

ACTION TRANSMITTAL 2021-25

DATE: July 28, 2021

TO: TAC Planning Committee

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Steve Peterson, Manager of Highway Planning and TAB/TAC Process, steven.peterson@metc.state.mn.us

SUBJECT: MnDOT-Led Systemwide Review and Update of the Roadway Functional Class System

REQUESTED ACTION: Approval of the recommendations put forth by the MnDOT-led review of the region's functional classification system.

RECOMMENDED MOTION: That TAC Planning recommend that the Metropolitan Council:

1. Administratively modify the 2040 Transportation Policy Plan to:
 - A. Include MnDOT's recommended systemwide changes to the Minor Arterial system;
 - B. Upgrade Dakota County State Aid Highway (CSAH 23) from an A-Minor Arterial Expander to a Principal Arterial from CSAH 42 to CSAH 70.
 - C. Upgrade Dakota County CSAH 70 from an A-Minor Arterial Expander to a Principal Arterial from CSAH 23 to Interstate 35.
2. Recommend that the MnDOT Commissioner submit all of the changes from the functional classification study to the Federal Highway Administration for approval.

BACKGROUND AND PURPOSE OF ACTION:

Systemwide Changes

Over the course of 2019 through 2021, MnDOT led a process to comprehensively review the functional classification of all roadways within the seven-county metro area. This metro-wide process followed a similar review of Greater Minnesota roads. The systematic statewide review was requested by the Federal Highway Administration (FHWA) and is expected to be completed approximately once per decade.

The functional classification of a roadway reflects the role the road plays in the movement of people and goods within a region. All roads serve two purposes; mobility and access, and all roads perform these two functions to varying degrees. Functional classification is the system which identifies the primary purpose of a road and how it interacts within the overall network. An Interstate Highway like I-35, for example, has limited access, provides a high degree of mobility, and carries many people for long distances. A local road, on the other hand, provides direct access to homes and businesses, is lower speed, and has much less traffic. Accurately classifying a roadway

system is essential for defining the role of the roadway in the overall transportation network. Functional classification also helps determine which roads are eligible to receive federal funding.

The functional classification system categorizes roads into four primary types: Principal Arterials (PAs), Minor Arterials, Collectors, and Local streets. The Metropolitan Council has further divided the Minor Arterials into A-Minor Arterials and Other Arterials.

Changes to the Minor Arterial and Collector system are approved by the Technical Advisory Committee (TAC). Changes to the Principal Arterial system require approval of the Metropolitan Council and must be reflected in the Transportation Policy Plan.

The MnDOT review and update process included staff from MnDOT, the Council, FHWA, counties, cities, and townships within the metro area. It consisted of a series of meetings with all seven counties as well as individual cities to ensure that all proposed changes were acceptable. A Steering Committee with local representatives helped guide the study. Finally, an appeals process was set-up to resolve any outstanding issues, but this was not used by any local agencies (i.e., any differences of opinion were worked out along the way).

Highlights of the recommended changes includes the following with details in Table 1 and the attached figures:

1. Minimal changes to the principal arterial network except for two Dakota County segments (one corridor).
2. Minimal changes to the A-Minor Arterial system.
3. Reductions of many Other Arterials (formerly B-Minors) to either Major or Minor Collectors.
4. Identification of the Minor Collector system as many cities had not designated this functional classification of roadway.

Table 1: Proposed Functional Classification Change Summary

Functional Classification	Existing Miles	Proposed Miles	% Change
Principal Arterial (PA)-Interstate	229	229	0%
PA-Other Freeway/Expressway	164	164	0%
PA-Other	294	304	4%
Minor Arterial	2,438	2,294	-6%
A-Minor (all categories)	1,946	1,930	-1%
B-Minor/Other	491	373	-24%

Major Collector	1,561	1,614	3%
Minor Collector	820	1,345	64%
Local	11,552	11,113	-4%

Two Principal Arterial Changes

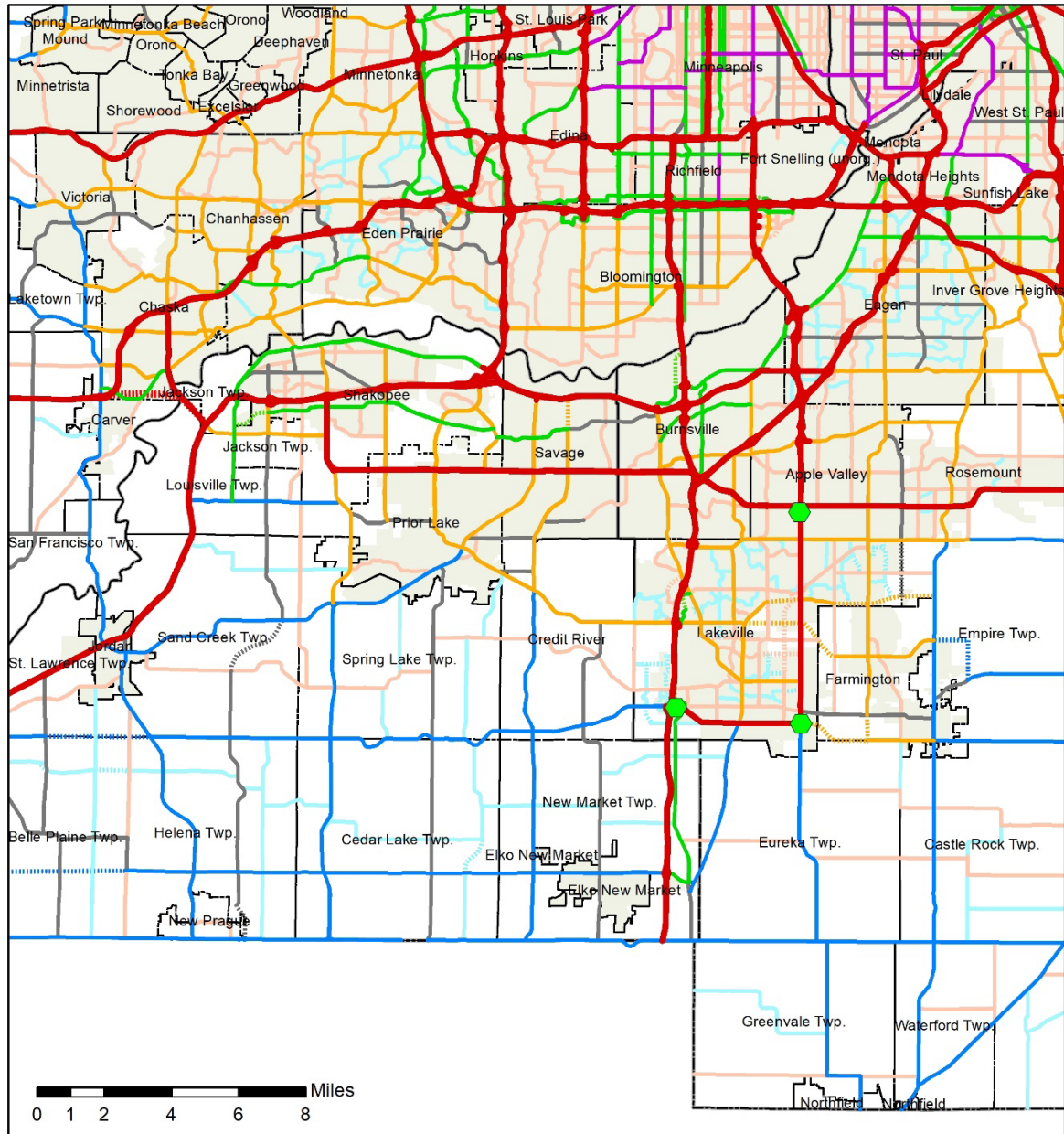
The upgrading of an existing roadway to a PA is a rare occurrence. Additions to the PA network require a review that must ultimately be approved by the full Metropolitan Council before submittal to MnDOT and FHWA. Any approved changes will be administratively modified into the region’s Transportation Policy Plan as part of this action. In 2019, Dakota County submitted a principal arterial change request to the Metropolitan Council for the two segments detailed below. These routes were submitted based on the results of the 2018 Dakota County Principal Arterial Study.

1. Upgrade Dakota County CSAH 23 (Cedar Avenue) from an A-Minor Arterial Expander to a Principal Arterial from CSAH 42 to CSAH 70 (see segment 1362 on Figure 1). This roadway extends the existing PA further south to Lakeville. It is a 4-lane divided facility with access control (see Figures 1, 2, and 3).
2. Upgrade Dakota County CSAH 70 from an A-Minor Arterial Expander to a Principal Arterial from CSAH 23 to Interstate 35 (see segment 1363). This roadway connects Cedar Avenue back to another PA (I-35). An upgrade of CSAH 70 was completed in 2021 that improved it to a four-lane divided facility with access control. This segment is a Tier 1 Regional Truck Corridor (see Figures 1, 2, and 4).

Dakota County has been in the process of constructing this corridor to the Met Council’s standards for Principal Arterials and has recently completed these upgrades. This corridor has been built to function as a Principal Arterial and no longer meets the qualities of a Minor Arterial. The Federal Highway Administration imposed a moratorium on functional class changes, including this principal arterial request, until the conclusion of MnDOT’s systemwide functional classification review.

Subsequently, as part of MnDOT’s review, it was determined that these two Dakota County segments met the FHWA qualifications to be reclassified as Principal Arterials. Dakota County has also obtained local resolutions of support, as required by Council processes, from all impacted jurisdictions, in this case, the City of Apple Valley and City of Lakeville. Letters of support ensure that local jurisdictions are aware of any potential Principal Arterial designation impacts (e.g., limited direct access to the roadway from private and public streets).

Figure 1: Requested New Functional Classifications (Segments 1362-1363)



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

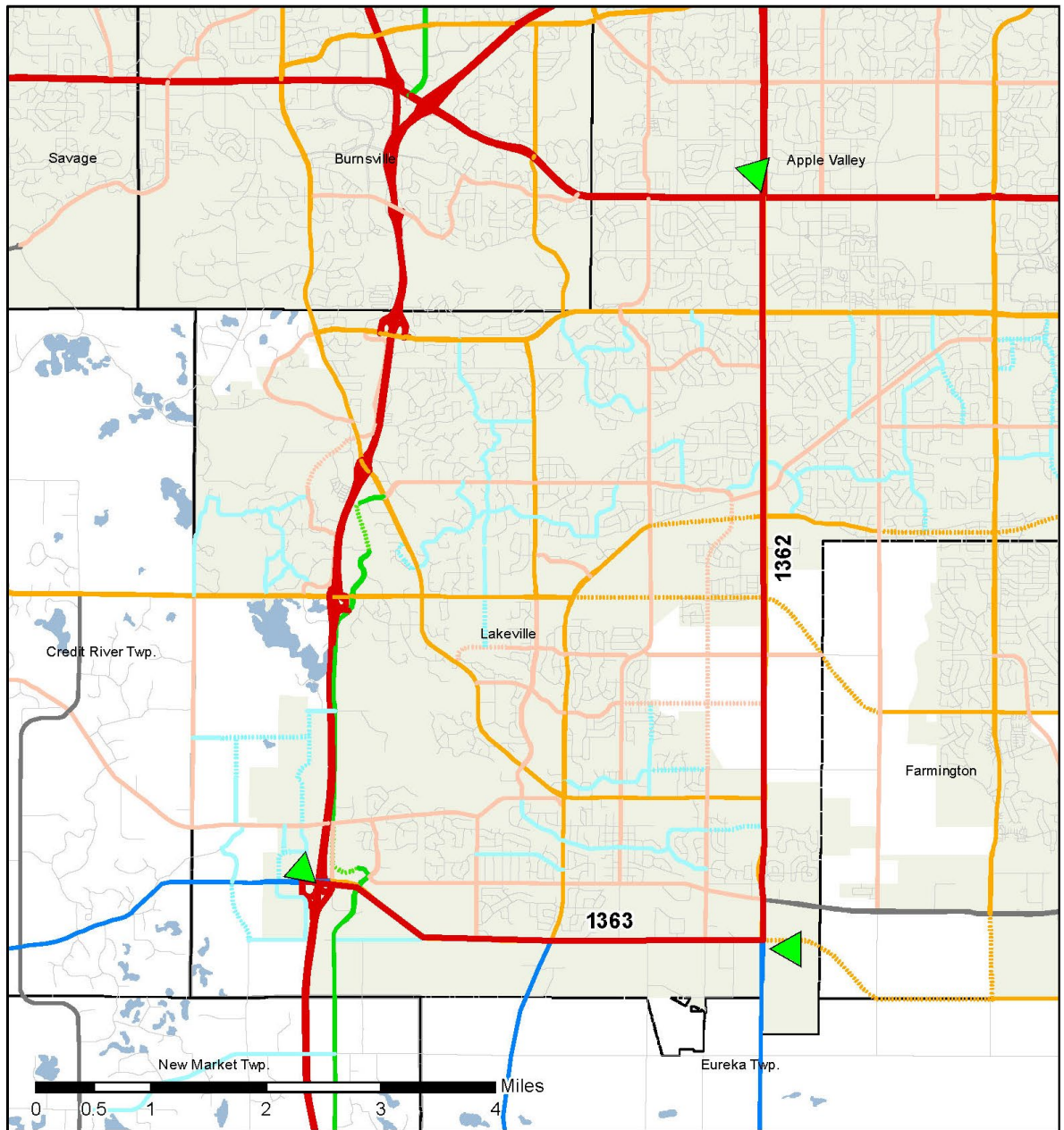
County Boundaries

MUSA



6-21-19

Figure 2: Requested New Functional Classifications, Closer View (Segments 1362-1363)



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
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- A Minor Expander
- A Minor Connector

City / Township Boundaries

Street Centerlines

County Boundaries

MUSA



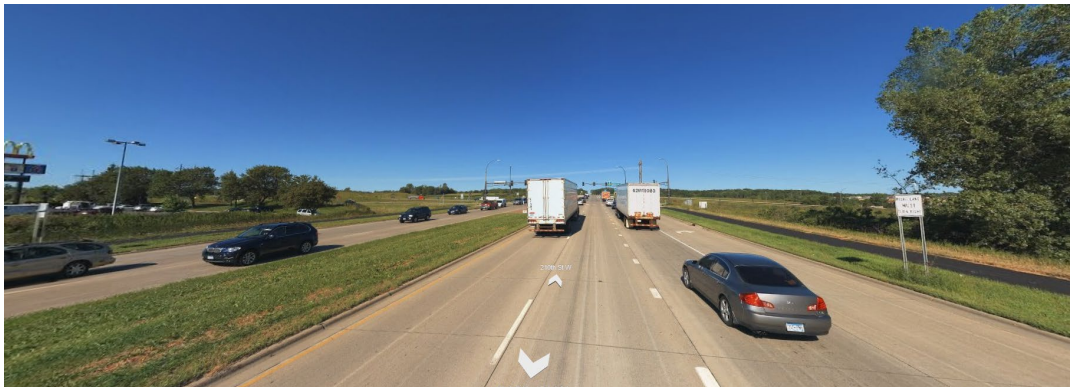
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Figure 3: Southbound CSAH 23 (Cedar Avenue) at CSAH 46 (160th Street West)



Source: Google Street View

Figure 4: Westbound CSAH 70 (Juniper Way) at I-35



Source: Google Street View

Recommendation to MnDOT Commissioner

The final part of this action is for the Metropolitan Council, as the region's Metropolitan Planning Organization (MPO), to recommend that the MnDOT Commissioner submit the systemwide changes to Federal Highway Administration for their final approval. MPOs play a vital role in functional classification within their planning area. The process involved the MPO and its members in a cooperative effort to examine functional classification.

STAFF ANALYSIS: The change process was comprehensive and significant outreach was performed to ensure that regional staff agreed with the proposed changes. The resulting proposed system changes more closely aligns with the most recent FHWA guidance and more accurately reflects the roadway characteristics described in Appendix D of the Transportation Policy Plan. MnDOT and the Metropolitan Council are both supportive of the recommended Principal Arterial changes. Additionally, the TAC will subclassify roadways within the A-Minor designation with their expected action on 9/1/21 and these designations will also be included as part of the TPP administrative modification.

ROUTING

TO	ACTION REQUESTED	DATE COMPLETED
TAC Planning Committee	Review & Recommend	
Technical Advisory Committee	Review & Recommend	
Transportation Advisory Board	Review & Recommend	
Metropolitan Council Transportation Committee	Review & Recommend	
Metropolitan Council	Review & Adopt	

— All Other Roadways

Previous Functional Classification (where changed)

— Minor Arterial

— Major Collector

— Minor Collector

— Local

Revised Functional Classification (where changed)

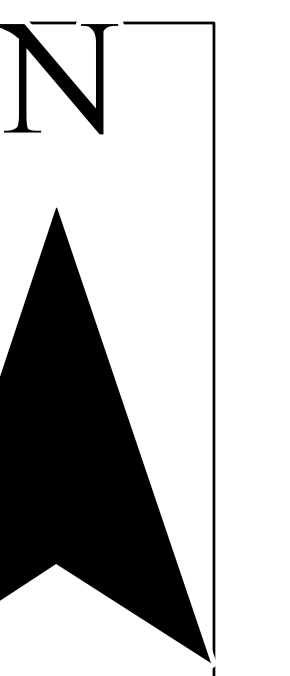
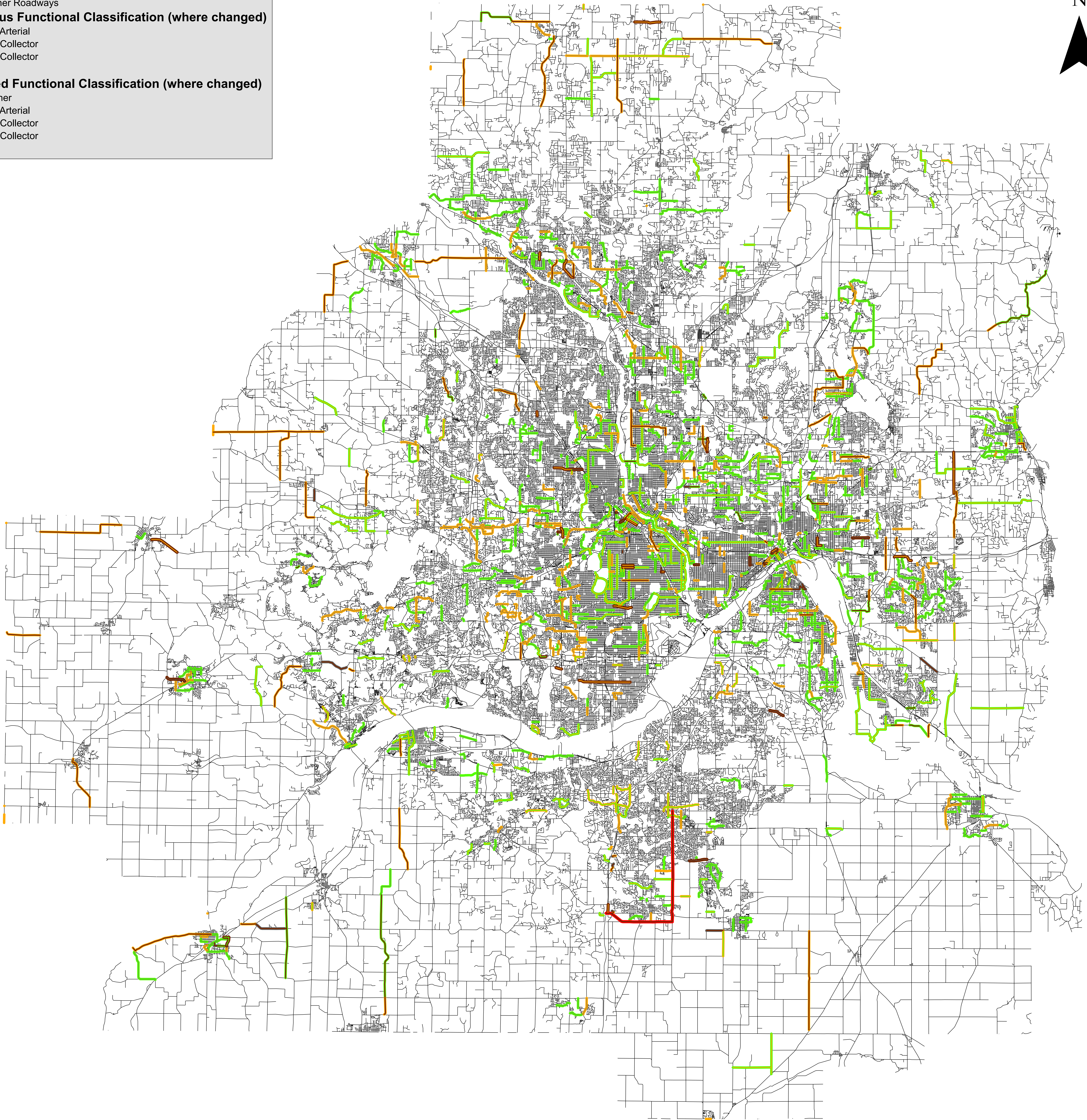
— PA Other

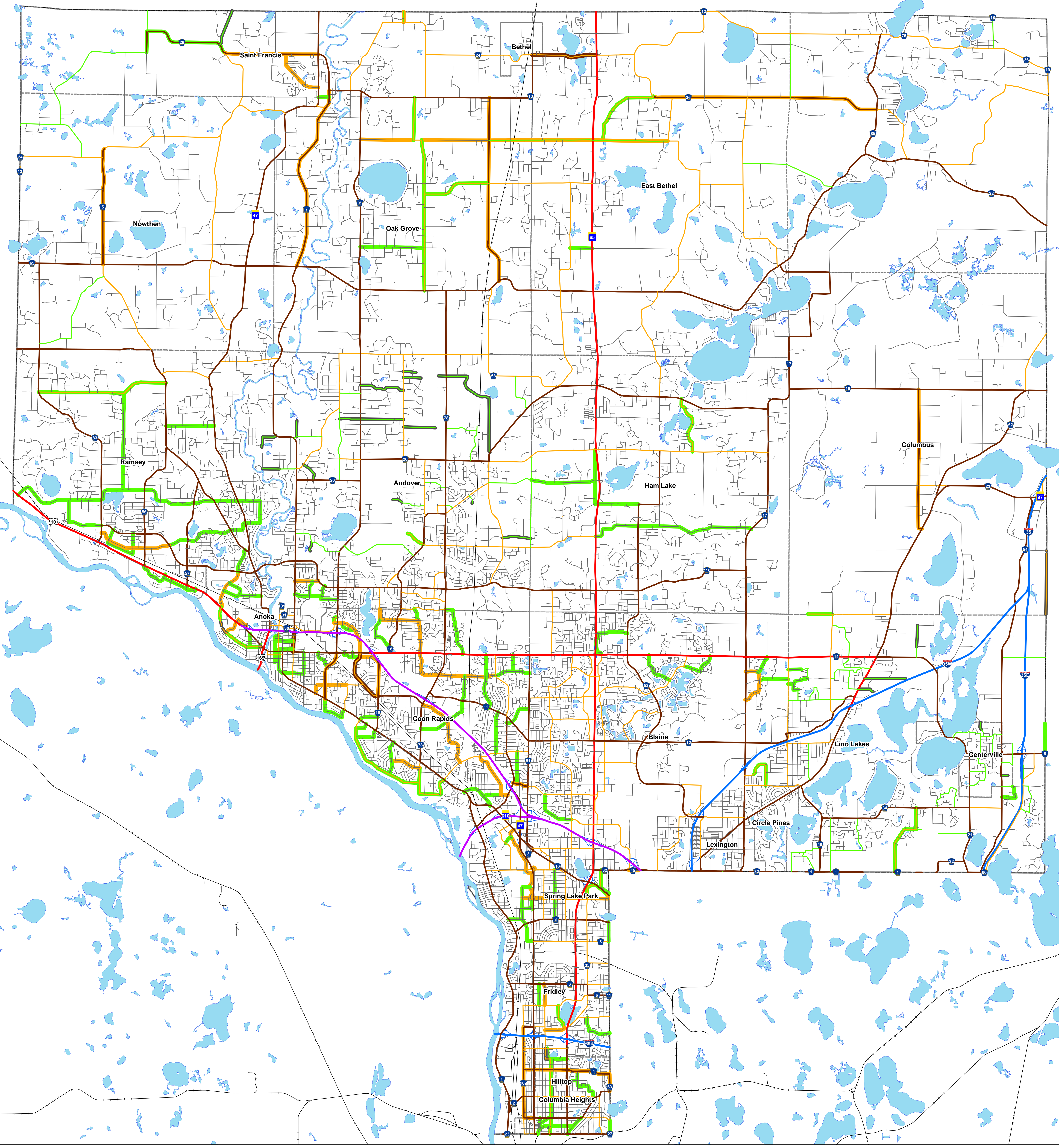
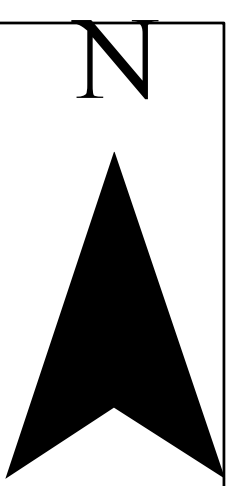
— Minor Arterial

— Major Collector

— Minor Collector

— Local





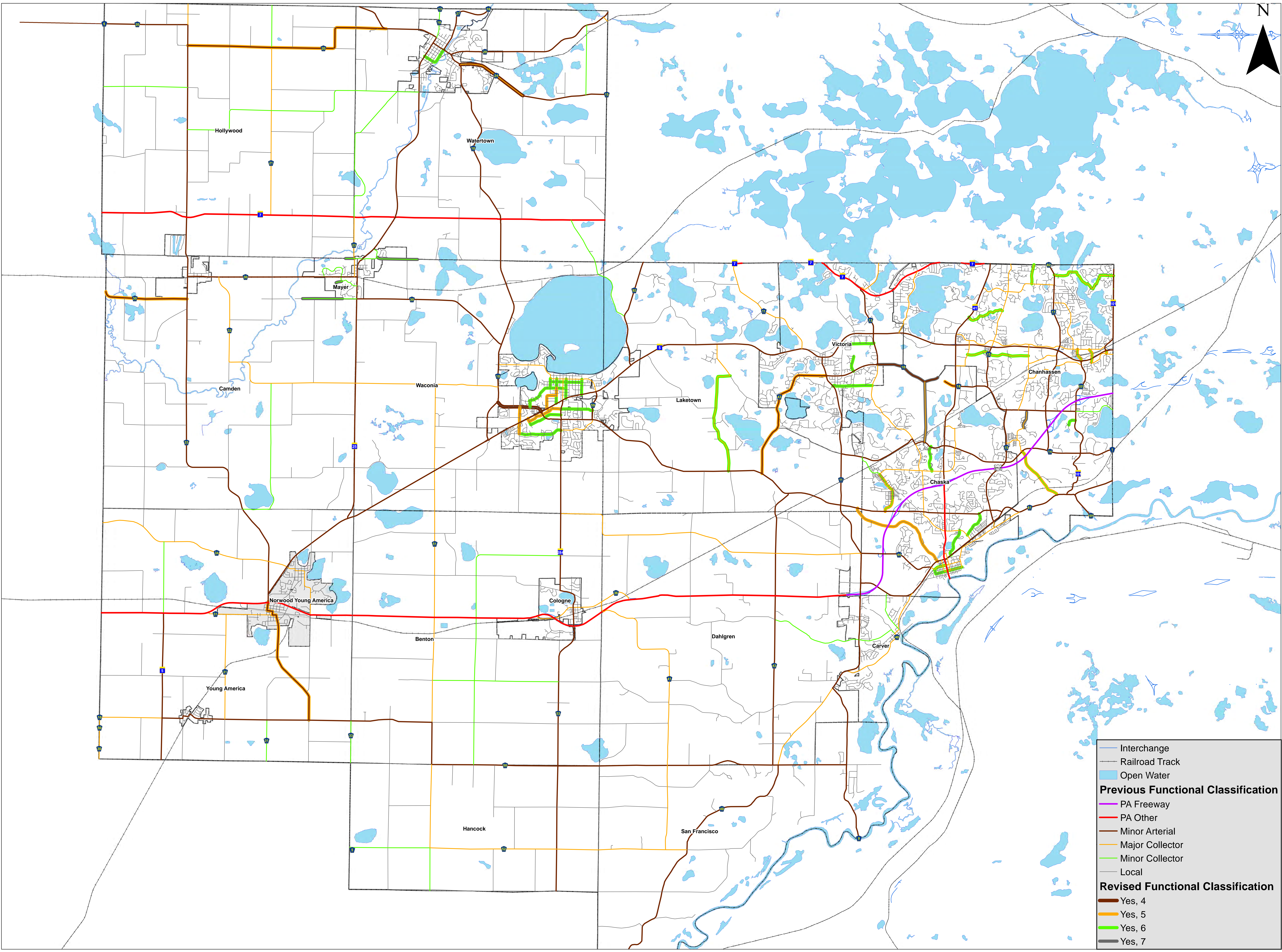
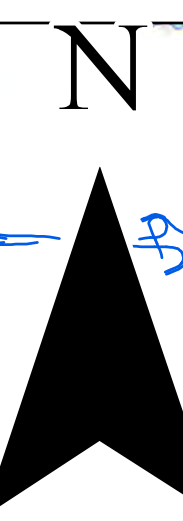
— Interchange
— Railroad Track
— Open Water

Previous Functional Classification

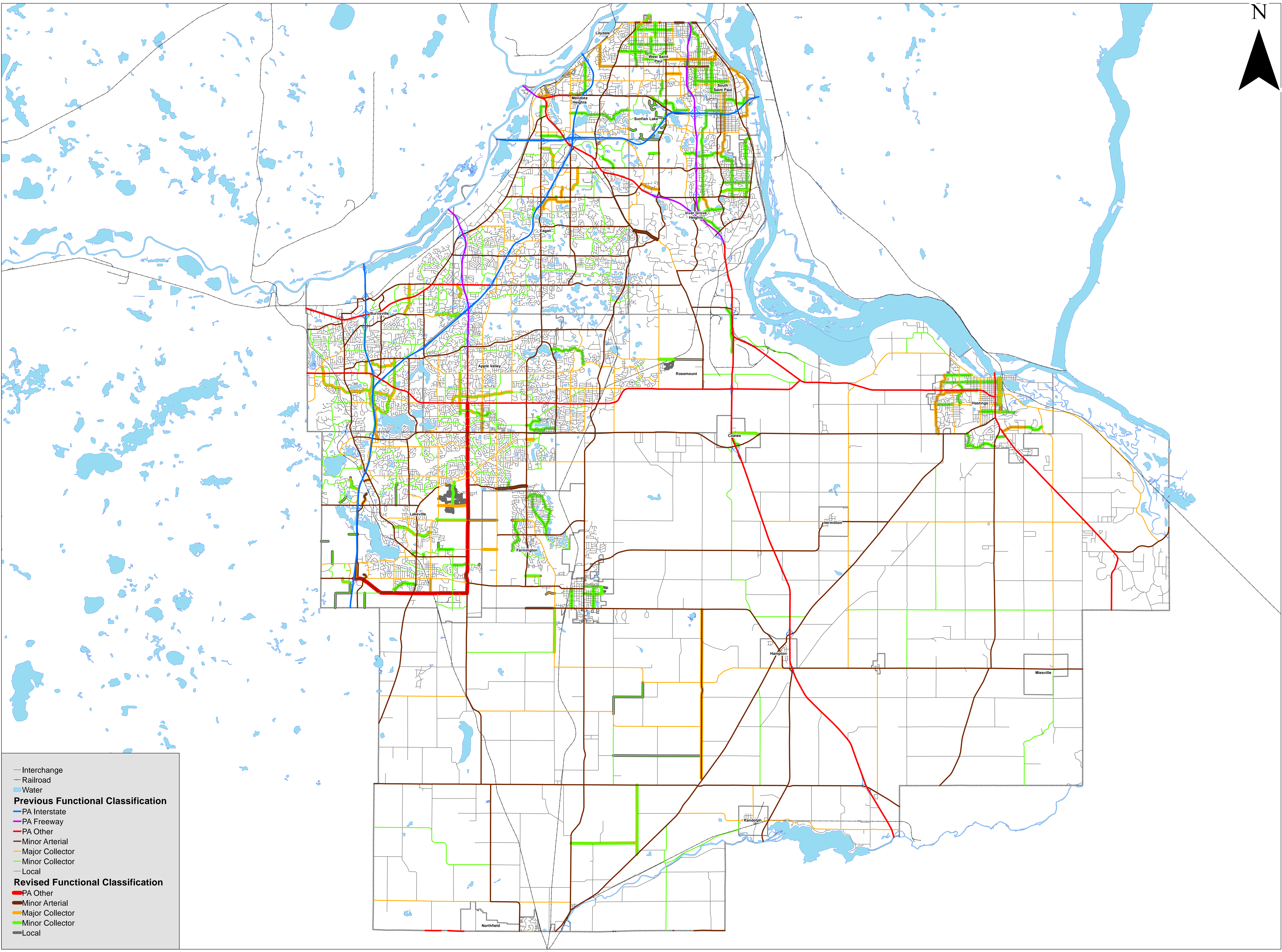
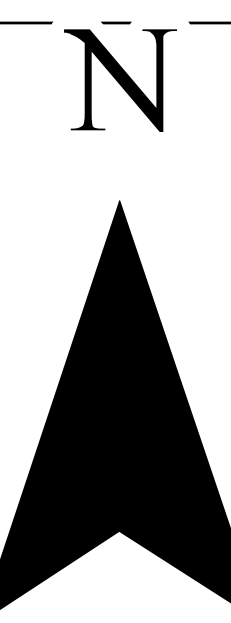
- PA Interstate
- PA Freeway
- PA Other
- Minor Arterial
- Major Collector
- Minor Collector
- Local

Revised Functional Classification

- Minor Arterial
- Major Collector
- Minor Collector
- Local



	Interchange
	Railroad Track
	Open Water
Previous Functional Classification	
	PA Freeway
	PA Other
	Minor Arterial
	Major Collector
	Minor Collector
	Local
Revised Functional Classification	
	Yes, 4
	Yes, 5
	Yes, 6
	Yes, 7



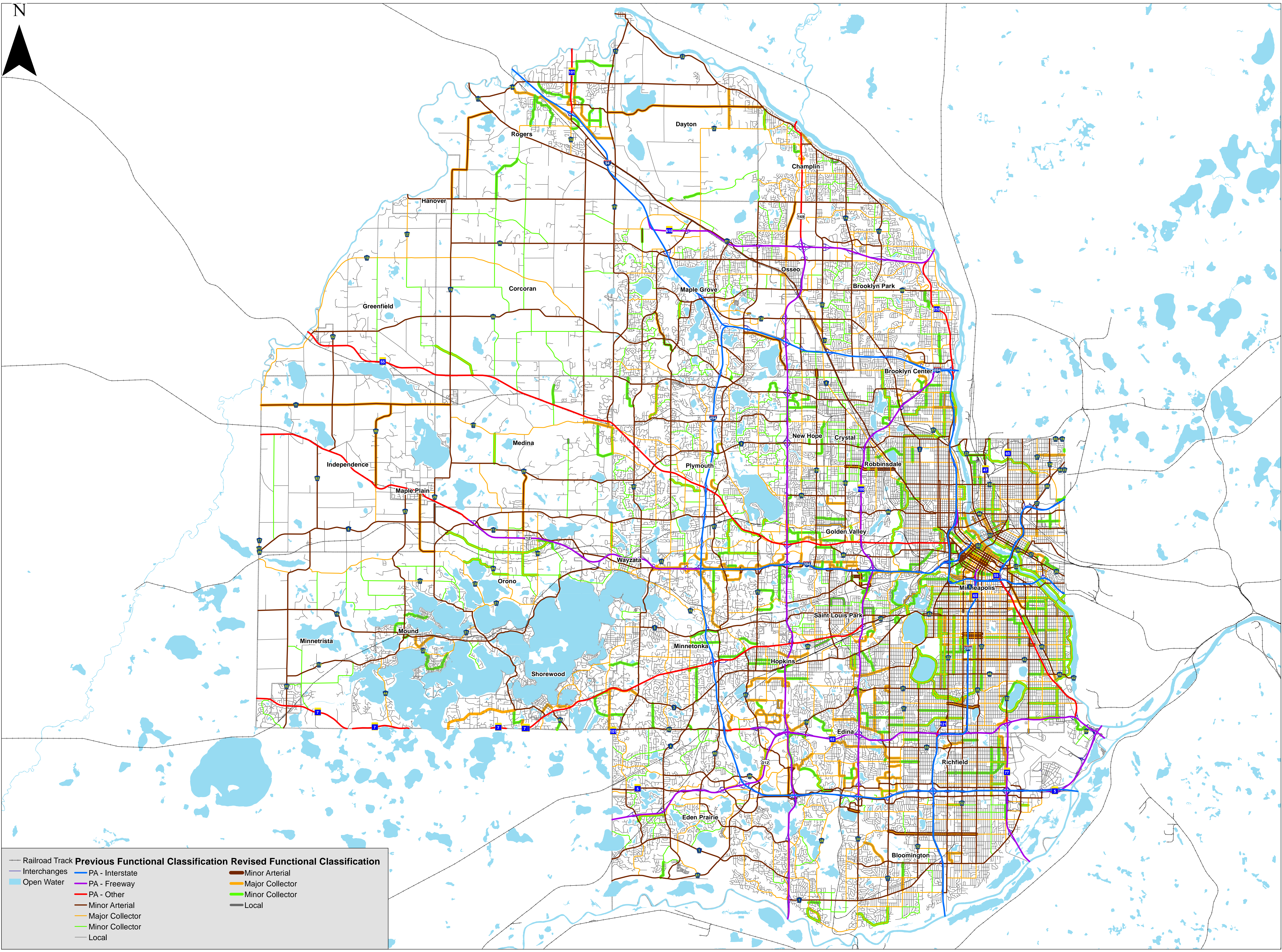
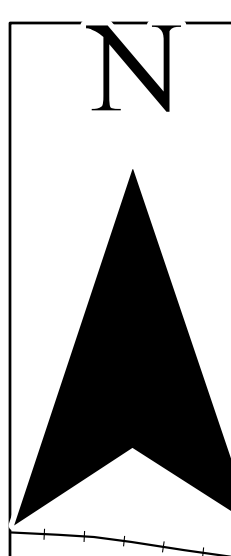
— Interchange
— Railroad
— Water

Previous Functional Classification

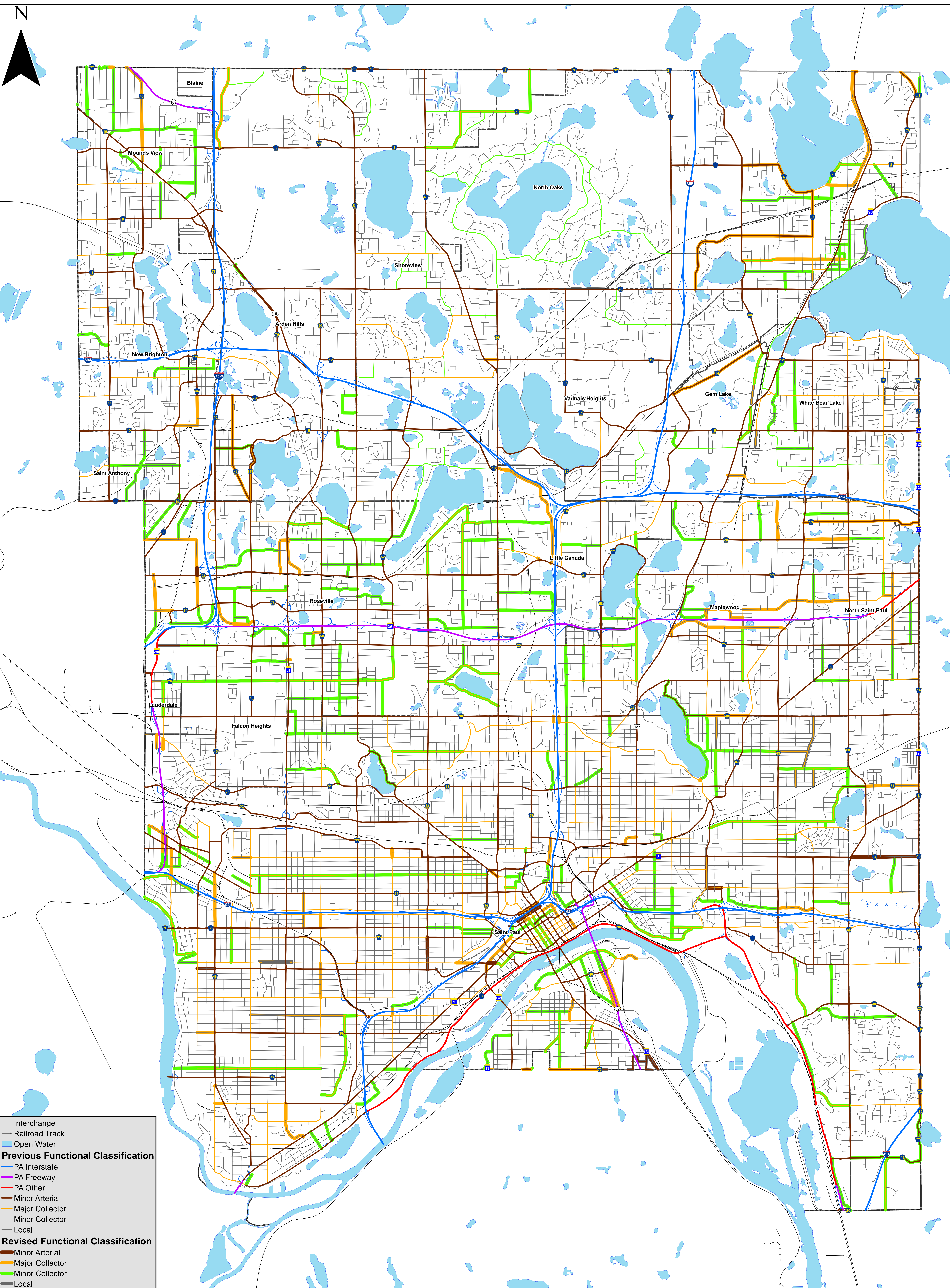
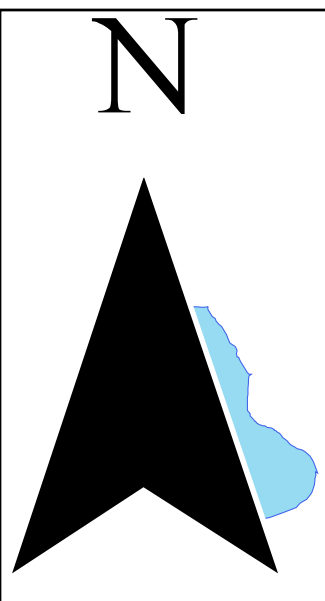
- PA Interstate
- PA Freeway
- PA Other
- Minor Arterial
- Major Collector
- Minor Collector
- Local

Revised Functional Classification

- PA Other
- Minor Arterial
- Major Collector
- Minor Collector
- Local



Previous Functional Classification		Revised Functional Classification	
—	Railroad Track	—	Minor Arterial
—	Interchanges	—	Major Collector
—	Open Water	—	Minor Collector
—	PA - Interstate	—	Local
—	PA - Freeway	—	
—	PA - Other	—	
—	Minor Arterial	—	
—	Major Collector	—	
—	Minor Collector	—	
—	Local	—	



— Interchange
— Railroad Track
— Open Water

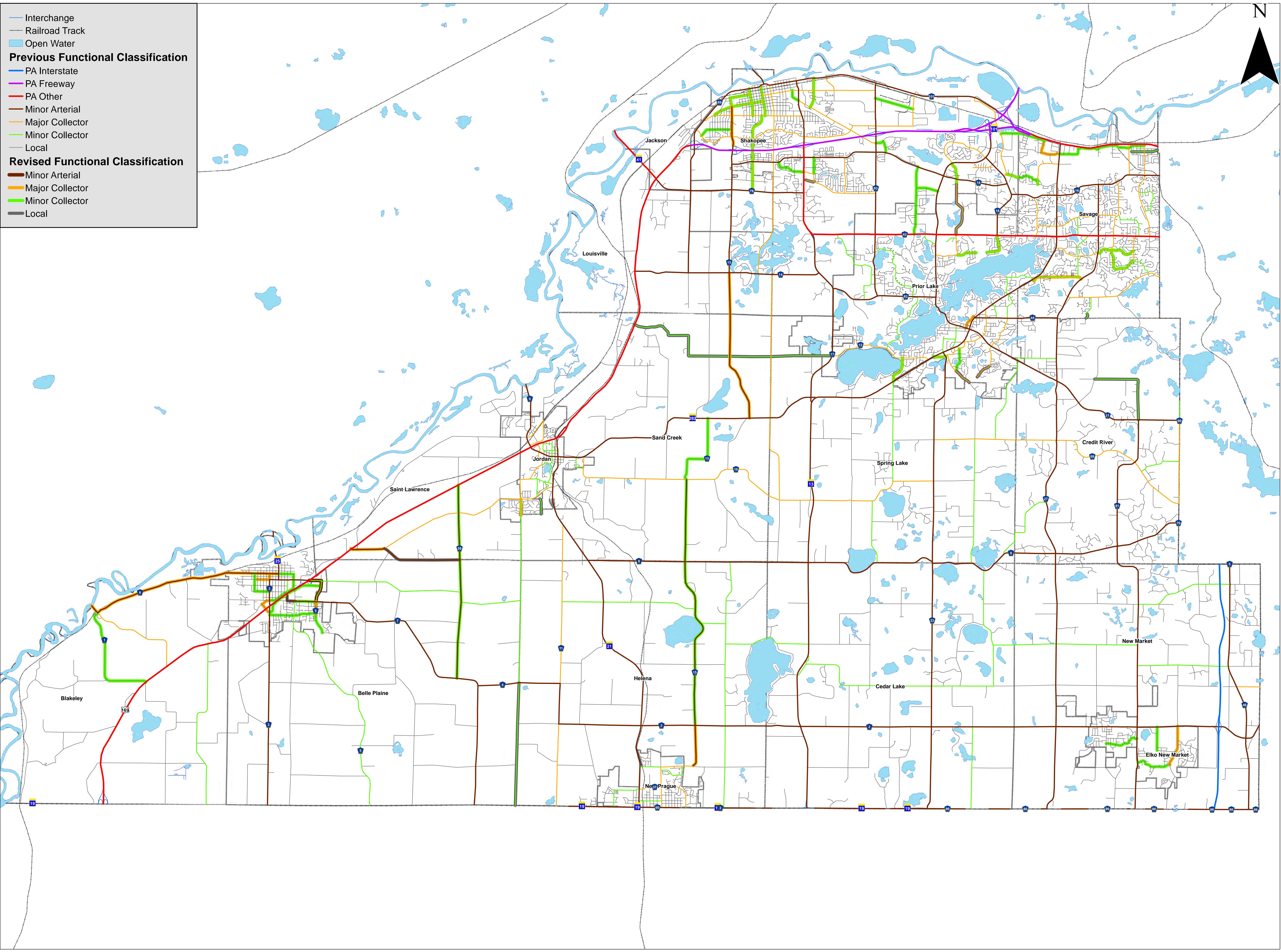
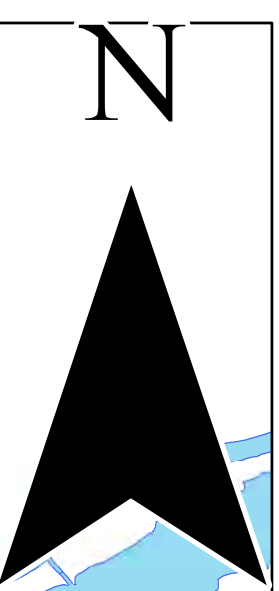
Previous Functional Classification

- PA Interstate
- PA Freeway
- PA Other
- Minor Arterial
- Major Collector
- Minor Collector
- Local

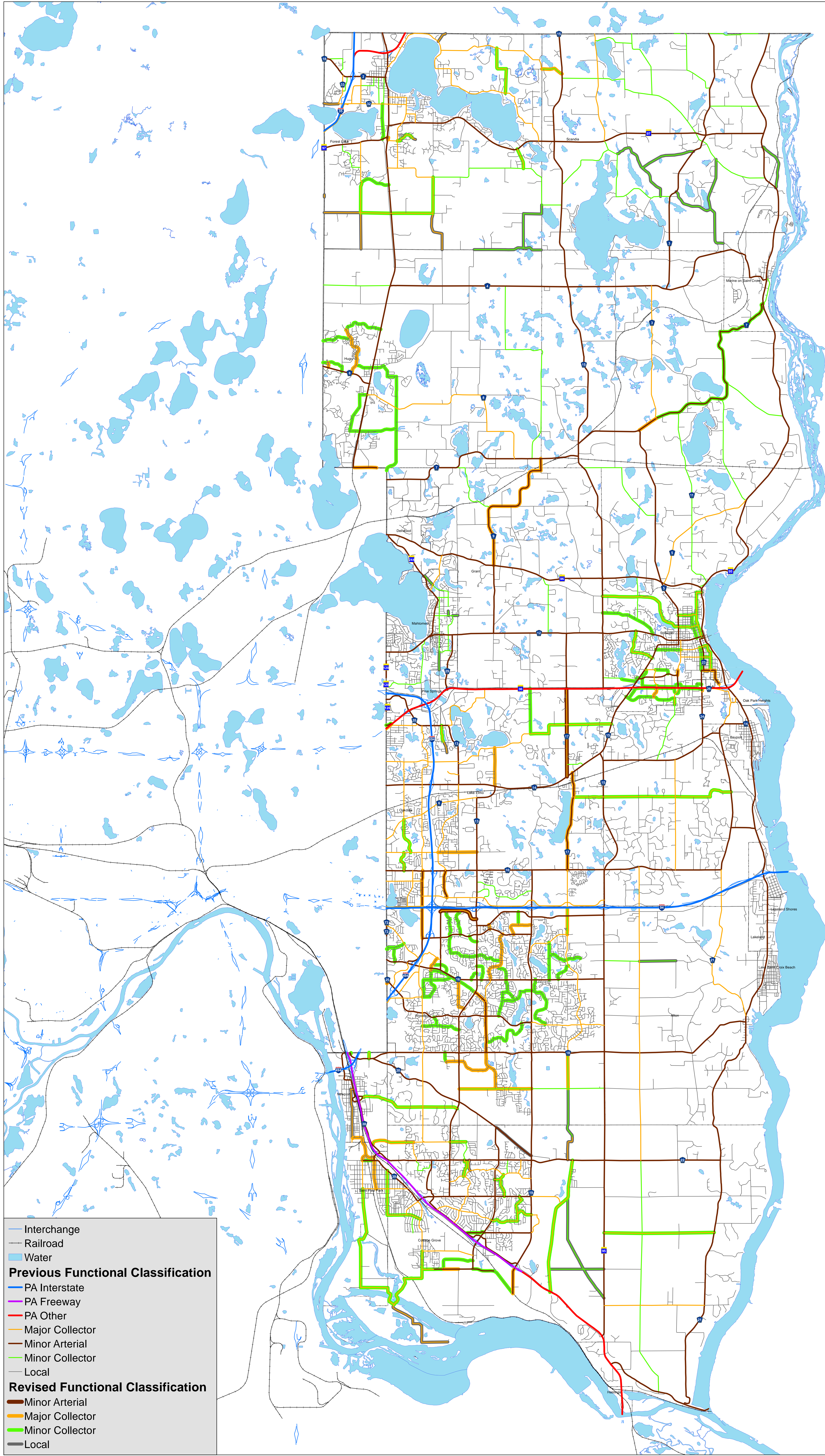
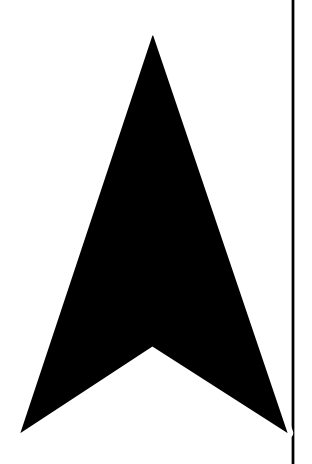
Revised Functional Classification

- Minor Arterial
- Major Collector
- Minor Collector
- Local

- Interchange
- Railroad Track
- Open Water
- Previous Functional Classification**
- PA Interstate
- PA Freeway
- PA Other
- Minor Arterial
- Major Collector
- Minor Collector
- Local
- Revised Functional Classification**
- Minor Arterial
- Major Collector
- Minor Collector
- Local



N



— Interchange
— Railroad
— Water

Previous Functional Classification

- PA Interstate
- PA Freeway
- PA Other
- Major Collector
- Minor Arterial
- Minor Collector
- Local

Revised Functional Classification

- Minor Arterial
- Major Collector
- Minor Collector
- Local