

## Northern Subarea Implementation Plan

### Short-Term 2021-2025 Projects

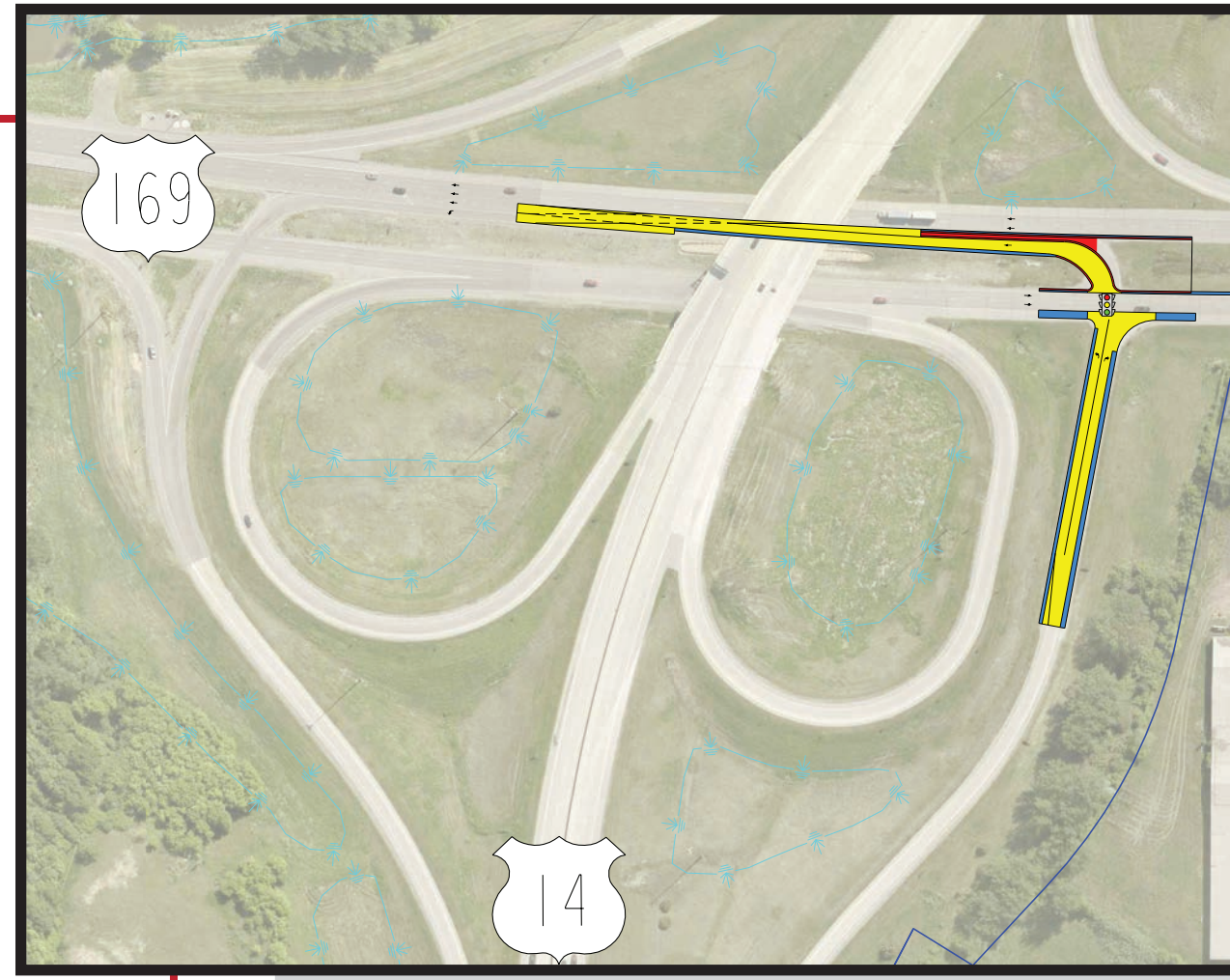
**2022 Construction**

**N1 Eastbound Ramp Signal**

A standalone traditional signal system installation project at the eastbound Highway 14 exit ramp intersection with Highway 169.

Cost = \$500,000 (161.74 Benefit Cost Ratio)

MnDOT led with cost participation from the City's of Mankato and North Mankato.



### Mid-Term 2026-2030 Projects

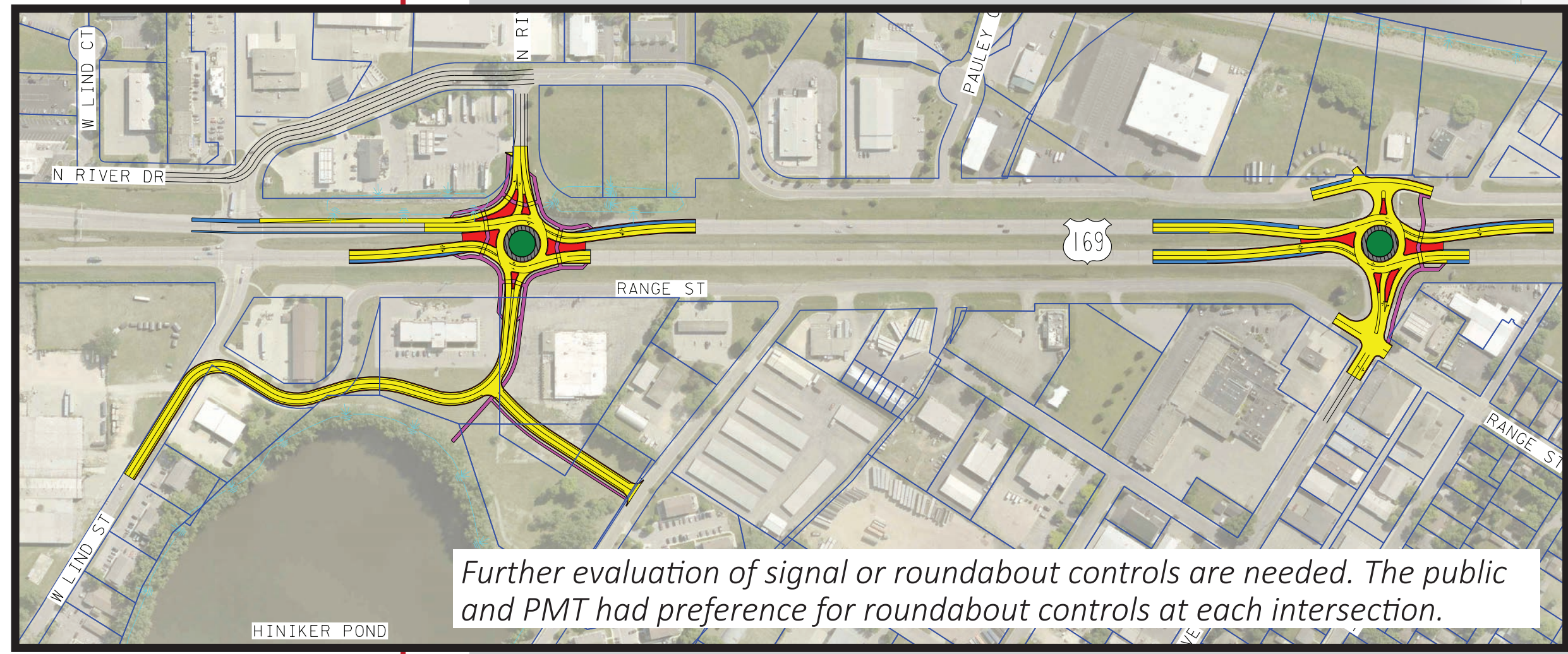
**2027 Construction**

**N2 North River Lane and Webster Avenue Roundabouts or Signals**

Closure of the Lind Street intersection with a new full access intersection at North River Lane and reconstruction of the Webster Avenue intersection to either a roundabout or leave as signal control. Either option includes restriping south of Webster Avenue. Lind Street closure should not occur before the new North River Lane intersection is built. Proposed modifications will require a new local connection on the east side of Hiniker Pond from Lind Street to Butterworth Street and connecting to the North River Lane intersection.

Cost = \$4.7-9.3M (2.69 Roundabout and -2.64 Signal Benefit Cost Ratio) + \$575,000 for Webster Avenue restriping.

MnDOT led with cost participation from the City's of Mankato and North Mankato.



**2030 Construction**

**N3 Grade Separated Pedestrian Crossing(s) of Highway 169**

Public support and evaluation scoring was strongest for a grade separated pedestrian crossing just north of the current Lind Street intersection because the surrounding amenities create pedestrian demand. However, agency feedback recognized the benefit of utilizing the existing Highway 14 bridge if possible. A feasibility study will be required to determine overpass or underpass for the pedestrian grade separation. The video animation included a pedestrian overpass for illustration purposes.

Cost = \$5.9M

MnDOT led with cost participation from the City's of Mankato and North Mankato.



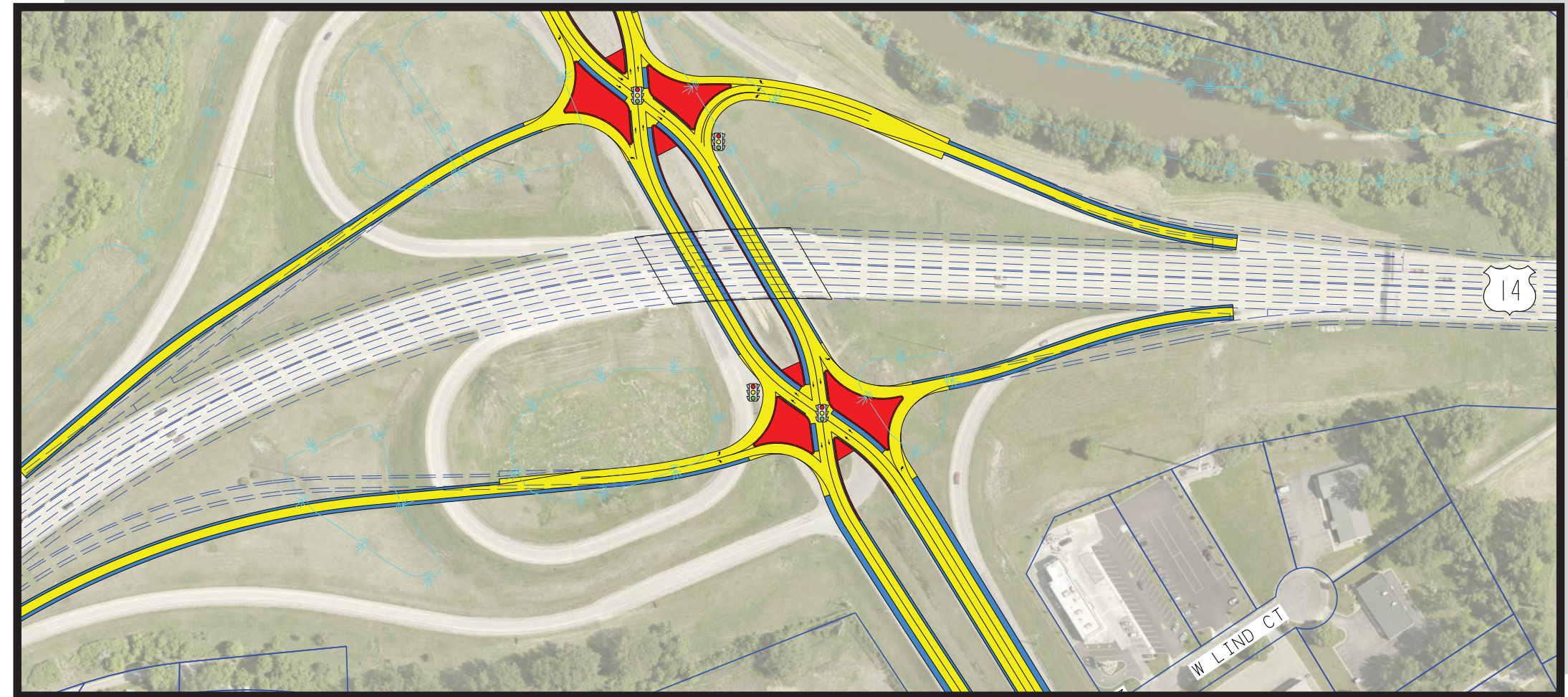
### Long-Term 2031+ Development & Safety Driven Projects

**N4 Highway 14/169 Diverging Diamond Interchange (\$9M\*)**

Reconstruction of the existing partial cloverleaf interchange into a diverging diamond with signalized ramp intersections was determined to only be needed with increased area development and crash issues.

**N5 Grade Separated Pedestrian Crossing (\$5M\*)**

Agency feedback recognized that a grade separated crossing could also be beneficial at Webster Avenue if pedestrian movements were not adequately accommodated on the Veteran's Memorial Bridge and a future Lind Street area pedestrian grade separation.



### Northern Subarea

The northern subarea runs from the Veterans Memorial Bridge to Lake Street.



\*Long-term projects not inflated past 2021 \$ since build year is unknown.



[illegible]



MAPO Highway 169 Corridor Study  
Northern Subarea Implementation Plan

Priority*	Timeframe	Section	Project Name or #	Project Description	Estimated 2022 Cost** and (Anticipated Build Year Cost)	Benefit Cost Ratio	Lead Agency	Cost Participation	Likely Funding Sources	Potential Competitive Funding Sources	Comments
Short-Term 0 to 5 Years	2021 - 2025	Highway 14 interchange	Eastbound Ramp Signal	A standalone traditional signal system at the eastbound Highway 14 exit ramp intersection with Highway 169.	\$500,000	161.74	MnDOT	City of Mankato, City of North Mankato	TH, LOCAL	LPP, HSIP	Can be constructed as an independent standalone project to improve operations at the eastbound Highway 14 exit ramp intersection.
				Subtotal	\$500,000						
Mid-term 6 to 15 Years	2026 - 2030	North River Lane to Webster Avenue	North River Lane and Webster Avenue Roundabouts or Signals	Closure of the Lind Street intersection with a new full access intersection (roundabout or signal) at North River Lane and reconstruction of the Webster Avenue intersection to either a roundabout or leave as signal control. Lind Street closure shall not occur before the new full access intersection at North River Lane is established. Closure of Lind Street and the new full access intersection at North River Lane will require a new local connection on the east side of Hiniker Pond from Lind Street to Butterworth Street and connecting to the North River Lane intersection with Highway 169.	\$3.7-7.3M (\$4.7-9.3M in 2027 \$)	Roundabouts: 2.69 Signals: -2.64	MnDOT	City of Mankato, City of North Mankato	TH, LOCAL	HSIP, LPP, LRIP,COC, MNHFP TED/TEDI, State Bonding Bill	The concept allows for further evaluation of a signal or roundabout control at each intersection. The public and PMT had preference for roundabout controls at each intersection. Either intersection control can be paired with the Eastbound Ramp Signal project or a future Highway 14/169 Diverging Diamond interchange.  Should be planned to be paired with MnDOT planned investments for 2027.
		Webster Avenue intersection	Webster Avenue Intersection Modernization	Range Street remains open with modifications to lane striping/utilization on Webster Avenue and Range Street at the intersection. Closee Speedway driveway access to Webster Avenue.	\$450,000 (\$575,000 in 2027 \$)	-	City of North Mankato	NA	LOCAL	LPP, HSIP	To be paired with the North River Lane and Webster Avenue Roundabouts or Signal project. While improvements to operations may occur this concept does not address safety issues to a degree that would make it competitive for funding.
		Highway 14 interchange to Lind Street	Grade Separated Pedestrian Crossings of Highway 169	Public support and evaluation scoring was strongest for the grade separated pedestrian crossing just north of the current Lind Street intersection because the surrounding amenities create pedestrian demand to cross near that location. However agency feedback recognized the benefit of utilizing the existing Highway 14 bridge if possible.	\$4M (\$5.9M in 2030 \$)	-	MnDOT	City of Mankato, City of North Mankato	TH, LOCAL	LPP, TAP	If paired with a larger roadway reconstruction project the cost of a pedestrian grade separation could be included in a RAISE or INFRA request. More competitive funding options are available if paired with larger roadway project.
				Subtotal	\$8.2-15.7M						
Opportunity / Development / Safety Driven	Illustrative	Highway 14 interchange	Diverging Diamond Interchange	Reconstruction of the existing Highway 14/169 partial cloverleaf interchange into a diverging diamond interchange with signalized ramp intersections.	\$9M	5.08	MnDOT	City of Mankato, City of North Mankato	TH, LOCAL	RAISE, INFRA, COC, MNHFP TED, State Bonding Bill	Only needed with increased development and crash issues associated with the weaving created by the existing cloverleaf ramps. Could be paired with roundabouts or signals at North River Lane and Webster Ave.
		Webster Avenue	Grade Separated Pedestrian Crossings of Highway 169	Agency feedback recognized that a grade separated crossing could also be beneficial at Webster Avenue but would only be needed if pedestrian movements were not adequately accommodated on the Veteran's Memorial Bridge and a future Lind Street area pedestrian grade separation.	\$5M	-	City of North Mankato	City of Mankato, MnDOT	TH, LOCAL	LPP, TAP	Should consider pedestrian improvements considered in 2025 Veterans Memorial Bridge project.  If paired with a larger roadway reconstruction project the cost of a pedestrian grade separation could be included in a RAISE or INFRA request. More competitive funding options are available if paired with larger roadway project.

\*Timing of all projects dependent upon funding availability.  
\*\* All estimated costs are for individual improvements only and don't capture the full right-of-way and easement costs. Mid-term costs are inflated to an approximate build year as noted. Opportunity driven costs were not inflated since build year is unknown.

FUNDING KEY	
COC	Corridors of Commerce Funds (State)
CO	County State Aid Highway, County Sales Tax, Wheelage, or Other County Funds
HSIP	Highway Safety Improvement Program Funds (Federal)
LOCAL	City Funding MSAS or Township
LPP	Local Partnership Program Funds (State)
LRIP	Local Road Improvement Program Funds (State)
MHFP	Minnesota Highway Freight Program Funds (State)
PRIV	Private Funding / Development (Private)
SRTS	Safe Routes to School
TAP	Transportation Alternatives Program (Federal)
STP	Surface Transportation Program Funds (Federal)
TE	Transportation Enhancement Funds (Federal)
TED/I	Transportation Economic Development (State)
TH	Trunk Highway Funds (State)
RAISE	Rebuilding American Infrastructure with Sustainability and Equity (Federal)
INFRA	Infrastructure for Rebuilding America (Federal)
TRLF	Transportation Revolving Loan Fund (Federal)
TBACK	Turnback Funds (State)

MAPO Highway 169 Corridor Study  
Southern Subarea Implementation Plan

Priority*	Timeframe	Section	Project Name or #	Project Description	Estimated 2022 Cost** and (Anticipated Build Year Cost)	Lead Agency***	Cost Participation	Likely Funding Sources	Potential Competitive Funding Sources	Comments
Short-Term 0 to 5 Years	2021 - 2025	1 - Blue Earth River to County Highway 33	1D	Reduced conflict intersection at Amos Owen Lane with southbound to eastbound left removed and replaced with U-turn to the west of the intersection. Hawley Street is right-in/right-out.	\$2.2M	MnDOT	South Bend Township, Blue Earth County, City of Mankato (with orderly annexation)	TH, LOCAL, CSAH, CO	LPP, HSIP, MNHFP, TED	The Amos Owen Lane and County Highway 33 improvements need to be paired together for full safety benefits. The Green T at County Highway 33 is necessary, prior to closure of Hawley Street, to provide for the displaced left turns onto and off of Hwy 169.
				OR						During the study, MnDOT expressed concern with the addition of a traffic signal at this location due to its rural, high-speed character. MnDOT will revisit this recommendation when a project becomes more imminent to determine if an at-grade Green-T intersection is recommended versus looking towards partial grade separation that would maintain free-flow conditions on Highway 169.
				Full R-cut intersection at Amos Owen Lane with Hawley Street remaining open as it is today.						
		Hawley Street Pedestrian Bridge	Hawley Street Pedestrian Bridge	Pedestrian overpass across Highway 169/Hawley Street intersection with touchdowns at northwest to southeast quadrants, utilizing State of MN property (NW quadrant) and an undeveloped property (SW quadrant).	\$5M	MnDOT	South Bend Township, Blue Earth County, City of Mankato (with orderly annexation)	TH, LOCAL, CO	DNR, TAP, LPP	High level project cost in 2023 dollars including engineering and contingency estimates. Does not include right-of-way costs for the parcel on the SE quadrant.
		2 - County Highway 33 to County Highway 90	2A	CR 120 acceleration lanes.	\$660,000	MnDOT	South Bend Township, Blue Earth County, City of Mankato (with orderly annexation)	TH, LOCAL, CO	LPP, HSIP	Can be constructed independently as an interim improvement prior to a Highway 68 High-T
Subtotal					\$7.9M					
Mid-term 6 to 15 Years	2026 - 2030	2 - County Road 33 to County Highway 90	2A	High T at Highway 68.	\$22.2M (\$32.8M in 2030 \$)	MnDOT	South Bend Township, Blue Earth County, City of Mankato (with orderly annexation)	TH, LOCAL, CO	HSIP, COC, TED,/TEDI State Bonding Bill	High T to be paired with larger Highway 68 reconstruction project, serving as a capacity building project to be completed prior to the project, and provide a detour for future Highway 14 construction. Alternatively, the project could be modified slightly and paired with 1C instead of 1D and allow for a full median at County Highway 33. Construction will not impact the existing Minneopa Trail Pedestrian Bridge.
				CR 69 median closure and new local street connection to close multiple driveways on Highway 169. Convert CR 120 to R-cut.						County Highway 69 improvements remove all left turns so they must occur after the Highway 68 High T which can replace those movements within this area.
		3- County Road 90 to 133th Lane	3A	208th Lane and Loren Drive access closures with new local road connections.	\$1.9M (\$2.8M in 2030 \$)	MnDOT	South Bend Township, Blue Earth County, City of Mankato (with orderly annexation)	TH, LOCAL, CO	LPP, HSIP	208th Lane and Loren Drive access closures must happen simultaneously or previous to the Highway 60 and Gadwall Road R-cut.
				Reduced conflict intersection at Highway 60 at Highway 169 with northbound to westbound removed and replaced with U-turns						
		Subtotal					\$24.1-35.6M			
Opportunity / Development / Safety Driven	Illustrative	1 - Blue Earth River to County Highway 33	1D	Acceleration lane from Hawley Street to eastbound Highway 169	\$2.5M	MnDOT	TBD	TH	TBD	Time with a Blue Earth River Crossing bridge project.
		2 - County Highway 33 to County Highway 90	2C	CR 68 realignment with Highway 169 and extension of Southbend Ave (CR 69). Includes local driveway and median closures between Highway 68 and CR 69.	\$9M	TBD	TBD	TH, LOCAL, CO	TBD	Could be warranted if new industrial, commercial, or residential developments occur. Current local plans do not show planned development that would require these improvements.
				Full access intersection at Highway 60 and 169 with access closure at 208th Lane and new local road access.	\$5M	TBD	TBD	TH, LOCAL, CO	TBD	Could be warranted if new industrial, commercial, or residential developments occur. Current local plans do not show planned development that would require these improvements.
		3- County Highway 90 to 133th Lane	3B	Realignment and extension of Gadwall Road to a new full access intersection with Highway 169 east of the current intersection. Includes cul-de-sac of CR 117 and new local road connections for existing industrial properties.						

\*Timing of all projects dependent upon funding availability.  
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\*\*\* Southern Subarea not currently in the MnDot Capital Highway Investment Plan (CHIP)

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