

2019-154:
Scott County Functional Classification
Principal Arterial Change Requests

June 24, 2019



Functional Classification

1. Principal Arterials: Generally limited access highways and freeways such as Highway 169 and Interstate 494
2. Minor Arterials
3. Collectors
4. Local Streets

Highway 169 in Jordan (Principal Arterial)



Source: Google Street View

Interstate 494 in Richfield and Bloomington (Principal Arterial)



Source: Google Street View

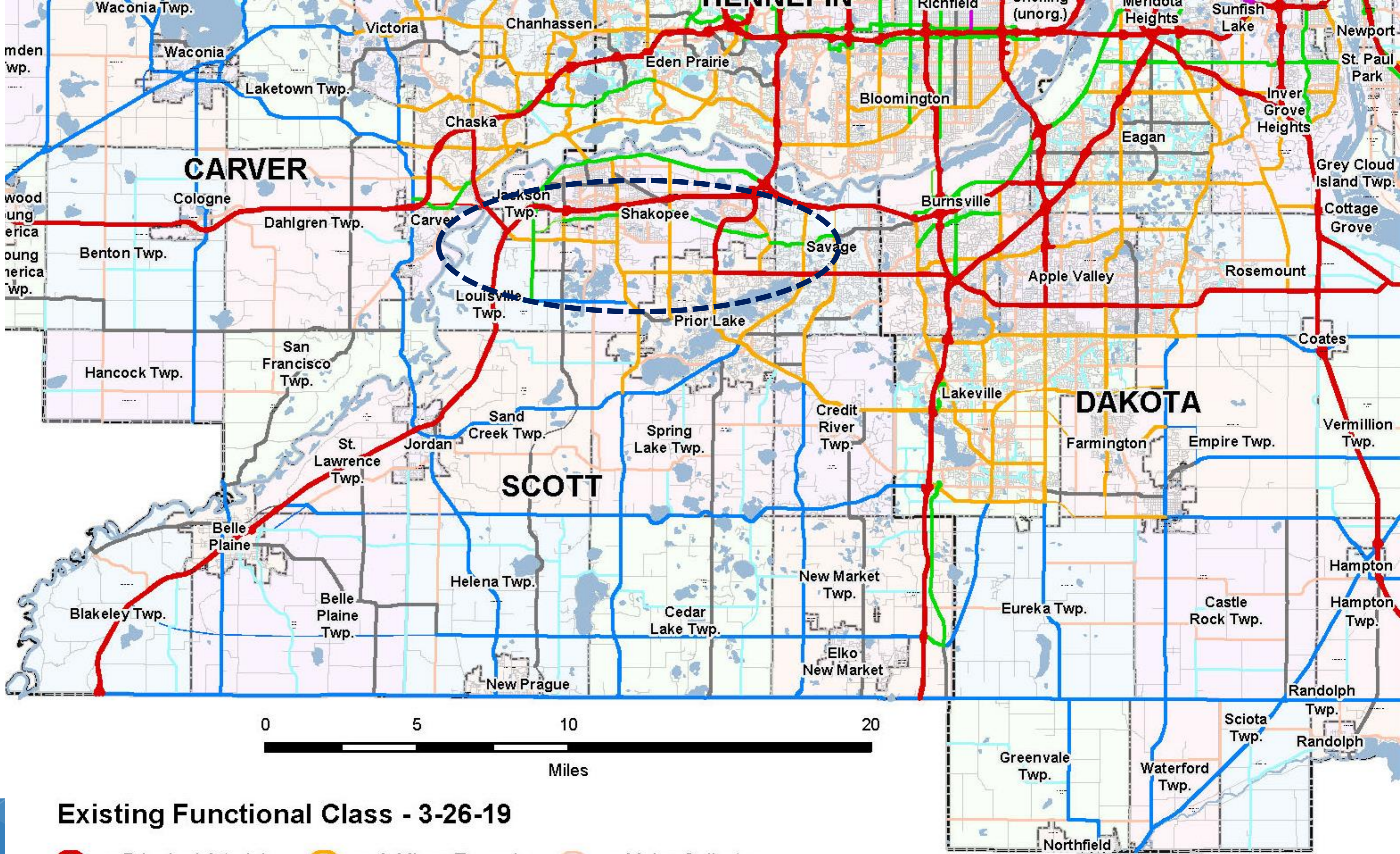
Principal Arterial Changes

- The Metropolitan Council is designated by the state to maintain the Metropolitan Highway System (i.e., Principal Arterials)
- Any changes to the Principal Arterial system will be administratively modified into the 2040 Transportation Policy Plan
- Requests must include resolutions of support from all impacted jurisdictions (5 resolutions in this case)
- Requested changes must be compatible with current function of the roadway as described in Appendix D of the 2040 Transportation Policy Plan, not the future function of the roadway

Impacts of Changing a Principal Arterial

- Limited private and public access
- The focus is on the mobility function of the roadway, which implies higher speeds and bigger intersections
- No change to eligibility for Regional Solicitation funds
- MnDOT will begin process to add the mileage to the National Highway System (NHS)
 - Part of federal performance measures
 - Eligible for National Highway Performance Program (NHPP) funds

Existing Functional Class in Scott County

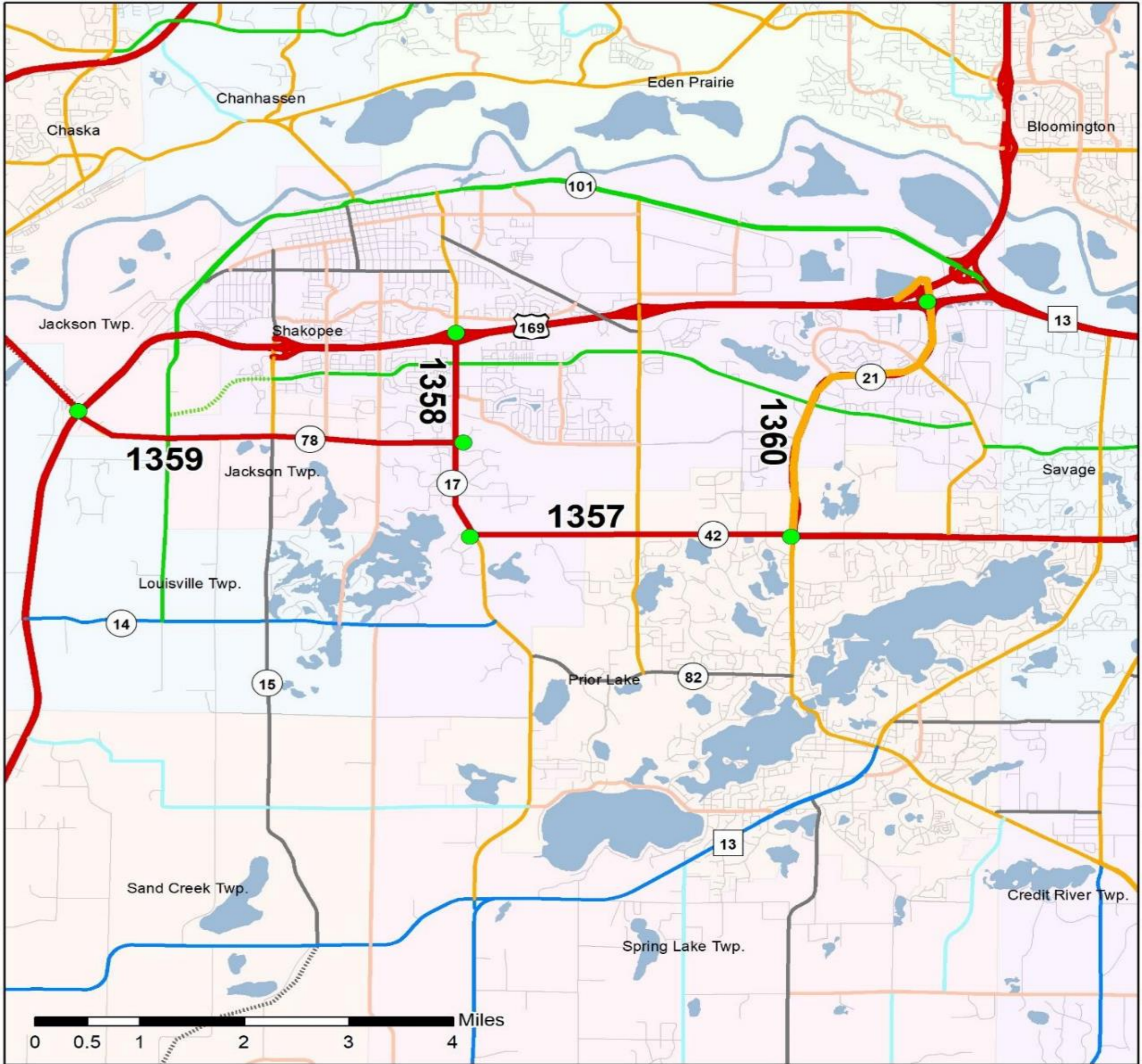


Existing Functional Class - 3-26-19

- Principal Arterial
- A-Minor Expander
- Major Collector
- A-Minor Augmentor
- A-Minor Connector
- Minor Collector
- A-Minor Reliever
- Other Arterial

Four Changes Requested by Scott County:

1. Upgrade Scott County State-Aid Highway (CSAH) 42 from an A-Minor Expander to a Principal Arterial (1357 on map)
2. Upgrade CSAH 17 from an A-Minor Expander to a Principal Arterial (1358).
3. Upgrade CSAH 78 from an A-Minor Expander to a Principal Arterial (1359).
4. Downgrade CSAH 21 from a Principal Arterial to an A-Minor Expander (1360).



Existing Regional Functional Class Roads

- Principal Arterial
- Other Arterial
- Major Collector
- Minor Collector
- A Minor Augmentor
- A Minor Reliever
- A Minor Expander
- A Minor Connector

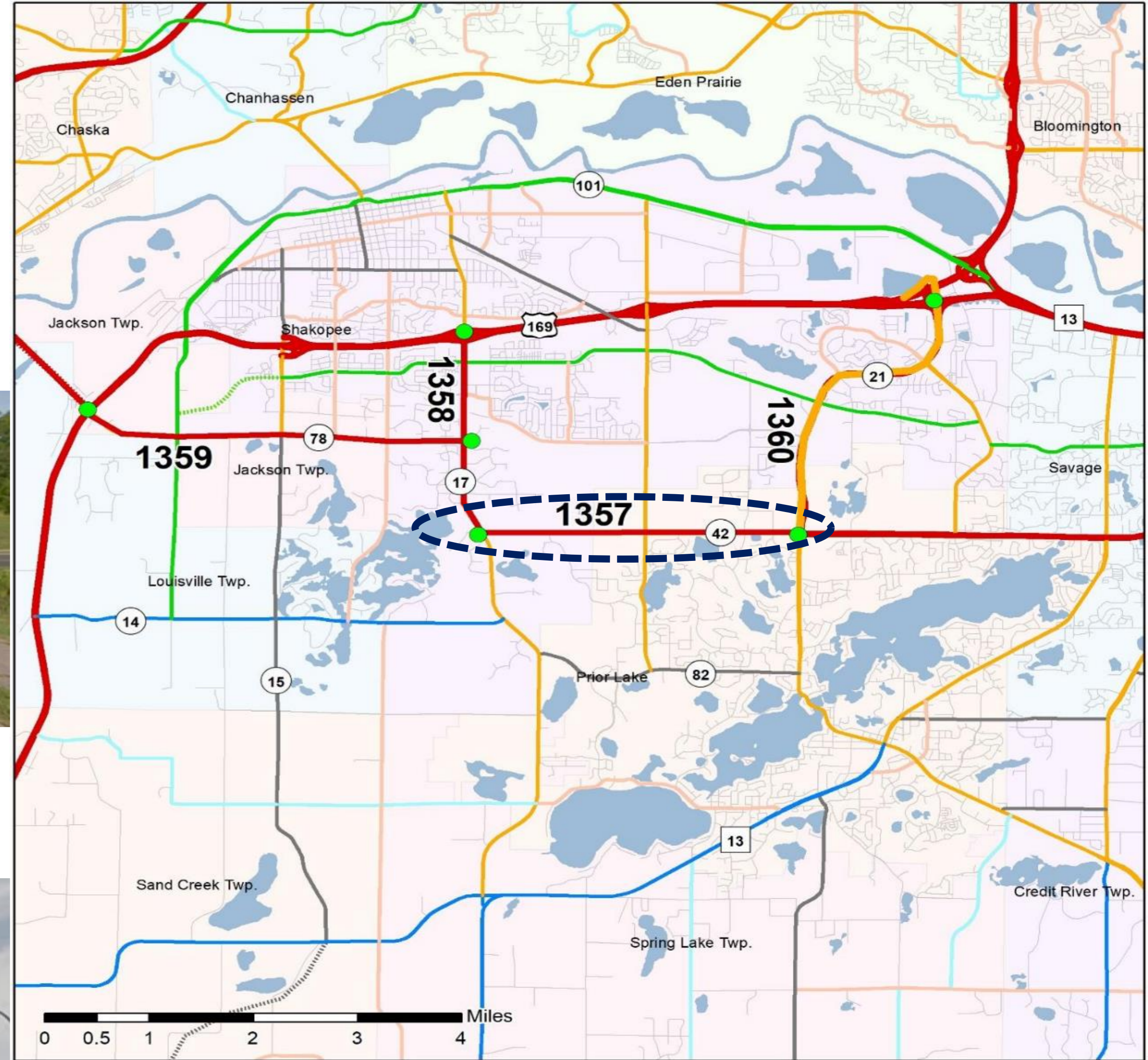
Planned Regional Functional Class Roads

- Principal Arterial
- Other Arterial
- Major Collector
- Minor Collector
- A Minor Augmentor
- A Minor Reliever
- A Minor Expander
- A Minor Connector

City / Township Boundaries
 Street Centerlines
 County Boundaries



1. Upgrade Scott County State-Aid Highway (CSAH) 42 from an A-Minor Expander to a Principal Arterial (1357 on map)



Existing Regional Functional Class Roads

- Principal Arterial
- Other Arterial
- Major Collector
- Minor Collector
- A Minor Augmentor
- A Minor Reliever
- A Minor Expander
- A Minor Connector

Planned Regional Functional Class Roads

- Principal Arterial
- Other Arterial
- Major Collector
- Minor Collector
- A Minor Augmentor
- A Minor Reliever
- A Minor Expander
- A Minor Connector

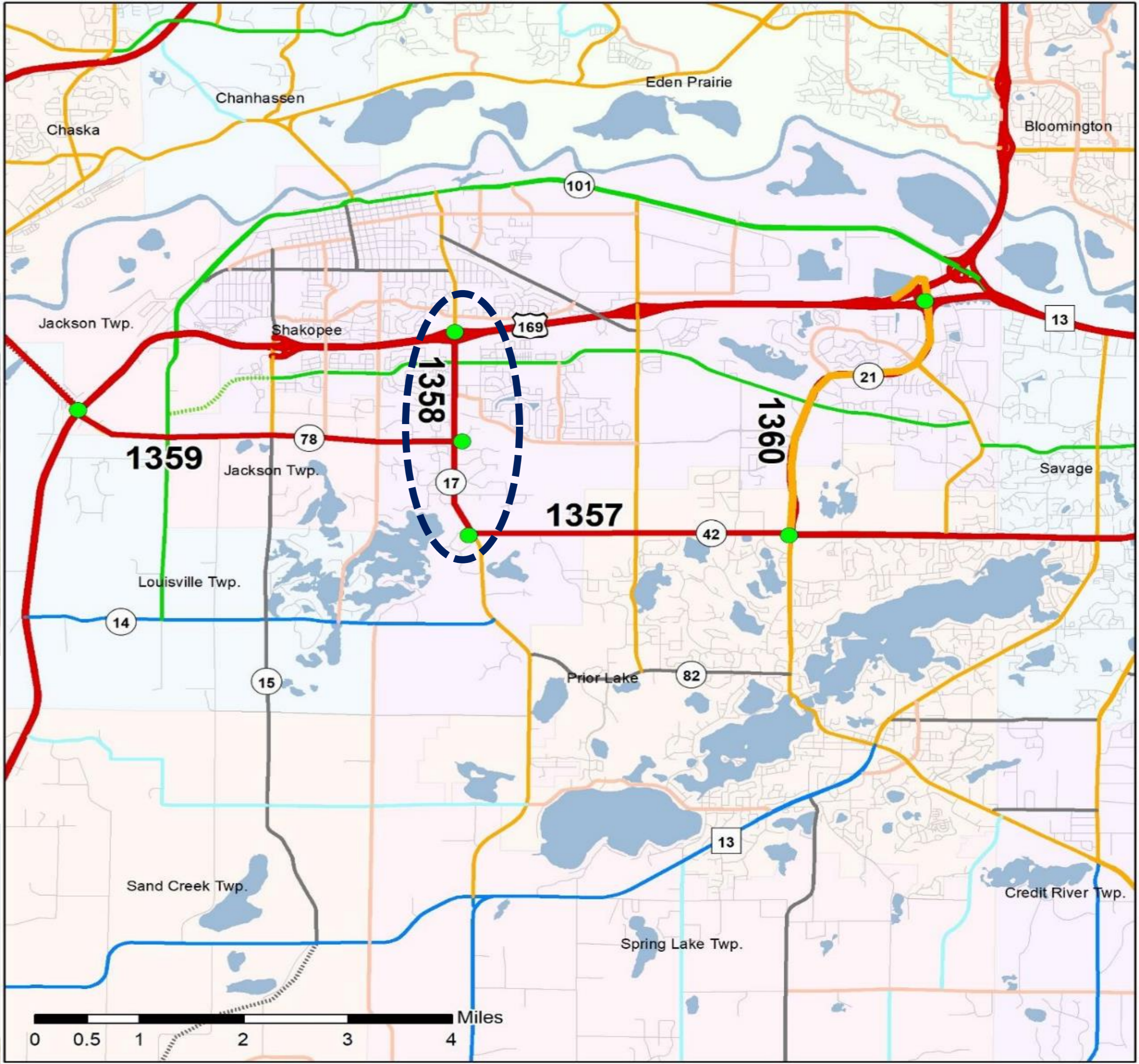
City / Township Boundaries

Street Centerlines

County Boundaries



2. Upgrade CSAH 17 from an A-Minor Expander to a Principal Arterial (1358).

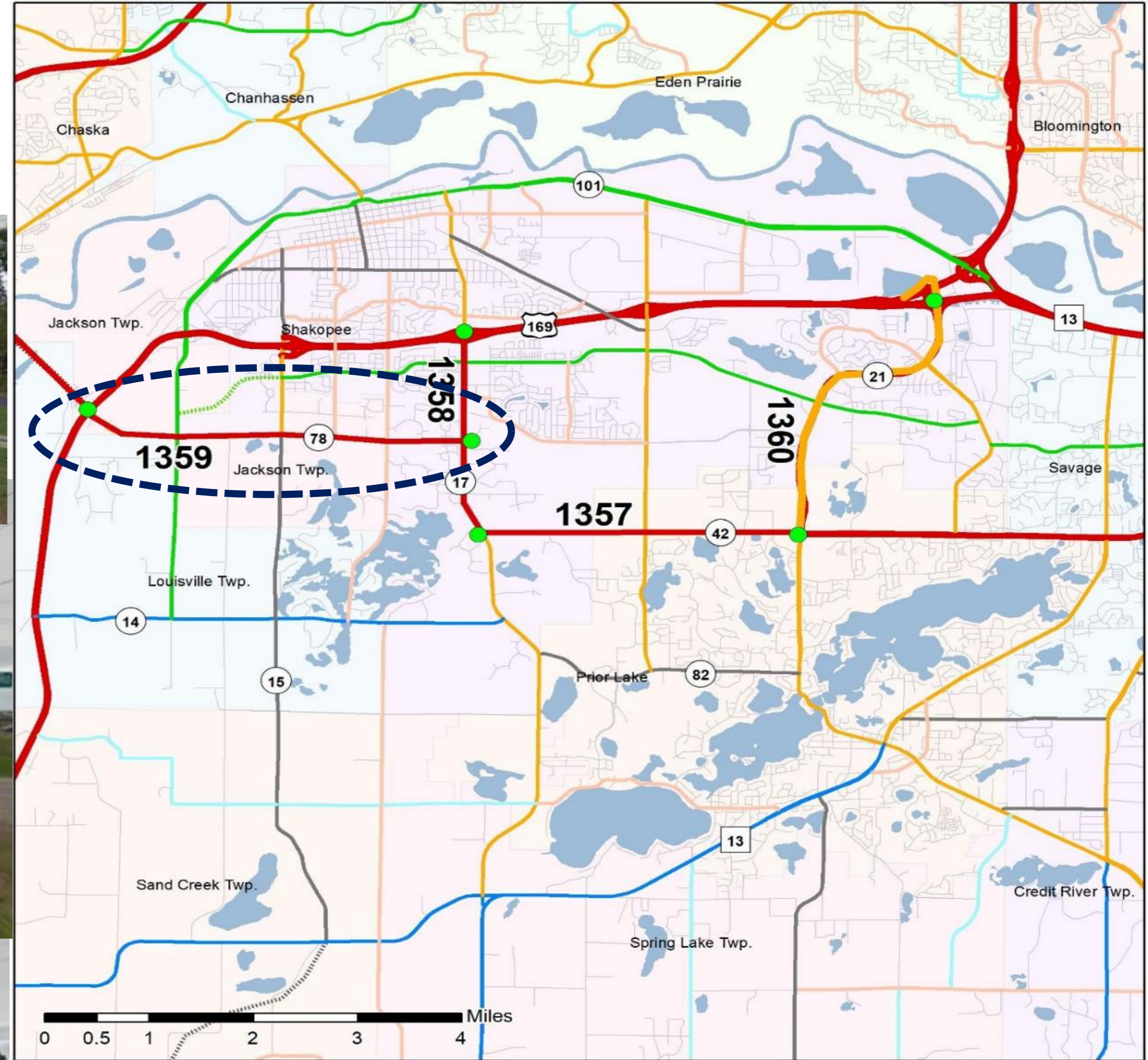


Existing Regional Functional Class Roads		Planned Regional Functional Class Roads	
	Principal Arterial		Principal Arterial
	Other Arterial		Other Arterial
	Major Collector		Major Collector
	Minor Collector		Minor Collector
	A Minor Augmentor		A Minor Augmentor
	A Minor Reliever		A Minor Reliever
	A Minor Expander		A Minor Expander
	A Minor Connector		A Minor Connector

City / Township Boundaries
 Street Centerlines
 County Boundaries



3. Upgrade CSAH 78 from an A-Minor Expander to a Principal Arterial (1359).



Existing Regional Functional Class Roads

- Principal Arterial
- Other Arterial
- Major Collector
- Minor Collector
- A Minor Augmentor
- A Minor Reliever
- A Minor Expander
- A Minor Connector

Planned Regional Functional Class Roads

- Principal Arterial
- Other Arterial
- Major Collector
- Minor Collector
- A Minor Augmentor
- A Minor Reliever
- A Minor Expander
- A Minor Connector

City / Township Boundaries

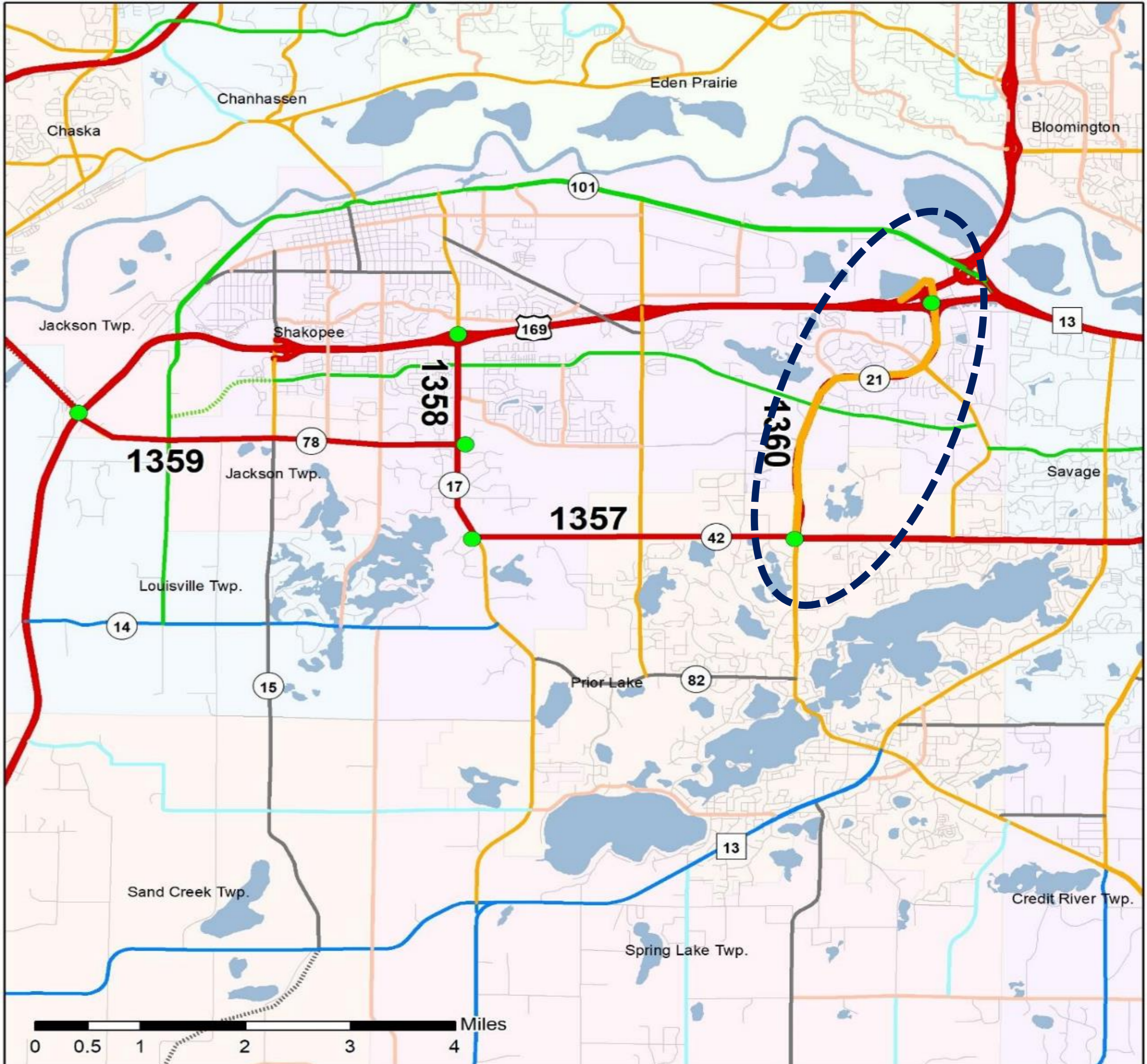
Street Centerlines

County Boundaries



4. Downgrade CSAH 21 from a Principal Arterial to an A-Minor Expander (1360).

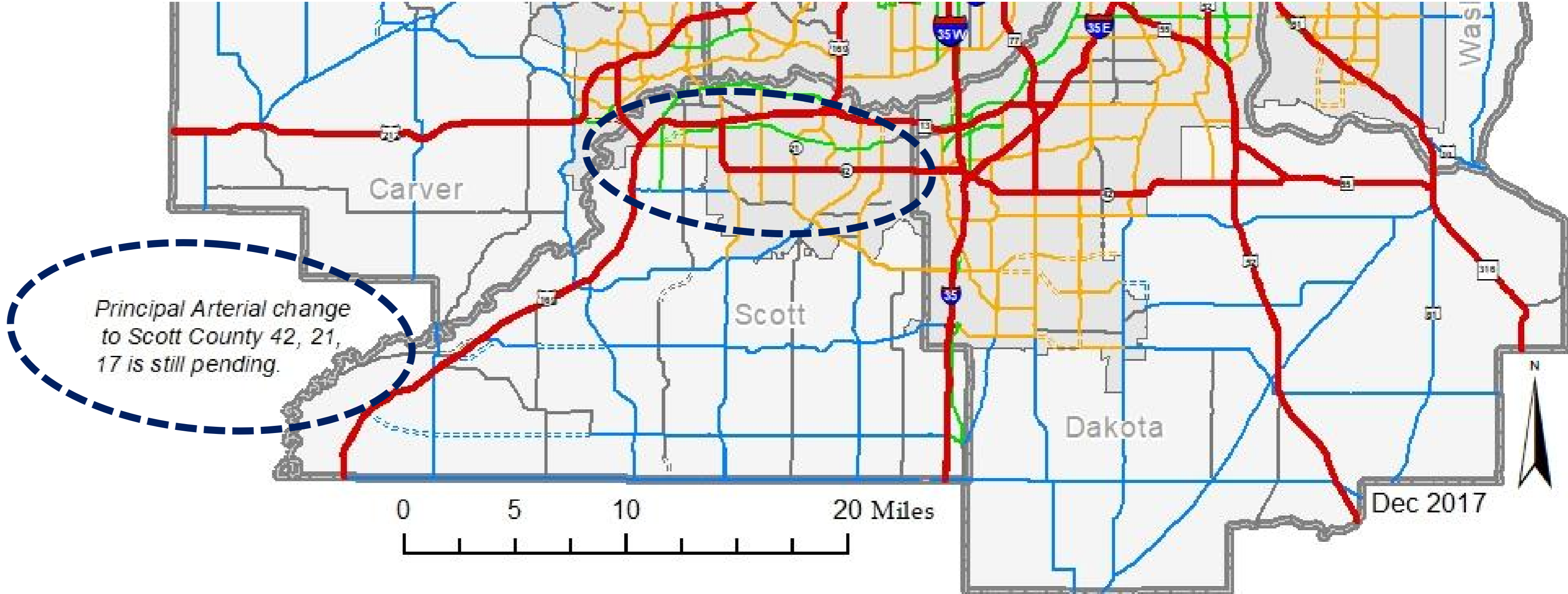
Principal Arterials should terminate at other Principal Arterials. If approved, CSAH 17 can serve as the north-south connection to Highway 169. CSAH 21 will no longer be needed as it is closely spaced to CSAH 17 and cannot easily be extended to the southern Scott County border to facilitate longer trips.









Existing Regional Functional Class Roads		Planned Regional Functional Class Roads	
	Principal Arterial		Principal Arterial
	Other Arterial		Other Arterial
	Major Collector		Major Collector
	Minor Collector		Minor Collector
	A-Minor Augmentor		A-Minor Augmentor
	A-Minor Reliever		A-Minor Reliever
	A-Minor Expander		A-Minor Expander
	A-Minor Connector		A-Minor Connector

City / Township Boundaries
 Street Centerlines
 County Boundaries

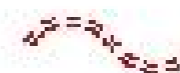
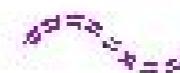




Map from 2040 Transportation Policy Plan (approved October 2018) showing 3 of the 4 proposed changes as pending. The proposed change to CSAH 78 is not included.



Existing

-  Principal Arterial
-  A-Minor Augmentor
-  A-Minor Reliever
-  A-Minor Expander
-  A-Minor Connector
-  Other Arterial

Planned

-  Principal Arterial
-  A-Minor Augmentor
-  A-Minor Reliever
-  A-Minor Expander
-  A-Minor Connector
-  Other Minor Arterial

Rationale

- Requested changes must be compatible with current function of the roadway, not the future function of the roadway
- 3 of the 4 requested changes meet the Appendix D guidelines of the TPP. Continue evaluating CSAH 78 as it transitions to function as a Principal Arterial.
- However, CSAH 78 does not meet the Principal Arterial guidelines at this time:
 - Spacing with other Principal Arterials is too close
 - Serves few trips (6,100) and few longer distance regional trips (over 8 miles)
 - Too much land access
 - Intersections are not high-capacity within segment, but are at segment termini
 - More access controls needed (Scott County proactively manages the access based on their Future Functional Classification map where CSAH 78 is shown as a future Principal Arterial)

Proposed Action

That the Metropolitan Council approve the following functional classification changes and administratively modify the 2040 Transportation Policy Plan to reflect these changes:

- Upgrade CSAH 42 from an A-Minor Expander to a Principal Arterial.
- Upgrade CSAH 17 from an A-Minor Expander to a Principal Arterial.
- Downgrade CSAH 21 from a Principal Arterial to an A-Minor Expander.
- Continue evaluating CSAH 78 as a future Principal Arterial in next 1-2 years, but do not change the current functional classification of the roadway at this time.
 - As part of the TPP administrative amendment, CSAH 78 will be listed as a future Principal Arterial in the “Additional Highway Needs beyond the Increased Revenue Scenario” section

TAB/TAC Input

- CSAH 78 does not currently function like a Principal Arterial. However, the new interchange under construction at TH 169 and TH 41/CSAH 78 may change traffic flows.
- Even though access management is based on future functional classification, it can be difficult to implement in practice. Showing CSAH 78 as a future PA in the TPP will help.
- There are development pressures in this same interchange area; access controls will be needed as development occurs instead of after.
- Principal Arterial planning has shifted from MnDOT to the counties.

Questions

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