

MCLEOD COUNTY AND CITY OF HUTCHINSON

Welcome to the Hutchinson NE Ring Road Study Open House!

October 4, 2022

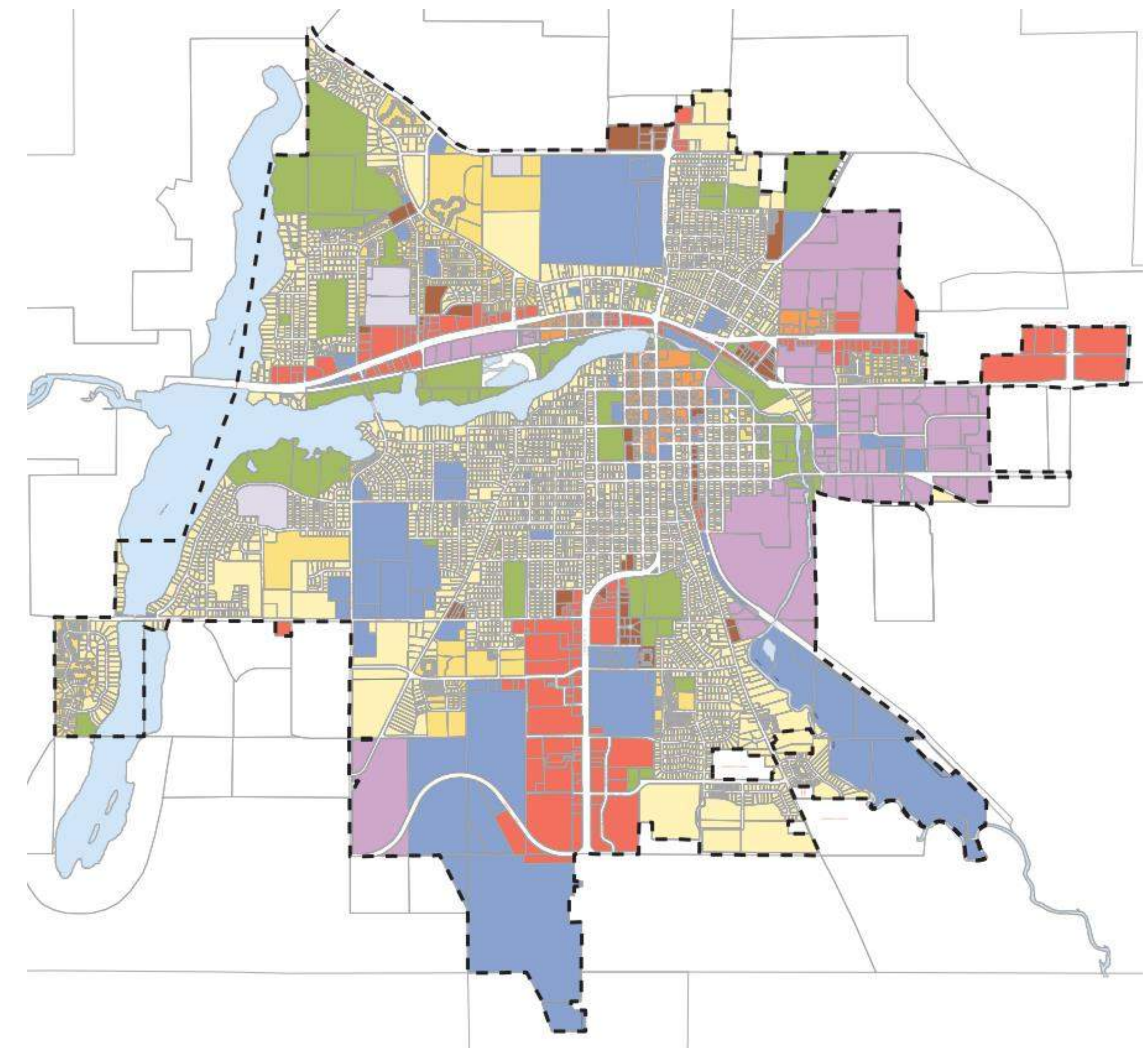


About the Study

McLeod County and the City of Hutchinson have been studying a plan to build a NE ring road around the city that curves from Hwy 15 on Hutchinson's north side to Hwy 7 / Hwy 22 on Hutchinson's east side. Current efforts build on studies that have already been completed.

What you will learn today:

- An understanding of travel patterns
- Route alignments considered & how they were evaluated
- Input from the community from Spring of 2021
- Findings from the evaluation
- Route alignments dismissed & those recommended for future consideration



City of Hutchinson

Understanding Travel Patterns

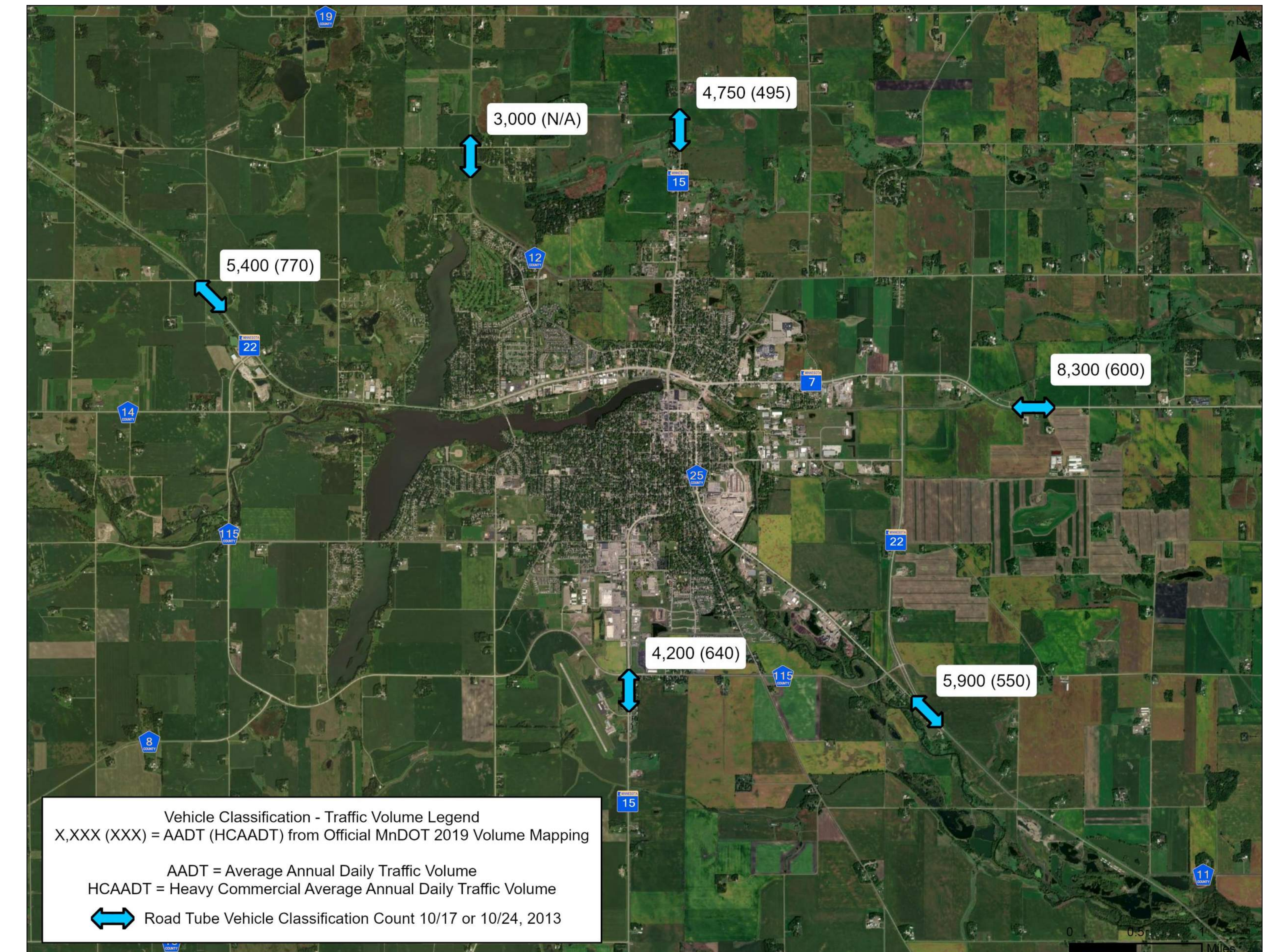
Determining who would travel on the new NE ring road is important in understanding the benefits of the roadway. This analysis determined who “may” shift their travel routes from other routes to the new roadway.

Traffic analysis process:

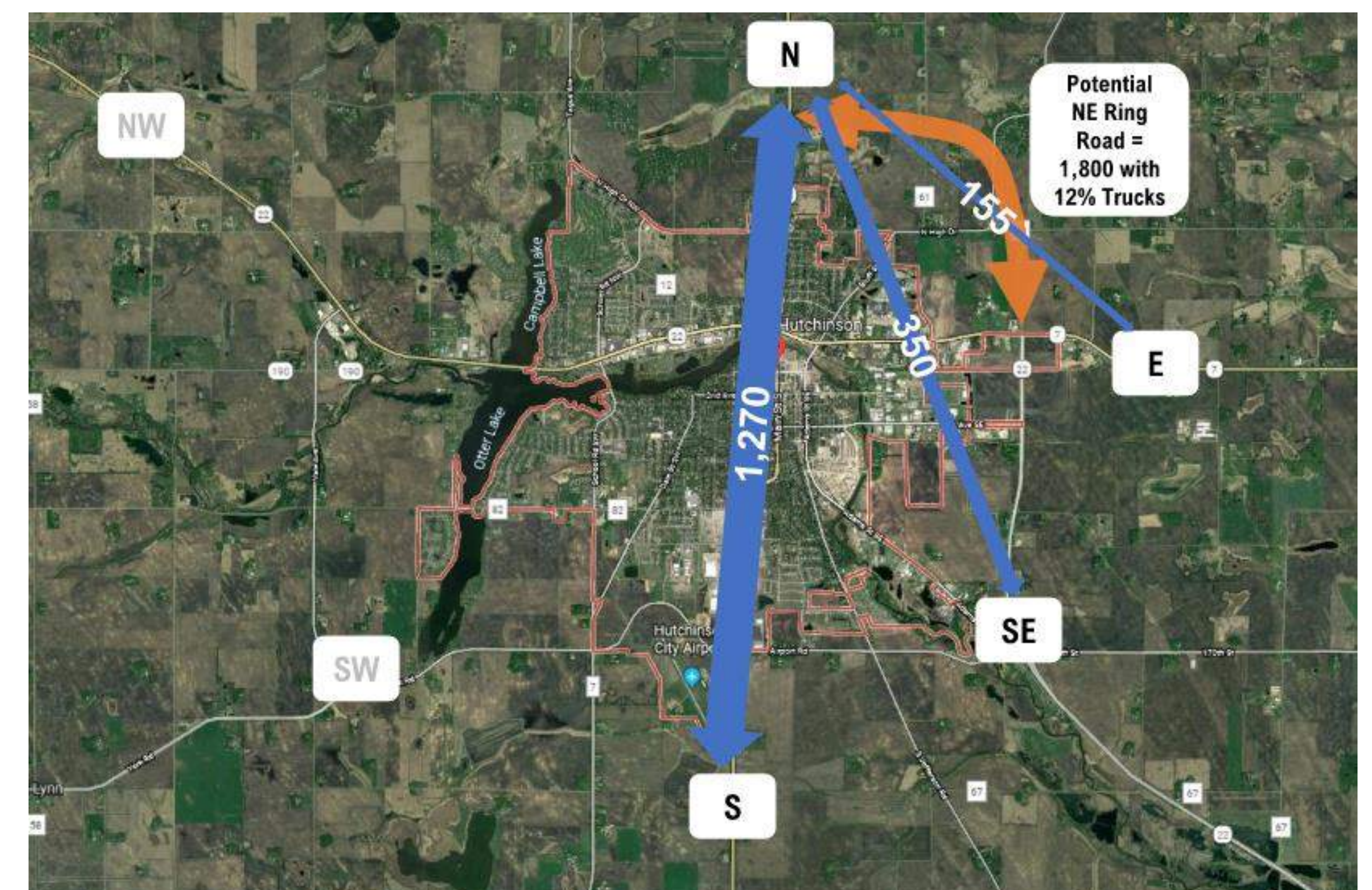
- First, routes that vehicles travel today through and around the City of Hutchinson were determined.
- Second, the number of vehicles per day expected to use the new roadway was estimated.
- Travel patterns were determined using GPS data.

Key highlights:

- North-south through traffic on Hwy 15 is the largest movement and has the most influence on the projected volume for the NE ring road.
- Projected traffic on the proposed NE ring road is 1,800 vehicles per day. This includes 220 trucks which is 12 percent of the traffic.
- This projection is similar to what is currently using the SW ring road in Hutchinson.

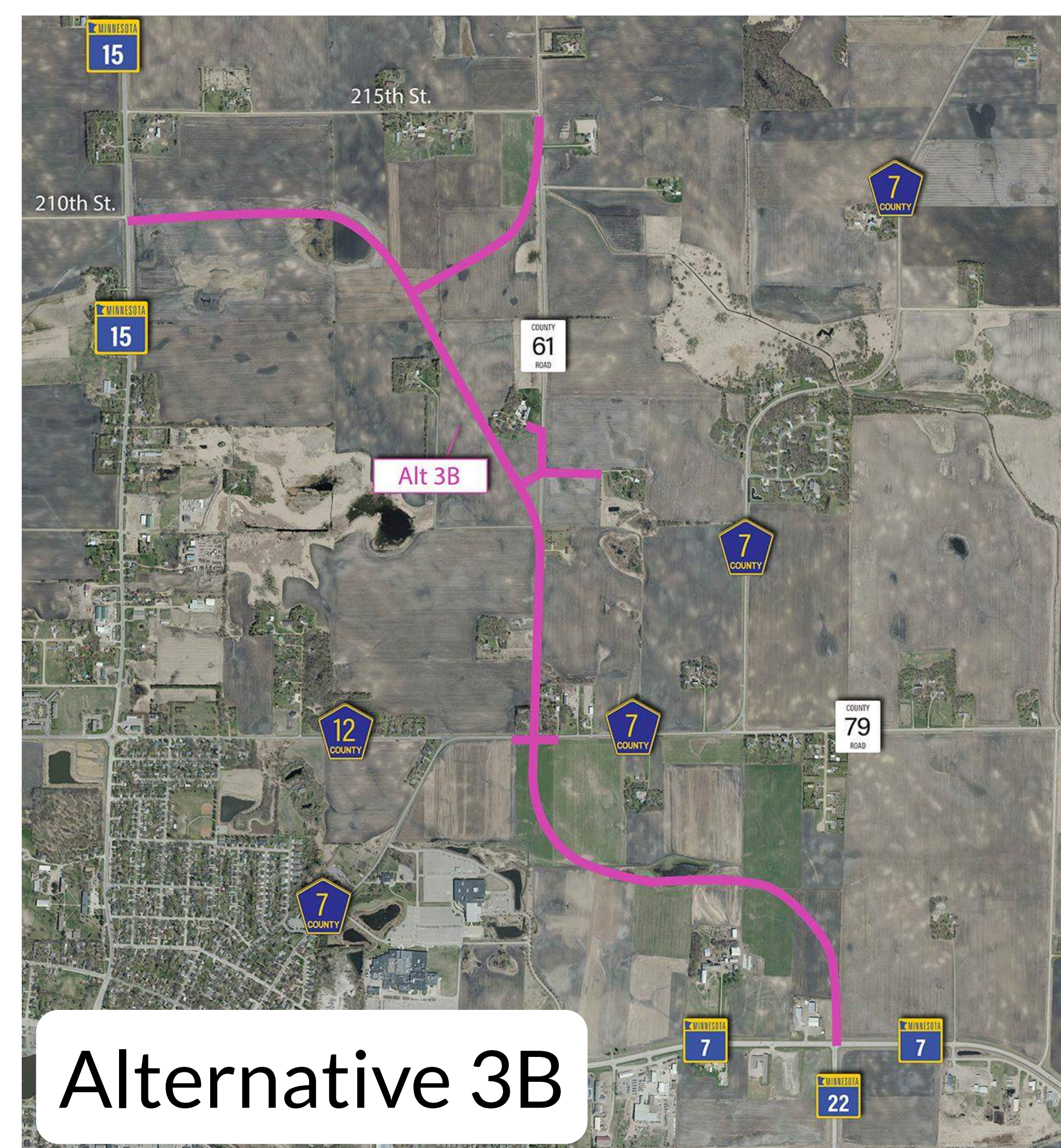
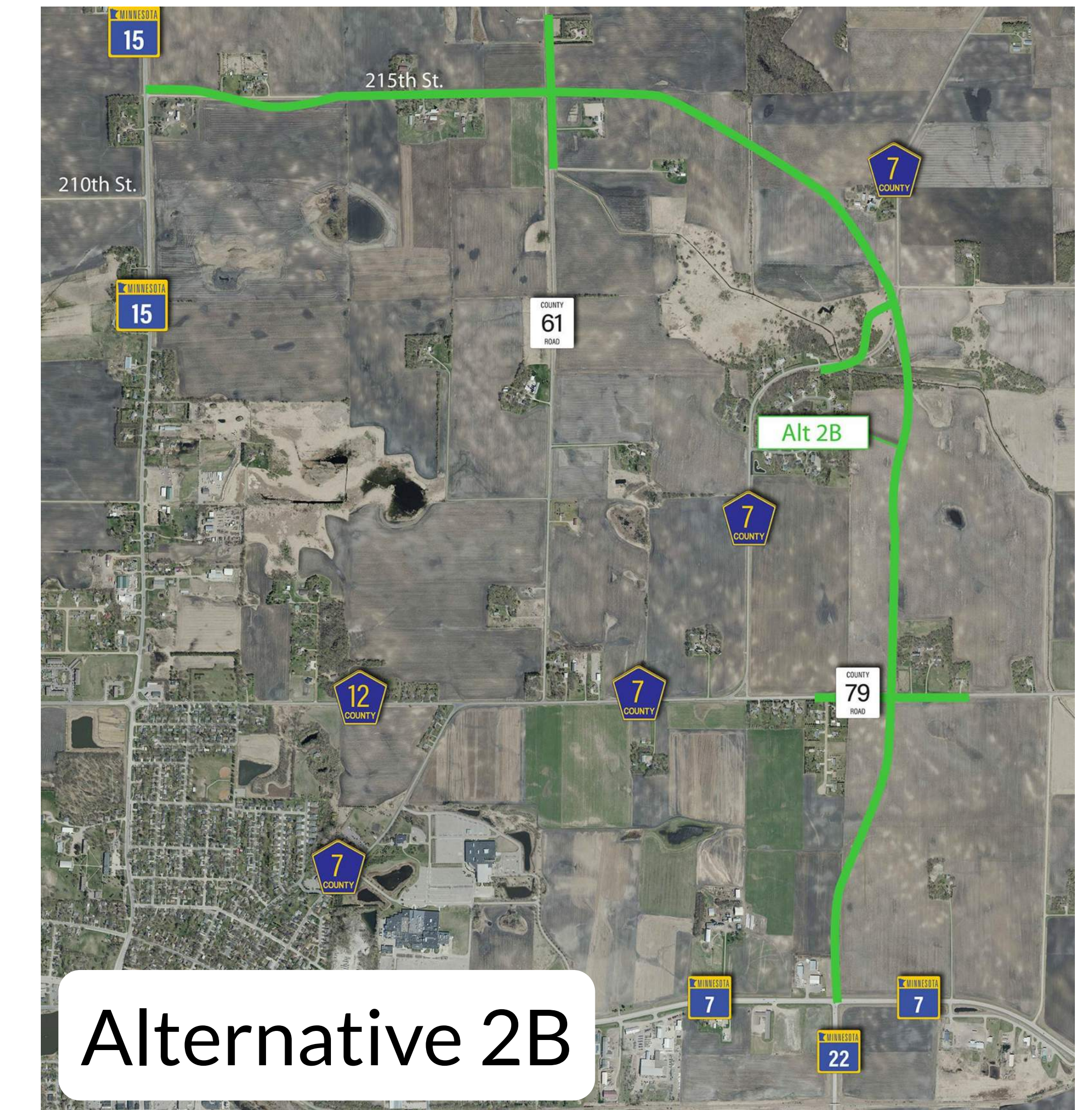
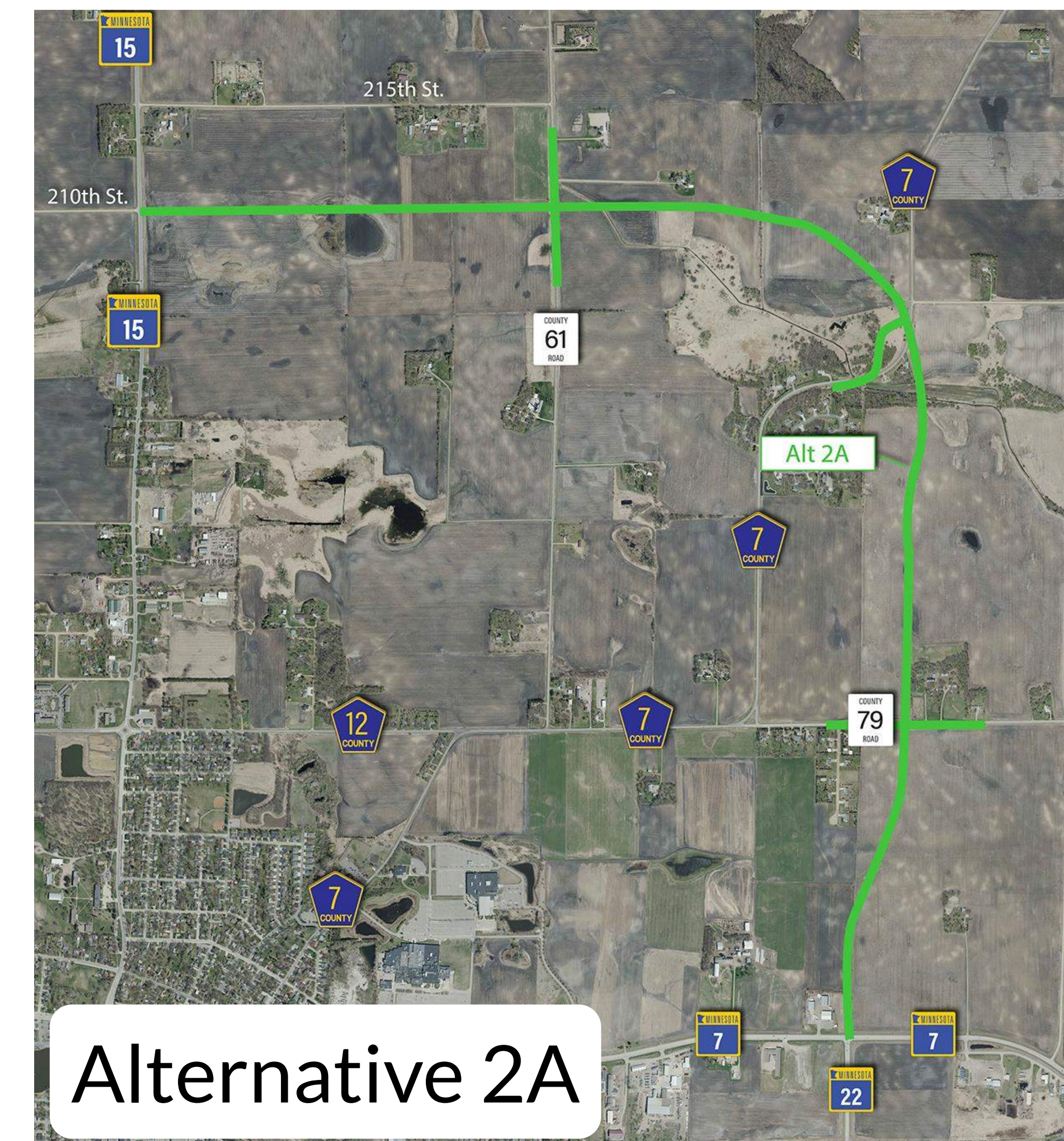


Existing Traffic Levels

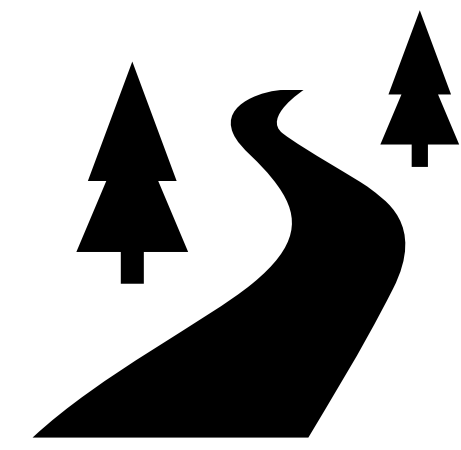


Potential Traffic on NE Ring Road

Route Alignments Considered



How Routes Were Evaluated



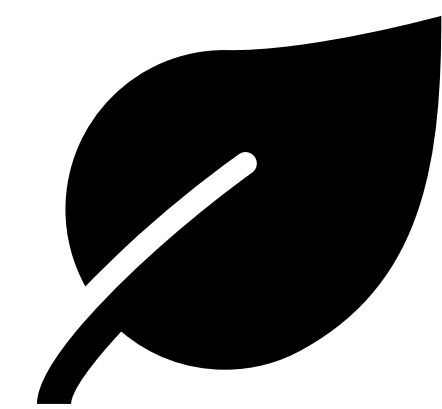
Infrastructure Needed

- Total route length
- Length of existing roadways used
- Number of access locations



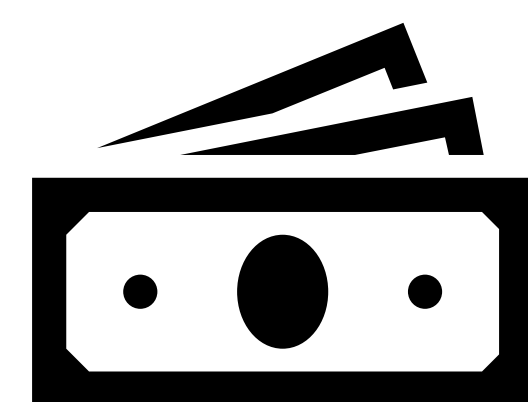
Property Impacts

- Property impacts by land use



Environmental Considerations

- Land use and prime farmland
- Wetlands and floodplains
- Parks, trails, and other recreation resources
- Threatened and endangered species and habitats
- Historic resources
- Social and environmental justice
- Noise



Costs

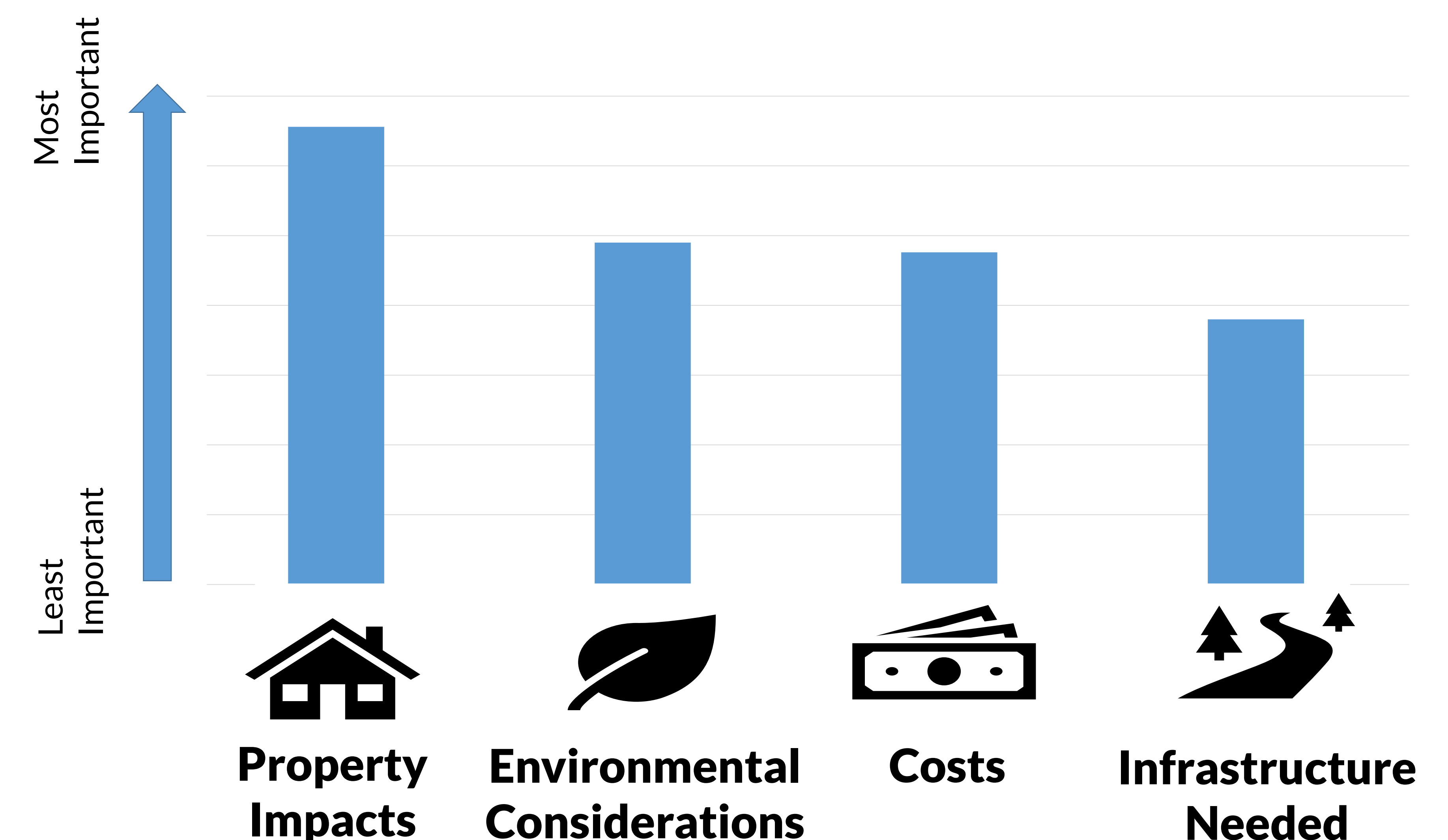
- Mainline roadway costs
- Minor roadway costs
- Property impact costs
- Total estimated project cost

Input from the community

Outreach with the community was conducted from February 18, 2021 through March 15, 2021. Study information was shared through many media sources and input was solicited regarding the alternatives being considered and how they will be evaluated.

What we asked:

- Please rank the evaluation criteria from most important to least important to you.
- Please rank the routes bring considered in the order they best meet your needs.
- Did you have any initial reactions to the evaluation criteria presented?
- Did you have any general comments or questions that you would like answered?



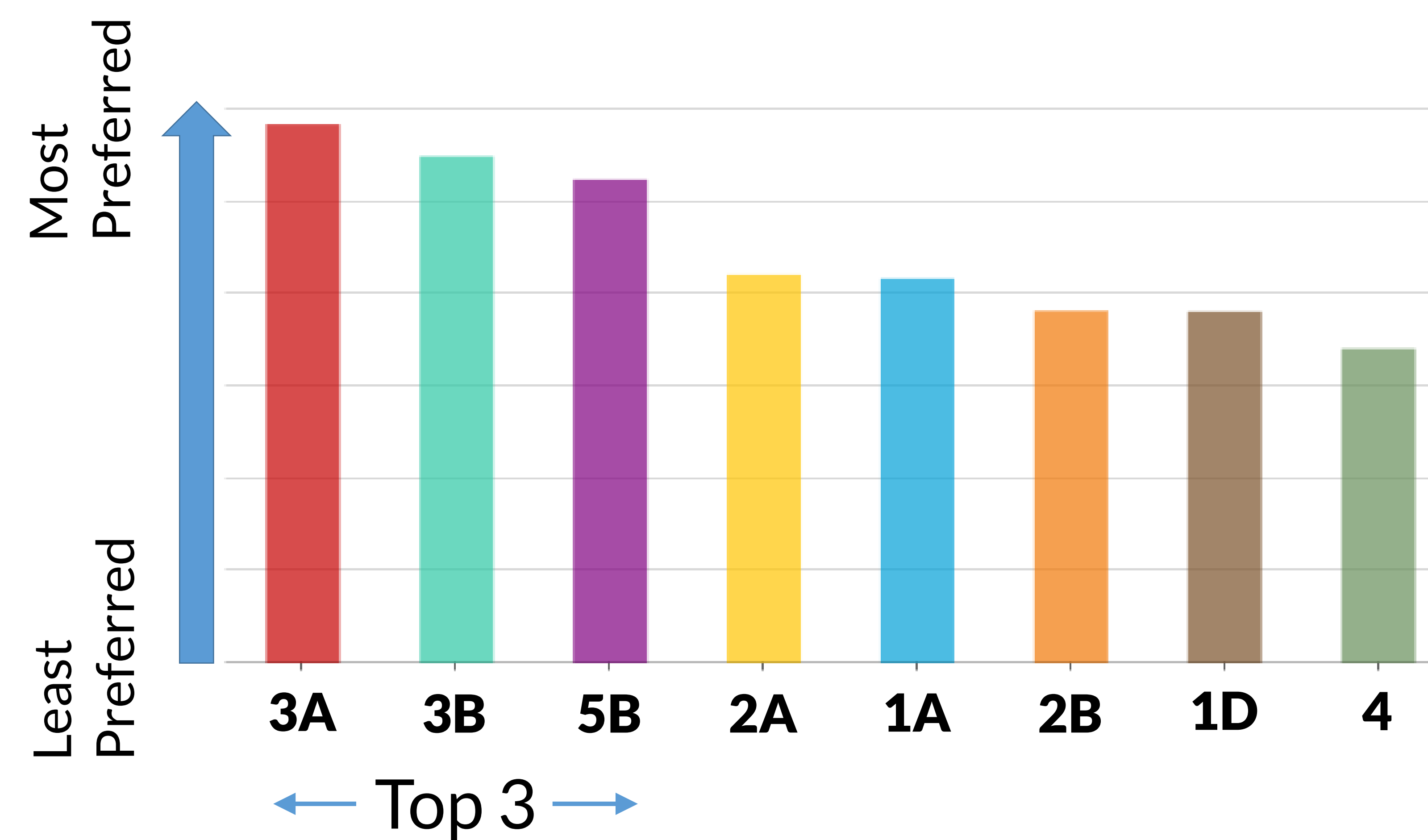
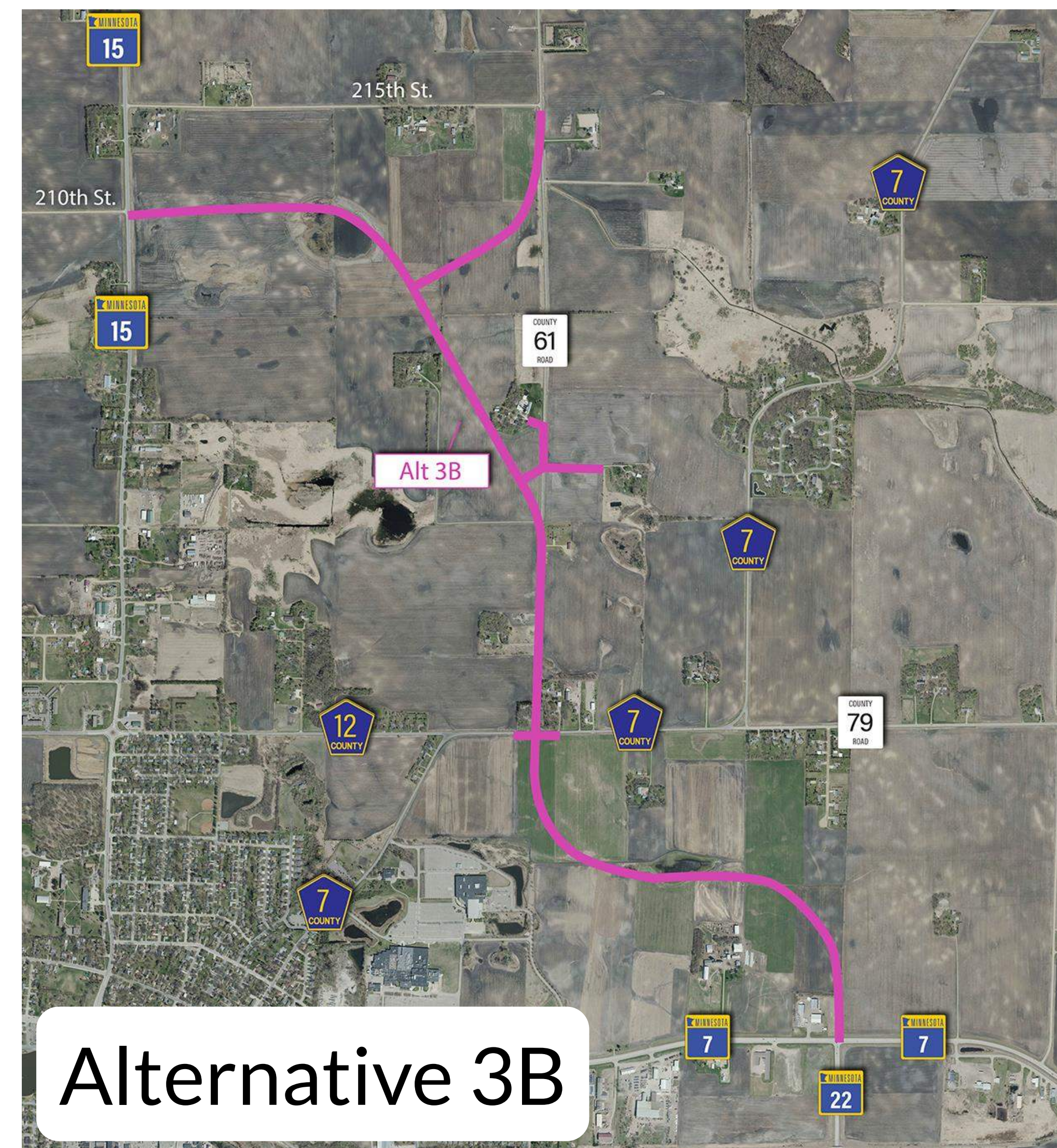
Hot topics:

- Property impacts are a major concern.
- Need to consider the “need” of the ring road relative to its high cost.
- Concerned with increased traffic levels and noise near homes.
- Concerned with safety of roadway design.



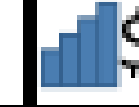
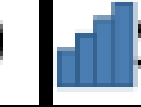
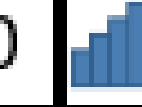
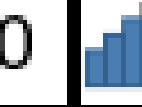











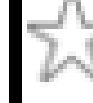








Most frequently used words!

Community-preferred Alignment Options



Evaluation of Route Alternatives

Evaluation Criteria		Alternatives							
		1A	1D	2A	2B	3A	3B	4	5B
Infrastructure Needed									
Route Length	Total route length (miles)	3.1	3.2	3.7	3.8	3.3	3.1	3.4	2.8
Intersections	Number of major intersections	3	3	4	4	2	3	4	3
Property Impacts									
Property Impacts	Number of parcels impacted ⁽¹⁾	<15	15-30	15-30	15-30	15-30	15-30	<15	>30
Driveways	Number of driveways impacted	0	1-5	1-5	6-10	6-10	6-10	1-5	1-5
Environmental Impacts									
Wetlands	Number of wetlands impacted	5	6	5	5	12	10	6	8
Floodplains	Number of floodplains impacted	None	None	None	None	None	None	None	None
Water Resources	New impervious area (sq ft) ⁽²⁾	620,000	520,000	780,000	590,000	490,000	550,000	720,000	600,000
Prime Farmland	Risks for impacts to prime farmland	High	High	High	High	High	High	High	High
Parks and Trails	Number of parks or trails impacted	None	None	None	None	None	None	None	None
Cultural and Historic Resources	Risk for impacts to cultural and historic resources ⁽³⁾	Low	Low	Low	Low	Low	Low	Low	Low
Public Lands	Risk for impacts to public-owned lands	None	None	None	None	None	None	None	Potential
Threatened/Endangered Species	Impacts to threatened and endangered species	None	None	None	None	None	None	None	None
Noise	Risk for building setback issues ⁽⁴⁾	Low	Moderate	Low	Low	High	High	Low	Low
Social	Number of parcels "split" requiring cross-access ⁽⁵⁾	7	5	8	5	5	6	1	8
Environmental Justice	Low income and minority populations impacted	None	None	None	None	None	None	None	None
Other Considerations									
Superelevation Concerns	Number of curves with superelevation risk ⁽⁶⁾	1	2	0	0	1	0	1	1
Ditch Crossings	Number of ditch crossings	1-5	1-5	5-10	5-10	1-5	1-5	5-10	1-5
Gas Main Crossings	Number of gas main crossings	2	2	3	3	3	3	2	2
Financial Considerations									
Total Project Cost	2020 Bid Prices	 \$ 13,000,000	 \$ 14,250,000	 \$ 16,000,000	 \$ 15,250,000	 \$ 15,250,000	 \$ 15,000,000	 \$ 14,750,000	 \$ 12,250,000
Return on Investment	Years until payback = Total Cost/Yearly Savings	 20	 25	 35	 35	 25	 25	 30	 20
Public Input (Ranking of Routes)		 5	 7	 4	 6	 1	 2	 8	 3

Notes:

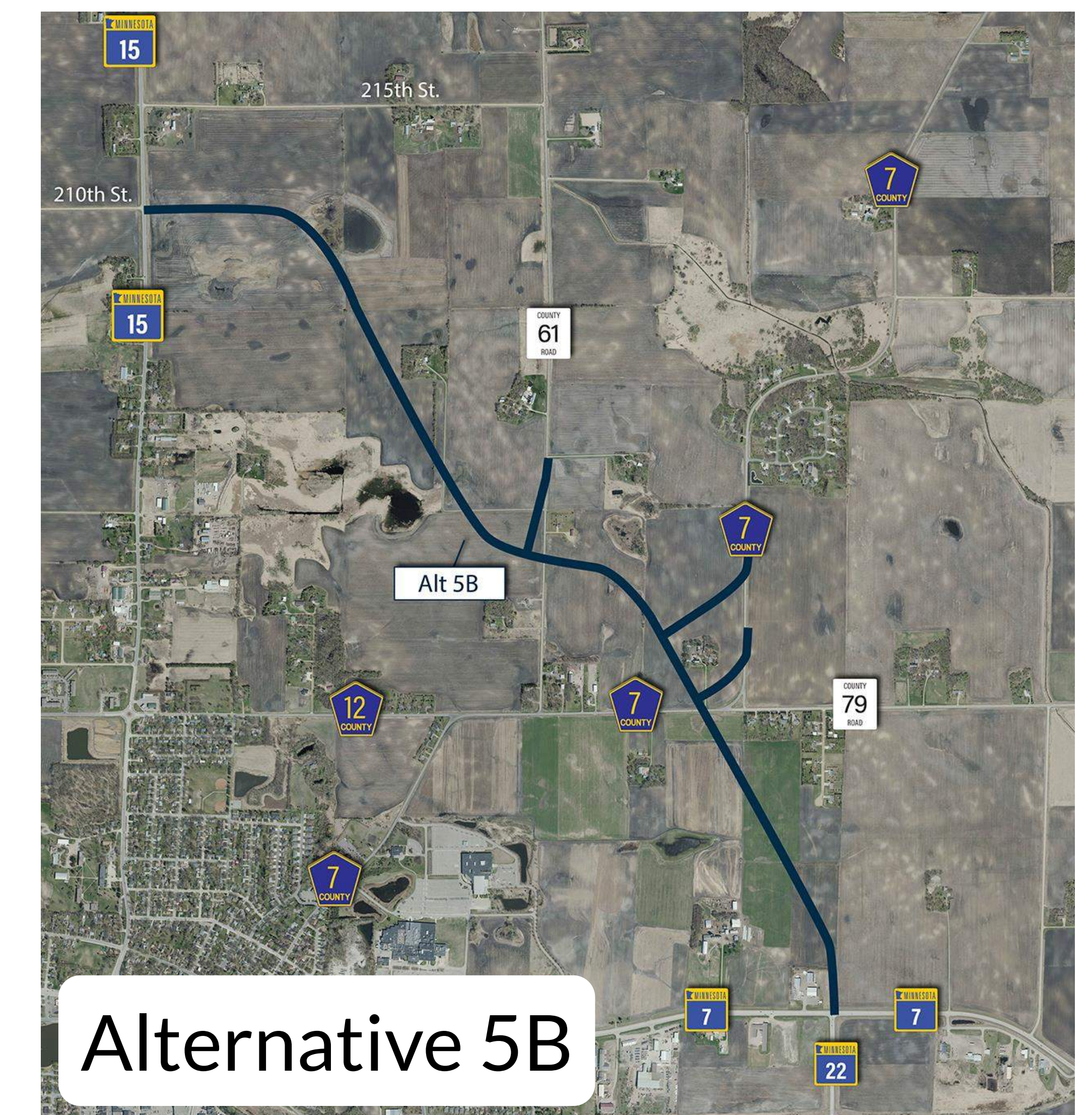
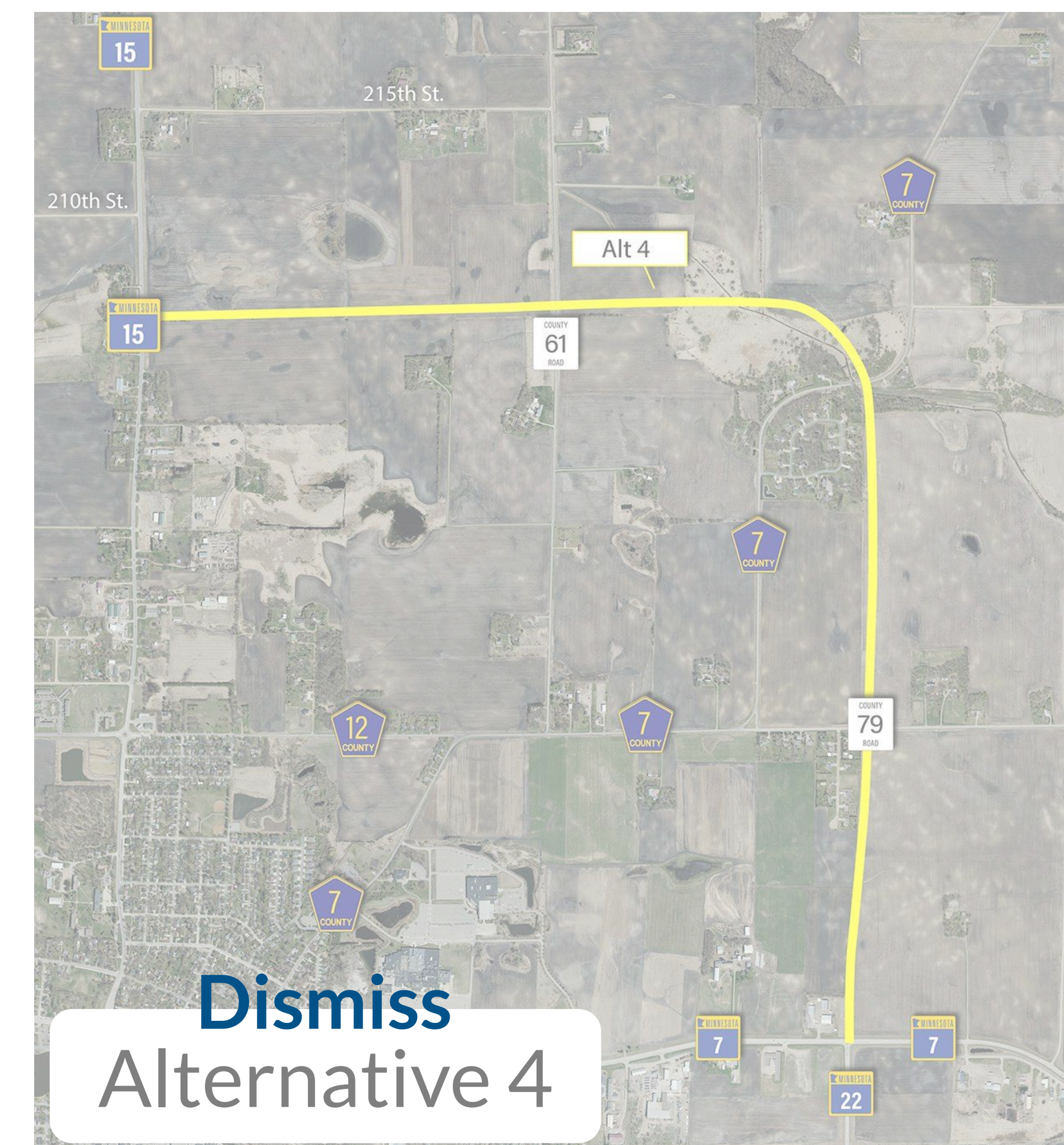
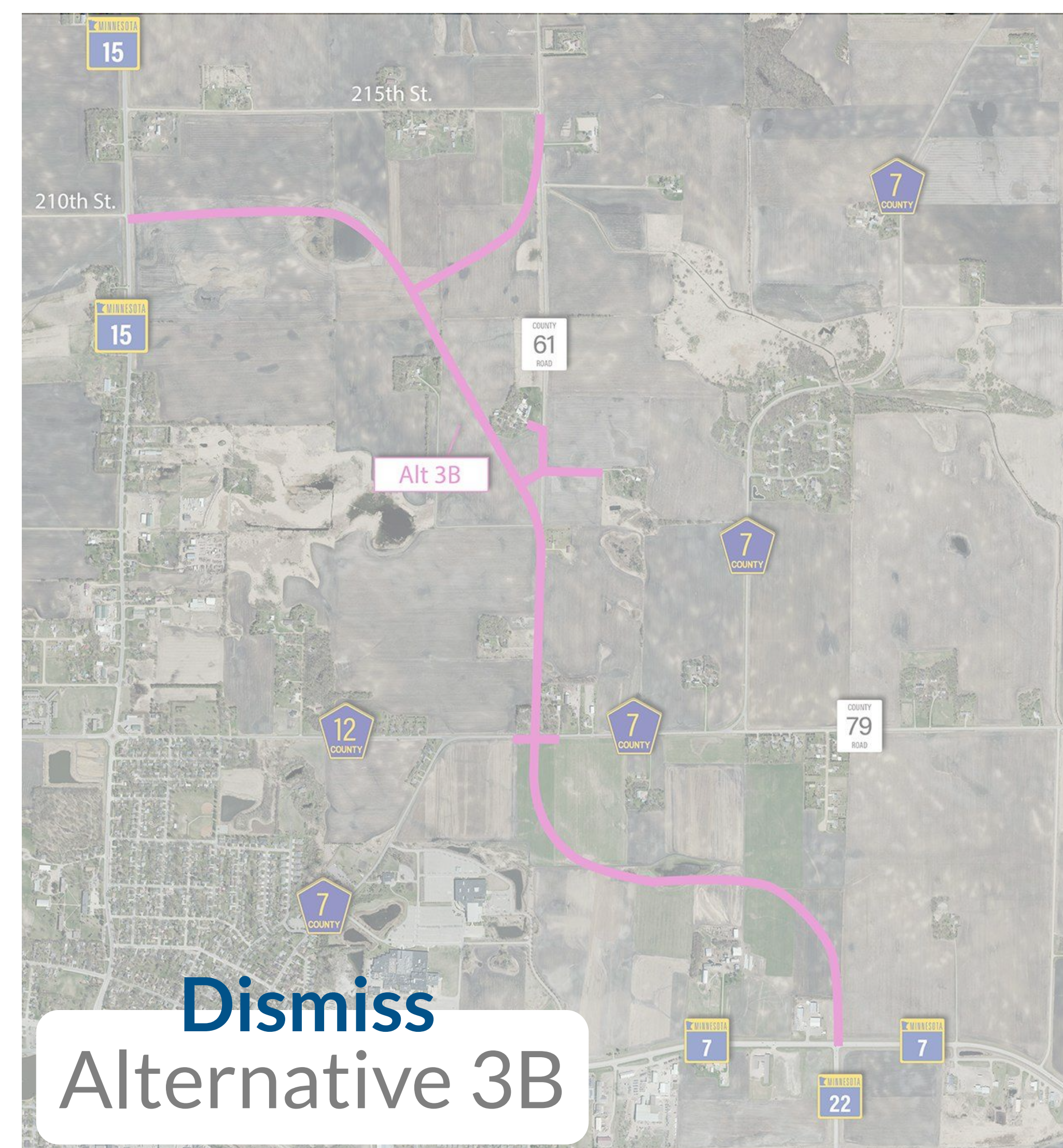
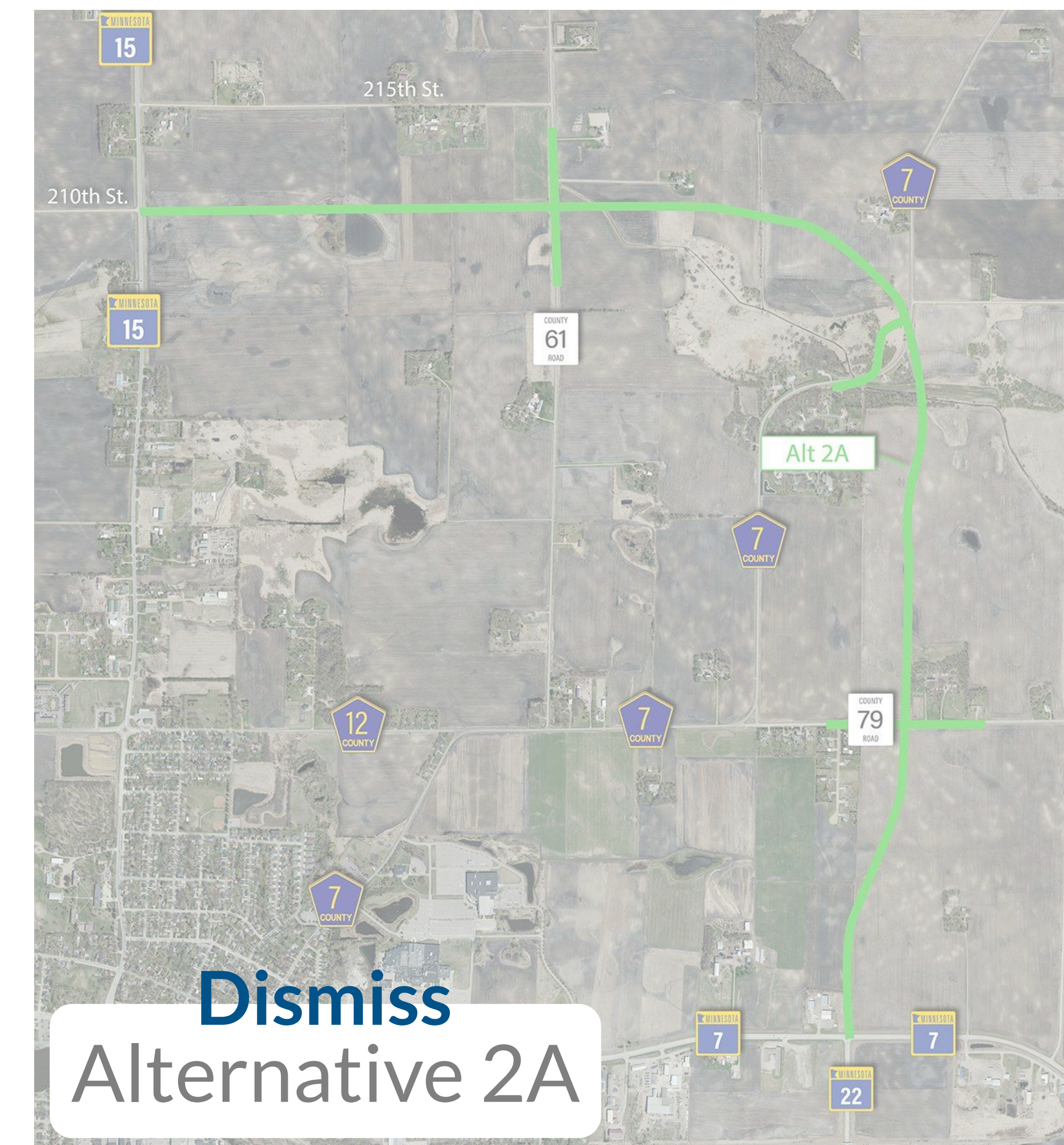
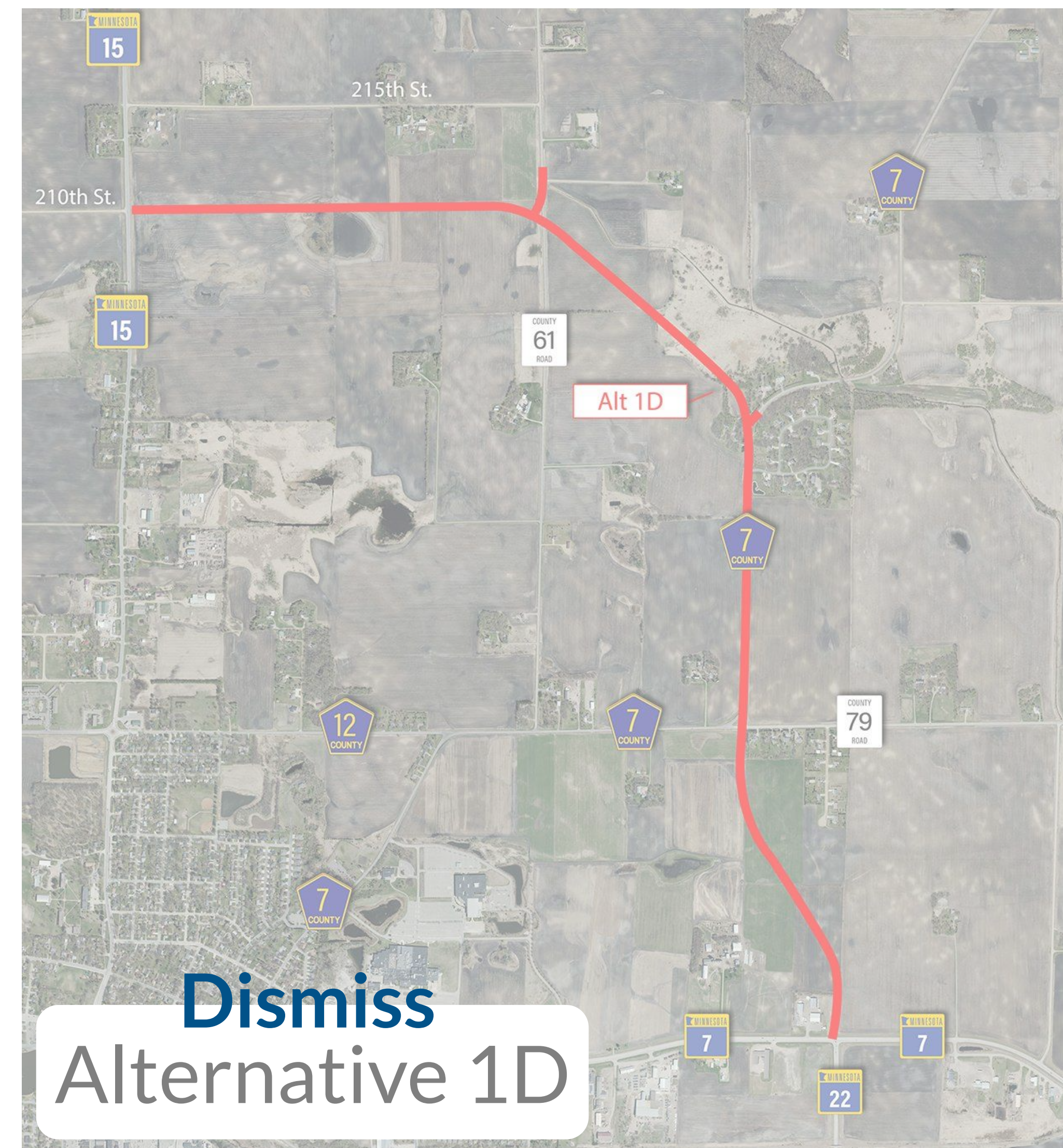
- (1) Includes parcels likely impacted by new roadway alignment, including parcels where roadway currently exists.
- (2) Includes only length of new roadway alignment. Does not include reconstruction or widening of existing roadways.
- (3) Did not include cultural resources review through MnDOT OES.
- (4) Only quantifies locations where building setbacks are likely infringed upon.
- (5) Quantifies parcels that are bisected or split leading to impacts to access.
- (6) Curves can likely be "softened" to reduce risk, which would lead to additional impacts and cost.

Best or Least Impact

Worst or Most Impact



Study Recommendations



Route Alignments Dismissed

Dismiss Routes 2A and 2B:

- Highest risk for property impacts
- “Relatively” close to Bernhagen Woods neighborhood
- Moderate risk for environmental impacts
- Highest cost with lowest ROI
- Low public support

Dismiss Route 3B:

- Similar benefits to route 3A but a more complicated design and less parcel splits

Dismiss Route 4:

- Low risk for property impacts but adjacent to Bernhagen Woods neighborhood
- Low risk for environmental impacts
- Less cost-effective
- Low public support

Dismiss Route 1D:

- Moderate risk for property impacts but adjacent to Bernhagen Woods neighborhood
- Low risk for environmental impacts
- Low public support

Route Alignments for Further Consideration

Alternative 1A: Most desired relative to property impacts and environmental considerations

Alternative 3A: Most desired by community

Alternative 5B: Most desired relative to infrastructure needed and cost



Thank You!

Next Steps

- Obtain feedback from the community regarding route alignments for further consideration.
- If a project is recommended to move forward, next steps include seeking outside funding opportunities (i.e., state and federal grant programs), complete final detailed construction plans, acquire necessary right of way, and construct project.
- If the new roadway is built, construction would not likely happen until 3 to 10 years from now.



? Additional Information

- No official decisions have been made regarding this project.
- If a project is recommended to move forward, it would likely be in the 3 to 10-year window, depending on funding opportunities.
- A NE ring road has been a concept since the late 90's after completion of the SW Ring Road. This was also identified in Hutchinson's 2012 Transportation Plan.