# **ROADWAY FUNCTIONIAL CLASSIFICATION GUIDE**

LOCAL PLANNING HANDBOOK

## 2050 TRANSPORTATION POLICY PLAN

The Metropolitan Council, in collaboration with the Minnesota Department of Transportation (MnDOT) and local partners, is responsible for designating the functional classification of all roadways within the seven-county metro area. The functional classification of a roadway identifies each roadway's role in the movement of people and goods along the transportation network. Some, such as Interstate highways, emphasize mobility and high-speed movement for longer distance trips. Others, such as local roadways, function to primarily provide direct access to businesses, residences, and other destinations. The functional classification of a roadway is based on factors such as spacing of roadways, mileage of classifications in the region, traffic volumes, the number and type of trips the road carries, the accessibility to the adjacent land, and other characteristics such as the speed limit and width of the roadway.

As the Metropolitan Planning Organization (MPO) for the region, the Council works closely with MnDOT, who provides oversight and final approval of all functional classification designations in the state and submits this information to the Federal Highway Administration (FHWA).

For the 2050 Comprehensive Planning cycle, communities are required to incorporate the existing functional classification system as depicted in their system statement. In addition, the Met Council and MnDOT are requesting communities review their roadway functional classification system and propose any updates following the guidance provided in this fact sheet and in the 2050 Transportation Policy Plan. An overview of the functional classification system, specific roadway designations and criteria can be found in detail in the Imagine 2050 Transportation Policy Plan.

## WHY THE FUNCTIONAL CLASSIFICATION SYSTEM IS IMPORTANT

The functional classification of roadways defines the role each element of the roadway system plays in serving travel needs. All roads serve two main objectives to varying degrees – mobility and land access. The functional classification of a roadway defines the role of each roadway in serving the user's needs.

Functional classification is determined based on roadway characteristics and involves determining systems level considerations for each roadway. Specific roadway characteristics play a role in classifications as well, but set classifications also inform design decisions that affect the road's function like speed, width, intersection spacing and private property access control. Functional classification can also be considered when identifying the multimodal role of a road, including truck, transit, bicycle, and pedestrian use and accommodation. Highway and street projects should implement designs including multimodal accommodations that are compatible with a road's functional classification and surrounding land uses. Functional classification ensures that non-transportation factors, such as land use and development, are considered when planning and designing streets and highways.

A roadway's functional classification is used for many purposes, including:

- Eligibility for federal highway funds;
- Transportation agencies description of roadway system performance and targets;
- Access management;
- Freight truck routing;
- Prioritizing for investments in project selection; and
- Transit route planning and travel route designation.

Within the seven-county metropolitan area the functional classification system consists of four classes of roads: principal arterials (including all freeways and other principal arterials), minor arterials (including four sub designations), collector streets (major and minor) and local streets.

Unique to the seven-county metro area, minor arterials and principal arterials that are not designed as freeways are eligible to compete for federal funds through the region's established Regional Solicitation. Federal guidance allows use of federal funds on all non-local roadways, but the region has decided the best use of these scarce funds is on the most important regional roadways. Recently, planners and engineers have expanded roadway design options under the functional classification significantly, especially in areas where providing for non-motorized travel is a priority. Such classifications, while serving local needs, must either collapse or expand into the federal classification or be used as an overlay so that the federal classification can be applied for consistency with the federal guidance and funding discussions.

## **FUNCTIONAL CLASSIFICATION DESCRIPTIONS**

The following will provide brief descriptions of the various classification types within the overall system, find resources at the end of this document for a more thorough overview of the functional classification system and guidance on factors and other considerations that go into the classification of the region's and nation's roadways. It is also important to understand that guidance for functional classification varies by location. Guidance for urban and rural areas are different. Urban and rural designations are based on the urban area boundary developed every ten years following the decennial census and finalized by the Met Council acting through its federal Metropolitan Planning Organization (MPO) authority. This process was completed in 2023 following the 2020 Census.

## **Principal Arterials**

The emphasis of principal arterials is on moving large volumes of traffic over long distances rather than providing direct access to land. They connect the region with other areas in the state, the nation, and the world. Principal arterials also connect regional centers and freight terminals within the metropolitan area. These roadways make up both the National Highway System (NHS) and the Regional Highway System that local communities must conform to in their comprehensive plans. There are three sub-classifications of principal arterials:

- Interstates: Interstates are the highest classification of Arterials and are designed and constructed with mobility and long-distance travel in mind. Roadways in this category are officially designated as Interstates by the Secretary of Transportation.
- Other Freeways & Expressways: Roads in this category have directional travel lanes that are usually separated by some type of physical barrier, and their access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections. Like Interstates, these roadways are designed and constructed to maximize their mobility function, and abutting land uses are not directly served by them.
- Other Principal Arterials: Roadways in this category serve major centers of metropolitan areas, provide a high degree of mobility, and can provide mobility through rural areas. Abutting land uses can be served directly. Forms of access for Other Principal Arterial roadways include driveways and at-grade intersections with other roadways.

#### Minor Arterials

The minor arterial system supplements the principal arterial system and provides connections to the principal arterial system. Minor arterials support access to major traffic generators, including regional job concentrations and freight terminals, and between rural centers within and just outside the region. Minor arterials serve medium-to-short trips and often support multimodal (transit, pedestrian, bicycle) elements. The Metropolitan Council further separates minor arterials into four sub-designations (not recognized by FHWA) based on their role and geography in the transportation network:

- Relievers: Provide supplementary capacity for congested, parallel principal arterials.
- Augmentors: Supplement the principal arterial system in more densely developed or redeveloping areas.
- Expanders: Supplement the principal arterial system in less densely developed or redeveloping areas.
- Connectors: Provide safe, direct connections between rural centers and to principal arterials in rural areas without adding continuous general purpose lane capacity.







## Collectors (Major and Minor)

Mobility and land access are equally important on the collector road system. The collector system provides connections between neighborhoods and from neighborhoods to regional job concentrations and local centers. They also provide supplementary connections between major traffic generators within regional job concentrations. Direct land access and intersections can be more closely spaced than arterials. Collectors typically serve short trips of one to four miles and connect primarily to minor arterials, other collectors, and local streets. Major collectors are typically see higher vehicle volumes and are longer than minor collectors and/or link to more dense development.

## **Local Roads**

Local roads connect blocks and land parcels, with the primary emphasis on land access. In most cases, local roads connect to other local roads and collectors. In some cases, they connect to minor arterials. Local roads serve short trips at low speeds.

## 2050 COMPREHENSIVE PLANNING

For 2050 Comprehensive Plans, communities may propose changes to their existing functional classification networks. If so, these should be coordinated with Council and MnDOT staff before formally submitting change requests. Any changes will need to complete the functional classification change request process if they want the designations in their comprehensive plan to be recognized by the Metropolitan Council, MnDOT, and FHWA.

The functional classification of roads should be identical in both local comprehensive plans and the regional functional class maps. There are three instances where there may be inconsistencies:

- Local municipalities will sometimes use functional classifications which offer further granularity than the regional classification. In this case, the local definitions should be assigned to one of the regional classifications.
- Historically, the collector system was not reviewed in the comprehensive planning process. Differences in the collector system can be corrected by working through the change request process with Council staff.
- There may be a lag between a local jurisdictional change and the resulting change to the regional classification map.
  Please note that changes to the functional roadway classification in a community's comprehensive plan do NOT automatically get changed in the regional functional classification data layer.

Cities and counties within the seven-county region can request changes to the functional classification of roadways they own and maintain to reflect changes in their context and role in the network. All change requests for these communities are submitted to the Metropolitan Council for review. Requested changes must adhere to the criteria outlined the Transportation Policy Plan (TPP) and be consistent with federal guidance. In addition, changes which impact other jurisdictions must be coordinated with them to assure system continuity.

#### Additional Resources

The following resources include further details on functional classification from federal and state sources. If communities intend to designate classifications in their community outside what is found in their system statement, they should consult these guidance documents before engaging with Met Council and MnDOT staff with proposals.

- 2050 Transportation Policy Plan: Functional Classification, Met Council
- Highway Functional Classification Concepts, Criteria and Procedures 2023 Edition, FHWA
- Roadway Data and Support: Functional Classification, MnDOT
- 2020 Urban Area Boundaries, Met Council
- Approaches to Implementing Context-Based Classification of Roadways, Transportation Research Board

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