

## STUDY PURPOSE

- To define a comprehensive vision for Riverfront Drive to continue reinvestment while serving continued growth and local/regional mobility needs over the next 25 years.

## STUDY GOALS

- Provide efficient vehicle and freight mobility and access
- Safely accommodate all users
- Support an inviting and safe pedestrian environment
- Support bicycle connections across Riverfront Drive
- Support future land use and redevelopment plans
- Provide improvements compatible with the historic and natural environment
- Enhance community identity

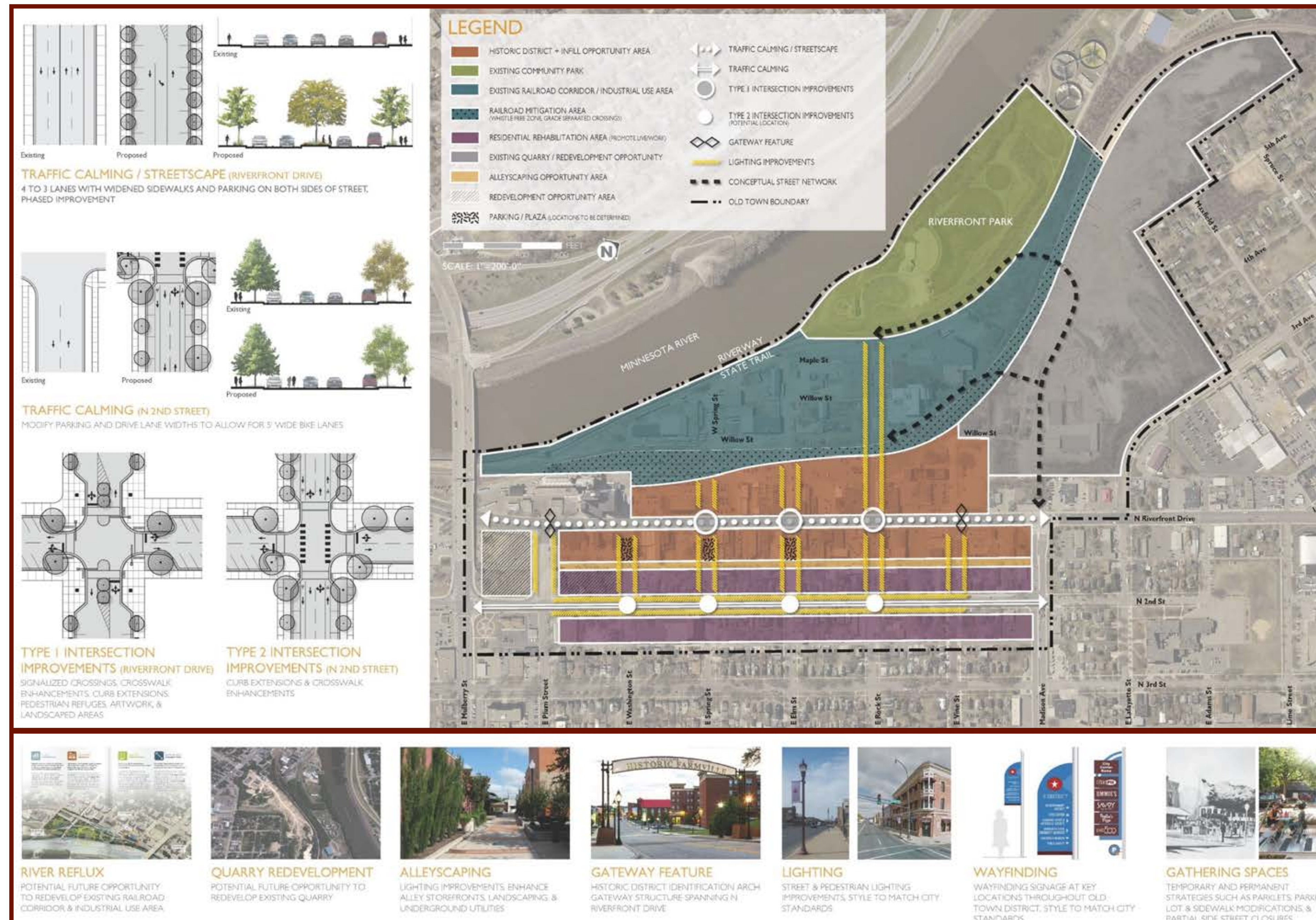


# Old Town Master Plan

## IMPLEMENTATION TACTICS – CONNECTIONS AND LINKAGES

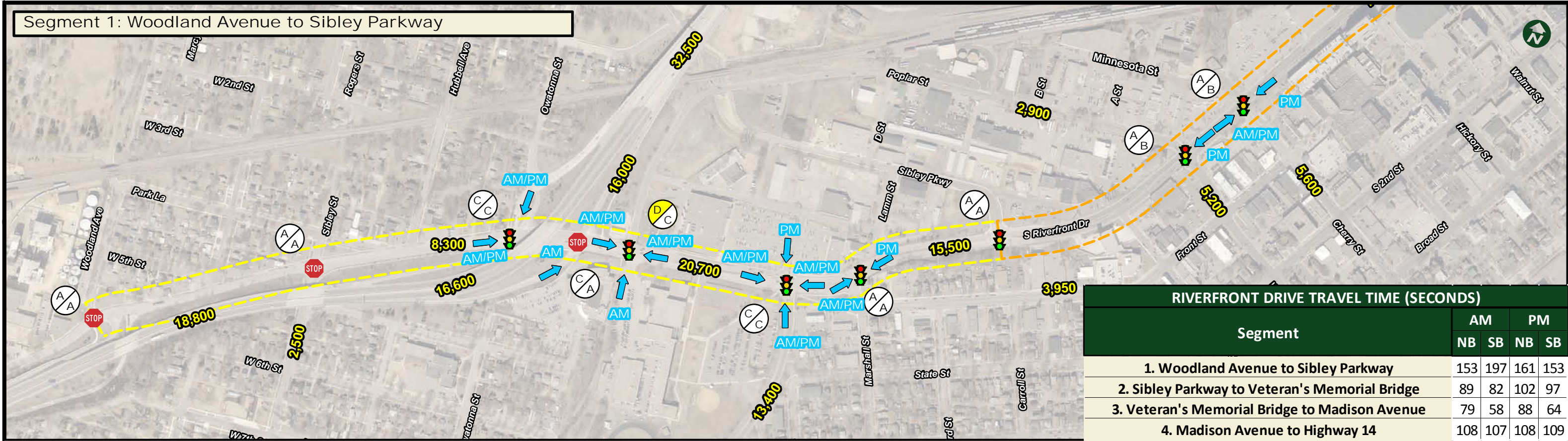
- Examine traffic characteristics along Riverfront Drive
  - Examine right-sizing the street and other complete street elements to reduce traffic speeds
  - Encourage walkability
- Reconnect to the river and reclaim the quarry

- Improve connectivity
  - Improve pedestrian crossings
  - Improve pedestrian connections to city center core/entertainment
  - Foster a multi-modal transportation network





Segment 1: Woodland Avenue to Sibley Parkway



Segment 2: Sibley Parkway to Veteran's Memorial Bridge



**Legend**

- AADT Volumes:** #,### Average Annual Daily Traffic (AADT) Volumes - Existing
- Problematic Traffic Back-Ups:** Blue arrow pointing left
- Traffic Control:**
  - STOP: Side Street Stop
  - Traffic Signal: Traffic Signal
- Level of Service Grade:**
  - A-C: White circle
  - D: Yellow circle
  - E: Orange circle
  - F: Red circle
- Corridor Study Segments:**
  - Woodland Avenue to Sibley Parkway (Yellow dashed line)
  - Sibley Parkway to Veteran's Memorial Bridge (Orange dashed line)
  - Veteran's Memorial Bridge to Madison Avenue (Red dashed line)
  - Madison Avenue to Highway 14 (Blue dashed line)

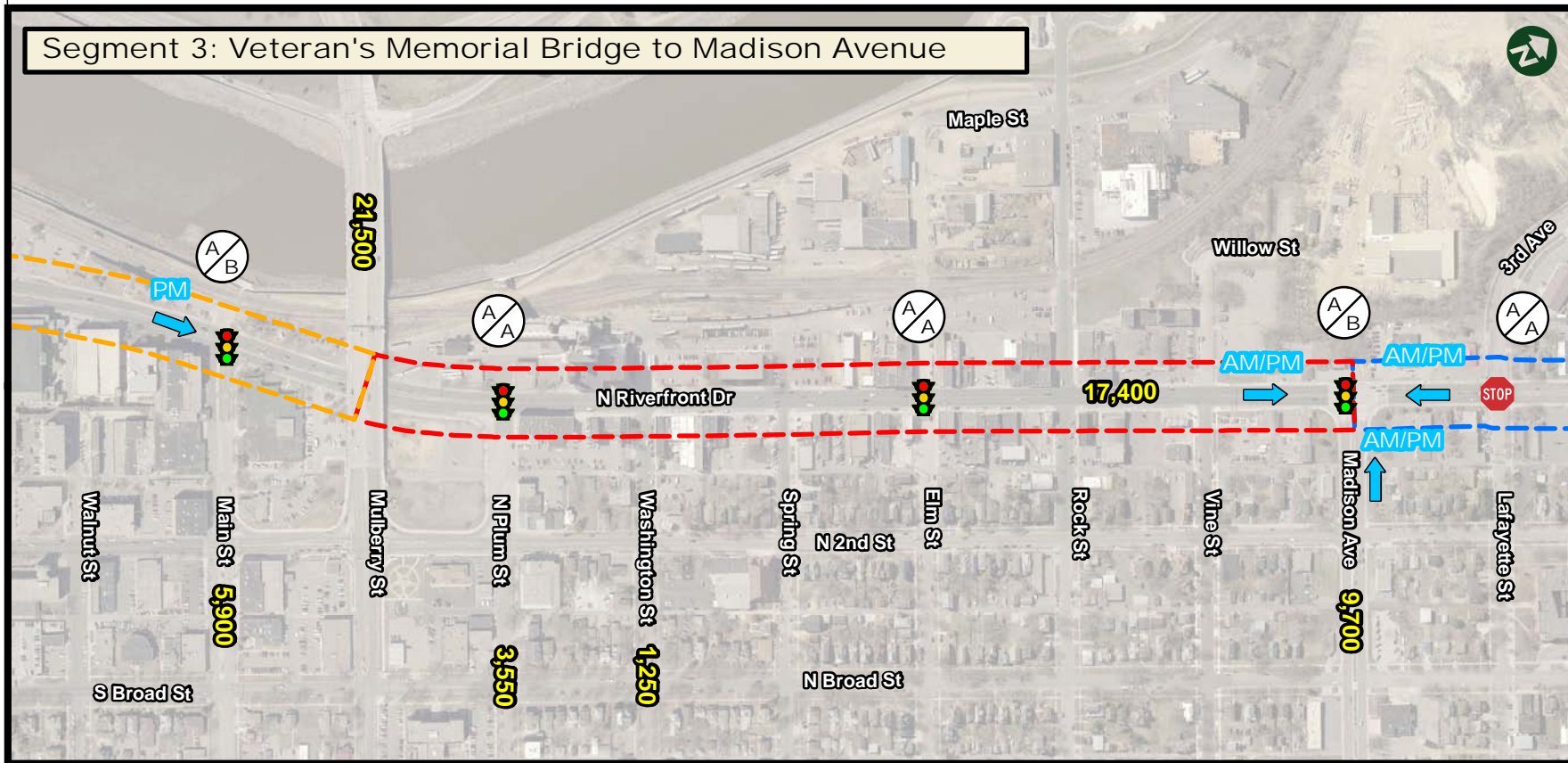
0 500 Feet  
Source: MnDOT, Blue Earth County, City of Mankato, ESRI, Google Maps



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Segment 3: Veteran's Memorial Bridge to Madison Avenue

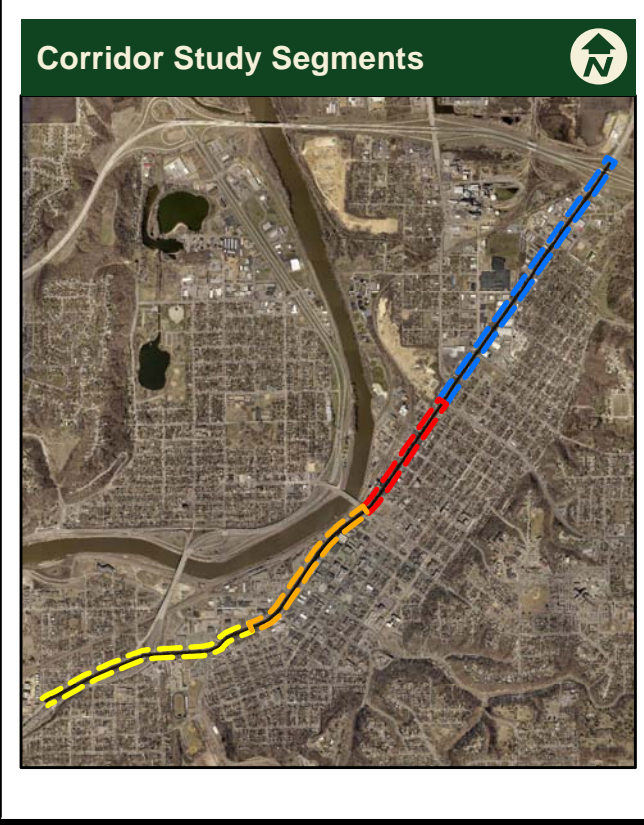


### Legend

- AADT Volumes - Existing:** ####
- Problematic Traffic Back-Ups:** Blue arrow
- Intersection Level of Service:** Circle with A/B or A/A
- Traffic Control:**
  - Side Street Stop: Red octagon
  - Traffic Signal: Traffic light icon
- Level of Service Grade:**
  - A-C: White box
  - D: Yellow box
  - E: Orange box
  - F: Red box
- Corridor Study Segments:**
  - Woodland Avenue to Sibley Parkway: Yellow dashed line
  - Sibley Parkway to Veteran's Memorial Bridge: Orange dashed line
  - Veteran's Memorial Bridge to Madison Avenue: Red dashed line
  - Madison Avenue to Highway 14: Blue dashed line

0 500 Feet

Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps

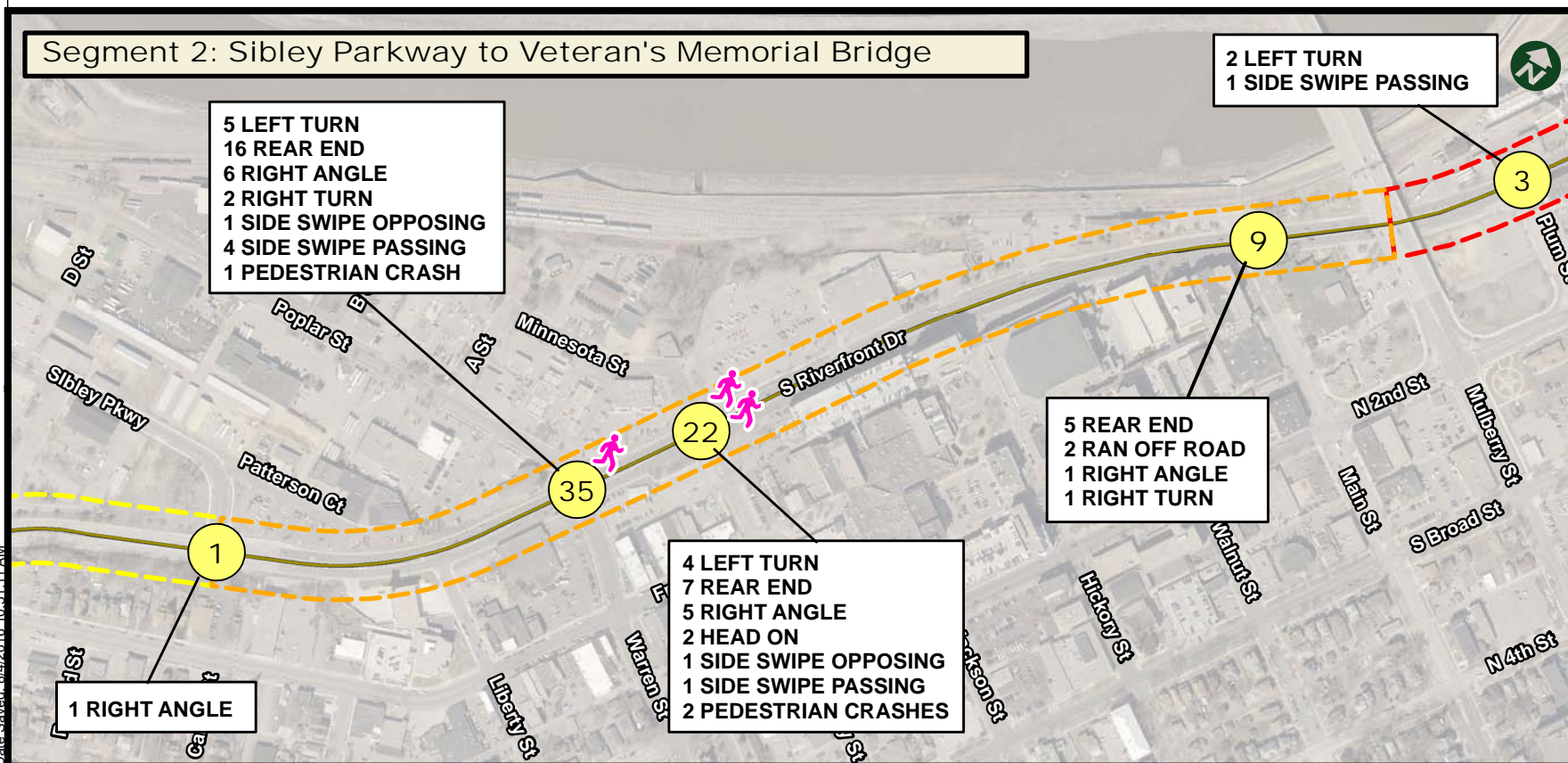
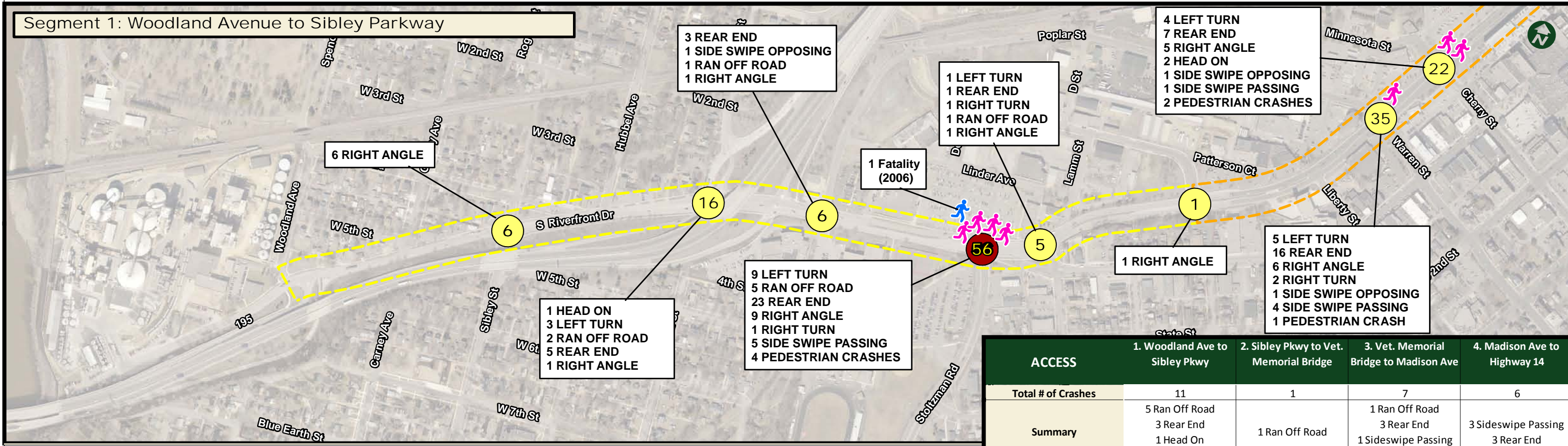


Segment 4: Madison Avenue to Highway 14



RIVERFRONT DRIVE TRAVEL TIME (SECONDS)				
Segment	AM		PM	
	NB	SB	NB	SB
1. Woodland Avenue to Sibley Parkway	153	197	161	153
2. Sibley Parkway to Veteran's Memorial Bridge	89	82	102	97
3. Veteran's Memorial Bridge to Madison Avenue	79	58	88	64
4. Madison Avenue to Highway 14	108	107	108	109

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### Legend

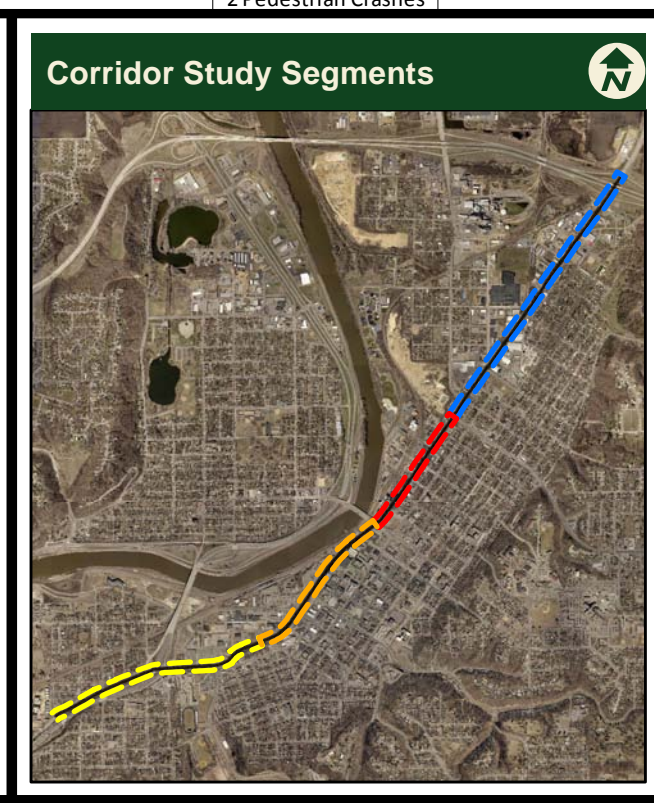
- Pedestrian/Bicycle Crash (Other)
- Pedestrian/Bicycle Crash (2010-2014)
- Crashes Within Normal Range
- Crashes Outside Normal Range
- Number of Vehicle Crashes

### Corridor Study Segments

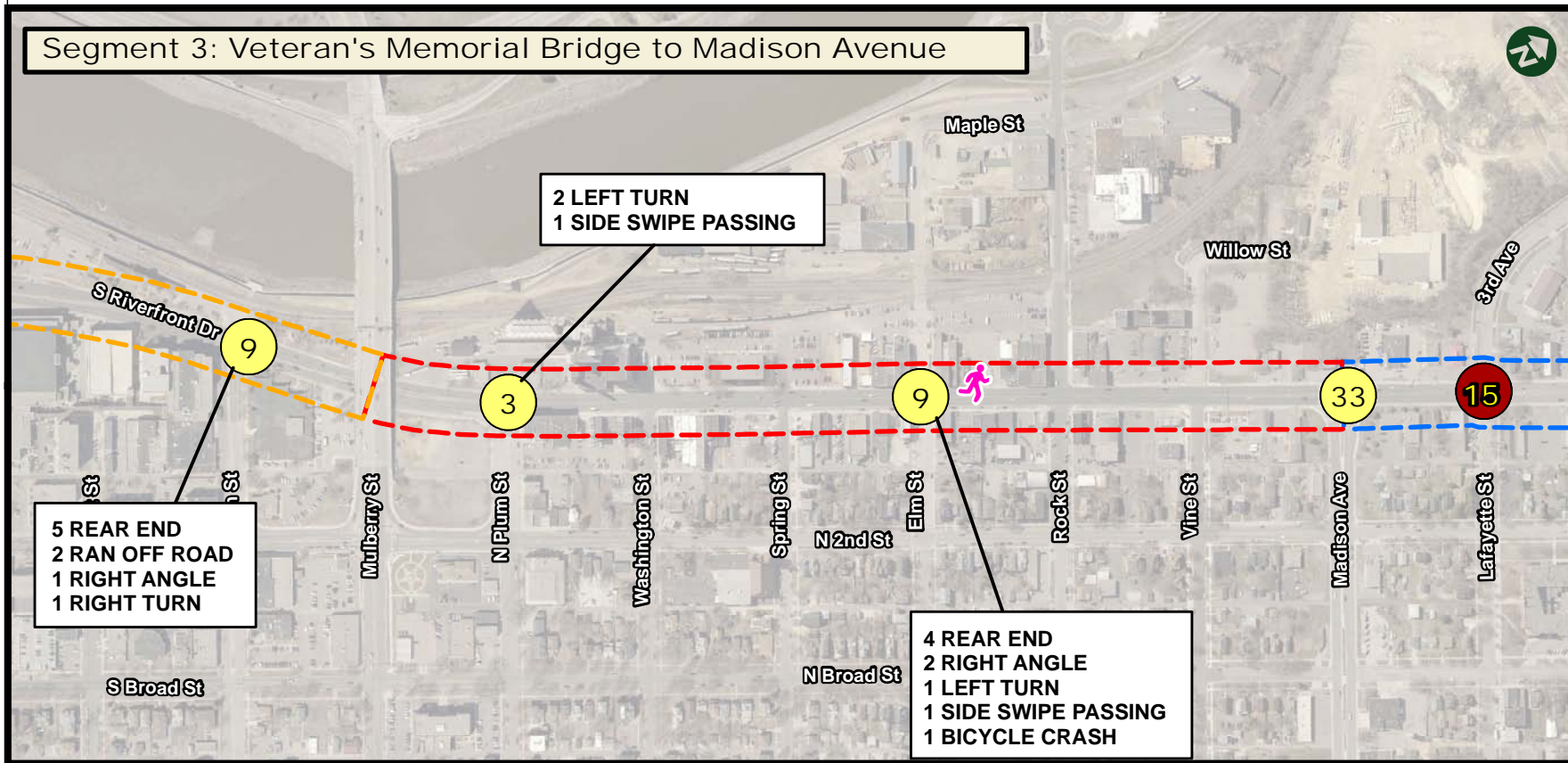
- Woodland Avenue to Sibley Parkway
- Sibley Parkway to Veteran's Memorial Bridge
- Veteran's Memorial Bridge to Madison Avenue
- Madison Avenue to Highway 14

0 500 Feet

Source: MnDOT, Blue Earth County, City of Mankato, ESRI, Google Maps



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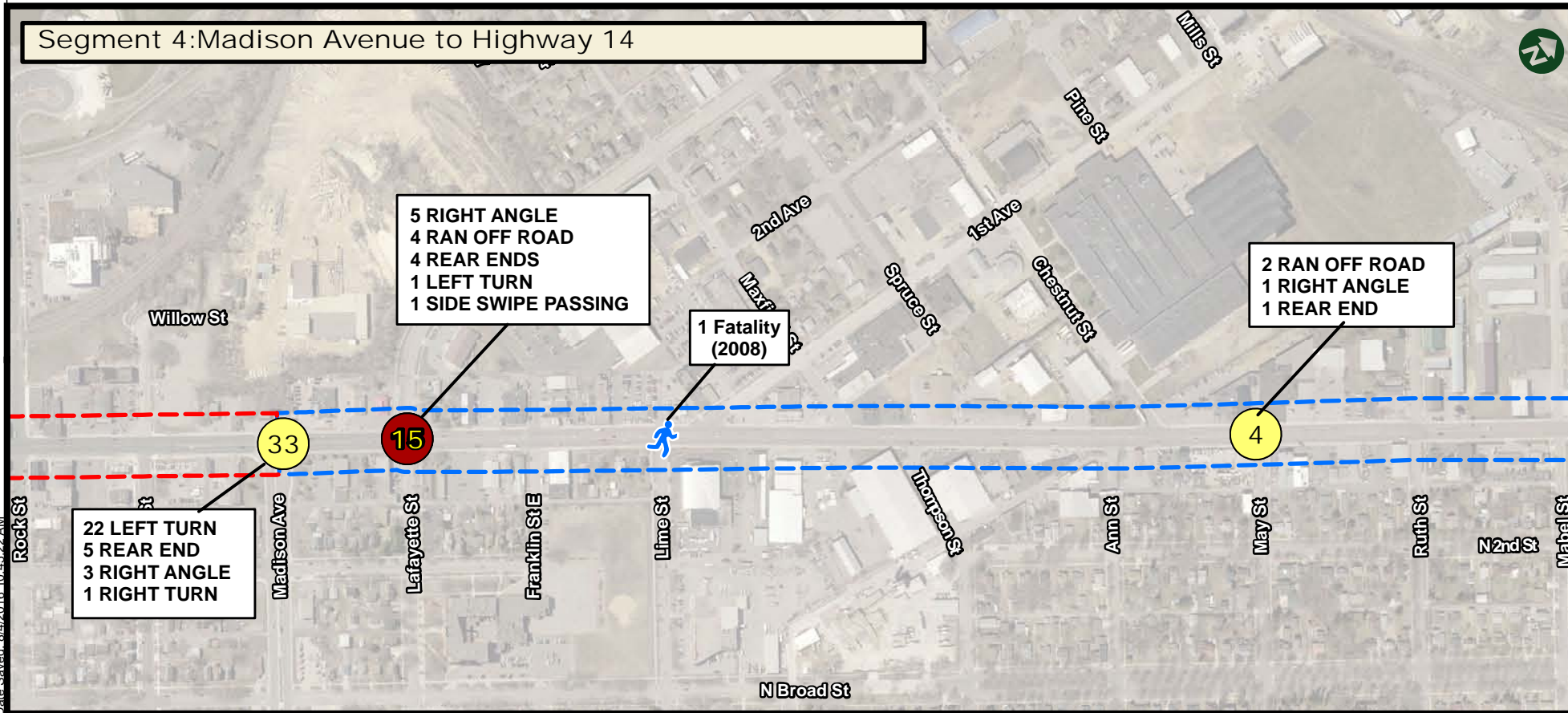
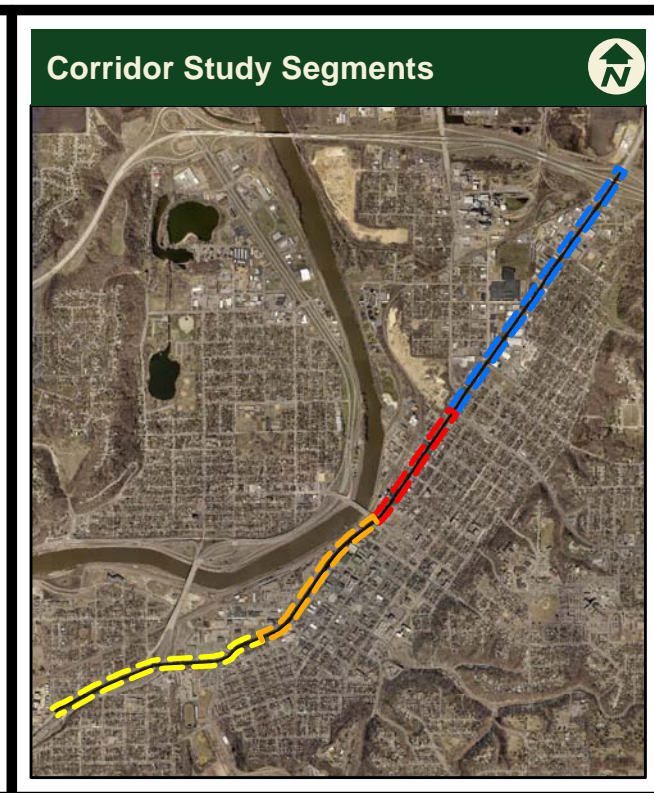
- Pedestrian/Bicycle Crash (Other)
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- Crashes Outside Normal Range
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### Corridor Study Segments

- Woodland Avenue to Sibley Parkway
- Sibley Parkway to Veteran's Memorial Bridge
- Veteran's Memorial Bridge to Madison Avenue
- Madison Avenue to Highway 14

0 500 Feet

Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps



ACCESS	1. Woodland Ave to Sibley Pkwy	2. Sibley Pkwy to Vet. Memorial Bridge	3. Vet. Memorial Bridge to Madison Ave	4. Madison Ave to Highway 14
<b>Total # of Crashes</b>	11	1	7	6
<b>Summary</b>	5 Ran Off Road 3 Rear End 1 Head On 2 Sideswipe Passing	1 Ran Off Road	1 Ran Off Road 3 Rear End 1 Sideswipe Passing 2 Pedestrian Crashes	3 Sideswipe Passing 3 Rear End

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# Riverfront Drive Corridor Study

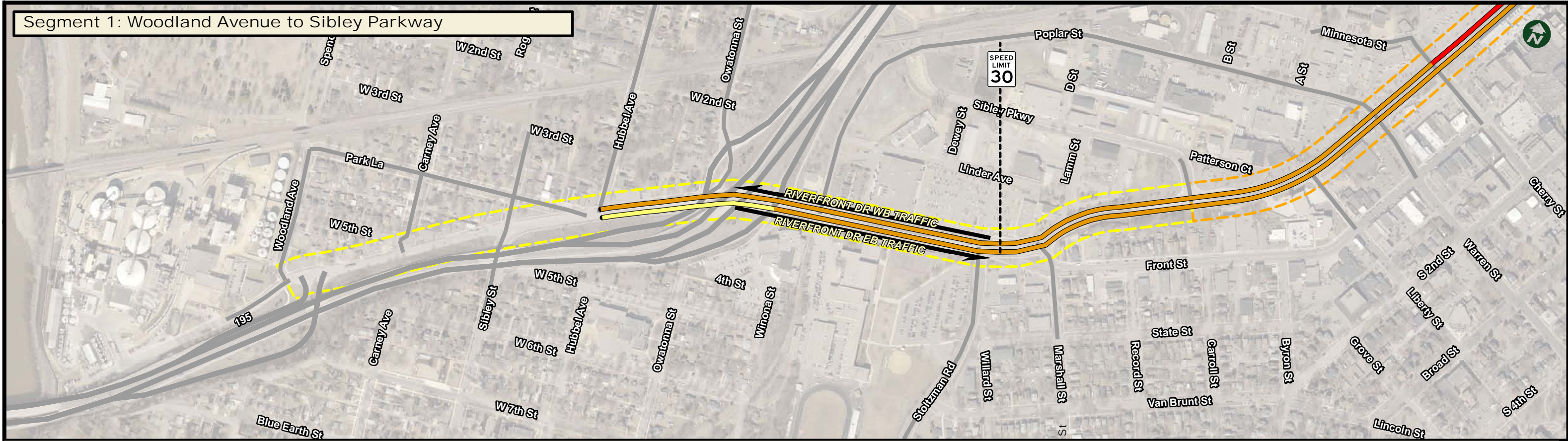
Mankato/North Mankato Area Planning Organization

# Traffic Speeds - Segments 1 & 2

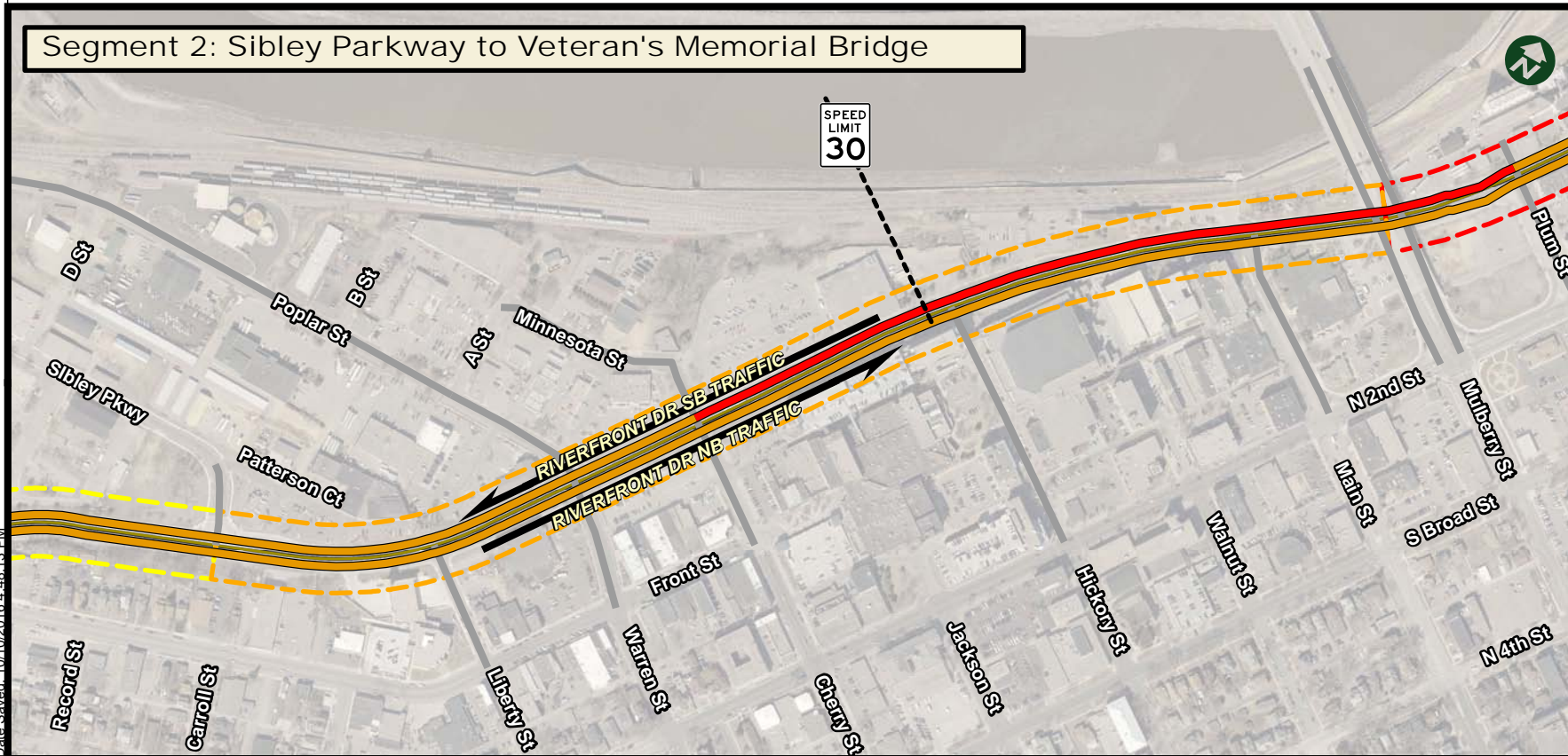
October, 2016



### Segment 1: Woodland Avenue to Sibley Parkway



### Segment 2: Sibley Parkway to Veteran's Memorial Bridge



### Legend

- Roads
- Speed of Traffic
  - Traveling at or below posted SL
  - Traveling 1-4 mph above posted SL
  - Traveling 5-9 mph above posted SL
  - Traveling 10+ mph above posted SL
- Corridor Study Segments
  - Woodland Avenue to Sibley Parkway
  - Sibley Parkway to Veteran's Memorial Bridge
  - Veteran's Memorial Bridge to Madison Avenue
  - Madison Avenue to Highway 14

0 500 Feet

Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps



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# Riverfront Drive Corridor Study

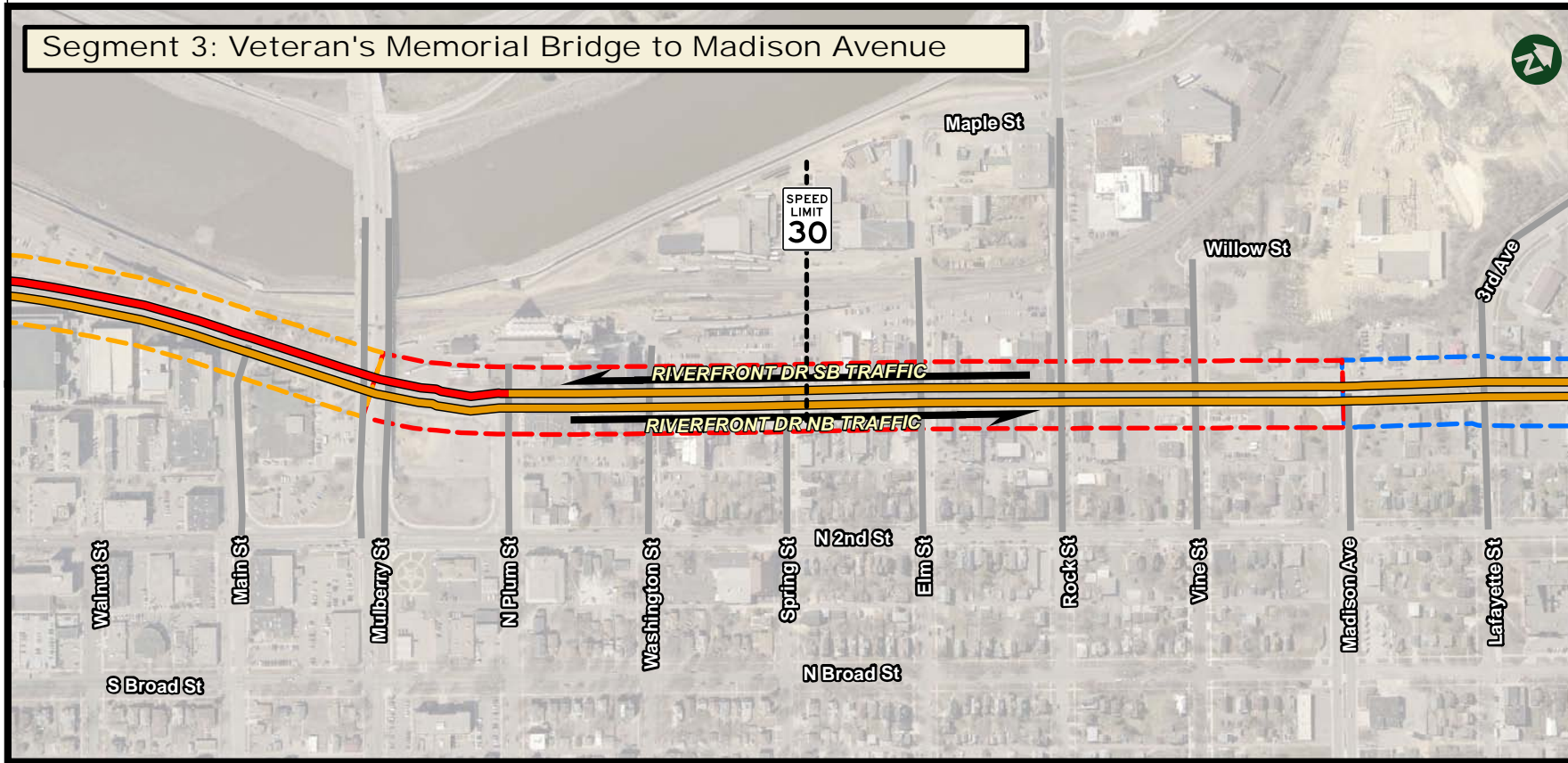
Mankato/North Mankato Area Planning Organization

# Traffic Speeds - Segments 3 & 4

August, 2016



## Segment 3: Veteran's Memorial Bridge to Madison Avenue



### Legend

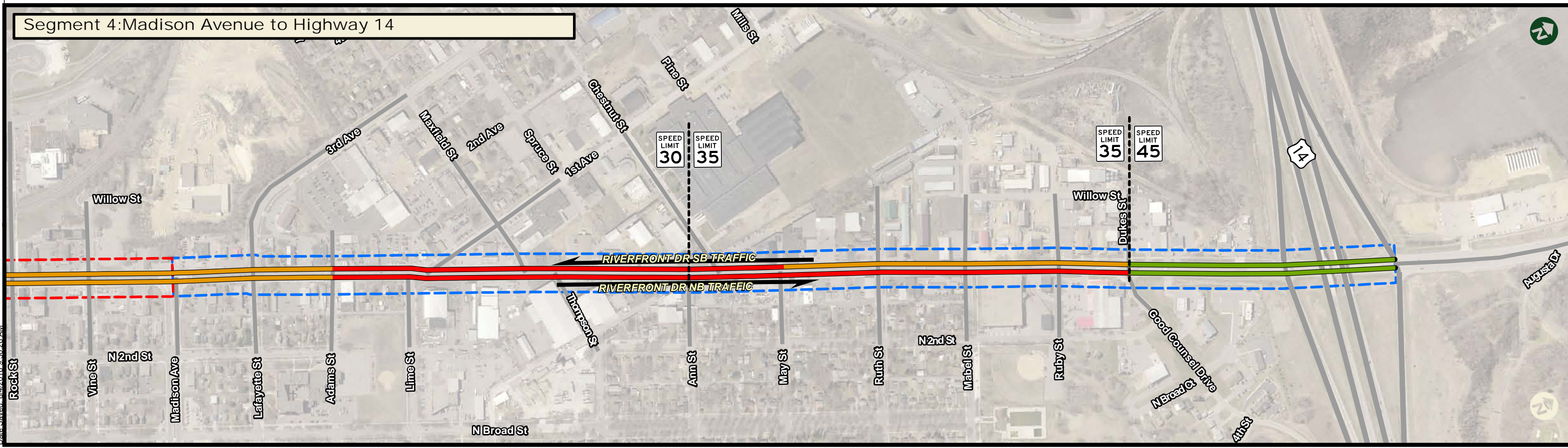
- Roads
- Speed of Traffic**
  - Traveling at or below posted SL
  - Traveling 1-4 mph above posted SL
  - Traveling 5-9 mph above posted SL
  - Traveling 10+ mph above posted SL
- Corridor Study Segments**
  - Woodland Avenue to Sibley Parkway
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  - Veteran's Memorial Bridge to Madison Avenue
  - Madison Avenue to Highway 14

0 500 Feet

Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps

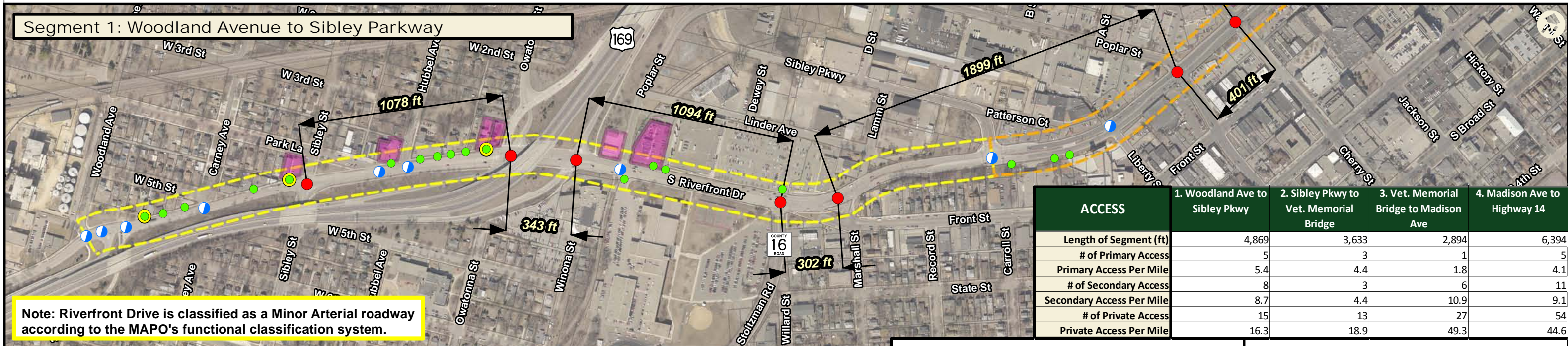


## Segment 4: Madison Avenue to Highway 14

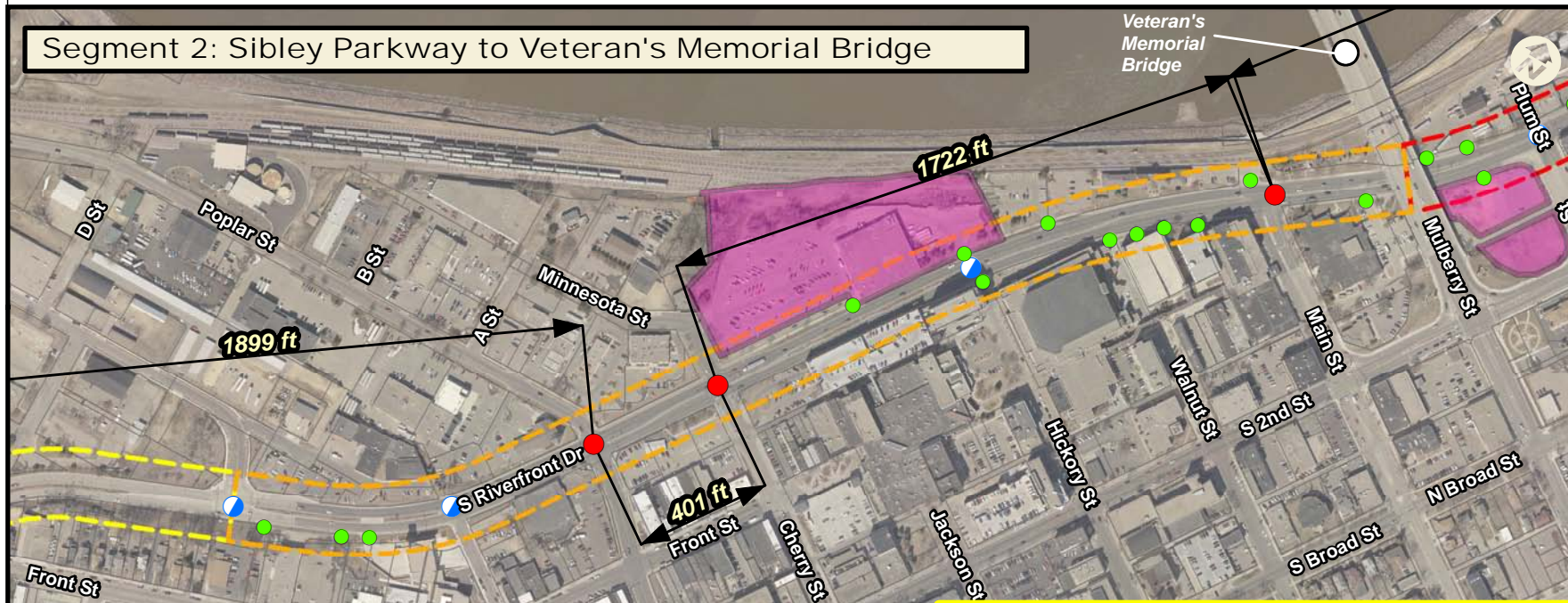


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Note: Riverfront Drive is classified as a Minor Arterial roadway according to the MAPO's functional classification system.



### Legend

**Access Type**

- Primary Intersection (Red dot)
- Secondary Intersection (Blue dot)
- Private Access (Green dot)
- Private Shared (Yellow dot)
- Parcels with Side Street Access (Pink square)
- Parcels (White square)

**Corridor Study Segments**

- Woodland Avenue to Sibley Parkway (Yellow dashed line)
- Sibley Parkway to Veteran's Memorial Bridge (Orange dashed line)
- Veteran's Memorial Bridge to Madison Avenue (Red dashed line)
- Madison Avenue to Highway 14 (Blue dashed line)

0 500 Feet      1/8 Mile = 660 ft  
1/4 Mile = 1320 ft

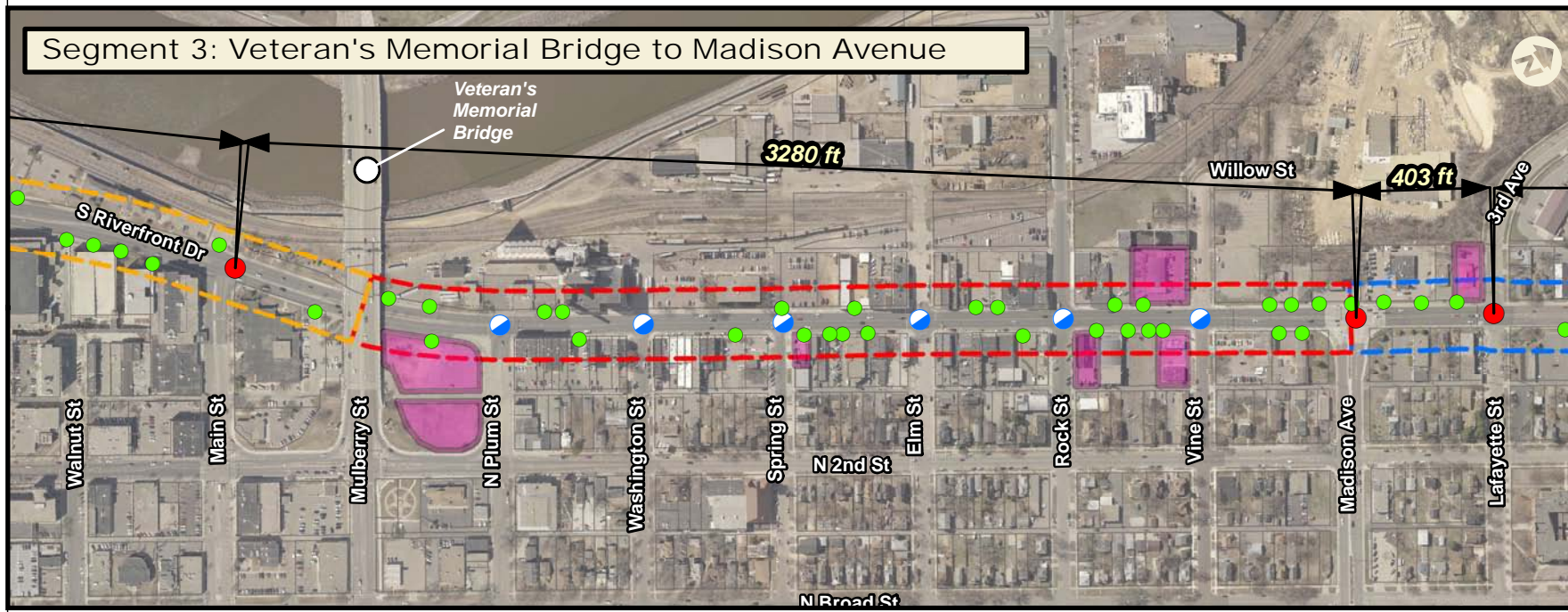
Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps



PRINCIPAL ARTERIALS	Primary (Full - Movement) Intersection Spacing		
	Rural	1 mile	2 access / mile
	Urban/Urbanizing	1/2 mile	3 access / mile
Urban Core	300-660 feet	9-19 access / mile	
PRINCIPAL ARTERIALS	Secondary Intersection Spacing		
	Rural	1/2 mile	3 access / mile
	Urban/Urbanizing	1/4 mile	5 access / mile
Urban Core	300-660 feet	9-19 access / mile	

MINOR ARTERIAL	Primary (Full - Movement) Intersection Spacing Guidelines		
	Rural	1/2 mile	3 access / mile
	Urban/Urbanizing	1/4 mile	5 access / mile
Urban Core	300-660 feet	9-19 access / mile	
MINOR ARTERIAL	Secondary Intersection Spacing		
	Rural	1/4 mile	5 access / mile
	Urban/Urbanizing	1/8 mile	9 access / mile
Urban Core	300-660 feet	9-19 access / mile	

COLLECTORS	Primary (Full - Movement) Intersection Spacing Guidelines		
	Rural	1/2 mile	3 access / mile
	Urban/Urbanizing	1/8 mile	9 access / mile
Urban Core	300-660 feet	9-19 access / mile	
COLLECTORS	Secondary Intersection Spacing		
	Rural	1/4 mile	5 access / mile
	Urban/Urbanizing	N/A	N/A
Urban Core	300-660 feet	9-19 access / mile	



### Legend

**Access Type**

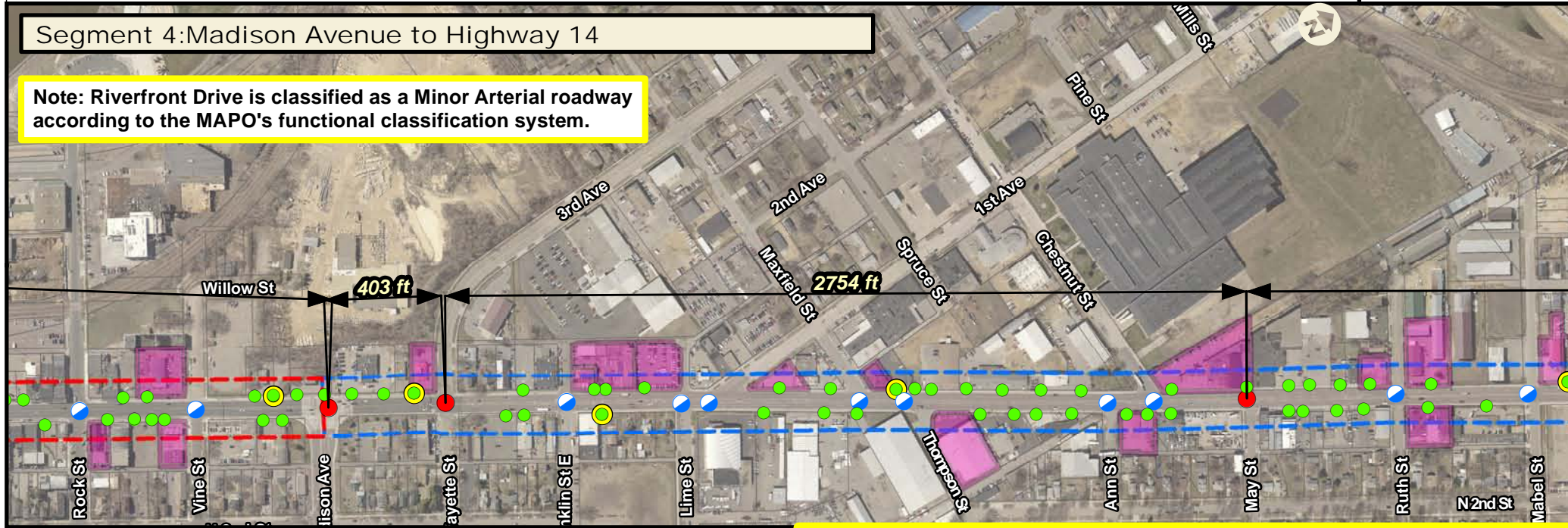
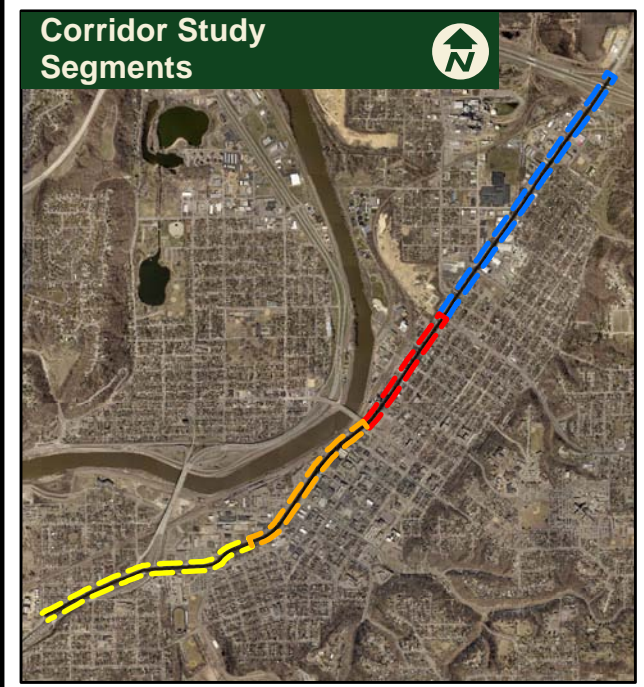
- Red circle: Primary Intersection
- Blue circle: Secondary Intersection
- Green circle: Private Access
- Yellow circle: Private Shared
- Pink square: Parcels with Side Street Access
- White square: Parcels

**Corridor Study Segments**

- Yellow dashed line: Woodland Avenue to Sibley Parkway
- Orange dashed line: Sibley Parkway to Veteran's Memorial Bridge
- Red dashed line: Veteran's Memorial Bridge to Madison Avenue
- Blue dashed line: Madison Avenue to Highway 14

0 500 Feet

Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps



ACCESS	1. Woodland Ave to Sibley Pkwy	2. Sibley Pkwy to Vet. Memorial Bridge	3. Vet. Memorial Bridge to Madison Ave	4. Madison Ave to Highway 14
Length of Segment (ft)	4,869	3,633	2,894	6,394
# of Primary Access	5	3	1	5
Primary Access Per Mile	5.4	4.4	1.8	4.1
# of Secondary Access	8	3	6	11
Secondary Access Per Mile	8.7	4.4	10.9	9.1
# of Private Access	15	13	27	54
Private Access Per Mile	16.3	18.9	49.3	44.6

**Note: Riverfront Drive is classified as a Minor Arterial roadway according to the MAPO's functional classification system.**

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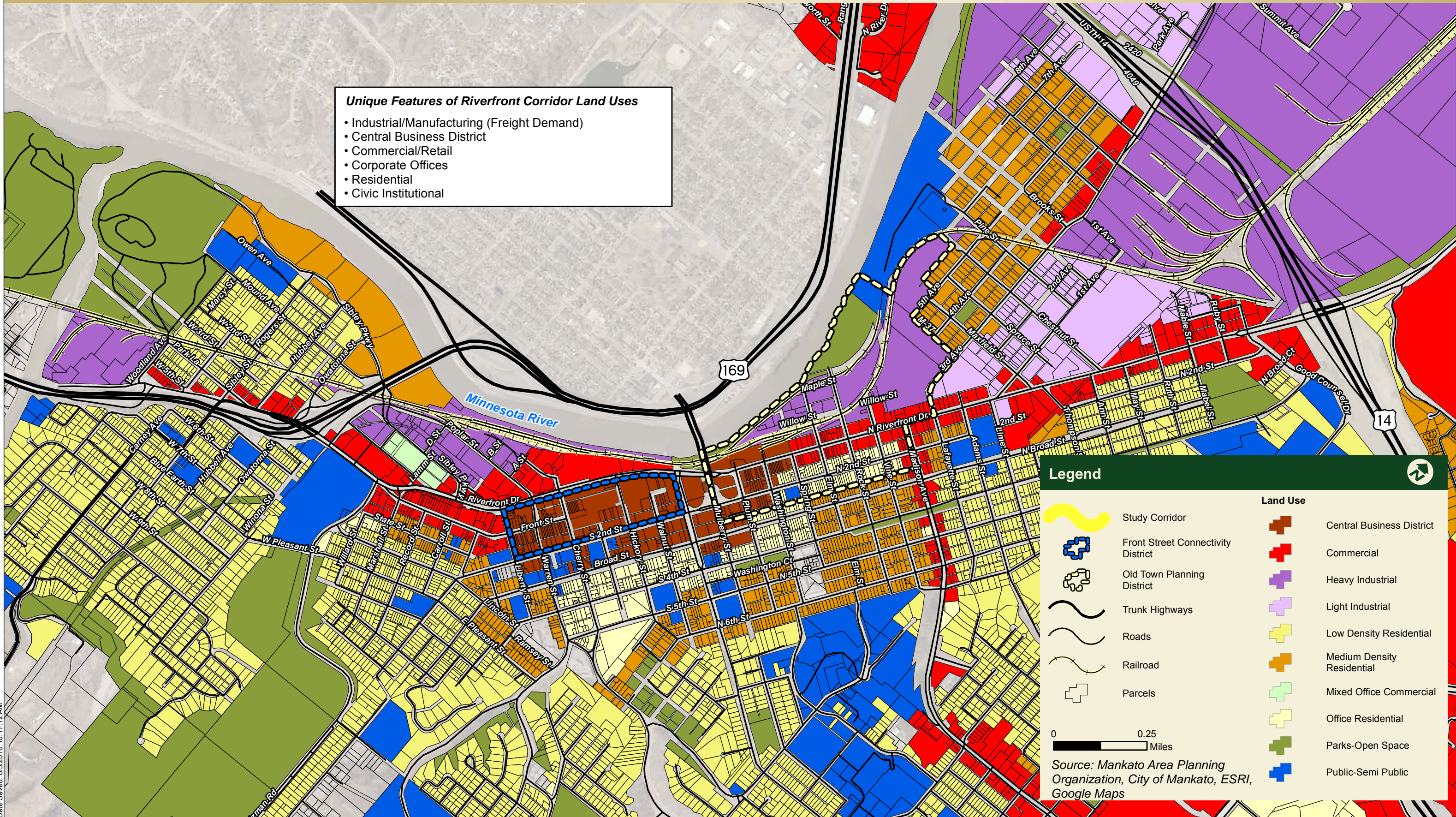
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	Urban/Urbanizing	N/A	N/A
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**Unique Features of Riverfront Corridor Land Uses**

- Industrial/Manufacturing (Freight Demand)
- Central Business District
- Commercial/Retail
- Corporate Offices
- Residential
- Civic Institutional



**Legend**

	Study Corridor		Central Business District
	Front Street Connectivity District		Commercial
	Old Town Planning District		Heavy Industrial
	Trunk Highways		Light Industrial
	Roads		Low Density Residential
	Railroad		Medium Density Residential
	Parcels		Mixed Office Commercial
	0 0.25 Miles		Office Residential
<i>Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps</i>			Parks-Open Space
			Public-Semi Public

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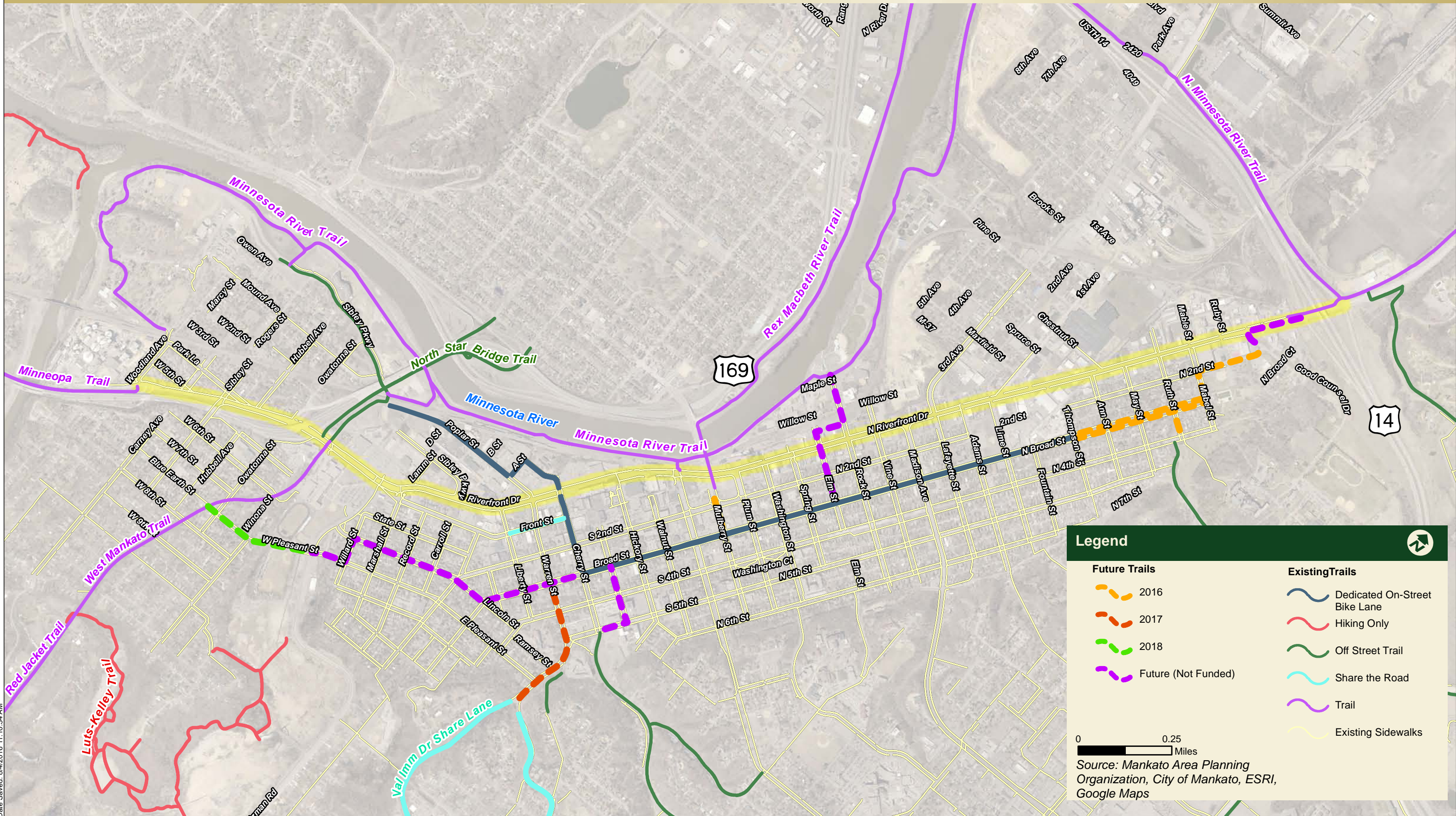


# Riverfront Drive Corridor Study

Mankato/North Mankato Area Planning Organization

# Pedestrian & Bicycle Connections

August, 2016



**Legend**

2016	Dedicated On-Street Bike Lane
2017	Hiking Only
2018	Off Street Trail
Future (Not Funded)	Share the Road
	Trail
	Existing Sidewalks

0 0.25 Miles

Source: Mankato Area Planning Organization, City of Mankato, ESRI, Google Maps

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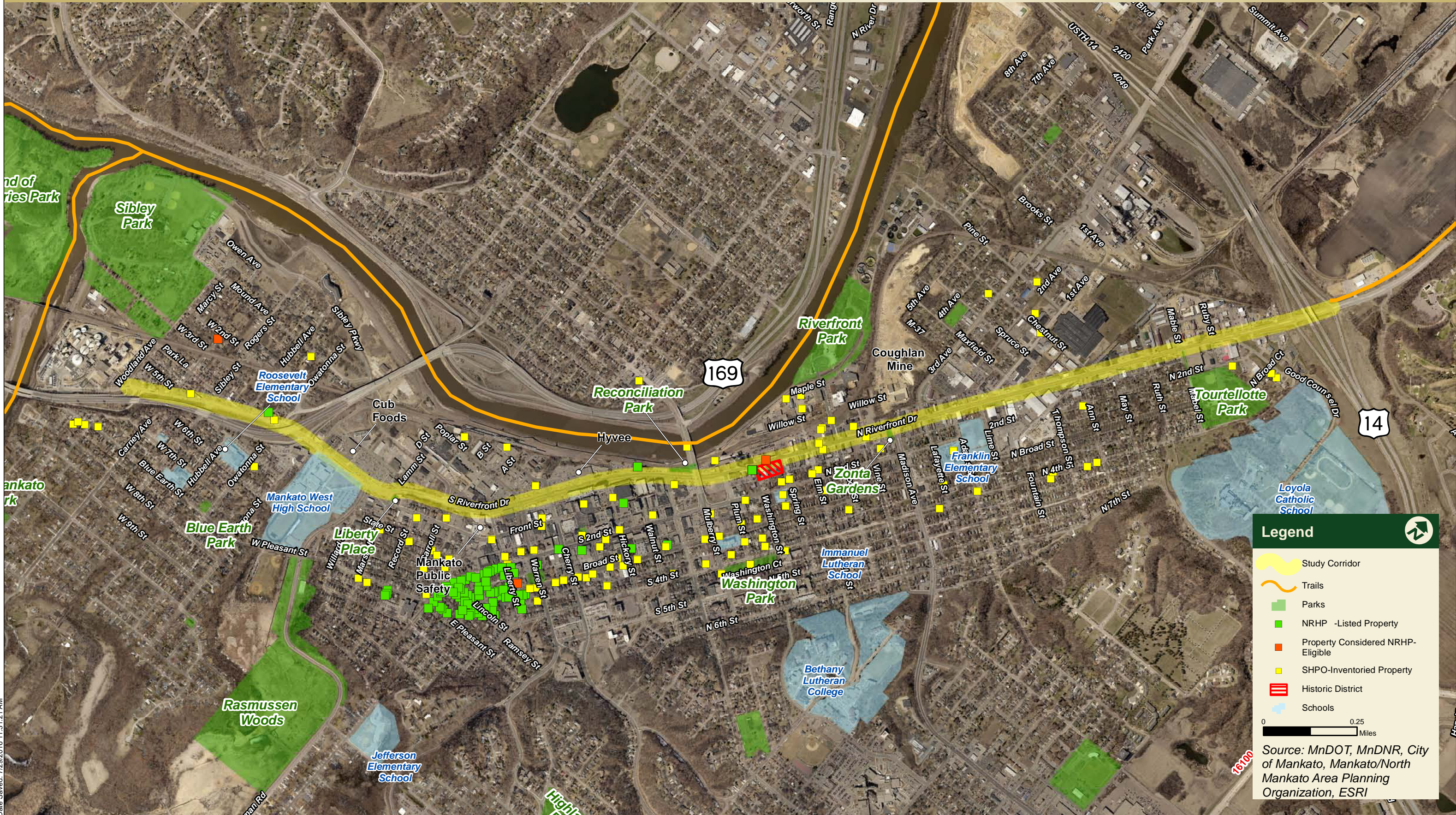


# Riverfront Drive Corridor Study

Mankato/North Mankato Area Planning Organization

# Figure 3: Parks, Trails, Historic, and Educational Properties

July, 2016



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## NEXT STEPS

- Develop Alternatives (Nov-Feb)
- Open House #2 - Public Input on Alternatives (Jan)
- Open House #3 - Study Recommendations (Spring)

