

Principal Arterial Study FINAL REPORT APPENDIX A

Highway Segment Data and Detailed Maps

This appendix presents the 21 corridor segments analyzed in the Dakota County Principal Arterial Study (organized into the 17 figures listed below). The series of 17 figures includes a narrative page with the map legend and a map showing the details, best viewed as facing pages.

The segments were categorized into four subareas; North, South, East, and West. The contents of this appendix, including an introductory page and index map (*Figure A-1*), are as follows:

| Subarea | Figure | Description | | | | | | | |
|---------|--------|---|--|--|--|--|--|--|--|
| (Index) | A-1 | Appendix Guide/Intro; Corridor Segments and Subareas (index map) | | | | | | | |
| | A-2 | MN 3 Study Corridor, Segment 3A (I-494 to MN 149) | | | | | | | |
| | A-3 | AN 3 Study Corridor, Segment 3B (MN 149 to CH 42) | | | | | | | |
| North | A-4 | CH 63 Study Corridor, Segment 63 (I-494 to MN 55) (Future Extension) | | | | | | | |
| | A-5 | CH 28 Study Corridor, Segment 28 (MN 149 to MN 55) | | | | | | | |
| | A-6 | MN 149 Study Corridor, Segments 149A & 149B (I-494 to MN 55); (MN 55 to MN 3) | | | | | | | |
| West | A-7 | CH 23 Study Corridor, Segment 23A (CH 42 to CH 70) | | | | | | | |
| west | A-8 | CH 70 Study Corridor, Segments 70A & 70B (CH 8/Scott Co to I-35); (I-35 to CH 23) | | | | | | | |
| | A-9 | CH 70 Study Corridor, Segment 70C (CH 23 to MN 3) (Future Extension) | | | | | | | |
| East | A-10 | MN 3 Study Corridor, Segment 3C (CH 42 to MN 50) | | | | | | | |
| EdSL | A-11 | MN 50 Study Corridor, Segment 50A (MN 3 to US 52) | | | | | | | |
| | A-12 | MN 50/US 61 Study Corridor, Segment 50B/61 (US 52 to MN 316/Goodhue Co.) | | | | | | | |
| | A-13 | MN 3 Study Corridor, Segment 3D (MN 50 to CH 86) | | | | | | | |
| | A-14 | MN 3 Study Corridor, Segment 3E (CH 86 to MN 19/Rice Co.) | | | | | | | |
| South | A-15 | CH 23 Study Corridor, Segment 23B (CH 70 to CH 86) | | | | | | | |
| South | A-16 | CH 23 Study Corridor, Segments 23C & 23D (CH 86 to MN 19/Rice Co.) (Future Extension) | | | | | | | |
| | A-17 | CH 86 Study Corridor, Segments 86A & 86B (CH 46/Scott Co. to MN 3) | | | | | | | |
| | A-18 | CH 86 Study Corridor, Segment 86C (MN 3 to US 52) | | | | | | | |

Note: This document is set up for 2-sided printing with facing (left and right) pages to follow.

Appendix A (cover page)

Guide to Detailed Corridor/Segment Pages

This page provides the guide for the series of 21 detailed corridor/segment pages, specifically the left-side narrative page. This appendix detail focuses on key PA decision and timing characteristics, with text noting important contextual issues. *Figure A-1* shows the 21 corridor segments and subareas. The top of each narrative page includes the following <u>title information</u>:

<u>Segment</u>: _____ from ____ to ____ Length: <u>#.# miles</u> Cross Section: ____ <u>lanes</u> Posted Speed: ____<u>mph</u> Freight Tier: __

This title information is followed by a table formatted as follows, providing sub-segment details:

| Sub-9 | Segments a | nd Chara | cteristi | cs (<u>EXAN</u> | <u>1PLE</u>) | | | | | |
|---------------------|---------------------------|-----------------|--------------|---------------------------|----------------------------------|--------------------|--|-------------------------|--|--|
| CH 23 | CH 23A (<i>EXAMPLE</i>) | | | | | | | | | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | | |
| 1 | CH 42 to CH 46 | Apple Valley | 6 | Urban | 155 | ✓ | 2 | Well-established access | | |
| 2 | CH 46 to CH 9 | Lakeville | 4-6 | Urban | 155 (200 near CH 9) | ✓ | 1.28 | management | | |

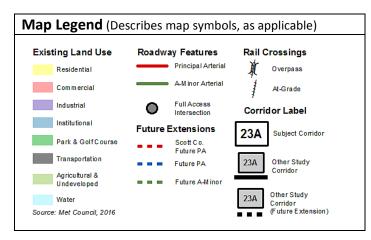
Does the Segment Fit Other Principal Arterial Criteria? Three bullets are provided:

| | or | \checkmark | System S | pacing/ | /Role: | Remarks | on ne | etwork/ | system | spacing | as ap | plicable. |
|--|----|--------------|----------|---------|--------|---------|-------|---------|--------|---------|-------|-----------|
|--|----|--------------|----------|---------|--------|---------|-------|---------|--------|---------|-------|-----------|

or Volume Guidance (Forecast): Remarks on 2030 forecasted volume as applicable.

☐ or ☑ Relative Traffic Volume/Connections: Remarks on relative volumes and connections.

Map Legend. The map legend is a companion to the mapping provided on the facing page. More information on map data sources and methodology is provided in Section _____ of the Final Report.

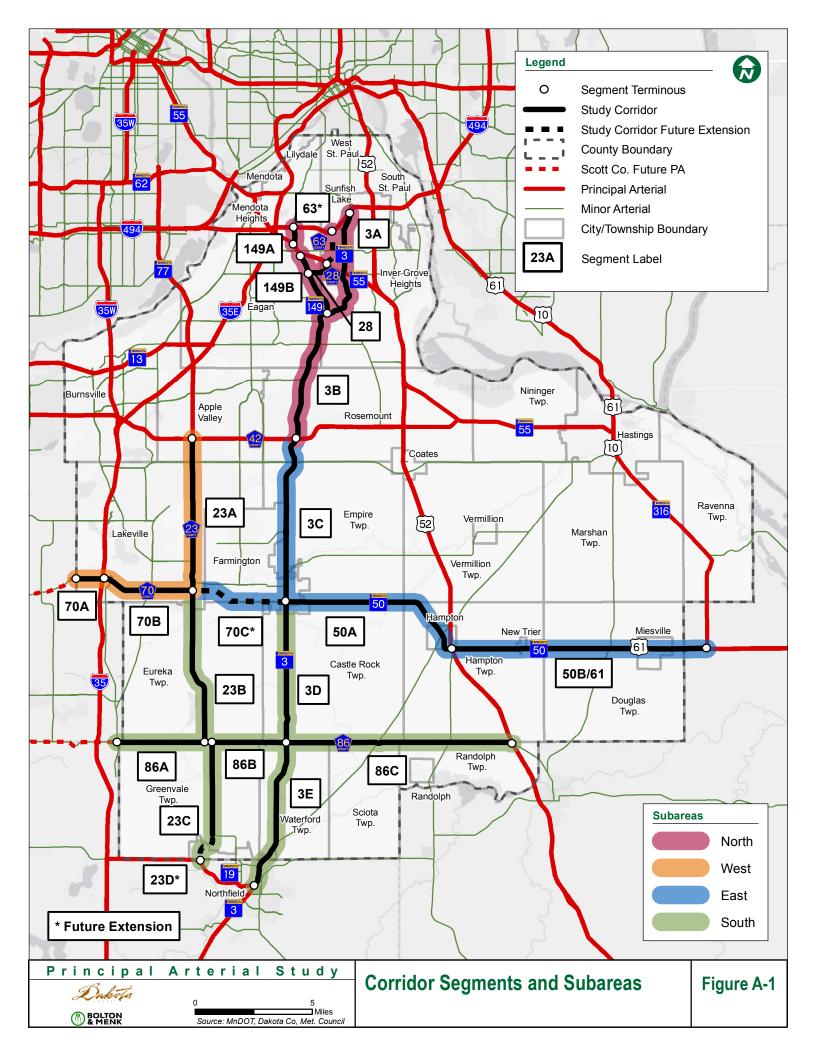


Observations and Recommendations

The text here summarizes observations for the segment, addressing system connectivity, land uses, and growth/timing considerations. It also provides PA designation recommendations (underlined), including need for additional studies, focus areas, and need for coordination of decision-making among various study segments.

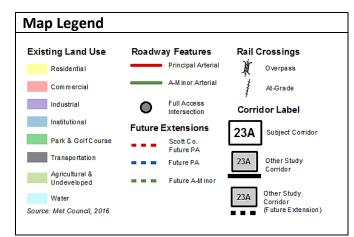
Guidance: Principal Arterial Public Street Access Spacing and Volumes (Key guidance on PA characteristics, for convenience/reference; it is the same table for all segments)

| | Public Str | | | | |
|--------------------|----------------------------|--------------------|--------------------------|-------------------------------|--|
| Facility Type | Primary Intersection | Secondary I | ntersection | Signal Spacing | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | |



| Segm | ent 3A: Mi | N 3 from I | -494 to | MN 149 | F | Posted Speed: 45-50 mph | | | | |
|---------------------------------|--------------------|---------------------------|--------------|---------------------------|----------------------------------|-------------------------|--|--|---|--|
| Length: 5 mi Cross Section: 2-4 | | | | | | 4 lanes Freigh | | | nt Tier: 3 Sub-Segment 2 & 3 only | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | | Remarks | |
| 1 | I-494 to MN 55 | Inver Grove Heights | 2-4 | Urban | 100 - 250 | - | 1.5 | | Connects to I-494 and MN 55; developing area | |
| 2 | MN 55 to CH 71 | Inver Grove Heights | 2 | Urban- izing | 100 | - | 0.8 | | Connects to MN 55; few constraints from development | |
| 3 | CH 71 to MN 149 | Inver Grove Heights | 2 | Urban- izing | 100 | - | 0.4 | | Multiple private access points | |

- System Spacing/Role: At less than 1.5 mile from US 52, closer than urban guidance
- ✓ <u>Volume Guidance (Forecast)</u>: Volumes in the north part of sub-segment 1 (about 35% of entire segment) exceed the urban volume guidelines; most of the segment is below guidance (see below)
- ☑ Relative Traffic Volume/Connections: High volumes at connections with I-494 and MN 55, but lower volumes than on US 52

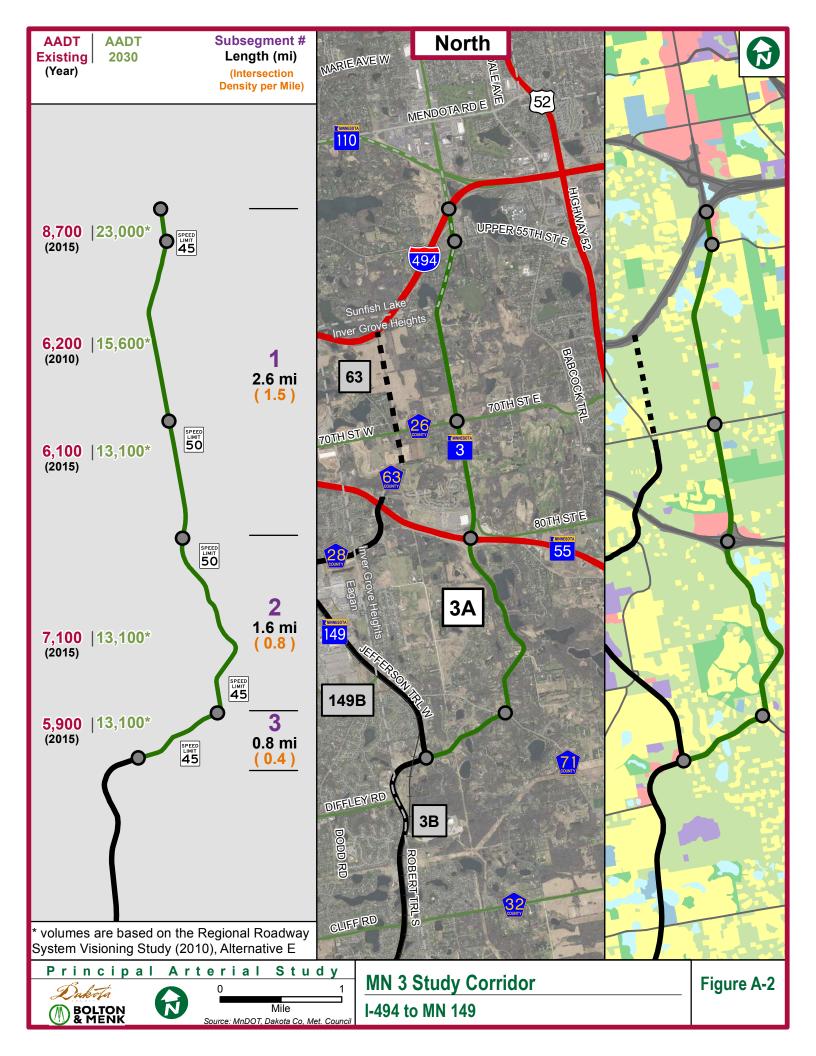


Observations and Recommendations

This segment includes PA connections to I-494 (at the north end) and MN 55 (midsegment). It also connects to MN 149, a high capacity intersection, at the south end.

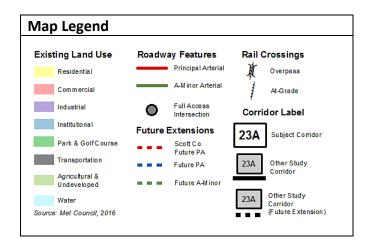
Segment 3A is a winding road with many access points that would not be conducive to PA function without substantial geometric improvements. Additional PA capacity in this vicinity will be provided by the future CH 63, and long-term plans for MN 149. These future PAs negate the need for 3A as a PA. This segment is not recommended for designation as a future PA.

| Guidance: Principal | Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | | |
|----------------------------|---|--------------------------|---------------------|-------------------------------|--|--|--|--|--|--|
| | Public Stre | | | | | | | | | |
| Facility Type | Primary Intersection | Secondary I | ntersection | Signal Spacing | | | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | Rural Principal Arterial | | | | | | | | |
| Based on Land Use | 15,000 to 100,000 i | ADT | 2,500 to 25,000 ADT | | | | | | | |



| Segm | ent 3B: MN | 3 from MN | 149 to | CH 42 | Pos | Posted Speed: 30-55 mph | | | |
|-----------------------------------|-----------------------------------|-----------|--------------|---------------------------|----------------------------------|-------------------------|--|---|--|
| Length: 5.3 mi Cross Section: 2 l | | | | | | | Freig | ht Tier: 3 | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | |
| 1 | MN 149 to City Limit | Eagan | 2 | Urban | 100 | - | 1.8 | A few challenges observed with access management and | |
| 2 | City Limit to Connemara Trl | Rosemount | 2 | Urban | 120-150 | - | 0.9 | physical constraints, but mostly reasonable right-of- way widths. | |
| 3 | Connemara Trl to CH 42 | Rosemount | 2 | Urban | 70-150 | - | 1.5 | Connects to CH 42, an existing PA. Several private and shared access points, 30-mph speed and limited right-ofway in mile north of CH 42. | |

- System Spacing/Role: Typically spaced at more than 3-4 miles from MN 77 and US 52
- ☑ Volume Guidance (Forecast): Exceeds urban typical volumes (see below)
- Relative Traffic Volume/Connections: High-volume connection to CH 42, an existing PA; with good spacing from MN 77 and US 52, MN 3 has higher volume than other parallel minor arterials

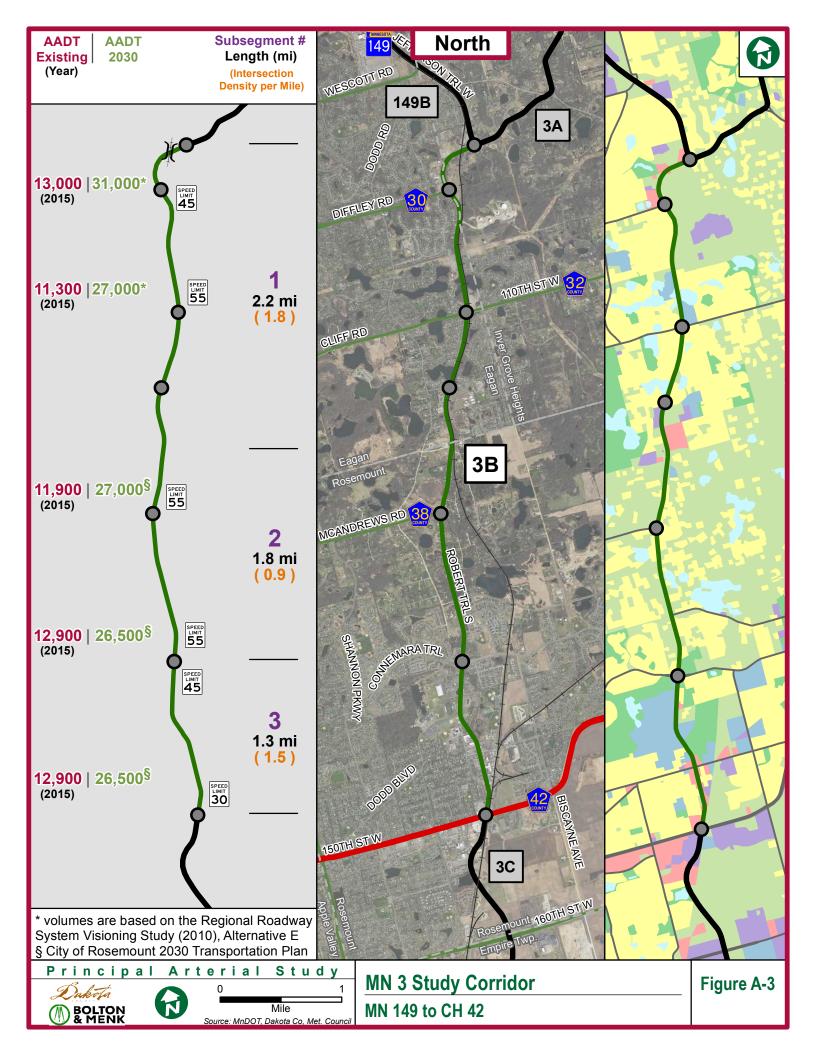


Observations and Recommendations

The south end of this segment connects to PA, CH 42. Major commercial and industrial sites are located at the south end in downtown Rosemount (in sub-segment 3), where speed, access, right-of-way, and other characteristics present challenges (about 1 mile). MN 3 is constrained by the railroad and a rail overpass on north end.

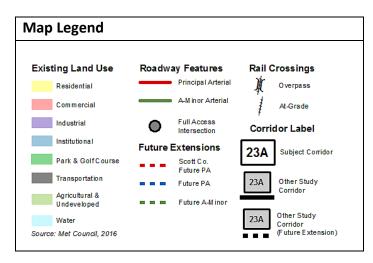
Segment 3B is recommended for future designation as a PA. This recommendation should be coordinated with other PA recommendations and future designations in the North Subarea.

| Guidance: Principal | Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | | |
|---------------------|---|--------------------|--------------------------|-------------------------------|--|--|--|--|--|--|
| | Public Stre | | | | | | | | | |
| Facility Type | Primary Intersection | Secondary I | ntersection | Signal Spacing | | | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | | | | | | |
| Based on Land Use | 15,000 to 100,000 i | ADT | 2,500 to 25,000 ADT | | | | | | | |



| Segm | ent 63: CH | -494 to | MN 55 | Poste | Posted Speed: 40 mph | | | | | |
|---------------------|-------------------|---------------------------|--------------|---------------------------|----------------------------------|--------------------|-------------------------------|------------------------------------|--|--|
| Length: 1.7 mi | | | Cr | Cross Section: 2 lanes | | | (New alignment unknown lanes) | | ht Tier: N/A | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Inters | Access section nsity /mi) | Remarks | |
| 1 | I-494 to MN 55 | Inver Grove Heights | 2 | Urban | 100 - 250 | - | 1 | 8 | Connects to I-494 and MN 55; developing area | |

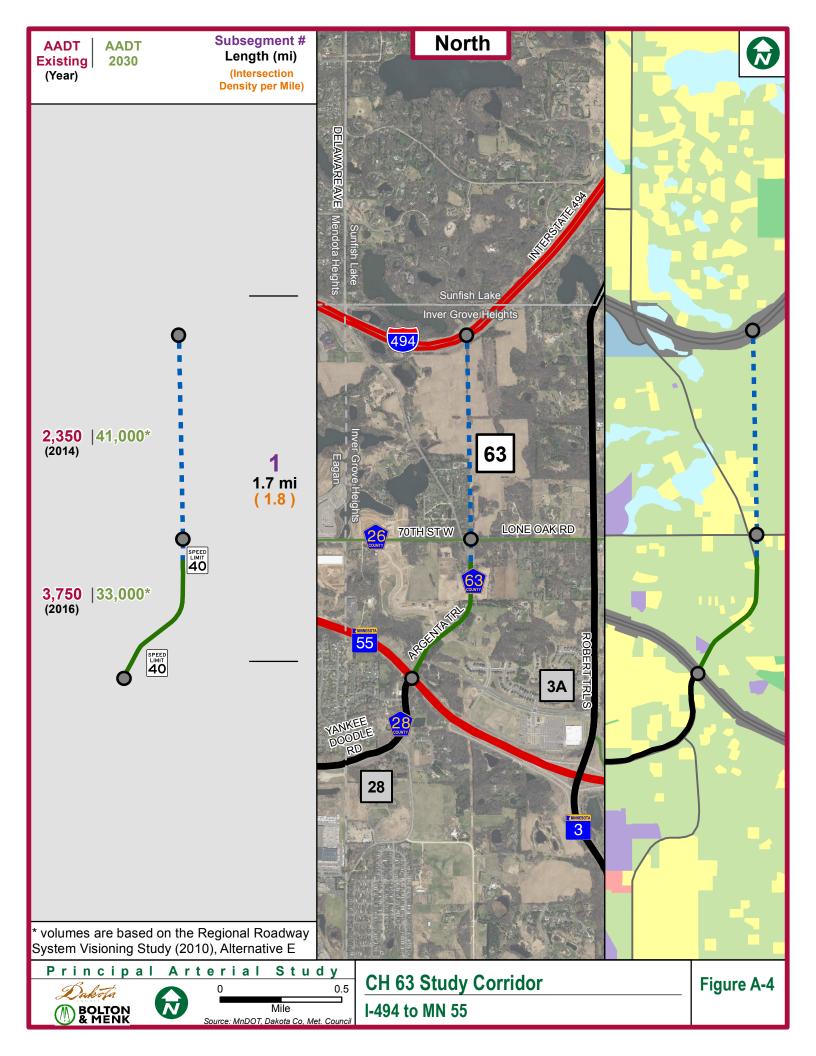
- ☑ System Spacing/Role: At less than 1.7 mile from US 52, closer than urban guidance
- ✓ <u>Volume Guidance (Forecast)</u>: Volumes for the segment exceed the minimum urban volume guidelines.
- Relative Traffic Volume/Connections: High connecting volumes at I-494 and MN 55, but lower volumes than on US 52 and MN 3.



Observations and Recommendations

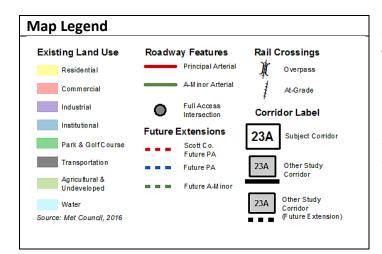
Upon completion of construction, this segment will provide a key connection between PAs on either end – to I-494 in the north and to MN 55 in the south. The I-494 and CH 63 intersection will be served by an interchange; the MN 55 and CH 63 intersection will be a high capacity intersection. Segment 63 is recommended for future PA designation pending completion of construction. Also see findings for Segments 3A and 149A, which are not recommended as future PAs. This recommendation should be coordinated with other PA recommendations and future designations in the North Subarea.

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | | |
|---|----------------------------|--------------------|---------------------|---------------------------------|--|--|--|--|--|
| | Public Street Spacing | | | | | | | | |
| Facility Type | Primary Intersection | Secondary I | ntersection | Signal Spacing | | | | | |
| Rural | 1 mile | 1/2 mile | | Only at Primary Intersections | | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | <u> </u> | <u>Rural</u> Principal Arterial | | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | | | |



| Segm | nent 28: CH | 28 from | MN 14 | 49 to MN 55 | P | Posted Speed: 45-50 mph | | | |
|---------------------------------|--------------------|---------|--------------|---------------------------|----------------------------------|-------------------------|---|--------------------|--|
| Length: 1.1 mi Cross Section: 4 | | | | | | lanes Freight Tier: 2 | | | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Acce Intersect Densit (#/mi | ion / | |
| 1 | MN 149 to MN 55 | Eagan | 4 | Urban | 150 | _ | 1.8 | Connects to MN 149 | |

- System Spacing/Role: Reasonable fit to urban guidance.
- ✓ <u>Volume Guidance (Forecast)</u>: Volumes for the segment exceed the minimum urban volume guidelines.
- ☑ Relative Traffic Volume/Connections: High connecting volumes at MN 55.

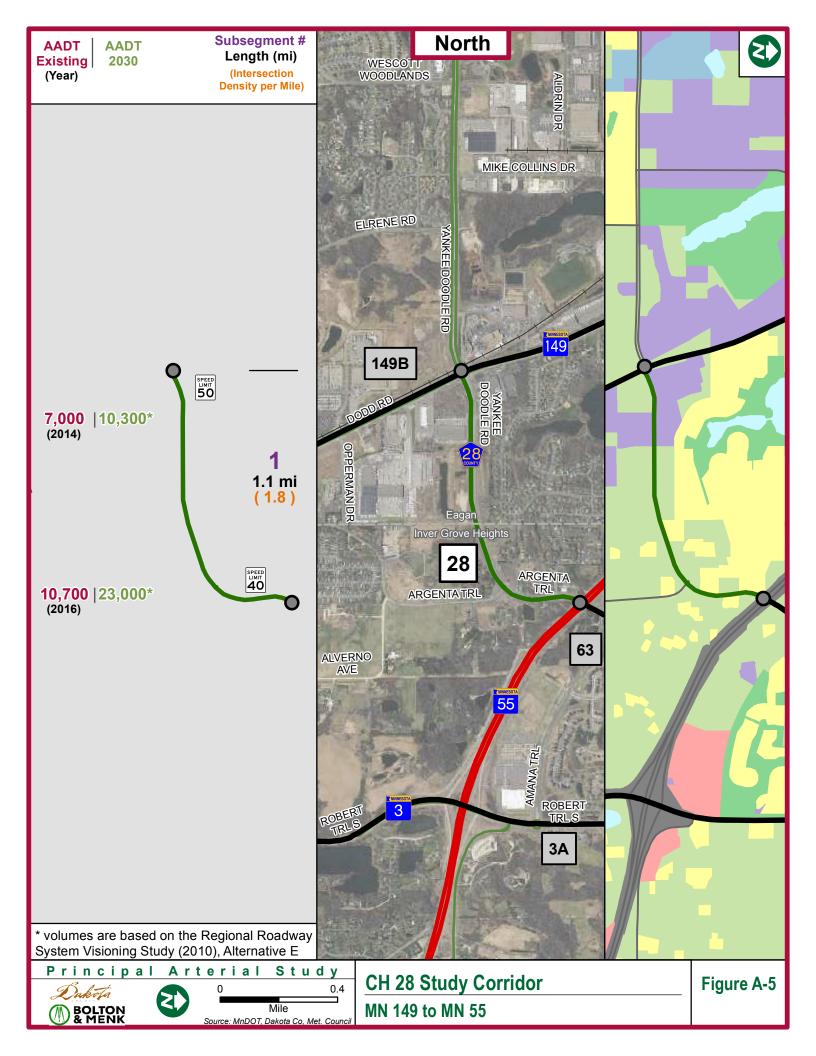


Observations and Recommendations

This segment includes an important system connection at the east end (MN 55). Major commercial and industrial sites are located near this segment.

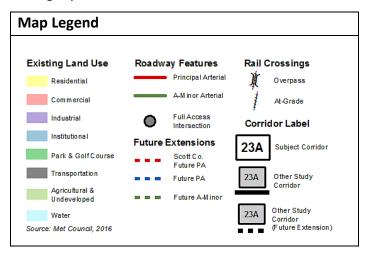
Segment 28 is recommended for future designation as a PA. This recommendation should be coordinated with other PA recommendations and future designations in the North Subarea.

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | | |
|---|-----------------------------|------------------------|--------------------------|-------------------------------|--|--|--|--|--|
| | Public Stre | | | | | | | | |
| Facility Type | Primary Intersection | Secondary Intersection | | Signal Spacing | | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | | |
| Urban Core | 300-600 feet, depend | ent upon block le | ength | 1/4 mile | | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Arte | erial | Rural Principal Arterial | | | | | | |
| Based on Land Use | 15,000 to 100,000 A | ADT | 2,500 to 25,000 ADT | | | | | | |



| Segm | Segment 149A & 149B: MN 149 from I-494 to MN 3 Posted Speed: 45-55 mph | | | | | | | | | | |
|--|--|--------------------------------------|-----|---------------------------|----------------------------------|--------------------|--|-------------------------------------|--|--|--|
| Length: 3.7 mi Cross Section: 2-4 land | | | | | | | es Freight Tier: 2 | | | | |
| Sub- seg. No. | Location | N Location City Lai | | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Acce Intersecti Density (#/mi) | on | | | |
| MN 1 | MN 149A | | | | | | | | | | |
| 1 | I-494 to MN 55 | Eagan | 4 | Urban | 100 - 150 | - | 2.5 | Connects to I-494 | | | |
| MN 1 | 49B | | | | | | | | | | |
| 1 | MN 55 to CH 71 | Eagan & Inver Grove Heights | 4-2 | Urban | 100 - 150 | - | 1.3 | Connects MN 55 ; developing area | | | |
| 2 | CH 71 to MN 3 | Inver Grove Heights | 2 | Urban | 100 - 150 | - | 3.3 | Connects to MN 3. | | | |

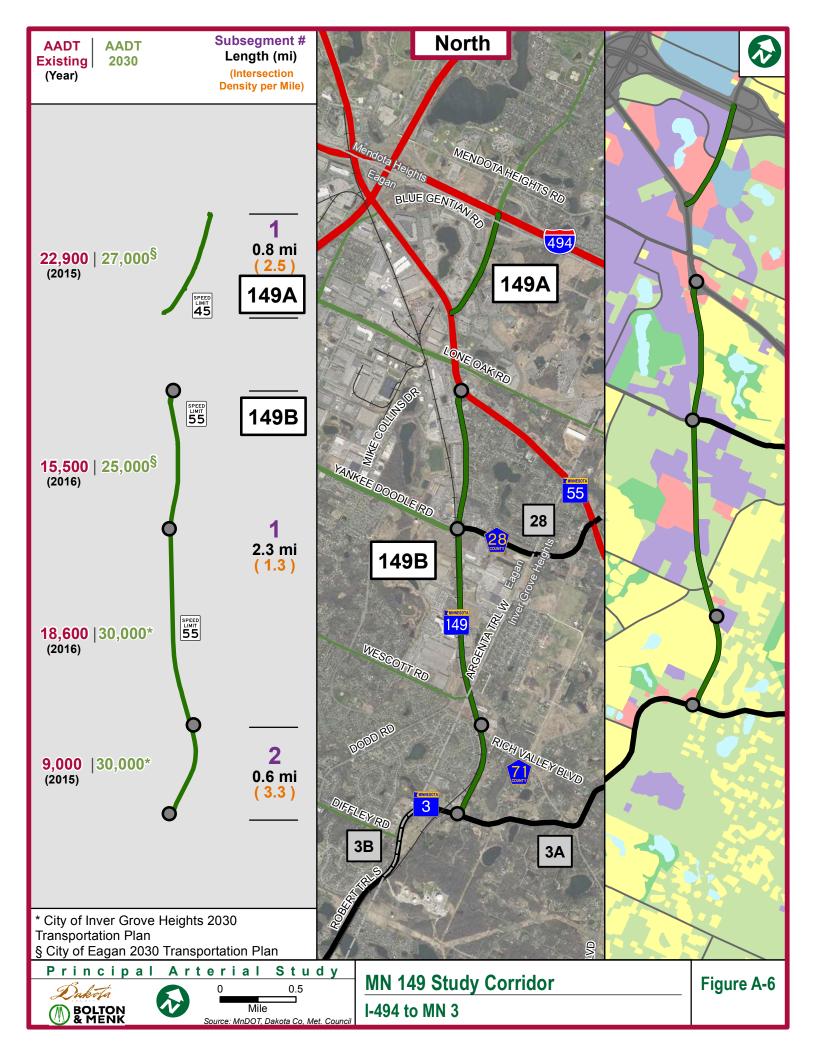
- System Spacing/Role: At less than 1.7 mile from CH 63, closer than urban guidance
- ✓ <u>Volume Guidance (Forecast)</u>: Volumes for the segment exceed the minimum urban volume guidelines.
- Relative Traffic Volume/Connections: Important connections and high volumes at I-494 and MN 55; slightly lower volumes than future CH 63.



Observations and Recommendations

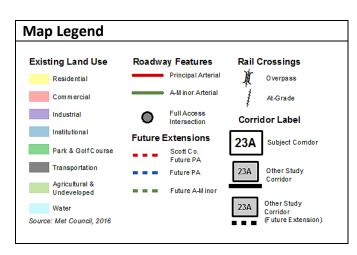
This segment includes PA connections and high capacity intersections at I-494, MN 55, and with MN 3 at the south end. Major commercial and industrial sites are located along this segment. Segment 149B is recommended for future designation as a PA. Segment 149A is not recommended for future designation as a PA. This recommendation should be coordinated with other PA recommendations and future designations in the North Subarea.

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|---|-------------------|--------------------------|-------------------------------|--|--|--|--|
| | Public Stre | | | | | | | |
| Facility Type | Primary Intersection Secondary Intersection | | Signal Spacing | | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | ent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Arto | erial | Rural Principal Arterial | | | | | |
| Based on Land Use | 15,000 to 100,000 A | ADT | 2,500 to 25,000 ADT | | | | | |



| Segm | nent 23A: C | H 23 from | n CH 42 | 2 to CH 70 |) I | Posted Speed: 45-55 mph | | | | |
|-------------|--------------------|-----------------|---------------------|-------------------|------------------------|--|------|----|--|--|
| Lengt | th: 6.5 mi | Cr | ross Secti | on: 2-6 l | anes | ht Tier: 3 | | | | |
| Sub- | | Na | Approx. Road R/W | | Tuestait | Full-Access Intersection Density | | | | |
| seg. No. | Location | City | No. Lanes | Design Context | Width (ft.) | Transit Service | (# / | | Remarks | |
| 1 | CH 42 to CH 46 | Apple Valley | 6 | Urban | 155 | ✓ | 2 | 2 | Well-established access | |
| 2 | CH 46 to CH 9 | Lakeville | 4-6 | Urban | 155 (200 near CH 9) | ✓ | 1.2 | 28 | management | |
| 3 | CH 9 to CH 50 | Lakeville | 4 | Rural | 130 | ✓ | 1.4 | 49 | High frequency of field access points; developing area | |
| 4 | CH 50 to CH 70 | Lakeville | 4 | Rural | 120-140 | ✓ | 2. | 4 | Connection to CH 70; developing area | |

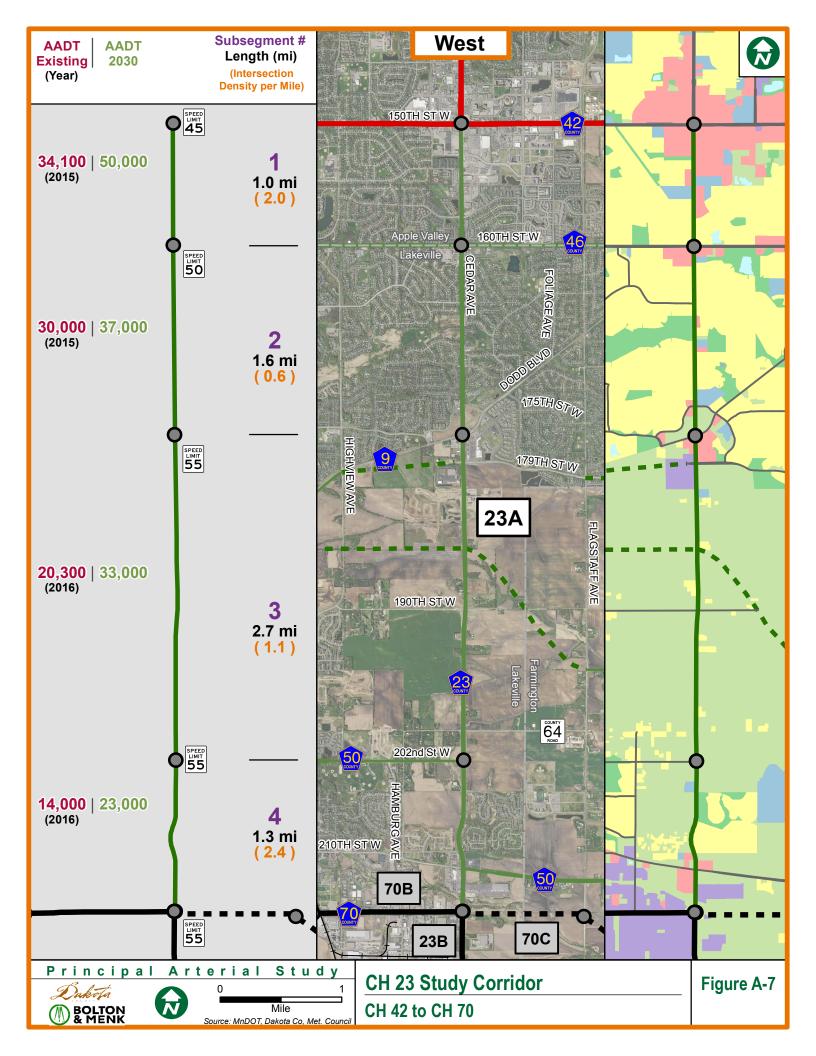
- ☑ System Spacing/Role: Fits urban guidance (more than 3 miles from I-35 and MN 3)
- ☑ Volume Guidance (Forecast): Far exceeds both urban and rural typical volumes (see below)
- Relative Traffic Volume/Connections: Higher volumes than MN 3 (Segment 3C); connects to CH 42 & CH 23 to north (existing PAs) and to CH 50 & CH 70 to south (high connecting volumes).



Observations and Recommendations

This segment includes PA connections (CH 23, MN 77, and CH 42) at the north end and high-capacity intersections at the south end (CH 70 and CH 23). Major commercial and industrial sites (freight terminals) are present. **Segment 23A is recommended for near-term PA designation** with possible additional studies advised to manage high volumes, intersection spacing, and access. <u>Note</u>, PA designation will require coordination with CH 70, particularly 70B which is also recommended for near-term PA designation.

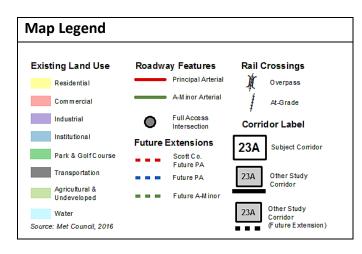
| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|----------------------------|-----------------------|--------------------------|-------------------------------|--|--|--|--|
| | Public Stre | Public Street Spacing | | | | | | |
| Facility Type | Primary Intersection | Secondary I | ntersection | Signal Spacing | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | | |



Segment 70A & 70B: CH 70 from CH 8 (Scott Posted Speed: 45-55 mph Co) to CH 23 Length: 5.2 mi Cross Section: 2-4 lanes Freight Tier: 1 (70B only) **Full-Access** Approx. Intersection Sub-R/W Road Width Design **Density** seg. No. **Transit** No. Location City Lanes Context (ft.) **Service** (#/mi) **Remarks CH 70A** Connects to I-35 and Scott CH 8 to Rural & Easement 1 Lakeville 2-4 0.6 CH 8 (Scott Co. future PA and (60)-75 **I-35** Urban growth area); some easement **CH 70B** I-35 to Rural & Easement Some on easement. The 1 Lakeville 2-4 1.1 (60)-170frequency of private access CH 9 Urban CH 9 to points increases to the east 2 Lakeville 2 Rural 75-170 0.9 **CH 23** (Airlake Industrial Park)

Do the Segments Fit Other Principal Arterial Criteria? (\checkmark = yes)

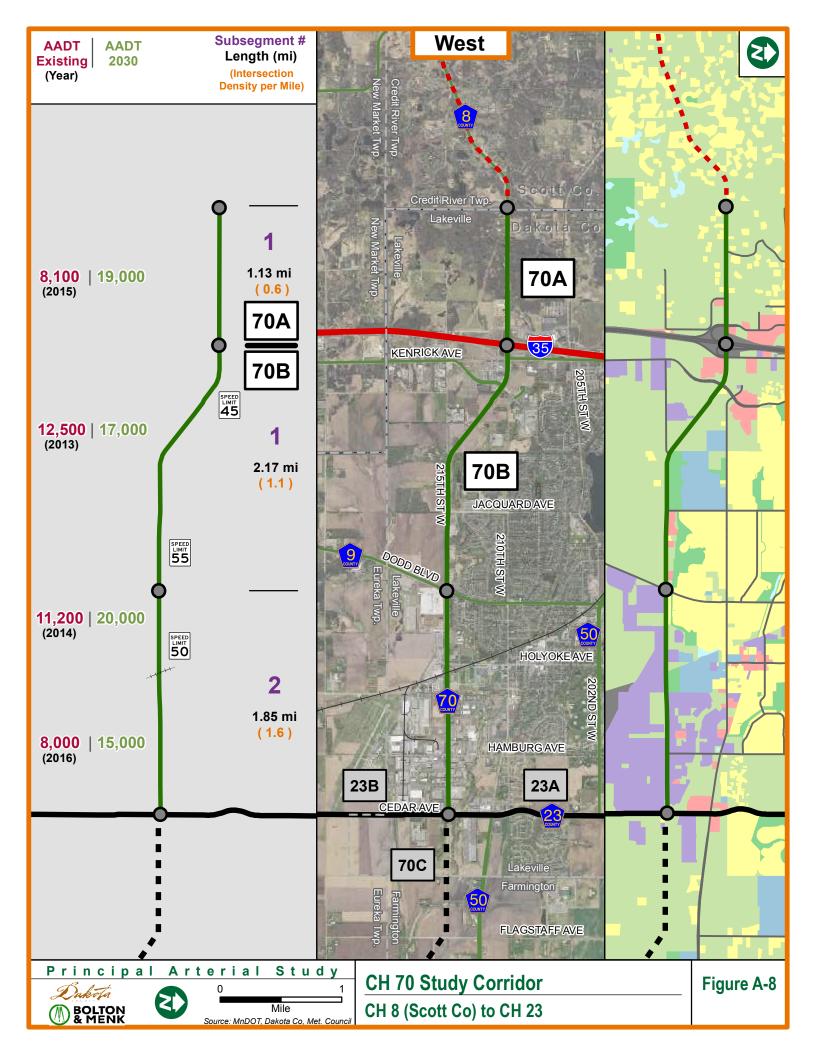
- System Spacing/Role: Fits urban guidance (more than 7 miles from CH 42)
- ✓ <u>Volume Guidance (Forecast)</u>: Exceeds both urban and rural typical volumes (see below) and attracts higher forecast volumes considering combined demand with CH 50 (about 1 mile or less to north)
- Relative Traffic Volume/Connections: CH 70B has volumes similar to E-W roadways to the north and attracts relatively high volumes considering CH 50; substantially higher volumes than CH 86 and other E-W roadways to the south. Access to Airlake Industrial Park and Airlake Airport.



Observations and Recommendations

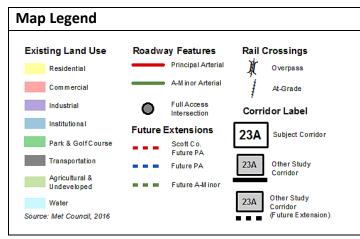
These growth-area segments include a PA connection to I-35, CH 23, and Scott County's planned CH 8 (a possible future PA). Major commercial and industrial sites (freight terminals) are present to the east. Segment 70B is recommended for near-term PA due to existing and planned land uses in Lakeville, and this study's recommendation to designate Segment CH 23A as a PA in the near-term. Additional information is needed regarding the proposed eastward extension of CH 70 (Segment 70C). Segment 70A is recommended for future PA designation. Additional information or studies are needed to address right-of-way and access management.

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|----------------------------|--------------------|---------------------|-------------------------------|--|--|--|--|
| | Public Stre | | | | | | | |
| Facility Type | Primary Intersection | Signal Spacing | | | | | | |
| Rural | 1 mile | 1/2 r | mile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | mile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | J | Rural Principal Arterial | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | | |



| _ | ent 70C: (Future Extension | CH 70 from | CH 23 t | o MN 3 | Po | Posted Speed: TBD - 55 mph | | | |
|-----------------------------------|-----------------------------|--------------------------|------------------------|----------------------------|-----------------------------------|----------------------------|-----|---|--|
| Length: 4.1 mi Cross Section: 2-4 | | | | | | Freight Tier: 3 sub-Segme | | | |
| Sub- seg. No. | Location | City | No. Lanes | | | Remarks | | | |
| 1 | CH 23 to Essex Ave | Lakeville, Farmington | 2-4 (detail TBD) | Rural & Urban- izing | 50-100 on existing segments | - | 1.4 | Future extension and growth- area highway segment; few constraints from development (to date); limited right-of-way and other corridor planning challenges | |
| 2 | Essex Ave to MN 3 | Farmington | 2 | Rural & Urban | 50 - 100 | - | 1.5 | Connects to MN 3 and MN 50. Reasonable access management. | |

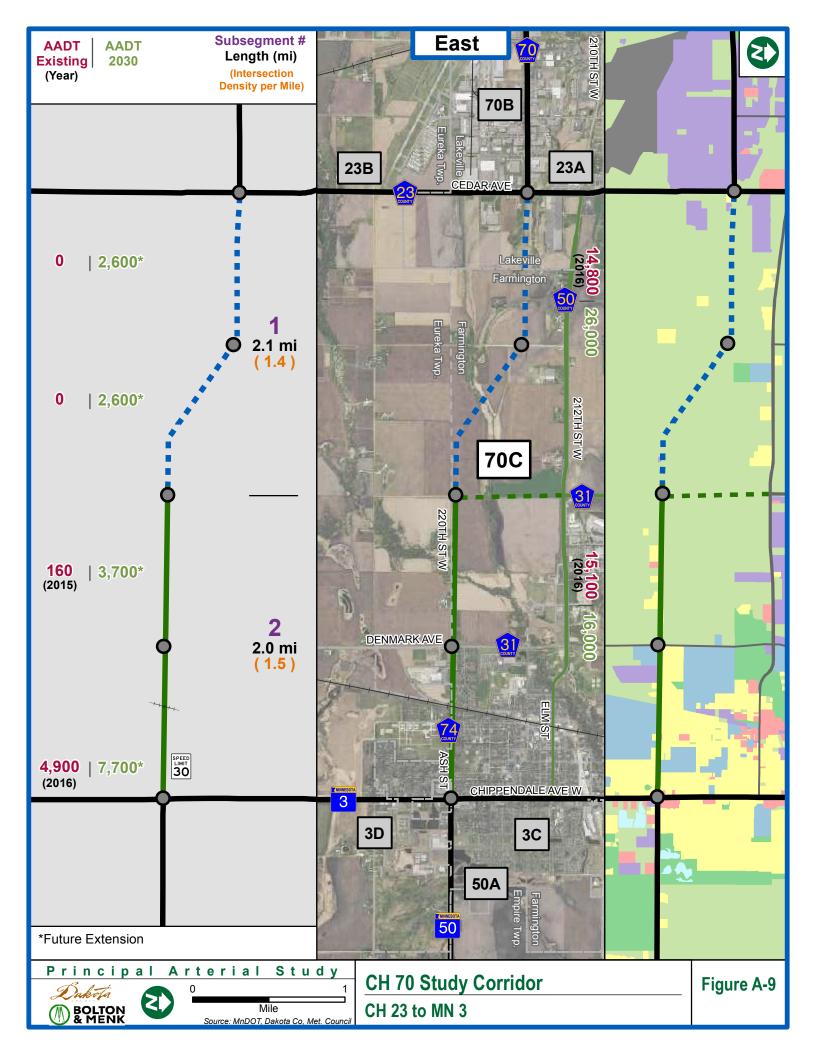
- System Spacing/Role: Fits urban guidance (more than 3 miles from CH 42)
- ☑ Volume Guidance (Forecast): Forecasted volume to exceed urban and rural guidance (see below)
- Relative Traffic Volume/Connections: Forecasted volumes similar to E-W roadways to the north and attracts high volumes considering CH 70 to the west and CH 50; substantially higher volumes than CH 86 and other E-W roadways to the south



Observations and Recommendations

This future east-west segment would close a gap, between MN 50 and CH 70 and connect MN 3 and CH 74 to CH 23 (see CH 23A, MN 3C, CH 70A/70B, and 50A). Major commercial and industrial sites (freight terminals) and a reliever airport are present to the west, with new development now also proposed east of CH 23. Segment 70C is recommended for future PA designation pending completion of additional studies needed to address right-of-way, design/access details, and the blending of travel demands and routings with other highways and local streets.

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|----------------------------|-----------------------|--------------------------|-------------------------------|--|--|--|--|
| | Public Stre | Public Street Spacing | | | | | | |
| Facility Type | Primary Intersection | Signal Spacing | | | | | | |
| Rural | 1 mile | 1/2 r | mile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | mile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | | |



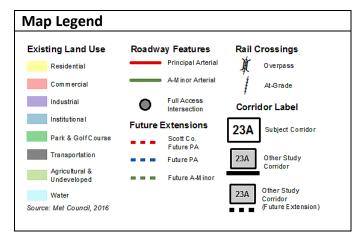
| Jegn | Tosted Speed. 45 35 mpm | | | | | | | | | | | |
|---------------------|---|--------------------|--------------|---------------------------|----------------------------------|--------------------|--|--|--|--|--|--|
| Leng | th: 7.7 mi | | Cros | Cross Section: 2-4 lanes | | | | Freight Tier: 3 | | | | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | | | | |
| 1 | CH 42 to CH 46 | Rosemount | 2 | Rural & Urban | 70-100 | - | 1.8 | Connects to CH 42. Developing area. | | | | |
| 2 | CH 46 to Farmington City Limit | Empire Township | 2 | Rural | 75-130 | - | 1.9 | Rural highway segment with private driveways and field access points; few constraints from development | | | | |
| 3 | Farmington City Limit To Empire Twp Limit | Empire Township | 2-4 | Urban | 70-100 | - | 0.6 | High frequency of access points in Empire Township. Developing area. | | | | |
| 4 | Empire Twp Limit To MN 50 | Farmington | 4 | Urban | 70-100 | - | 1.3 | Connects to MN 50. Reasonable access management. | | | | |

Posted Speed: 45-55 mph

Does the Segment Fit Other Principal Arterial Criteria? (✓ = yes)

Segment 3C: MN 3 from CH 42 to MN 50

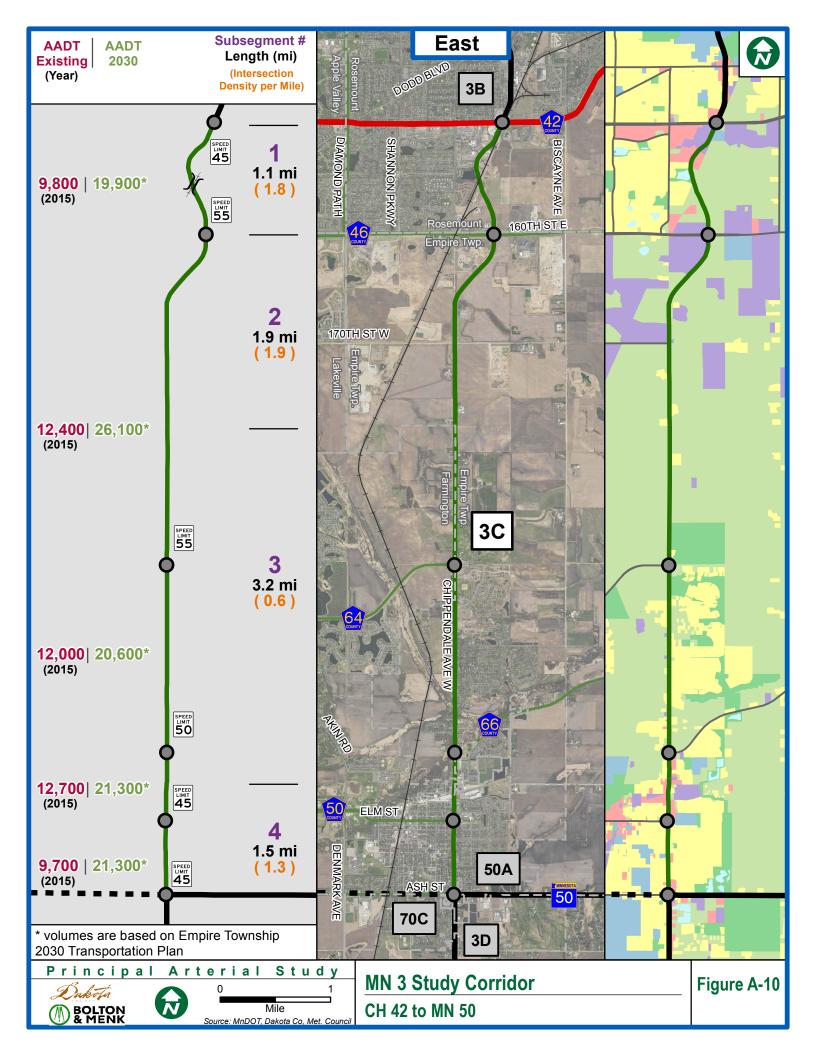
- System Spacing/Role: Reasonable fit to rural guidance (5.8-6.0 miles from US 52)
- ☑ Volume Guidance (Forecast): Exceeds typical rural and urban volumes (see below)
- Relative Traffic Volume/Connections: Lower volumes than CH 31 to north, but provides continuity to the south. Connections to CH 42 in Rosemount and MN 50 in Farmington which results in higher traffic volumes on the south end; there is better network spacing with CH 23 (approx.. 4.0 miles to the west).



Observations and Recommendations

This segment connects to CH 42, a PA, on the north end; crosses CH 46 via a high capacity intersection; and ends at MN 50, also a high-capacity intersection. **Segment 3C** is recommended for long-term PA designation pending additional studies and in relation to other adjacent PA designations (see also Segment 70C, which is a proposed future connection).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|----------------------------|-------------------|--------------------------|-------------------------------|--|--|--|--|
| | Public Stre | eet Spacing | | | | | | |
| Facility Type | Primary Intersection | ntersection | Signal Spacing | | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | ent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | | | | |
| Based on Land Use | 15,000 to 100,000 i | ADT | 2,500 to 25,000 ADT | | | | | |



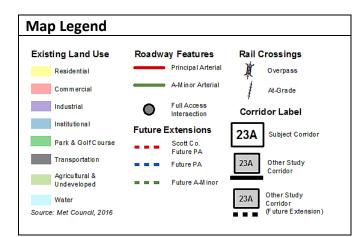
| Segm | Segment SUA: Will SU ITOITI WIN S to US SZ | | | | | | | | | | | |
|---------------------|--|--|------------------|---------------------------|----------------------------------|--------------------|--|--|--|--|--|--|
| Length: 8.5 mi | | | | Cross Section: 2 lanes | | | | Freight Tier: 3 | | | | |
| Sub- seg. No. | g. | | No. Lane s | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | | | | |
| 1 | MN 3 to CH 79 | Castle Rock & Empire Twps | 2 | Rural | 70 - 100 | - | 0.5 | | | | | |
| 2 | CH 79 to CH 47 | Castle Rock, Empire, Vermillion, & Hampton Twps | 2 | Rural | 65-120 | - | 0.9 | Connects MN 3, Farmington, and Empire to Hampton & US 52 | | | | |
| 3 | CH 47 to US 52 | Hampton Twps | 2 | Urbani- zing | 65-120 | - | 2.0 | | | | | |

Posted Speed: 55 mph

Do the Segments Fit Other Principal Arterial Criteria? (\checkmark = yes)

Segment 504: MN 50 from MN 3 to US 52

- ☑ System Spacing/Role: Fits rural guidance (7 miles from CH 42 6 miles from CH 86)
- ☑ Volume Guidance (Forecast): Exceeds both rural typical volumes (see below)
- Relative Traffic Volume/Connections: MN 50A has higher volumes than CH 86 to the south but has substantially lower volumes than CH 42 to the north.



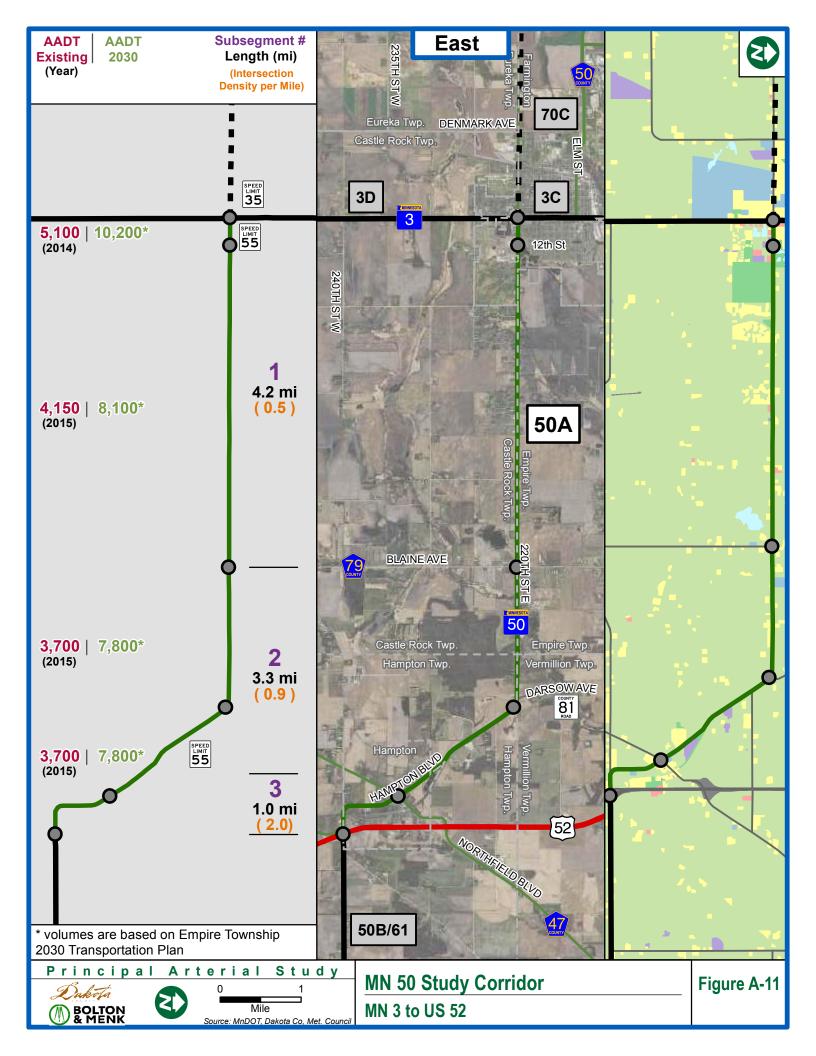
Observations and Recommendations

This growth-area connection to PA interchange, US 52 (east end) and with MN 3 (west end). To the west, Segment 50A links to CH 70, which connects to I-35 and to Scott CH 8 (a possible future PA). Major commercial and industrial sites (freight terminals) are located west of this segment. **Segment 50A is**

recommended for future PA designation.

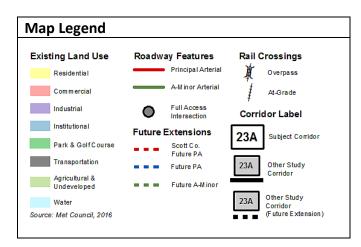
Additional information or studies may be needed to address right-of-way within the City of Hampton, the proposed eastward extension of CH 70, access management, the blending of travel demands and, coordination of PA designation with CH 23, CH 50, and MN 50 (see also CH 23A, CH 70C, and CH 70B).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|-----------------------------|-------------------|--------------------------|-------------------------------|--|--|--|--|
| | Public Stre | et Spacing | | | | | | |
| Facility Type | Primary Intersection | Signal Spacing | | | | | | |
| Rural | 1 mile 1/2 mile | | | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | ent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Arto | erial | Rural Principal Arterial | | | | | |
| Based on Land Use | 15,000 to 100,000 i | ADT | 2,500 to 25,000 ADT | | | | | |



| Segm | ent 50B/61 | L: US 52 to MN | 316 (G | Co) F | Posted Speed: 55 mph | | | | |
|---------------------|--------------------|---|--------------|---------------------------|----------------------------------|--------------------|--|--|--|
| Lengt | : h: 9.7 mi | | Cross Se | ection: 2 | lanes | Freight Tier: 3 | | | |
| Sub- seg. No. | Location | City (Twp) | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | |
| 1 | US 52 to CH 89 | Hampton, New Trier, Hampton Twp | 2 | Rural | 60 - 95 | - | 1.3 | Rural highway segment | |
| 2 | CH 89 to US 61 | Douglas Twp | 2 | Rural | 60 - 95 | - | 1.1 | with several private driveways, field access points; few constraints | |
| 3 | US 61 to MN 316 | Miesville, Douglas Twp & Goodhue Co | 2 | Rural | 100 | - | 1.0 | from development. | |

- System Spacing/Role: Reasonable fit to rural guidance (9 miles from CH 42/MN 55)
- ☑ Volume Guidance (Forecast): The forecast range exceeds 2,500 ADT (see more in text below)
- ☑ Relative Traffic Volume/Connections: Much lower volumes than CH 42/MN 55 (parallel to north); only significant connection between US 52 and MN 316/US 61 in the area



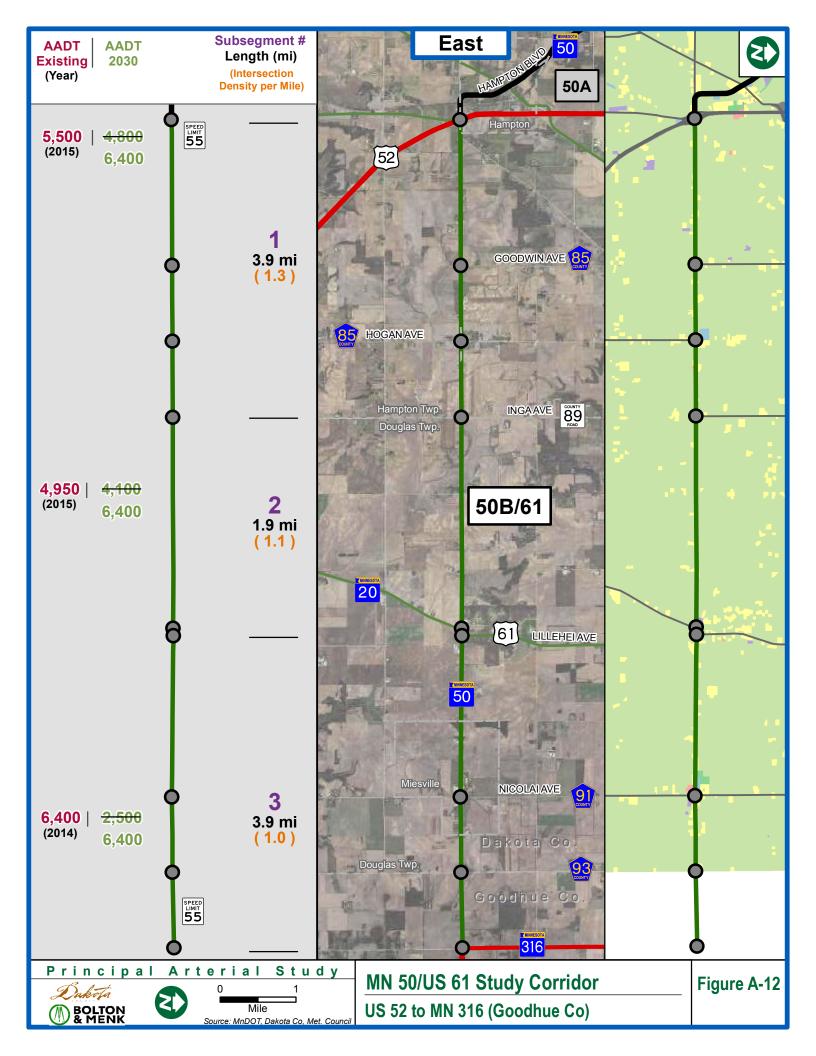
Observations and Recommendations

This segment includes a PA interchange connection with US 52 (west end). Parts of the segment are characterized by limited right-of-way and space constraints (particularly in the Cities of Hampton and New Trier). **Segment 50B/61** is

recommended for future designation as a

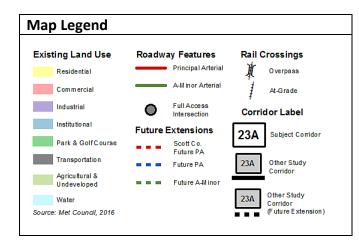
<u>PA.</u> The 2030 forecasts shown are lower values than credible and the value of 6,400 ADT is noted as a representative placeholder. Additional information or planning studies are needed to address long-term timing issues, other system priorities, right-of-way, pavement, truck traffic, and system connectivity (see also segment 50A).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|----------------------------|-----------------------|--------------------------|-------------------------------|--|--|--|--|
| | Public Stre | Public Street Spacing | | | | | | |
| Facility Type | Primary Intersection | Signal Spacing | | | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | | |



| Segm | ent 3D: MI | N 3 from MI | N 50 to | CH 86 | Po | Posted Speed: 45-55 mph | | | |
|---------------------|----------------------|-------------------------|--------------|---------------------------|----------------------------------|-------------------------|--|--|--|
| Length: 6 mi Cro | | | | Cross Section: 2 lanes | | | Freight Tier: 3 | | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | |
| 1 | MN 50 to 225th St | Farmington | 2-4 | Urban | 150-200 | - | 4.0 | Connects to MN 50. Reasonable access management. | |
| 2 | MN 50 to CH 78 | Castle Rock Township | 2 | Rural | 150 | - | 1.0 | Rural highway segment with several private driveways and | |
| 3 | CH 78 to CH 80 | Castle Rock Township | 2 | Rural | 150 | - | 1.3 | field access points; few constraints from | |
| 4 | CH 80 to CH 86 | Castle Rock Township | 2 | Rural | 150 | - | 0.8 | development, but is on easement only. | |

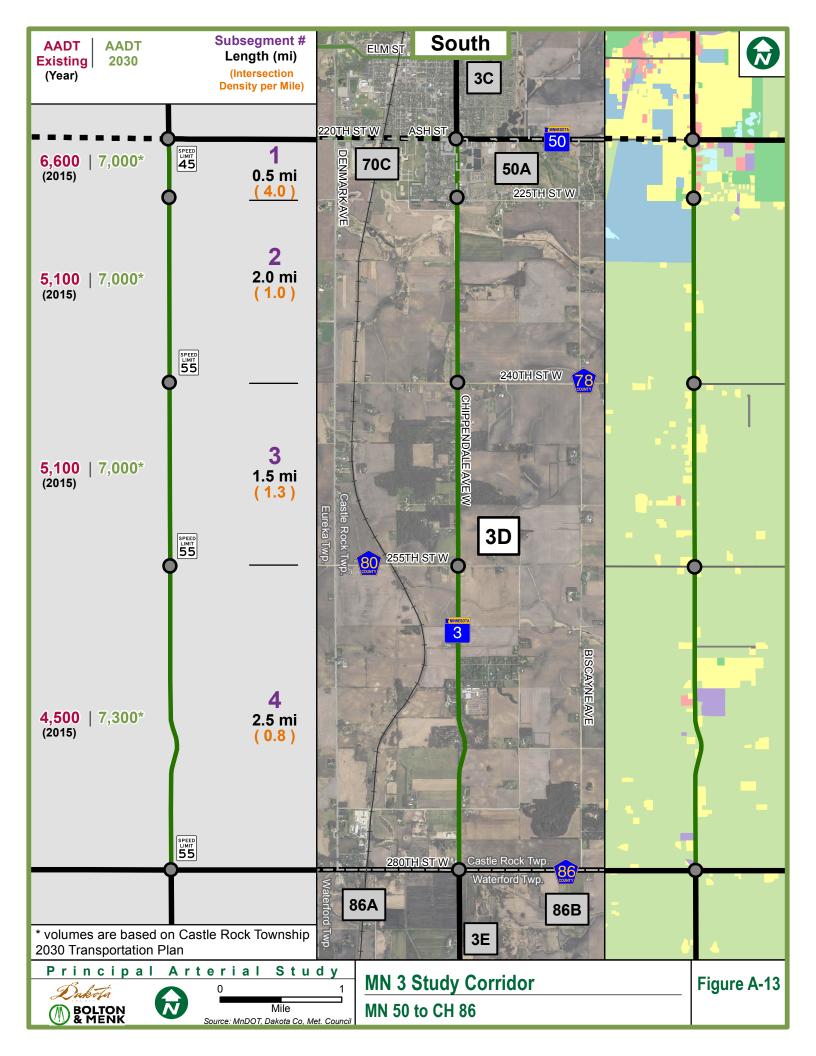
- System Spacing/Role: Reasonable fit to rural guidance (5.5-9.3 miles from US 52 to the east; 3.5-4.0 miles from CH 23 to the west)
- ☑ Volume Guidance (Forecast): Exceeds urban typical volumes (see below)
- Relative Traffic Volume/Connections: Lower volumes than CH 70/MN 50



Observations and Recommendations

This segment connects to TH 50 on the north end, which is a high capacity intersection, and CH 86 on the south end. **Segment 3D** is recommended for future PA designation pending additional studies and in relation to other adjacent PA designations (see also Segments 70C, 86B, and 86C which are also recommended future PAs).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | |
|---|----------------------------|---|--------------------------|-------------------------------|--|--|--|
| | Public Stre | | | | | | |
| Facility Type | Primary Intersection | Primary Intersection Secondary Intersection | | | | | |
| Rural | 1 mile | 1/2 r | mile | Only at Primary Intersections | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | mile | Only at Primary Intersections | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | |

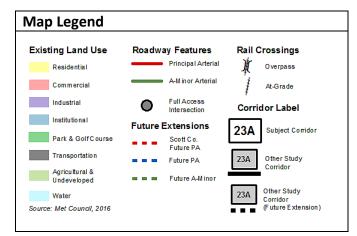


Segment 3E: MN 3 from CH 86 to MN 19 (in Posted Speed: 50-55 mph Northfield, Rice County) Length: 5.4 mi Cross Section: 2 lanes Freight Tier: 1 Sub-Segment 3 & 3

| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | |
|---------------------|---------------------------------------|-----------------------|--------------|---------------------------|----------------------------------|--------------------|--|--|--|
| 1 | CH 86 to 297 th St W | Waterford Township | 2 | Rural | Easement (150) | - | 1.1 | Rural highway segment with several private driveways and field access points; few constraints from development, but is on easement only | |
| 2 | 297 th St W to CH 47 | Waterford Township | 2 | Rural | Easement (150) | - | 1.6 | | |
| 3 | CH 47 to Rice Co. Line | Waterford Township | 2 | Rural Urban | 150-200 | - | 1.0 | Connects to Northfield (Rice Co.) Well established access management | |
| 4 | Rice Co. Line to MN 19 | Northfield | 2 | Urban | 70-150 | - | 2.4 | | |

Does the Segment Fit Other Principal Arterial Criteria? (\checkmark = yes)

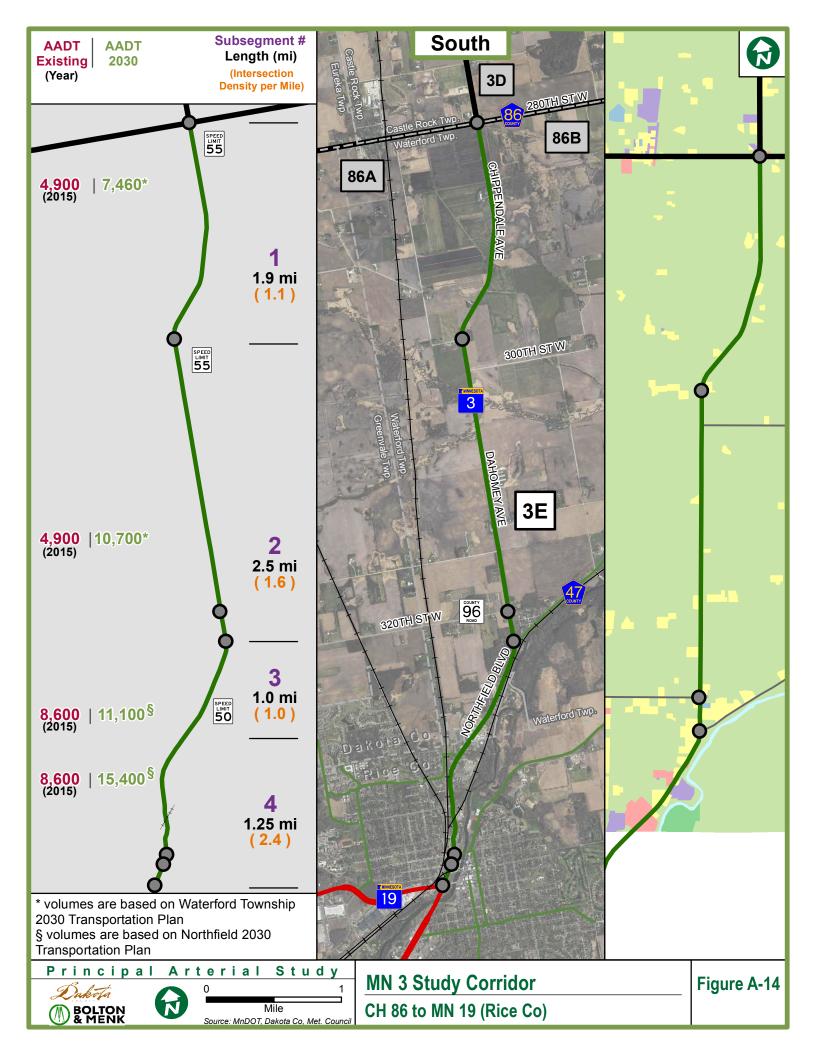
- System Spacing/Role: Reasonable fit to rural guidance (10.0-12.0 miles from US 52 to the east; 1.4-3.0 miles from CH 23 to the west)
- ☑ Volume Guidance (Forecast): Exceeds rural typical volumes; south end (sub-segment 4, also exceeds urban typical volumes) (see below)
- Relative Traffic Volume/Connections: Higher volumes than CH 86A and 86B. Connects to city of Northfield (Rice Co.) local roadways and PA.



Observations and Recommendations

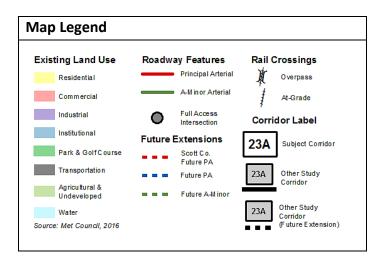
This segment provides an important system connection to the City of Northfield (in Rice Co.). This is reflected by increased traffic volume at southern end (sub-segments 3 and 4). Segment 3E is recommended for future PA designation pending additional studies and in relation to other adjacent PA designations (see Segments 86B, 86C, and 3D which are proposed future connections). This segment will be the only north-south PA in southern Dakota County between I-35 and US 52 (Segments 23C and 23D are not recommended for future PA designation).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | |
|---|----------------------------|--------------------|--------------------------|-------------------------------|--|--|--|
| | Public Stre | | | | | | |
| Facility Type | Primary Intersection | Signal Spacing | | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | Rural Principal Arterial | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | |



| Segm | Segment 23B: CH 23 from CH 70 to CH 86 Posted Speed: 55 mph | | | | | | | | | | |
|----------------------------------|---|------------------------------|--------------|---------------------------|------------------------------|--|-------------------------------------|----------------|---|--|--|
| Length: 6.5 mi Cross Section: 2- | | | | | | 4 lanes Freight Tier: 3 Sub-Segments 1 & 2 c | | | | | |
| Sub- seg. No. | Location | City | No. Lanes | Road Design Context | Approx. R/W Width (ft. | Transit Service | Full-Ad Interse Den: (# /I | ection sity | Remarks | | |
| 1 | CH 70 to 225 th St | Lakeville & Eureka Twp | 4-2 | Rural | Easement (150) | - | 2 | ! | Connecting to CH 70; high frequency of access points; Development constrained on west (Industrial Park & Airlake Airport) | | |
| 2 | 225 th St to CH 80 | Eureka Twp | 2 | Rural | Easement (150) | - | 1.: | 2 | Rural highway segment with several private driveways and field access points; few | | |
| 3 | CH 80 to CH 86 | Eureka Twp | 2 | Rural | Easement (150) | - | 0.9 | 9 | if any constraints for development | | |

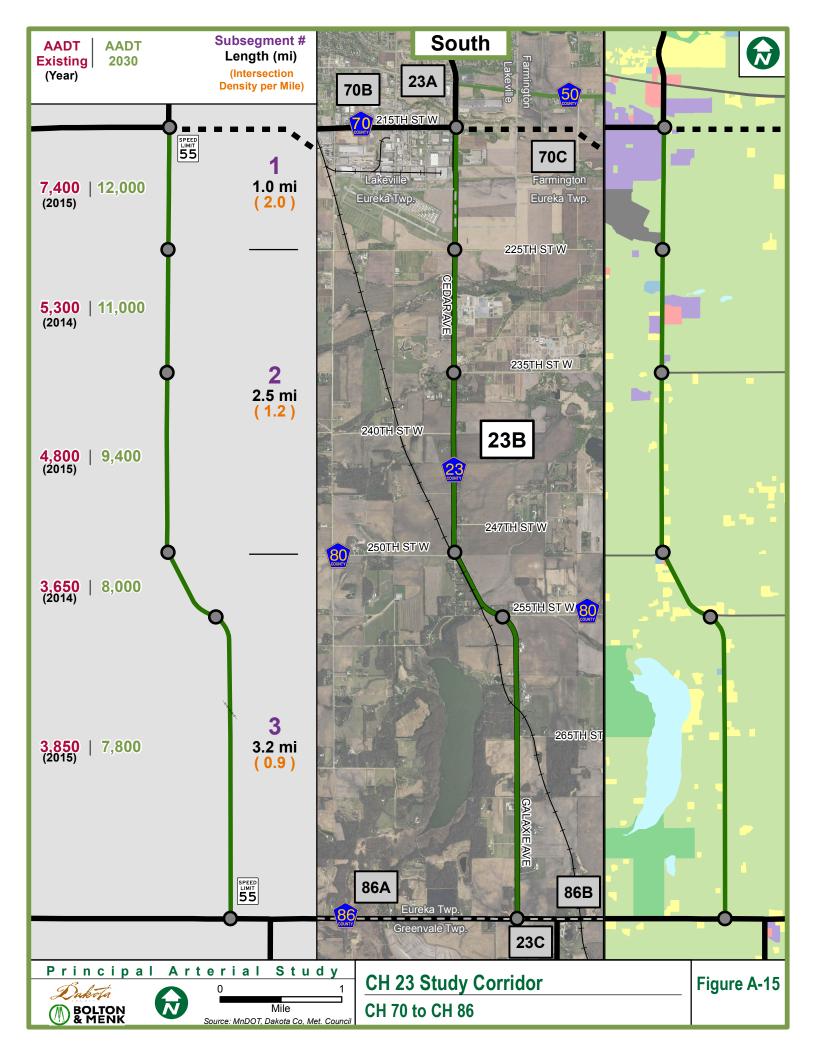
- ☑ System Spacing/Role: Reasonable fits rural guidance
- ☑ Volume Guidance (Forecast): Exceeds rural typical volumes and guidance (see below)
- Relative Traffic Volume/Connections: Lower volumes than MN 3 (Segment 3C)



Observations and Recommendations

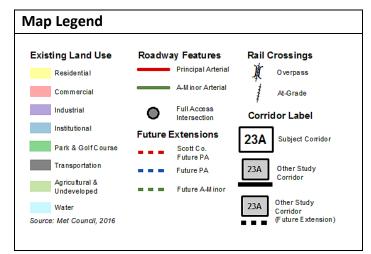
This segment includes connections to existing a-minor arterials at the north end (Segment 70B and Segment 23A) and the south end (CH 86). Major industrial sites (freight terminals) and a reliever airport are present on the north end. Segment 23B is recommended for future PA designation pending additional studies and in relation to other adjacent PA designations (see also Segments 23A, 70B, 70C, 86 A, and 86B which are all recommended near-term or future PAs).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|---------------------------------|-------------------|---------------------|-------------------------------|--|--|--|--|
| | Public Stre | | | | | | | |
| Facility Type | Primary Intersection | Secondary I | ntersection | Signal Spacing | | | | |
| Rural | 1 mile | 1/2 r | nile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | nile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | ent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Arterial | | | Rural Principal Arterial | | | | |
| Based on Land Use | 15,000 to 100,000 A | ADT | 2,500 to 25,000 ADT | | | | | |



| _ | Segment 23C & 23D: CH 23 from CH 86 to MN 19 (Rice Co) (includes Future Extension) Posted Speed: 55 mph | | | | | | | | | | |
|-----------------------------------|---|-----------------------------------|--------------|---------------------------|----------------------------------|--------------------|--|--|--|--|--|
| Lengt | th: 5.3 mi | | Cros | Cross Section: 2 lanes | | | | eight Tier: N/A | | | |
| Sub- seg. No. Location City | | | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Acces Intersectio Density (#/mi) | | | | |
| CH 23 | CH 23C | | | | | | | | | | |
| 1 | CH 86 to CR 90 | Greenvale Twps | 2 | Rural | Easement (50-75) | - | 1.5 | Rural highway segment with several private driveways and field access points; Dakota Co. proposed 10-ton highway; few constraints from | | | |
| 2 | CR 90 to CH 23 | Greenvale Twps | 2 | Rural | Easement (50-75) | - | 1.5 | development, but is on easement only | | | |
| CH 23 | D (Future Ex | xtension) | | | | | | | | | |
| 1 | CH 23 to MN 19 | Greenvale Twps & Northfield | | Rural | | - | 0.8 | Rural highway segment; Dakota Co. contingent 10-ton highway; few constraints from development | | | |

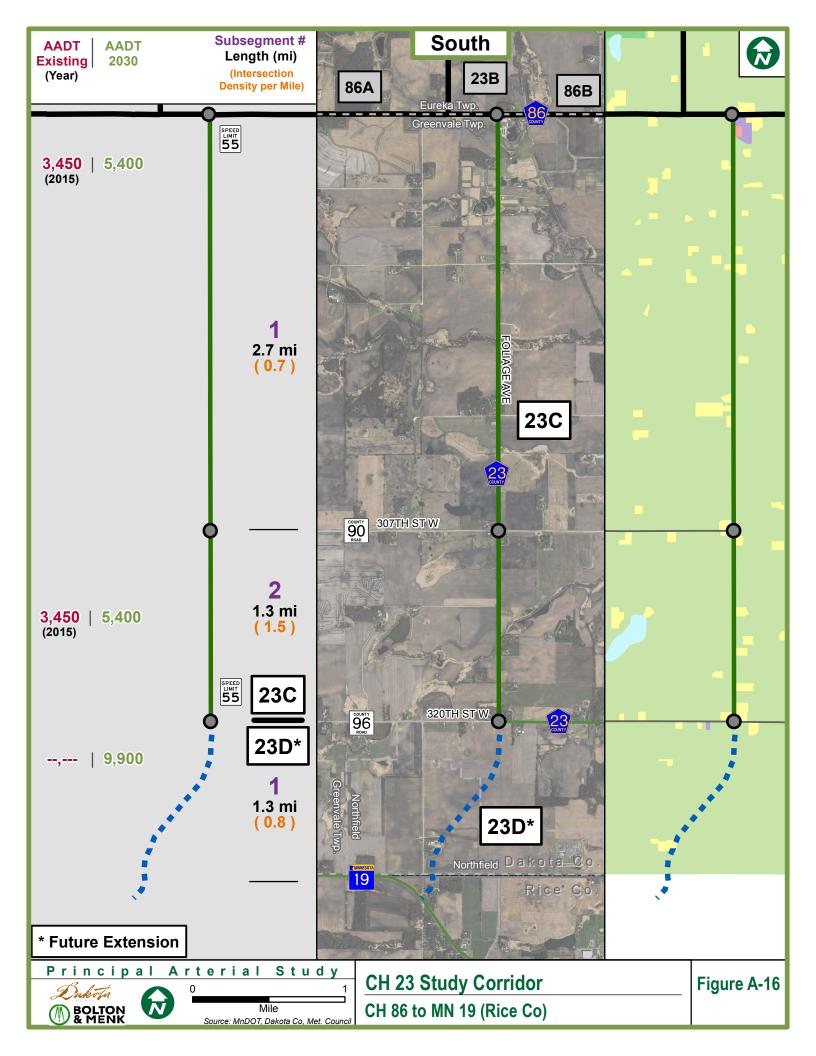
- System Spacing/Role: Reasonable fit to rural guidance
- ☑ Volume Guidance (Forecast): Exceeds rural typical volumes and guidance (see below)
- Relative Traffic Volume/Connections: Lower volume than MN 3. Requires construction of future connection to MN 19, a PA (in Rice County)



Observations and Recommendations

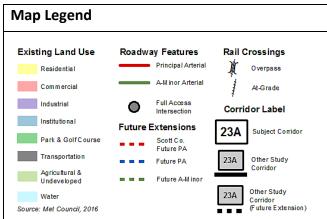
Segment 23C connects to CH 23 and CH 86 at the north end, which are A-minor arterials that are both recommended as future PAs. Segment 23D also connects to MN 19 at the south end (in Rice Co). The future 23D connection does not currently have broad based local support. Given lack of support, Segments 23C and 23D are not recommended for possible future PA designation at this time. The north-south PA function will be provided by Segment 3E (located 2.7 to 3.1 miles to the east) and I-35 (located 6-7 miles to the west).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|----------------------------|--------------------|---------------------|-------------------------------|--|--|--|--|
| | Public Stre | | | | | | | |
| Facility Type | Primary Intersection | Signal Spacing | | | | | | |
| Rural | 1 mile | 1/2 r | mile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | mile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | | Rural Principal Arterial | | | | |
| Based on Land Use | 15,000 to 100,000 i | ADT | 2,500 to 25,000 ADT | | | | | |



| Segm to MI | nent 86A & 86B N 3 | : CH 86 fr | om CH 4 | Posted Speed: 35 - 55 mph | | | | | |
|---------------------|-------------------------------------|--------------------------|--------------|---------------------------|----------------------------------|--------------------|--|---|--|
| Length: 9.3 mi | | | Cross Se | ection: 2 | lanes | | Freight Tier: 2 | | |
| Sub- seg. No. | Location | City (Twp) | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | |
| CH 86 | A | | | | | | | | |
| 1 | CH 46 to Holyoke Ave | Eureka Greenvale | 2 | Rural | Easement (100) | - | 1.9 | Rural highway with private driveways and field accesses; Dakota Co. contingent 10-ton | |
| 2 | Holyoke Ave to CH 23 | Eureka Greenvale | 2 | Rural | Easement (75-100) | - | 1.8 | highway; few development constraints, but is on easement only | |
| CH 86 | В | | | | | | | | |
| 1 | CH 23 to Castle Rock Twp. Line | Eureka Greenvale | 2 | Rural | Easement (75-100) | - | 1.6 | Includes the common 1/3-mile sub-segment | |
| 2 | Castle Rock Twp. Line to MN 3 | Castle Rock Waterford | | Rural | Easement (75-100) | - | 2.0 | with CH 23 (highest- volume part of corridor) | |

- ☑ System Spacing/Role: Reasonable fit to rural guidance (6.0-7.0 miles from CH 70/MN 50)
- ✓ <u>Volume Guidance (Forecast)</u>: Existing and forecast traffic volumes are well above 2,500 ADT (low end of rural guidance)
- Relative Traffic Volume/Connections: Much lower volumes than CH 70/MN 50 (parallel to north); connects to I-35 (Scott Co.) and MN 3.

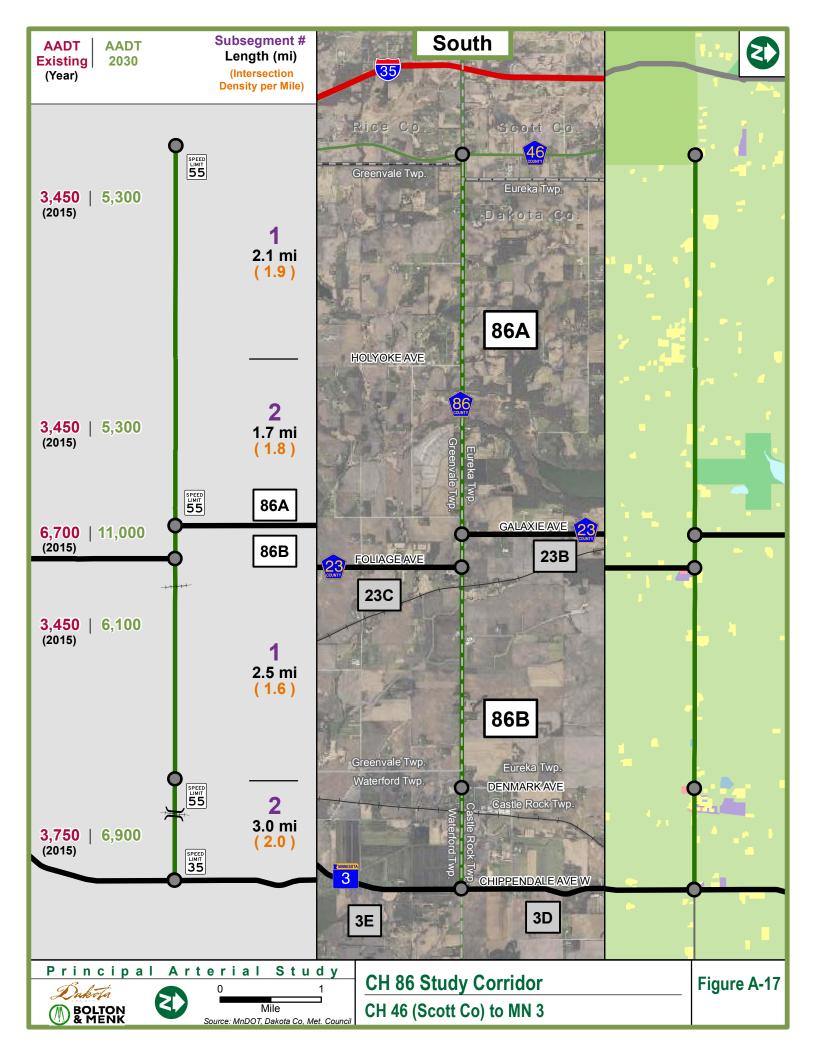


Observations and Recommendations

Segment 86A ends just prior to connecting to I-35. Scott Co. identifies a future PA to that would connect to Segment 86A. Both

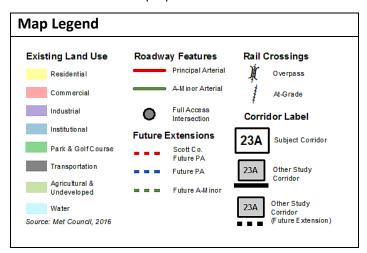
Segments 86A and 86B are recommended as future PAs. Additional information and studies should address the limited amount of existing dedicated right-of-way, pavement, constraints at railroad crossings, truck traffic, and system connectivity. Given relatively low travel demands, PA designation should also consider other system priorities. Close coordination with Scott Co., and MnDOT (to consider a connection to I-35) are needed.

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | | | | | |
|---|----------------------------|--------------------|---------------------|-------------------------------|--|--|--|--|
| | Public Stre | | | | | | | |
| Facility Type | Primary Intersection | Signal Spacing | | | | | | |
| Rural | 1 mile | 1/2 r | mile | Only at Primary Intersections | | | | |
| Urban/Urbanized | 1/2 mile | 1/4 r | mile | Only at Primary Intersections | | | | |
| Urban Core | 300-600 feet, depend | lent upon block le | ength | 1/4 mile | | | | |
| PA Typical Volumes | <u>Urban</u> Principal Art | erial | | Rural Principal Arterial | | | | |
| Based on Land Use | 15,000 to 100,000 | ADT | 2,500 to 25,000 ADT | | | | | |



| Segm | ent 86C: CI | H 86 from MN | 3 to US | 52 | Posted | Posted Speed: 55 mph | | | |
|---------------------|-------------------|---|--------------|---------------------------|----------------------------------|----------------------|--|--|--|
| Length: 9.7 mi | | | | ection: 2 | lanes | | Freight Tier: 2 | | |
| Sub- seg. No. | Location | City (Twp) | No. Lanes | Road Design Context | Approx. R/W Width (ft.) | Transit Service | Full-Access Intersection Density (#/mi) | Remarks | |
| 1 | MN 3 to CH 47 | Waterford, Castle Rock, & Sciota Twps | 2 | Rural | Easement (<u>150</u>) | - | 2 | Rural highway segment with several private driveways and field | |
| 2 | CH 47 to MN 56 | Castle Rock, Randolph, Hampton & Sciota Twps | 2 | Rural | Easement (<u>150</u>) | 1 | 1.5 | access points; few constraints from development, but is on easement only with | |
| 3 | MN 56 to US 52 | Randolph & Hampton Twps | 2 | Rural | Easement (<u>150</u>) | - | 1.4 | incomplete connections to the west | |

- ☑ System Spacing/Role: Reasonable fit to rural guidance (5.8-6.0 miles from CH 70/MN 50)
- ☑ <u>Volume Guidance (Forecast)</u>: Forecast range reasonably close to 2,500 ADT (low end of rural guidance)
- ☑ Relative Traffic Volume/Connections: Much lower volumes than CH 70/MN 50 (parallel to north); connects to US 52 (PA) and MN 3



Observations and Recommendations

This segment includes a PA interchange connection with US 52 (east end) and a connection to MN 3 (west end). **Segment 86C** is recommended for future designation as a PA. Given relatively low travel demands, PA designation should also consider other system priorities. Additional information and studies should addressing the limited amount of existing dedicated right-of-way, pavement, truck traffic, and system connectivity (see also segments 86A, 86B, 3C, 3D, 50A, and 50B/61).

| Guidance: Principal Arterial Public Street Access Spacing and Volumes | | | | |
|---|---|------------------------|---------------------------------|-------------------------------|
| | Public Street Spacing | | | |
| Facility Type | Primary Intersection | Secondary Intersection | | Signal Spacing |
| Rural | 1 mile | 1/2 mile | | Only at Primary Intersections |
| Urban/Urbanized | 1/2 mile | 1/4 mile | | Only at Primary Intersections |
| Urban Core | 300-600 feet, dependent upon block length | | 1/4 mile | |
| PA Typical Volumes | <u>Urban</u> Principal Arterial | | <u>Rural</u> Principal Arterial | |
| Based on Land Use | 15,000 to 100,000 ADT | | 2,500 to 25,000 ADT | |

