

Twin Cities Functional Classification Process Update Study



Study Purpose



Overview

This study was initiated to provide the framework for updating the functional classification in the Twin Cities metropolitan area so it is consistent with federal guidance and to incorporate the new framework into the Council's 2050 Transportation Policy Plan (TPP).

Development of the new framework also requires consideration of the existing minor arterial network and its value to the region.

Establishing the framework includes thinking through and documenting how state and local agencies will identify and process potential functional classification change requests.

In addition to compliance with federal guidance, another theme of the study tasks was attempting to make the regional functional classification system more approachable to communities in the region.

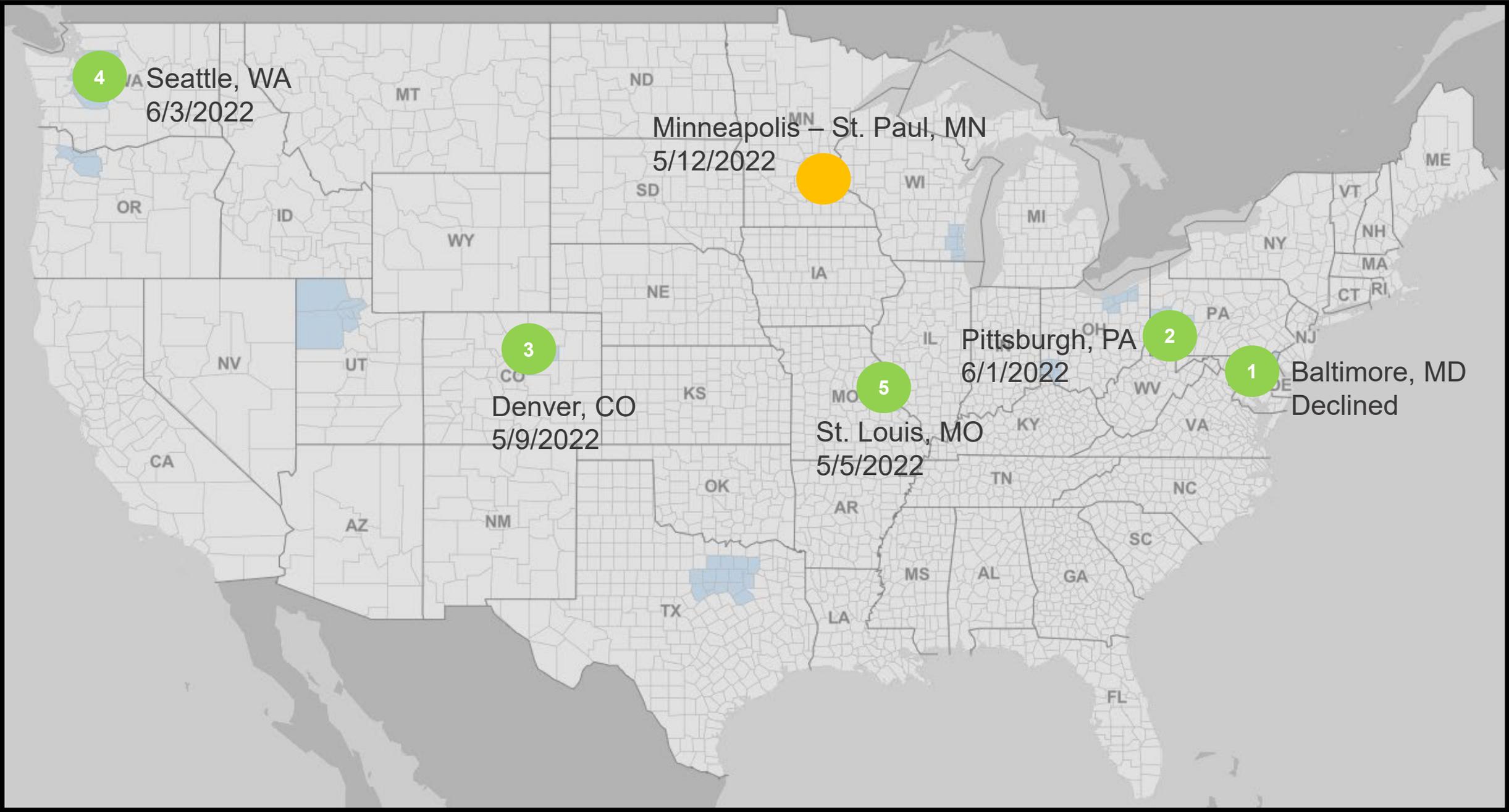
Key Tasks and Deliverables



Peer Region Review and A-Minor Designation Evaluation

- Peer region review of functional classification process and implemented functional classification
 - 5 peer MPO areas
 - Baltimore, MD
 - Pittsburgh, PA
 - Denver, CO
 - Seattle, WA
 - St. Louis, MO
 - Questions and interviews
- Evaluate effectiveness of the A-Minor arterial designation in regional decision-making
 - Technical memo

Peer Region Interviews



Findings from Peer Region Review

Relevant Peer Region Interview Findings

- Only Met Council and St. Louis (Missouri side) lead on both functional classification and MPO funding eligibility decisions
- Only Met Council and Denver have local designations for funding eligibility and Denver's designation has limited impact (only 20% of available funding allocated by MPO)
- Only Met Council considers multimodal throughput
- Several coordination challenges centered on Met Council functional classification, comprehensive planning coordination, and funding eligibility decision-making roles
- All MPOs other than the Twin Cities are consistent with federal guidance

Effectiveness of “A” Minor Arterial System

Findings and Recommendations

- Finding #1: The A-Minor Arterial classification has served an important role in regional transportation planning and programming. That role has changed as time has passed and the Regional Solicitation has evolved from being focused on the four A-Minor Arterial sub-classifications/designations to focused on type of improvement (modernization, strategic capacity, etc.). The existing Regional Solicitation rule to fund at least one of each of the A-Minor Arterial sub-classifications/designations has ensured that all areas of the region are funded since they are largely tied to land use.
 - Recommendation: The Regional Solicitation Evaluation in 2023-2026 will examine if the existing rule to fund at least one of each sub-classification/designation, minimums spending by land use, or another approach is the preferred way to ensure that investment continues to occur in all parts of the region and on all types of roadways.

Effectiveness of “A” Minor Arterial System (continued)

Findings and Recommendations

- Finding #2: The A-Minor Arterial Designation is inconsistent with federal functional classification guidance, is inconsistent with peer region practices, is confusing for local and state stakeholders, and is not regularly reviewed nor maintained by road authorities. Over time, this two-tiered system (A-Minor Arterials and B-/Other Minor Arterials) has become unbalanced and lost some of its usefulness with 84 percent of the total Minor Arterials being classified as A-Minors and only 16 percent being classified as Other Arterials.
 - Recommendation #1: As an interim step, with only 16 percent of the Minor Arterials classified as Other Arterials, the region should dissolve the distinction between the A-Minor Arterials and Other Arterials but retain the sub-classifications/designations. As part of this step, the remaining Other Arterials would need to have sub-classification/designations assigned – Augmentor, Connector, Expander, or Reliever. Then, as part of a future study effort, the region should work together to identify and evaluate options for updating sub-classifications/designations (if they are to remain) so they:
 - Are regularly reviewed by road authorities
 - Are regularly updated in routine state, regional, and local transportation planning activities, and
 - More transparently consider and prioritize the corridor’s support for multimodal travel in the region – including movement of freight and support for existing and planned land use

Effectiveness of “A” Minor Arterial System (continued)

Findings and Recommendations

- Finding #2: The A-Minor Arterial Designation is inconsistent with federal functional classification guidance, is inconsistent with peer region practices, is confusing for local and state stakeholders, and is not regularly reviewed nor maintained by road authorities. Over time, this two-tiered system (A-Minor Arterials and B-/Other Minor Arterials) has become unbalanced and lost some of its usefulness with 84 percent of the total Minor Arterials being classified as A-Minors and only 16 percent being classified as Other Arterials.
 - Recommendation #2: If the recommendation above proceeds, the Metropolitan Council will need to review and potentially update Roadway Group categories (presently there is Group 4: A-Minor and Wright/Sherburne Minor Arterials) in its Congestion Management Process (CMP) Policies and Procedures Handbook.

Key Tasks and Deliverables

Analysis and Update of TPP Appendix D

- Analysis of Appendix D and Consistency with FHWA guidance
 - Matrix documenting differences between documents
 - Recommendations for changes
 - Revisions to Appendix D guidance to better align with FHWA guidance and reflect study outcomes (three PA categories, dissolving “A-Minor” and “Other” arterials, etc.)



FHWA and Appendix D Comparison



Key Inconsistencies

Overall:

- Access: FHWA provides little to no detail
- ROW: Met council provides corridor width (e.g., 300'); FHWA provides dimensions of roadway elements

Principal Arterials:

- Appendix D combines interstates and freeways while FHWA has further refinements (Interstate, Other Freeways & Expressways; & Other Principal Arterials)
- FHWA does not address: access management strategies on highest classes; parking; bike/ped

FHWA and Appendix D Comparison



Key Inconsistencies

Minor Arterials:

- Met Council has 2 categories of minor arterials with four sub-designations; FHWA has just one category and no sub-designations
- Operations Criteria: FHWA does not address design speed with specific numbers – provides general categories
- FHWA does not address: intersections; parking; large trucks; bicycle and pedestrian accommodations

Collectors:

- FHWA does not provide detail for rural collectors in some instances

Local Streets:

- Criteria not addressed by FHWA: place connections; spacing; system connections (rural); trip making service; intersections; parking; large trucks; management tools; posted speed limit

Key Tasks and Deliverables

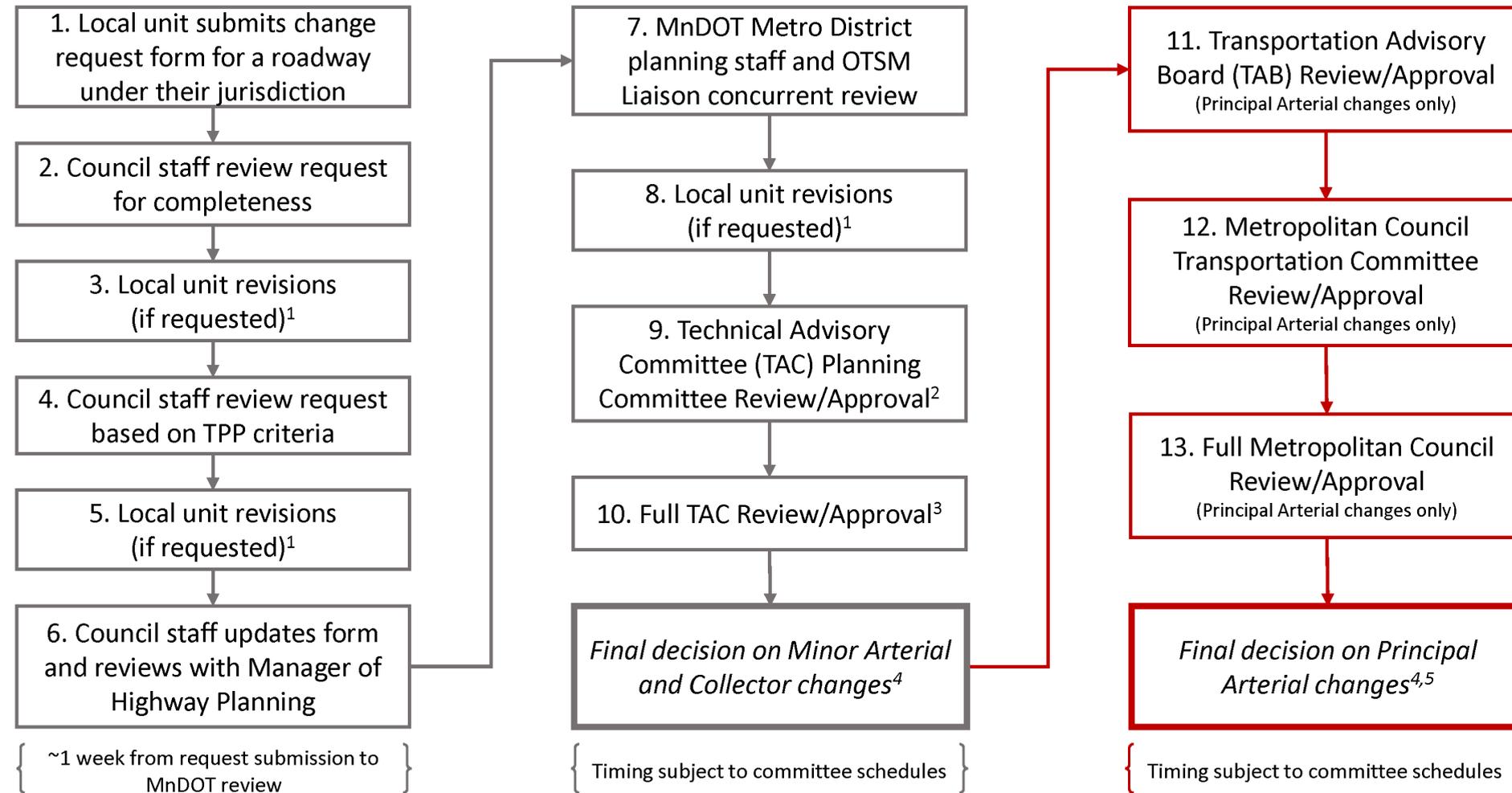


Functional Classification Change Process Documentation and Coordination

- Functional classification change request process
 - Chart of existing process
- Changes to the functional classification submittal approval process
 - Developed new functional classification change form
 - Recommended changes to website resources
- Outreach and education on the functional classification process
 - Developed FAQ regarding functional classification revision process
 - Flyer announcing changes to revision process

Current FC Change Request Process

Current Metropolitan Council Functional Classification Change Request Process



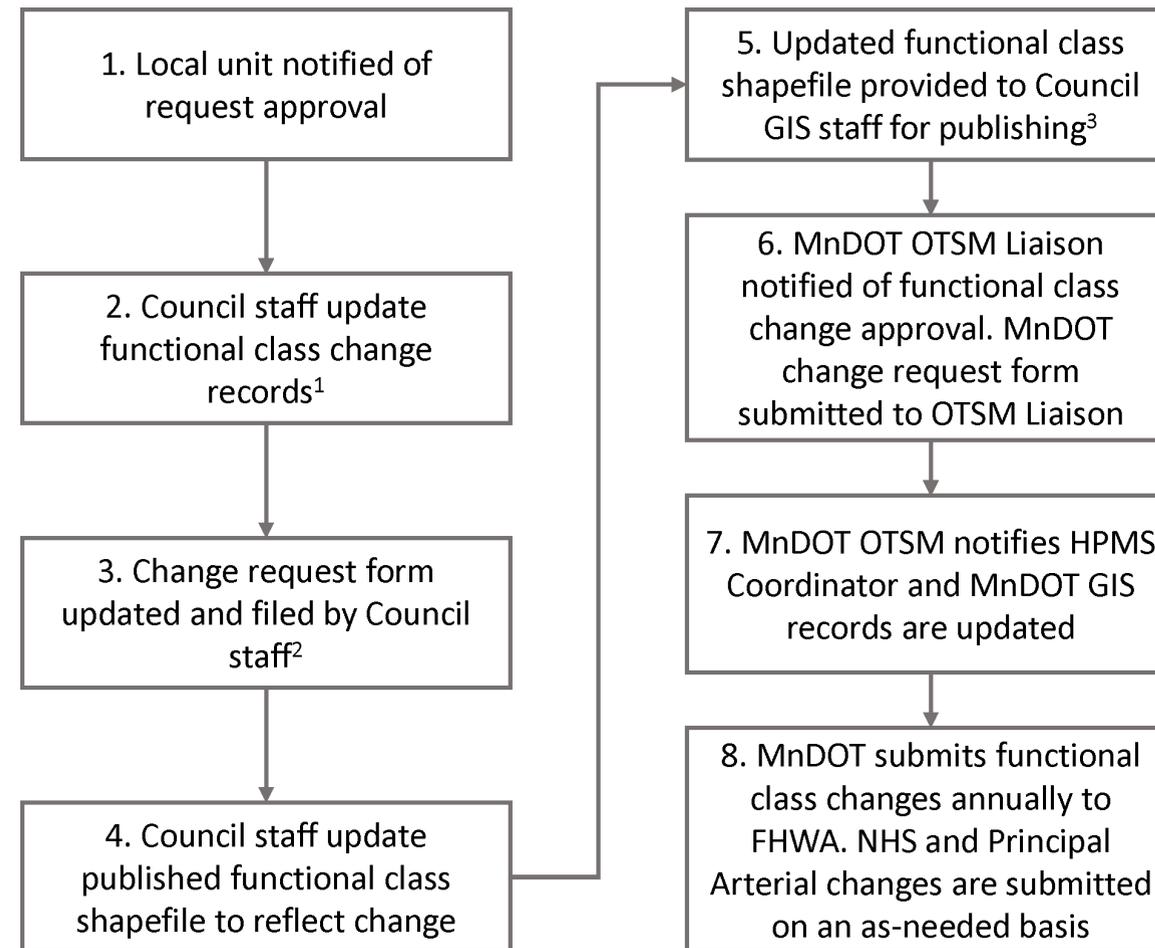
- (1) Additional information may be requested from the local unit of government at any time as part of the iterative process of developing the request. However, there are several points in the process where these requests are more common.
- (2) TAC Planning Committee may partially approve the request. Examples include approval of some segments, approval of modified termini, or approval of a different Minor Arterial sub-class in the case of Minor Arterial requests.
- (3) Committee schedules vary and do not always meet monthly. Non-urgent requests can be delayed.
- (4) All changes are subject to final approval by the Federal Highway Administration (FHWA).
- (5) Changes to the Principal Arterial network require a Transportation Policy Plan (TPP) administrative amendment as part of the functional classification approval, or the change can be added as part of a regularly-scheduled update to the TPP.

Legend

- All Changes
- Principal Arterial Changes

Current FC Change Request Process

Functional Classification Change Request Process Steps Following Request Approval



- (1) Internal records are maintained in a GIS shapefile. Attributes recorded include ID, segment termini, date, committee comments, etc. Note that this shapefile is used to record changes and is separate from the published functional class shapefile maintained by the Council.
- (2) Process outcome and date is recorded along with committee comments.
- (3) Note: changes are not considered official until reviewed by FHWA, however they may be utilized locally for funding or reference purposes in the interim.

Change Request Process



Summary of Issues and Opportunities – Website/Process

- Need for separate process to address technical corrections (not actual FC changes)
- Interest in an online version of the form that preparers could save and return to.
- Should provide examples of completed forms so preparers better understand required information and level of effort.
- Should provide examples of completed letters of support.
- Website provides additional instructions but is sometimes inconsistent with form terminology and does not address all sections.

Change Request Process



Summary of Issues and Opportunities – Form Content

- Need for clarity on whether one form can cover multiple changes.
- Interest in better alignment with MnDOT FC change form.
- Form should include links/references to supporting resources to help preparers fill out the form.
- Incorporate check boxes and word limits where possible based on past examples.
- Importance of including a map of requested segment – Interactive mapping tool like Regional Solicitation could be implemented for consistency.
- There is some confusion resulting from the use of the same form for planned roadway FC.
- Inconsistencies between form and website instructions.
- No comprehensive list of required attachments on form.

Change Request Process

High-Level Recommended Website Changes

- Implement online version of change request form with option to save progress and re-open.
- Implement online mapping tool similar to Regional Solicitation process OR embedded directly in submission form if possible.
- Align website and form instructions – provide instructions directly in form where possible.
- Direct technical corrections to staff rather than through change request form.
- Simplify content on change request website.

Key Tasks and Deliverables

Minor Arterial System Review

- Review of sub-designation for existing A-Minor arterials and assigning new sub-designation for former “Other” arterial based on study recommendation for a single minor arterial category.
 - Spreadsheet, maps, and GIS files outlining recommended minor arterial sub-designations for all routes



Minor Arterial Sub-Designation Review

Sub-Designation Categories

- Augmentor – Supplement PA system in fully developed areas within the MUSA
- Connector – Provide connections between rural centers and to PAs in rural areas
- Expander – Supplement the PA system in less densely developed or developing areas outside of the MUSA
- Reliever – Relief routes to parallel PAs that are within the MUSA



Minor Arterial Sub-Designation Review

General Approach

- Review all routes currently classified as “Other” minor arterials and apply a sub-designation
- Review all currently classified “A” minor arterials and check the existing sub-designation
- Provide maps and spreadsheet of sub-designations to project team
- Meet with owners of minor arterial routes
- Identify potential changes and bring back to the committee for discussion. Revise if needed and follow-up with local agencies
- Finalize spreadsheet and prepare GIS maps
- Present information to TAC planning for consent/approval



Meetings with Agencies

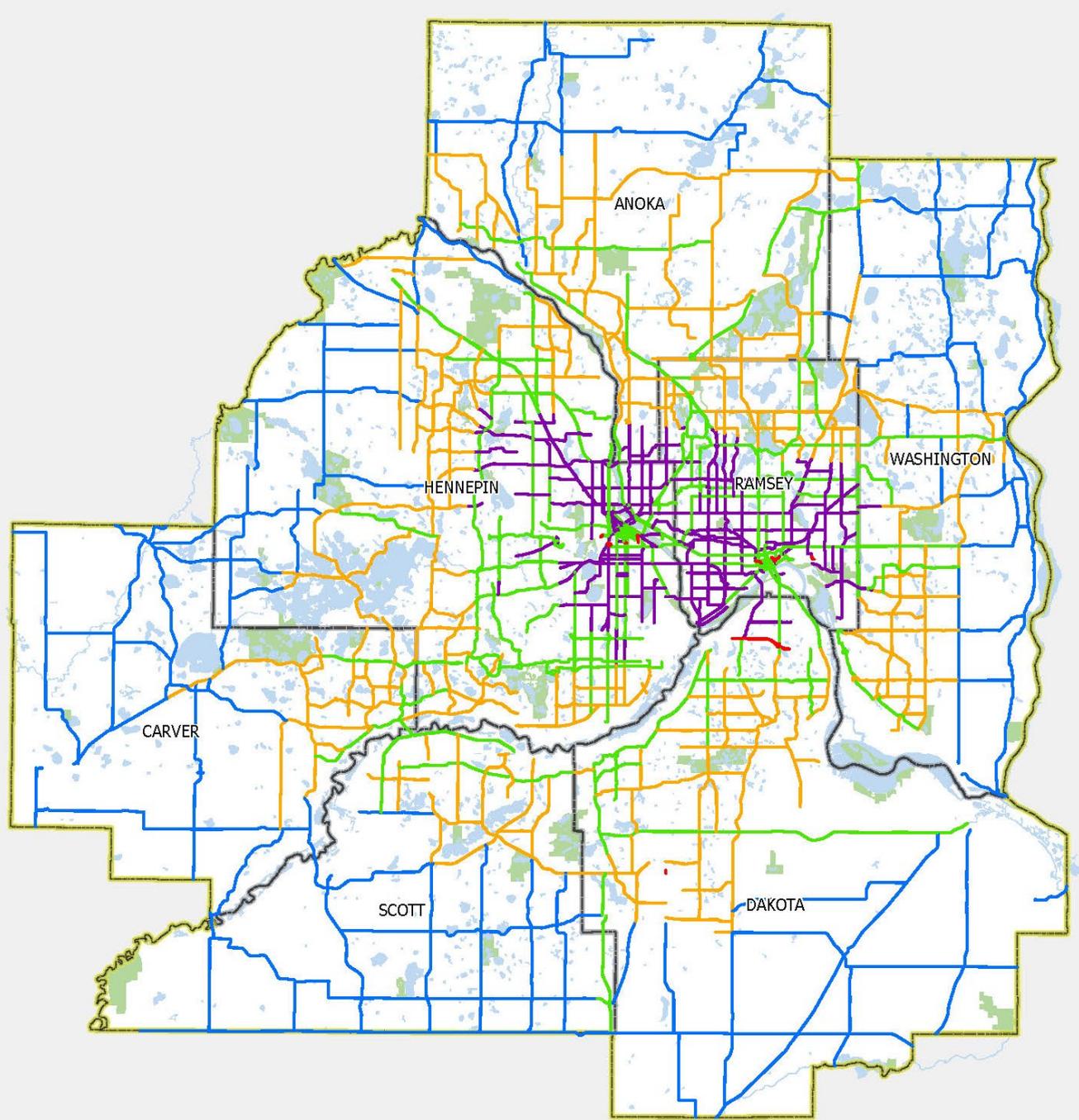
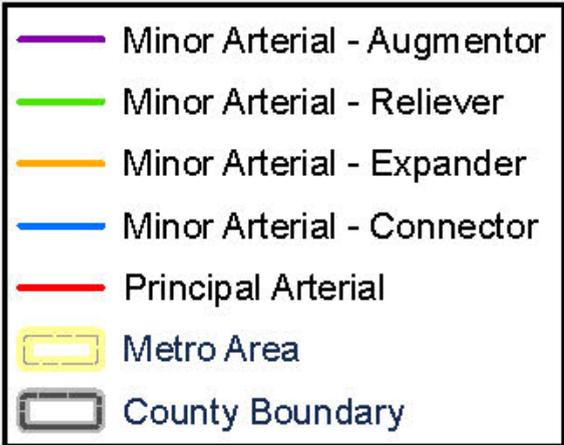


General Feedback and Comments

- Agencies welcomed combining “A” and “Other” minor arterials into a single category.
- Agencies were supportive of all minor arterial routes being eligible for regional solicitation funding in the future – understood it would not apply to this year’s solicitation
- Agencies appreciated that they would not have to take the map through the change process
- Most recommendations developed by the project team were supported/agreed to by the agencies
- Most comments for potential change were made to the reliever and connector sub-designations
- Conversations spurred interest in potential changes – ones that will need to be explored by the various agencies

Revised Map

Updated Minor Arterial Network



Key Tasks and Deliverables



Development of a Future Principal Arterial Functional Class Map

- Identification and mapping of potential other principal arterials
 - Review of MnDOT “other PA” list
 - Review of city and county lists and planning documents
 - Coordination with counties
 - List of routes consistent with FHWA guidance
- Future PA functional classification map
 - Draft and final maps
 - GIS files

Principal Arterial Categories

Consistency with FHWA Guidance

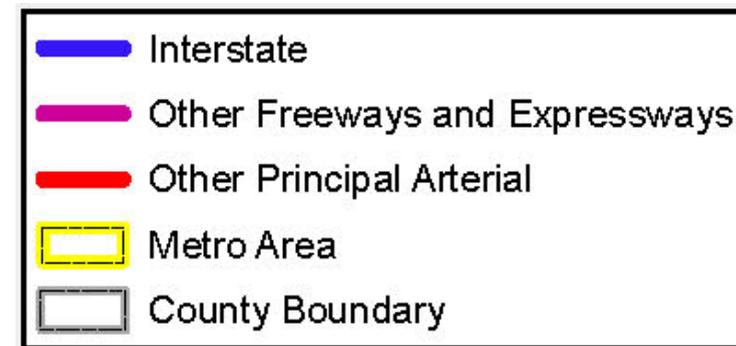
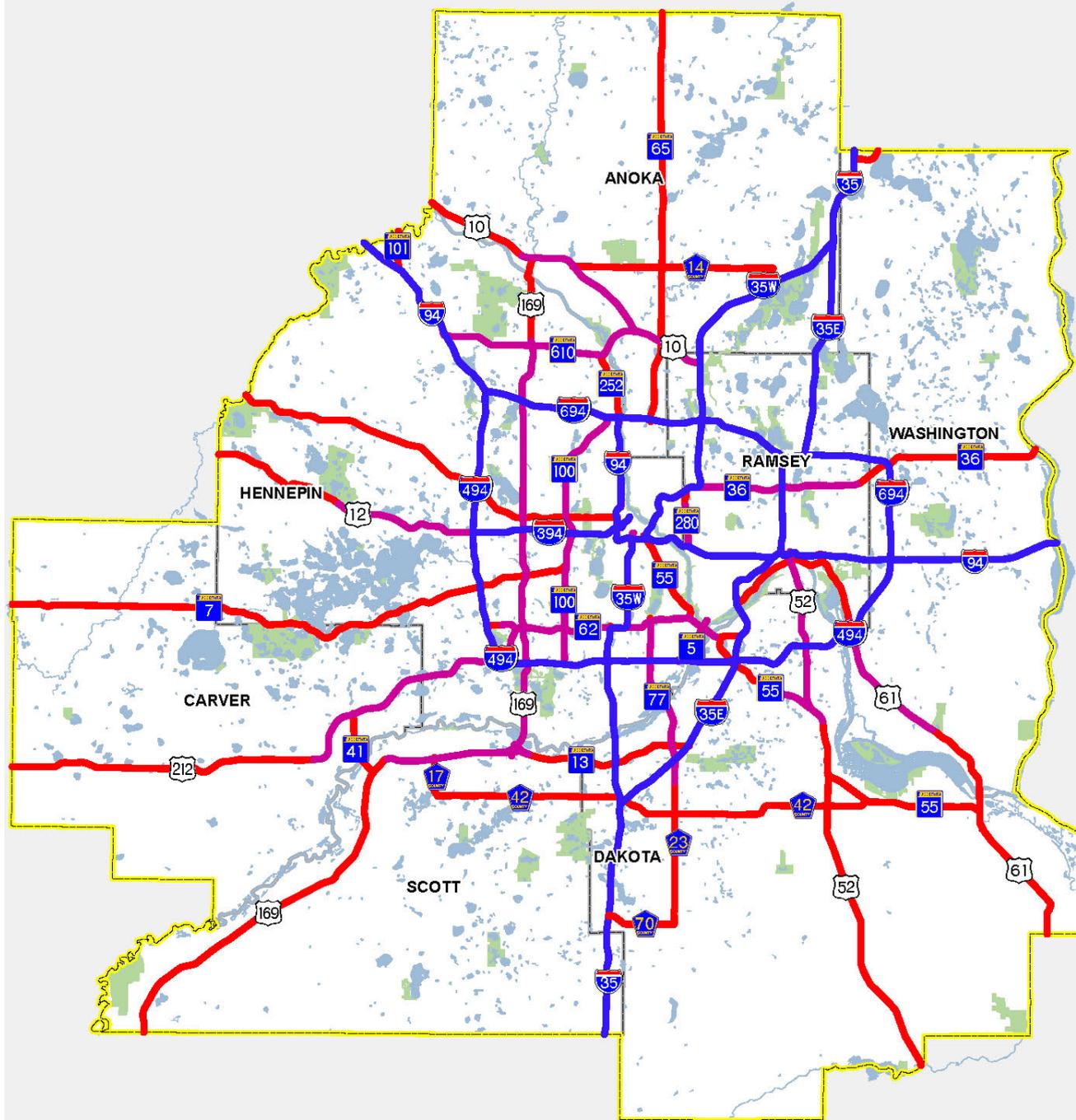
2050 TPP will use the three FHWA-identified categories of principal arterials. These include:

- Interstates
- Other freeways & expressways
- Other principal arterials

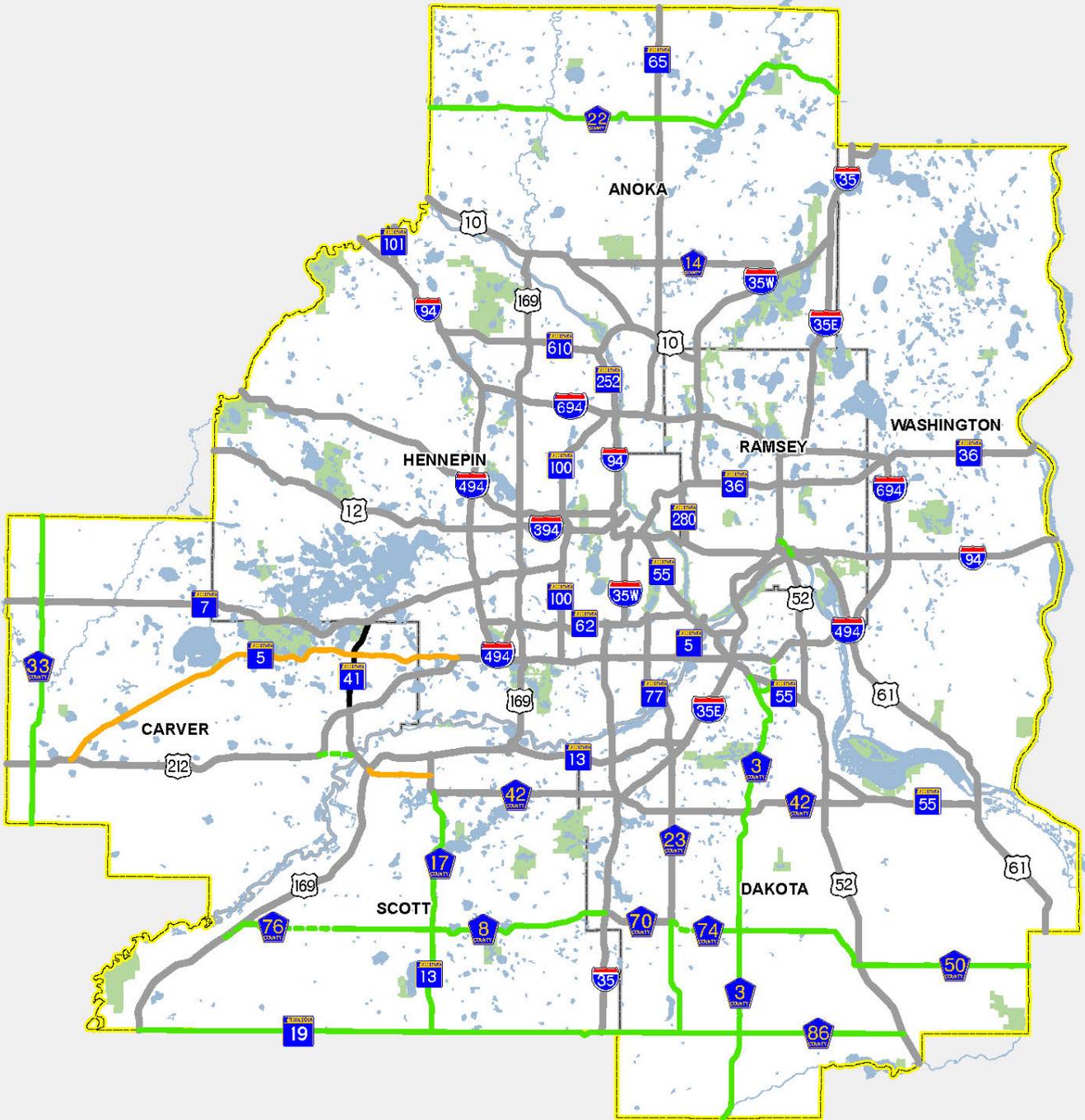
Presently Appendix D combines interstates and freeway principal arterials and has a second category that is other principal arterials.

Routes under discussion will only be classified when/if they are ready to be upgraded to a principal arterial route. Routes under discussion were identified by the counties. This study will not change any of the routes – the map is to be used to consider a potential broader principal arterial network for the region in the future. They are routes to be watched as the region continues to develop.

Current PA Map – Interstate, Freeway and Other



Potential Other PA Routes and Existing Routes



- Interstate, Other Freeways and Expressways, and Other Principal Arterial (Existing)
- Future Other Principal Arterial (Short Term)
- Future Other Principal Arterial (Long Term)
- New Alignment (Long Term)
- Additional Discussed Route
- ▭ Metro Area
- ▭ County Boundary

Conclusions



Direction Moving Forward

- The 2050 TPP will recognize the three sub-classifications of principal arterials: Interstate, Other Freeways & Expressways, and Other Principal Arterials.
- All “A” and “other” minor arterial routes will be combined into a single category to be consistent with FHWA guidance. A sub-designation will be provided for routes currently identified as “Other” minor arterial routes.
- Changes regarding funding eligibility for minor arterial routes will not take place until the 2026 Regional Solicitation.