
Estimated Cost to Demolish and NOT REPLACE BRIDGE

- \$300,000
 - split 50/50 Fargo and Clay Co
- Would need to determine what to do with road (TBD at a later date)
- Demolition should occur in 2022
due to bridge being a public safety
hazard



Estimated Cost to Replace **As-Is** (in 2026)

- Bridge Replacement:
 - Length = 350 feet
 - Cost Estimate = 4.5M
- Projected funding
 - ND side (80% Fed/20% City)
 - 1.8M Fed/450K City
 - MN side
 - 2.25M Mn Bridge Bonds
 - State Aid Funds



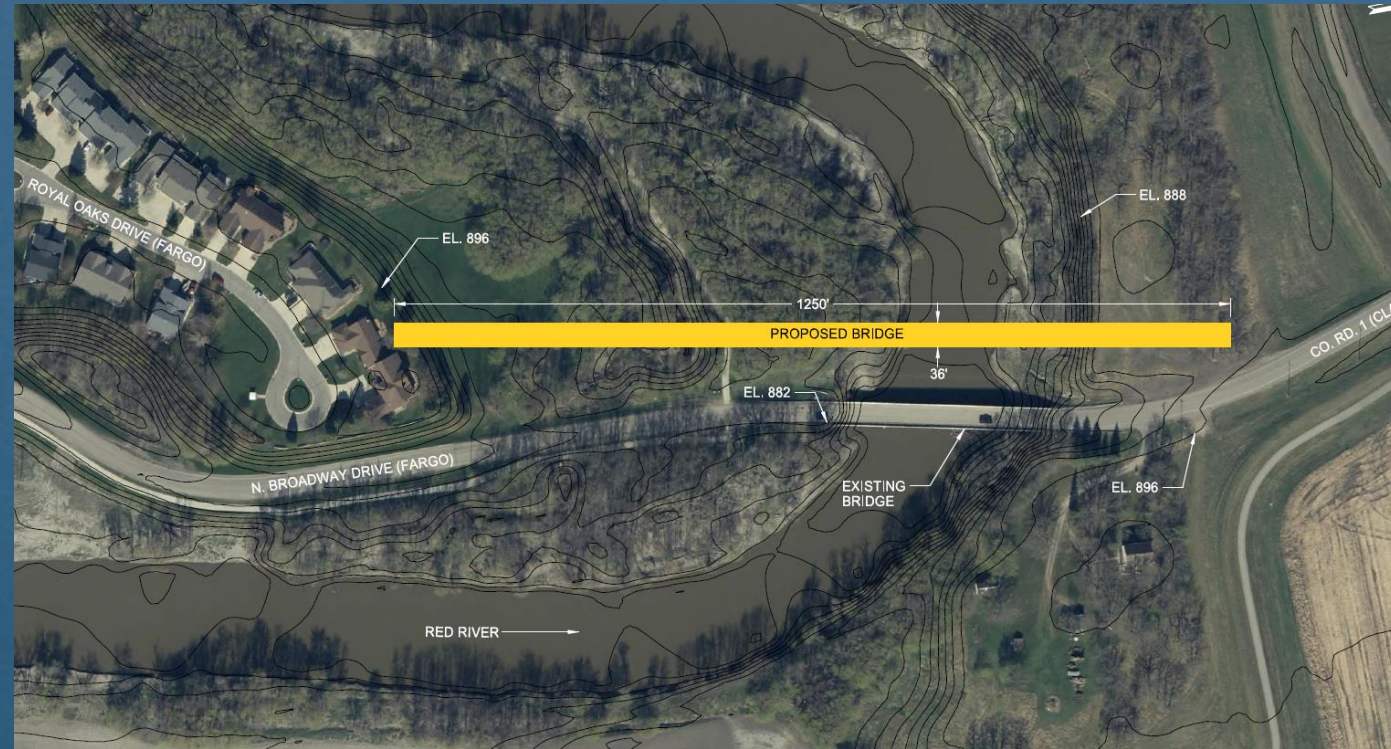
Estimated Cost to Replace **As-Is** (in 2026), cont.

- Road Stabilization (Fargo side)
 - Scope of work – Stabilize embankment and move road west
 - Cost Estimate = 3.0M
 - Projected funding
 - 100% City = 3.0M
- Bridge and Road
 - Cost Estimate = 7.5M
 - ND side = 5.25M
 - MN side = 2.25M



Estimated Cost to **Raise above Diversion Flows**

- Bridge Replacement:
 - Length = 1,250 feet
 - Cost Estimate = 17.5M
- Projected funding
 - ND side = 8.75 M
 - 80% Fed = 7.0M
 - 20% City = 1.75M
 - MN side = 8.75 M
 - Mn Bridge Bonds
 - State Aid Funds



Estimated Cost to **Raise above Diversion Flows**

- Other Costs (Fargo side)
 - ROW Acquisition
 - Cost Estimate = 2.0M
 - Reconstruct Royal Oaks
 - Cost Estimate = 1.0M
- Bridge and Road
 - Cost Estimate = 20.5M
 - ND side = 11.75M
 - MN side = 8.75M





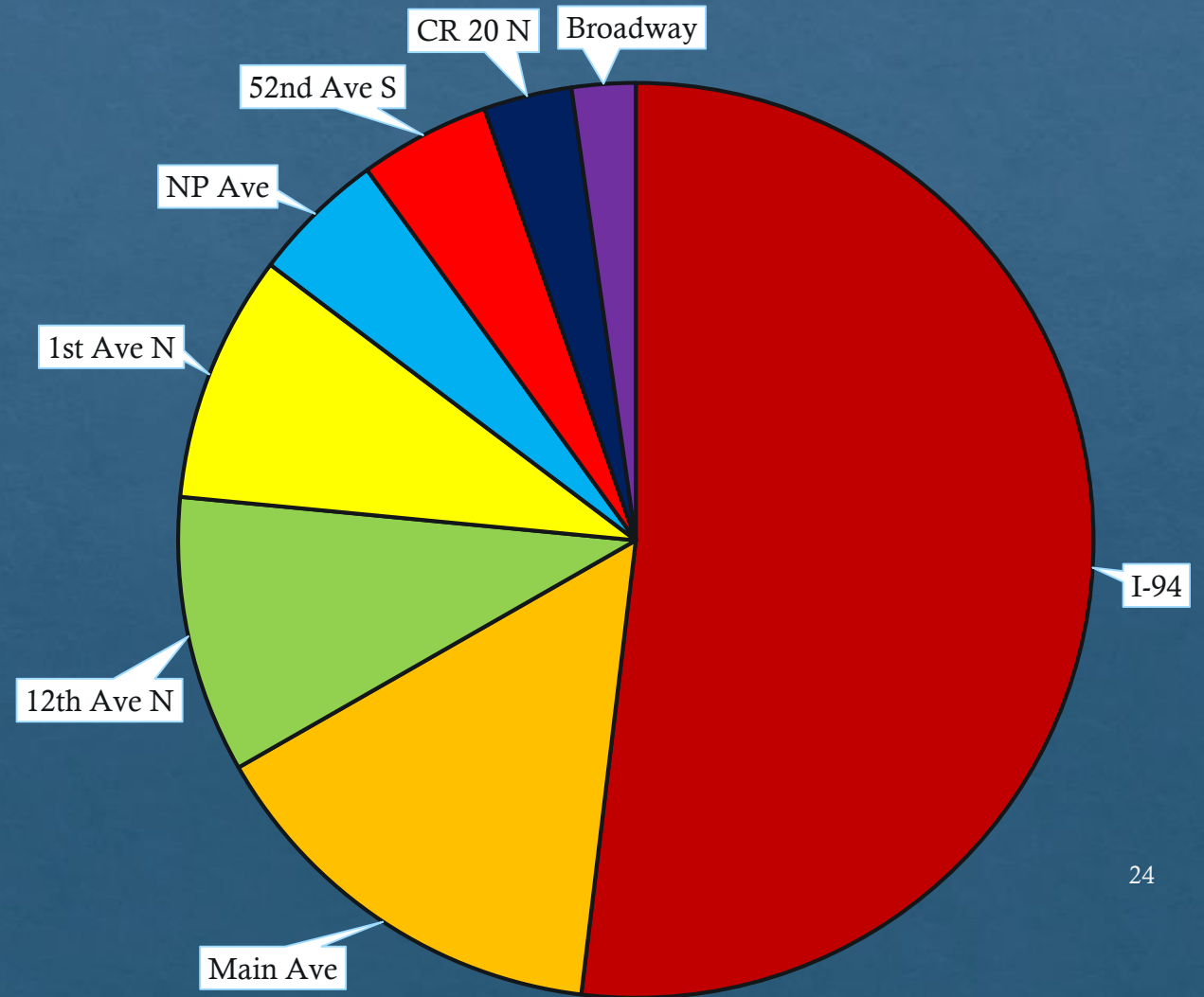
1,250 ft

2,050 ft

Traffic Data

- Daily Traffic Counts on Red River Bridges – 2018
(highest to lowest)

- **I-94** **70,000**
- **Main Ave** **20,000**
- **12th Ave N** **13,200**
- **1st Ave N** **11,830**
- **NP Ave** **6,370**
- **52nd Ave S** **6,230**
- **Co Road 20** **4,205**
- **Broadway** **3,035**



Bridge Length Data

- Red River Bridges Lengths
 - I-94 1300'
 - County Road 20 1000'
 - NP Ave 921'
 - Main Ave 860'
 - 52nd Ave S 612'
 - 1st Ave N 610'
 - 12th Ave N 530'
 - **Broadway 350' (Above Diversion option 1250')**

Flow Chart for Moving Forward

- **Question 1 - Do we want to Replace Bridge?**

Flow Chart for Moving Forward

- If NO,
 - Bid out a bridge demolition project in 2022
 - Since there are public safety and environmental concerns, this should be done regardless of any option
 - Look at Traffic Calming Options on 10th Street.
- Estimated Cost - \$300-400k for bridge work, \$100k 10th Street work

Moving Forward

If YES,

Option 1 - Leave at existing elevation

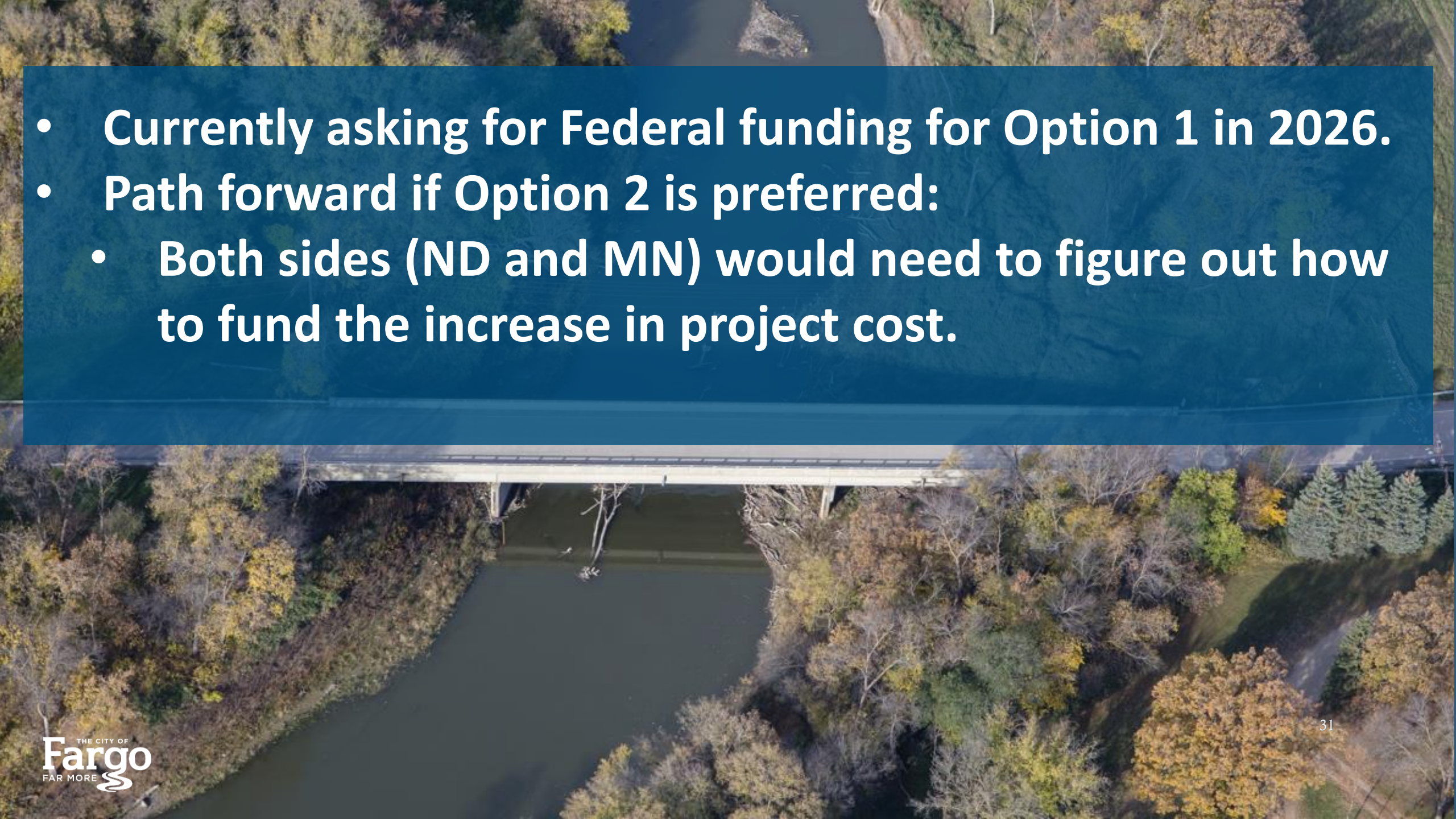
Option 2 - Raise it up

Moving Forward

- Option 1 – Existing elevation plan
 - Estimated Bridge Cost = 4.5M
 - Estimated Road Cost = 3.0M
- Bridge and Road
 - Total Cost Estimate = 7.5M
 - ND side = 5.25M
 - MN side = 2.25M

Moving Forward

- Option 2 – Raise bridge above FM Diversion & re-align roadway on Fargo side
 - Estimate Bridge Cost = 17.5M
 - Estimate ROW Cost (ND) = 2.0M
 - Estimated Royal Oaks Reconstruct (ND) = 1.0M
- Bridge and Road
 - Total Cost Estimate = 20.5M
 - ND side = 11.75M
 - MN side = 8.75M

- 
- An aerial photograph of a river winding through a forest with trees in autumn colors. A bridge spans the river in the middle ground. A large blue semi-transparent rectangle is overlaid on the top half of the image, containing white text.
- **Currently asking for Federal funding for Option 1 in 2026.**
 - **Path forward if Option 2 is preferred:**
 - **Both sides (ND and MN) would need to figure out how to fund the increase in project cost.**

An aerial photograph of a golf course. A river flows through the center, bordered by dense trees with autumn foliage. To the right, there are large fields of mature corn. A road runs along the bottom of the frame, with some buildings and parking areas visible on the left side. A semi-transparent blue rectangle is overlaid in the center, containing the text "Questions?" and "11.29.2021".

Questions?

11.29.2021