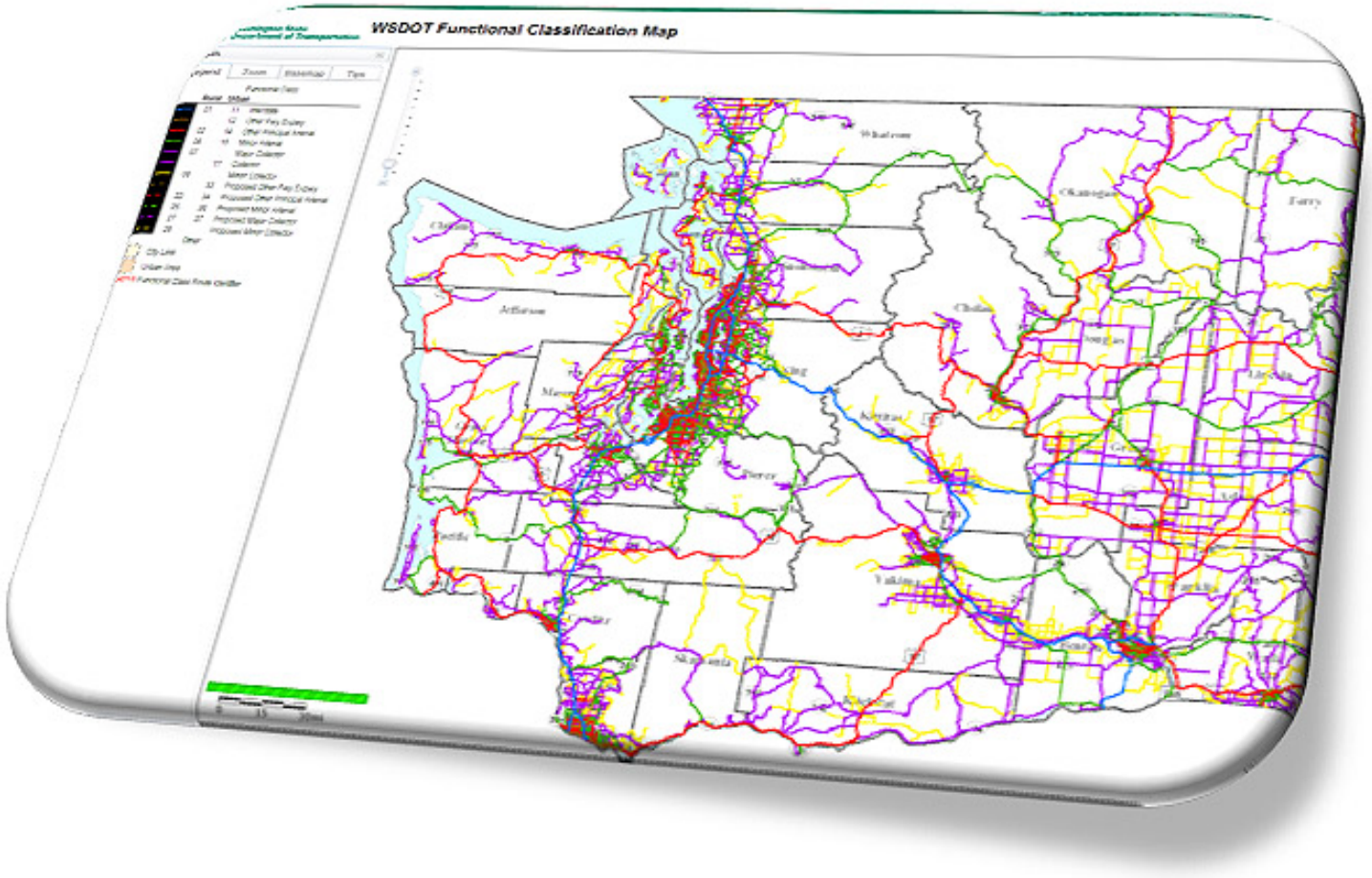
Guidelines for Amending Functional Classification in Washington State

October 2013



Washington State Department of Transportation

Transportation Data & GIS Office (TDGO)

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Prior Guidance:

This guidance document builds upon and updates the two most recent guidance documents circulated by FHWA, namely:

- Highway Functional Classification:
  Concepts, Criteria and Procedures, March 1989.
- Updated Guidance for the Functional Classification of Highways Memorandum, October 14, 2008[1]

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to several factors that contribute to the overall importance of a given roadway to a region or area.
All streets and highways are grouped into one of seven classes, depending on the character of the roadway and the degree of land access that they allow. The seven functional classes are represented by a one-digit code:

Federal Functional Class Codes

FFC Description	NEW FFC Code	Previous FFC Code
Rural Interstate	1	01
Rural Other Freeways / Expressways	2	(did not exist pre 2010)
Rural Other Principal Arterial	3	02
Rural Minor Arterial	4	06
Rural Major Collector	5	07
Rural Minor Collector	6	08
Rural Local Access	7	09
Urban Interstate	1	11
Urban Other Freeways / Expressways	2	12
Urban Other Principal Arterial	3	14
Urban Minor Arterial	4	16
Urban Major Collector	5	17
Urban Minor Collector	6	18 (did not exist pre 2010)
Urban Local Access	7	19

The majority of the concepts presented in the Highway Functional Classification document still hold true within this 2012 guidance document. However, it also incorporates changes specified in the *Updated Guidance for the Functional Classification of Highway Memorandum*. To summarize, the following changes took effect with the issuance of the 2008 memorandum:

1. While the original 1989 guidance document recommended "changing the functional classification when rural routes cross an urban boundary", a follow-up addendum in 1991 said, "Instead of automatically upgrading the functional classification of a rural route that crosses an urban boundary, the rural classification may be continued inside the urban boundary until there is a more logical and acceptable place for a change at a point inside the urban boundary." **This 2012 guidance document reinforces the assertion of the 2008 memorandum which states that, "the practice of automatically upgrading the functional classification of a rural route that crosses an urban boundary should be phased out and eliminated. Upgrading the functional classification due to an actual change in function should be the operative criteria, rather than the location of the urban/rural boundary."**

2. The original 1989 guidance document specified different functional classification categories within urban and rural areas. This 2012 guidance document carries forward the removal of these differences in the Highway Performance Monitoring System (HPMS) code values between urban and rural while still offering separate urban and rural guidance for determining which classification is appropriate. All functional classification categories will now exist in both urban and rural areas.

3. In Washington State, we are not managing FC differently with a new set of rules. The latest FHWA guidance expands upon and clarifies the same concepts that were in place previously. The Functional Class numbering system has been cross walked to a different set of numbers representing the same functional classes (See Crosswalk Table Above). The only difference is the subdivision of Urban Collector into Major and Minor Collector and the subdivision of Rural Other Principal Arterial into Other Freeway/Expressway and Other Principal Arterial so that the rural and urban functional classes all have the same categories.
   We will continue to use both codes until we can phase out the older two-digit codes.
   Please go to the end of this document to view Procedures For Requesting FFC Changes, Process Flowchart, Request Form example, Washington Urban Area Codes Table, and important web-links.

[1] http://www.fhwa.dot.gov/policy/ohpi/hpms/fchguidance.cfm

SECTION 1. INTRODUCTION

The *Highway Functional Classification: Concepts, Criteria and Procedures, 2013 Edition*, describes the procedures and processes for assigning functional classifications to roadways and adjusting urban area boundaries. This document builds upon and modifies prior guidance documents.

Our nation's roadway system is a vast network that connects places and people within and across national borders. Planners and engineers have developed elements of this network with particular travel objectives in mind. These objectives range from serving long-distance passenger and freight needs to serving neighborhood travel from residential developments to nearby shopping centers. The functional classification of roadways defines the role each element of the roadway network plays in serving these travel needs.

Over the years, functional classification has come to assume additional significance beyond its purpose as a framework for identifying the particular role of a roadway in moving vehicles through a network of highways. Functional classification carries with it expectations about roadway design, including its speed, capacity and relationship to existing and future land use development. Federal legislation continues to use functional classification in determining eligibility for funding under the Federal-aid program. Transportation agencies describe roadway system performance, benchmarks and targets by functional classification. As agencies continue to move towards a more performance-based management approach, functional classification will be an increasingly important consideration in setting expectations and measuring outcomes for preservation, mobility and safety.

As a result of the decennial census, the US Census Bureau issues urban area boundary maps. Transportation agencies should review these census boundaries and either accept them as is or adjust them for transportation planning purposes.

This guidance document provides recommended practices for assigning functional classifications and adjusting urban area boundaries concerning roadways that Federal, State and local transportation entities own and operate. Assigning functional classifications and adjusting urban area boundaries requires work elements common to many large-scale business enterprises: there are technical methods and tools to create an efficient and cost-effective end product; there are also procedural elements that require coordination and negotiation across agencies and individuals. This guidance document encompasses both of these elements.

This guidance document also recognizes and describes the implications of how our roadway systems are configured, used and planned for today:

- The Federal-aid system has matured significantly. A significant proportion of new functional classification designations are likely to occur from improvements and modifications to existing roads and corridors, rather than from designations on new roadways and corridors.

- In conducting functional classification updates, State departments of transportation (DOTs) strive for consensus with potentially dozens of agencies, including metropolitan and rural planning agencies, local officials and FHWA Division Offices.
- Geospatial technologies and travel demand forecasting capabilities have advanced significantly, greatly lowering the cost of data storage and increasing analysis capabilities.
- Planners and engineers have expanded roadway design options significantly, especially in areas where providing for non-motorized travel is a priority. Transportation agencies have developed their own classification terms to describe these options.

1.1 Overview

This guidance document builds upon and updates the two most recent guidance documents circulated by FHWA, namely:

- Highway Functional Classification: Concepts, Criteria and Procedures, March 1989
- Updated Guidance for the Functional Classification of Highways Memorandum, October 14, 2008[1]

1. All functional classification categories will now exist in both urban and rural areas. Specifically, all Principal Arterial sub-categories and all Collector sub-categories will be recognized in both urban and rural forms. The following revised functional classification categories should be used:
    a. Principal Arterial
        i. Interstate
        ii. Other Freeways & Expressways (OF&E) (**Figure 1-1**)
        iii. Other (OPA)
    b. Minor Arterial
    c. Collector
        i. Major Collector
        ii. Minor Collector
    d. Local

Figure 1-1: Principal Arterial - Other Freeways & Expressways

Source: Ohio Statewide Imagery Program

2. States should assign functional classifications according to how the roadway is functioning in the current year only. With regard to future routes, roads should be functionally classified with

[1] http://www.fhwa.dot.gov/policy/ohpi/hpms/fchguidance.cfm

the existing system if they are included in an approved Statewide Transportation Improvement Program (STIP) and are expected to be under construction within the STIP timeframe of 4 years or less. Use the current classification for roadways, even replacement roadways that will upgrade the roadway, until construction is complete. Reclassify the new roadway once it has been constructed.

Figure 1-2: HOV Lane on Interstate 95 in Woodbridge, VA

Source: www.roadstothefuture.com

Roadways that fall into the Principal Arterials- Other Freeways & Expressways category are limited-access roadways that serve travel in a similar way to the Interstates.

3. Ramps and other non-mainline roadways are to be assigned the same functional classification as the highest functional classification among the connecting mainline roadways served by the ramp. (**Figure 1-2**)

4. Principal Arterial roadways (**Figure 1-3**) serve a large percentage of travel between cities and other activity centers, especially when minimizing travel time and distance is important. For this reason, Arterials typically are roadways with high traffic volumes and are frequently the route of choice for intercity buses and trucks. The spacing of Arterials in urban areas is closely related to the trip-end density characteristics of activity centers in urban areas. The spacing of these facilities (in larger urban areas) may vary from less than 1 mile in highly developed central business areas to 5 miles or more in the sparsely developed urban fringes.

Figure 1-3: Other Principal Arterial in California

Source: Akos Szoboszlay

Transportation agencies apply a variety of treatments to preserve mobility and increase the person throughput of Urban Arterials, including ramp metering, high-occupancy-vehicle (HOV) lanes and high-occupancy toll lanes.

Principal Arterials play a unique role in providing a high degree of mobility and carrying a high proportion of travel for long distance trips. These facilities carry the major portion of trips entering and leaving an activity center, as well as the majority of through movements that either go directly through or bypass the area.

SECTION 2. CONCEPTS

2.1 Introduction

This section of the guidance document presents the concepts underlying the functional classification of roadways. It first introduces the two primary transportation functions of roadways, namely mobility and access, and describes where different categories of roadways fall within a continuum of mobility-access. In addition to mobility and access, other factors that can help determine the proper category to which a particular roadway belongs — such as trip length, speed limit, volume, and vehicle mix — are discussed in this section.

While Arterials, Collectors and Locals span the full range of roadway functions, the Federal functional classification scheme uses additional classification categories to describe these functions more precisely. Distinctions between access-controlled and full-access roadways; the urban and rural development pattern; and subtleties between "major" and "minor" sub-classifications are key considerations when determining the Federal functional classification category to which a particular roadway belongs. The process of determining the correct functional classification of a particular roadway is as much art as it is science. Therefore, a real-world example is presented to help make the discussion of functional classification more readily understood.

The flow of traffic throughout a roadway network is similar to the flow of blood through the human circulatory system or the trunk and branch system of a tree. The units moving through the system (blood cells, nutrients, vehicles, etc.) move through progressively smaller network elements as they approach their destination.

2.2 Functional Classification Concepts

Most travel occurs through a network of interdependent roadways, with each roadway segment moving traffic through the system towards destinations. The concept of functional classification defines the role that a particular roadway segment plays in serving this flow of traffic through the network. Roadways are assigned to one of several possible functional classifications within a hierarchy according to the character of travel service each roadway provides. Planners and engineers use this hierarchy of roadways to properly channel transportation movements through a highway network efficiently and cost effectively.

2.2.1 Access versus Mobility

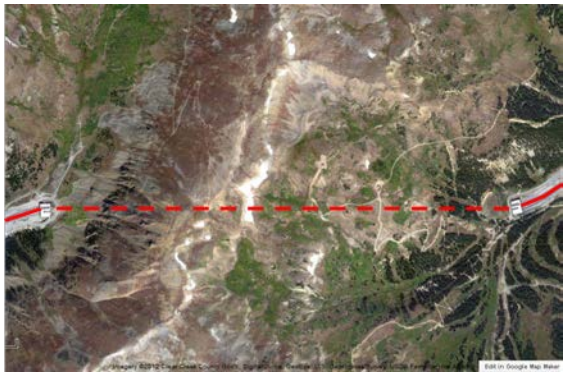
Roadways serve two primary travel needs: access to/egress from specific locations and travel mobility. While these two functions lie at opposite ends of the continuum of roadway function, most roads provide some combination of each.

- Roadway mobility function: Provides few opportunities for entry and exit and therefore low travel friction from vehicle access/egress
- Roadway accessibility function: Provides many opportunities for entry and exit, which creates potentially higher friction from vehicle access/egress

These two roles can be best understood by examining two extreme examples (**Figure 2-1** and **Figure 2-2**).

First, consider the Eisenhower Tunnel west of Denver, CO. Located along Interstate 70, the Eisenhower Tunnel runs under the Continental Divide in the Rocky Mountains and is one of the longest tunnels in the United States. Motorists that travel through the tunnel are en route to a distant location and are using the roadway completely to serve their "mobility" needs. There is no location that is immediately "accessible" to the roadway.

Figure 2-1: Aerial View of the Eisenhower (and Johnson) Tunnels along I-70, west of Denver, CO



Source: Google Earth Pro, June 27, 2012

Figure 2-2: View from Inside the Eisenhower Tunnel

Source: Creative Commons Attribution-Share Alike 2.0 generic license; Benjamin Clark

Next, consider the example of Eisenhower Court in North Platte, NE (**Figure 2-3**). This roadway is travelled almost exclusively by the individuals that live along the roadway. Hence, the roadway entirely provides "accessibility" and offers almost nothing in terms of mobility.

Figure 2-3: Aerial View of Eisenhower Court, North Platte, NE

Source: Google Earth Pro, June 27, 2012

Figure 2-4 depicts the neighborhood around Eisenhower Street in Carrollton, TX. This roadway serves both mobility needs (the residents that live along the side streets that intersect Eisenhower Street use it for some level of north/south mobility) and land access needs (there are both residential and commercial properties located along the roadway).

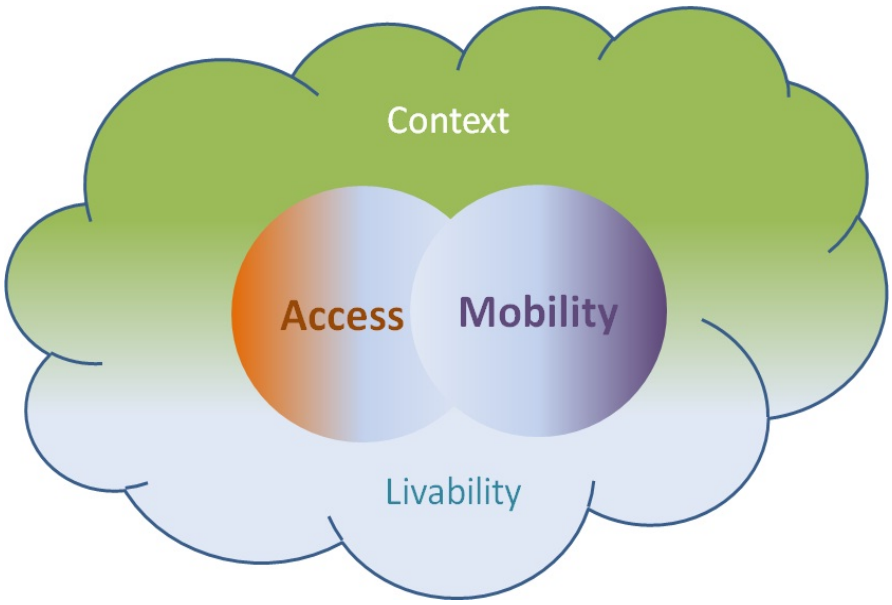
For nomenclature purposes, those roadways that provide a high level of mobility are called "Arterials"; those that provide a high level of accessibility are called "Locals"; and those that provide a more balanced blend of mobility and access are called "Collectors."

Figure 2-4: Aerial View of Eisenhower Street in Carrollton, TX

Source: Google Earth Pro, June 28, 2012

The relationship between mobility and land access is illustrated in **Figure 2-5**. Arterials provide mostly mobility; Locals provide mostly land access; and Collectors strike a balance between the two. Context Sensitivity and Livability form the environment through which Mobility and Access should be considered. These concepts are discussed in greater detail in Chapter 5.

Figure 2-5: Illustration of Access-Mobility Dynamic



Source: FHWA

While most roadways offer both "access to property" and "travel mobility" services, it is the roadway's primary purpose that defines the classification category to which a given roadway belongs.[2]

[2] The use of the term "Local" roadway in the context of functional classification is separate from the use of the term in a jurisdictional context. While it is true that roadways functionally classified as "Local" are often under the jurisdiction of a "local" entity (i.e., incorporated city), Local Roads are not always under local jurisdiction. Other roadway classifications, including Arterials, may also be under the jurisdiction of a local (i.e., non-state) entity.

A route is a linear path of connected roadway segments, all with the same functional classification designation. For example, the roadways along a given Arterial route may — and often do — comprise multiple named roadways or state numbered facilities. Similarly, different segments of a given named roadway, or even more likely a given state numbered route, may belong to different functional classification categories, depending on the character of travel service that each segment provides. In the example to the right, the minor Arterial "route" consists of a portion of Tyler Street and a portion of Dalton Avenue (shown in green). East of Dalton Avenue, Tyler Street (shown in brown) is a Minor Collector.

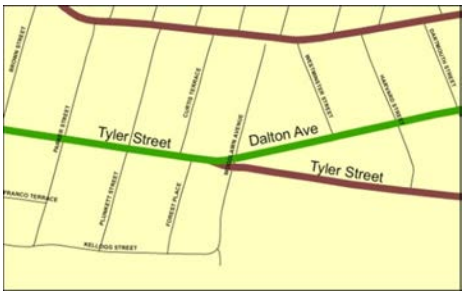
2.3 Other Important Factors Related to Functional Classification

The distinction between "mobility and accessibility" is important in assigning functional classifications to roadways. There are a few additional factors to consider, and these are discussed here.

Efficiency of Travel: Trip makers will typically seek out roadways that allow them to travel to their destinations with as little delay as possible and by the shortest travel time. Arterial roadways provide this kind of service, often in the form of fully or partially controlled access highways, with no or very few intersecting roadways to hinder traffic flow. Therefore, a high percentage of the length of a long-distance trip will be made on Arterials. In contrast, travelers making shorter trips tend to use Local and/or Collector roadways for a much higher proportion of the trip length than Arterial roads.

Collectors: As their name implies, Collectors "collect" traffic from Local Roads and connect traffic to Arterial roadways. Collector routes are typically shorter than Arterial routes but longer than Local Roads. Collectors often provide traffic circulation within residential neighborhoods as well as commercial, industrial or civic districts (see **Figure 2-6**).

Figure 2-6: Collector Example



Source: CDM Smith

Access Points: Arterials primarily serve long-distance travel and are typically designed as either access controlled or partially access controlled facilities with limited locations at which vehicles can enter or exit the roadway (typically via on- or off-ramps). In instances where limited or partial access control is not provided, signalized intersections are used to control traffic flow, with the Arterial given the majority of the green time.

In growing urban areas, Arterial roadways often experience an ever-increasing number of driveway access points. This high degree of accessibility decreases mobility. To address this issue and restore the carrying capacity of through traffic on these roadways, transportation agencies apply access management principles, such as driveway consolidation and median installations (see **Figure 2-7**).

Figure 2-7: Example of Access Points

Source: Ohio DOT, http://www.ahtd.info/basic_bike-

In contrast, roadways classified as "Local" provide direct access to multiple properties.

Speed Limit: In general, there is a relationship between posted speed limits and functional classification. Arterials typically have higher posted speed limits as vehicles encounter few or no at-grade intersections. The absence of cross-traffic and driveways allows for higher rates of speed, which provides mobility, especially for long-distance travel. In contrast, because their primary role is to provide access, Locals are lined with intersecting access points in the form of driveways, intersecting roadways, cross walks and transfer points for buses and other modes. Due to the frequency of traffic turns, speed limits are kept low to promote safe traffic operations. Speed limits on any non-access controlled roadways are also influenced by the mix of vehicles and modes that use them.

Route Spacing: Directly related to the concept of channelization of traffic throughout a network is the concept of distance (or spacing) between routes. For a variety of reasons, it is not feasible to provide Arterial facilities to accommodate every possible trip in the most direct manner possible or in the shortest amount of time. Ideally, regular and logical spacing between routes of different classifications exists. Arterials are typically spaced at greater intervals than Collectors, which are spaced at much greater intervals than Locals. This spacing varies considerably for different areas; in densely populated urban areas, spacing of all routes types is smaller and generally more consistent than the spacing in sparsely developed rural areas. Geographic barriers greatly influence the layout and spacing of roadways.

Usage (Annual Average Daily Traffic [AADT] Volumes and Vehicle Miles of Travel [VMT]): Arterials serve a high share of longer distance trips and daily vehicle miles of travel. In rural areas, Arterials typically account for approximately half of the daily vehicle miles of travel; in urban areas, this percentage is often higher. Collectors account for the next largest percentage of travel. Urban Area Collectors account for somewhat less (5 to 15 percent), while the percentage for Rural Area Collectors is typically in the 20 to 30 percent range. Lastly, by definition, Local Roads in rural areas typically serve very low density, dispersed developments with relatively low traffic volume. In contrast, the Urban Local Road network, with higher roadway centerline miles and higher density spacing, serves denser land uses and therefore accounts for a larger proportion of travel than its rural counterpart.

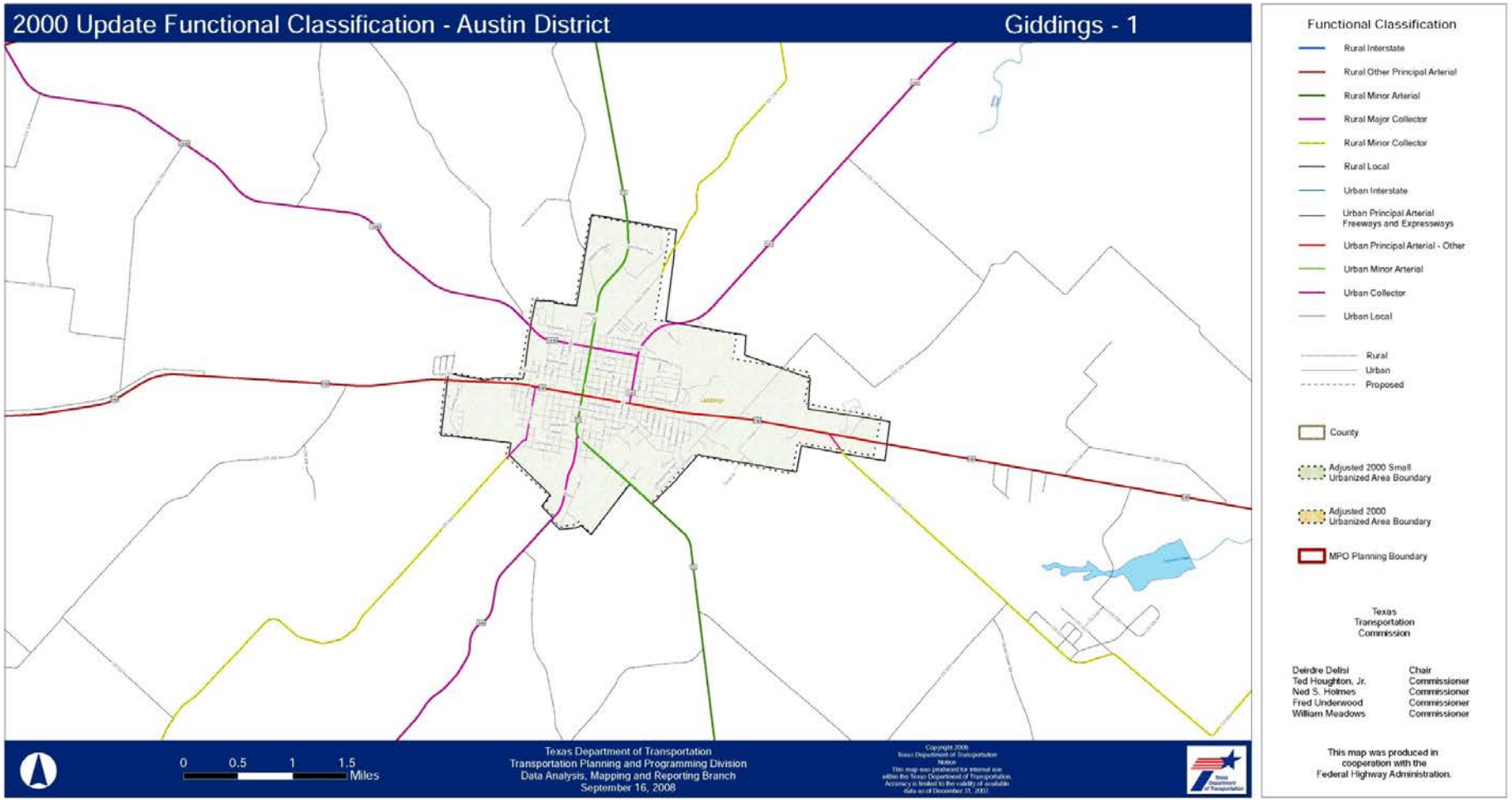
While there is a general relationship between the functional classification of a roadway and its annual average daily traffic volume, two roads that carry the same traffic volume may actually serve very different purposes and therefore have different functional classifications. Conversely, two roadways in different parts of a State may have the same functional classification but carry very different traffic volumes. This is particularly applicable among urban areas with very different populations — an Arterial within a remote city with a population of 50,000 is likely to have a much lower traffic volume than an Arterial within a city of 1 million people.

Traffic volumes, however, can come into play when determining the proper functional classification of a roadway "on the border" of a functional classification group (for example, trying to determine whether a roadway should be classified as a Collector or Local). Furthermore, AADT can often be used as a "tie-breaker" when trying to determine which of two (or more) similar and roughly parallel roadways should be classified with a higher (or lower) classification than the other. For example, suppose that two parallel roadways appear to serve the

When determining the functional classification of a given roadway, no single factor should be considered alone. For example, US 290 runs through the heart of Giddings, TX. Within the city, the roadway has many intersecting roadways, provides direct access to a number of densely developed commercial and residential properties and has speed limits as low as 35 mph. However, because the roadway is one of the two most direct routes of travel between Austin and Houston and a large percentage of its traffic consists of longer distance trips, the roadway is best classified as an Arterial.

function of a Collector. Classifying both of them as a Collector could lead to undesirable redundancy in the functional classification network. All other things being equal, the roadway with the higher AADT would generally be given the Collector classification, while its companion would be given a Local classification (**Figure 2-8**).

Figure 2-8: Functional Classification Map of Giddings, TX and Surrounding Unincorporated Territory



Source: Texas DOT, Transportation Planning and Programming Division, Data Analysis, Mapping and Reporting Branch, September 16, 2008

*Exceptions to the "connectivity" guideline exist. There are locations where an Arterial can "dead end" and not connect to another Arterial. A common example is when an Arterial terminates at a regionally significant land use (such as an airport or military installation). Another example is a Collector that serves a major residential community and, for topological or other constraining reasons, does not connect at one end to another similarly or higher classified roadway. Many other examples can also be found within coastal communities. Wings Neck Road in Bourne, MA (**Figure 2-10**) is a good example. Other obvious examples are Interstate spur routes (the highest type of Arterial, to be discussed in the following section) that terminate at a city street in the downtown of an urban area.*

Number of Travel Lanes: Roadways are designed and constructed according to their expected function. If a roadway is expected to function as an Arterial, it is designed for high capacity, with multiple travel lanes. In general, Arterials are more likely to have a greater number of travel lanes than Collectors, and Collectors are more likely to have a greater number of travel lanes than Locals. It should also be noted that the relationship between functional classification and number of lanes is stronger in urban areas than it is in rural areas.

Regional and Statewide Significance: Highly significant roadways connect large activity centers and carry longer-distance travel between and through regions and States. Arterials carry the vast majority of trips that travel through a given State, while Local Roads do not easily facilitate statewide travel.

Table 2-1 summarizes the relationship between the factors previously described and the three broad categories of functional classification.

Table 2-1: Relationship between Functional Classification and Travel Characteristics

Functional Classification	Distance Served (and Length of Route)	Access Points	Speed Limit	Distance between Routes	Usage (AADT and DVMT)	Significance	Number of Travel Lanes
Arterial	Longest	Few	Highest	Longest	Highest	Statewide	More
Collector	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Local	Shortest	Many	Lowest	Shortest	Lowest	Local	Fewer

2.4 System Continuity

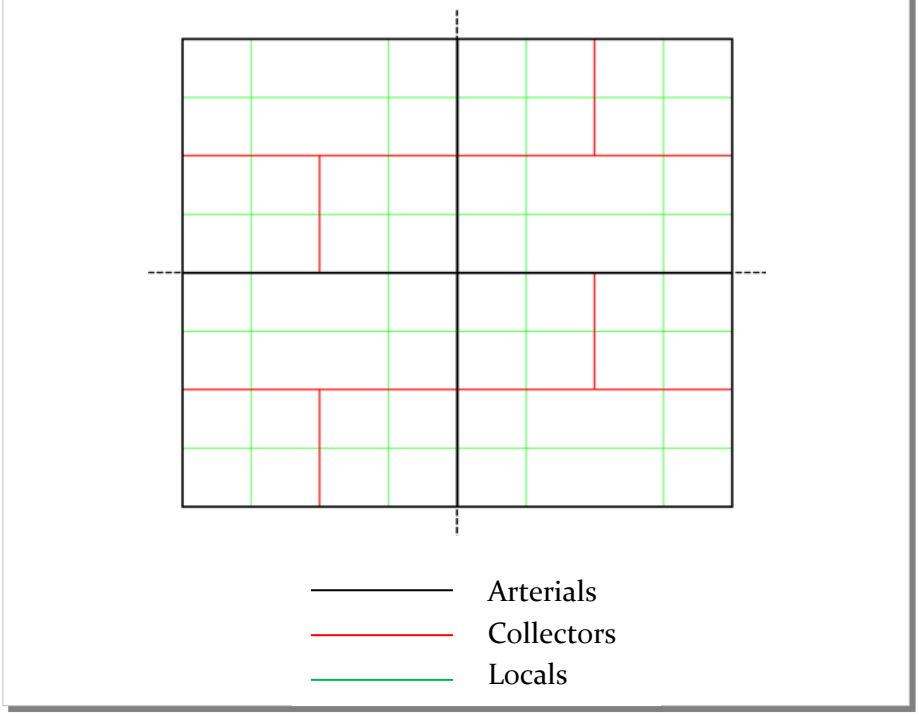
Because the roadway system is an interconnected network of facilities channeling traffic in both directions from Arterials to Collectors, then to Locals and back again, the concept of continuity of routes is important to recognize. A basic tenet of the functional classification network is continuity — a roadway of a higher classification should not connect to a single roadway of a lower classification.[3] Generally speaking, Arterials should only connect to other Arterials. However, there are exceptions to this guideline. Arterials can end or link to very large regional traffic generators or can connect to multiple parallel roads of lower functional classification that, together, provide the same function and capacity as an Arterial.

In **Figure 2-9**, the Arterials (represented by black lines) only connect to other Arterials. Collectors (represented by the red lines), only connect to Arterials or other Collectors. Lastly, Local Roads (represented by the green lines) can connect to any type of roadway.

Exceptions to the "connectivity" guideline exist. A Collector can serve a major residential community and — for topological or other constraining reasons —not connect at one end to another similar or higher classified roadway. Other examples can also be found, especially within coastal communities. Wings Neck Road in Bourne, MA (**Figure 2-10**) is a good example. **Figure 2-11** is an example of an Interstate spur terminating at a city street in Holyoke, MA.

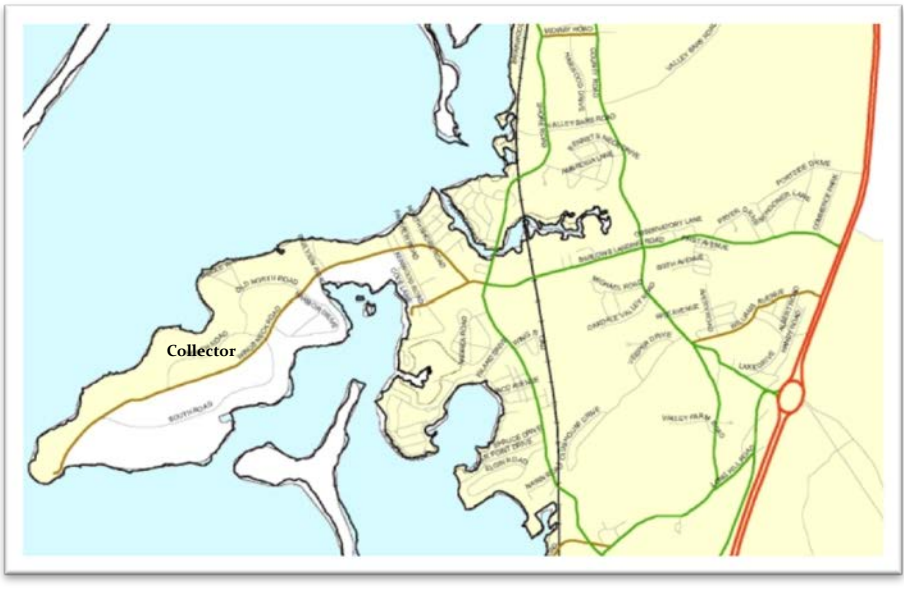
[3] A higher functionally-classified road can "split" its traffic between two lower-level roads, with different levels of access and mobility.

Figure 2-9: Schematic Illustrating the Concept of Continuity



Source: CDM Smith

Figure 2-10: Example of an Exception to the Connectivity Guidelines
Wings Neck Road, Bourne, MA



Source: MassDOT, Office of Transportation Planning, Functional Classification Map

Figure 2-11: Example of an Interstate Spur Terminating at a City Street in Holyoke, MA

Source: Google Earth Pro, June 29, 2012

SECTION 3. CRITERIA

3.1 Definitions and Characteristics

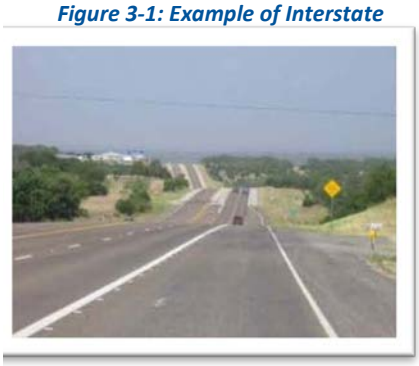
The previous section provided a general overview of the functional classification categories of Arterial, Collector and Local. For Federal functional classification purposes, this section breaks these categories down further to stratify the range of mobility and access functions that roadways serve. Additionally, the physical layout and the official designation of some roadways dictate the classification of certain roadways.

Access control is a key factor in the realm of functional classification. All Interstates are "limited access" or "controlled access" roadways. The use of the word "access" in this context refers to the ability to access the roadway and not the abutting land use—these roadways provide no "access" to abutting land uses. Access to these roadways is controlled or limited to maximize mobility by eliminating conflicts with driveways and at-grade intersections that would otherwise hinder travel speed. Access to these roadways is limited to a set of controlled locations at entrance and exit ramps. Travelers use a much lower functionally classified roadway to reach their destination.

3.1.1 Interstates

Interstates are the highest classification of Arterials and were designed and constructed with mobility and long-distance travel in mind. (**Figure 3-1**) Since their inception in the 1950's, the Interstate System has provided a superior network of limited access, divided highways offering high levels of mobility while linking the major urban areas of the United States.

Figure 3-1: Example of Interstate



Source: CDM Smith

Determining the functional classification designation of many roadways can be somewhat subjective, but with the Interstate category of Arterials, there is no ambiguity. Roadways in this functional classification category are officially designated as Interstates by the Secretary of Transportation, and all routes that comprise the Dwight D. Eisenhower National System of Interstate and Defense Highways belong to the Interstate functional classification category and are considered Principal Arterials.

3.1.2 Other Freeways & Expressways

Roadways in this functional classification category look very similar to Interstates. While there can be regional differences in the use of the terms 'freeway' and 'expressway', for the purpose of functional classification the roads in this classification have directional travel lanes 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.

3.1.3 Other Principal Arterials

Figure 3-2: Example of Other Principal Arterial

Source: CDM Smith

These roadways serve major centers of metropolitan areas, provide a high degree of mobility and can also provide mobility through rural areas. Unlike their access-controlled counterparts, abutting land uses can be served directly. Forms of access for Other Principal Arterial roadways include driveways to specific parcels and at-grade intersections with other roadways. (**Figure 3-2**) For the most part, roadways that fall into the top three functional classification categories (Interstate, Other Freeways & Expressways and Other Principal Arterials) provide similar service in both urban and rural areas. The primary difference is that there are usually multiple Arterial routes serving a particular urban area, radiating out from the urban center to serve the surrounding region. In contrast, an expanse of a rural area of equal size would be served by a single Arterial.

Table 3-1 presents a few key differences between the character of service that urban and rural Arterials provide.

Table 3-1: Characteristics of Urban and Rural Arterials

Urban	Rural
• Serve major activity centers, highest traffic volume corridors and longest trip demands • Carry high proportion of total urban travel on minimum of mileage • Interconnect and provide continuity for major rural corridors to accommodate trips entering and leaving urban area and movements through the urban area • Serve demand for intra-area travel between the central business district and outlying residential areas	• Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel • Connect all or nearly all Urbanized Areas and a large majority of Urban Clusters with 25,000 and over population • Provide an integrated network of continuous routes without stub connections (dead ends)

3.1.4 Minor Arterials

Figure 3-3: Example of Urban Minor Arterial

Source: Unsourced photo

Minor Arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher Arterial counterparts and offer connectivity to the higher Arterial system. In an urban context, they interconnect and augment the higher Arterial system, provide intra-community continuity and may carry local bus routes. **(Figure 3-3)**

In rural settings, Minor Arterials should be identified and spaced at intervals consistent with population density, so that all developed areas are within a reasonable distance of a higher level Arterial. Additionally, Minor Arterials in rural areas are typically designed to provide relatively high overall travel speeds, with minimum interference to through movement. The spacing of Minor Arterial streets may typically vary from 1/8- to 1/2-mile in the central business district (CBD) and 2 to 3 miles in the suburban fringes. Normally, the spacing should not exceed 1 mile in fully developed areas (see **Table 3-2**).

Table 3-2: Characteristics of Urban and Rural Minor Arterials

Urban	Rural
• Interconnect and augment the higher-level Arterials • Serve trips of moderate length at a somewhat lower level of travel mobility than Principal Arterials • Distribute traffic to smaller geographic areas than those served by higher-level Arterials • Provide more land access than Principal Arterials without penetrating identifiable neighborhoods • Provide urban connections for Rural Collectors	• Link cities and larger towns (and other major destinations such as resorts capable of attracting travel over long distances) and form an integrated network providing interstate and inter-county service • Be spaced at intervals, consistent with population density, so that all developed areas within the State are within a reasonable distance of an Arterial roadway • Provide service to corridors with trip lengths and travel density greater than those served by Rural Collectors and Local Roads and with relatively high travel speeds and minimum interference to through movement

3.1.5 Major and Minor Collectors

Collectors serve a critical role in the roadway network by gathering traffic from Local Roads and funneling them to the Arterial network. Within the context of functional classification, Collectors are broken down into two categories: Major Collectors and Minor Collectors. Until recently, this division was considered only in the rural environment. Currently, all Collectors, regardless of whether they are within a rural area or an urban area, may be sub-stratified into *major* and *minor* categories. The determination of whether a given Collector is a Major or a Minor Collector is frequently one of the biggest challenges in functionally classifying a roadway network.

In the rural environment, Collectors generally serve primarily intra-county travel (rather than statewide) and constitute those routes on which (independent of traffic volume) predominant travel distances are shorter than on Arterial routes. Consequently, more moderate speeds may be posted.

The distinctions between Major Collectors and Minor Collectors are often subtle. Generally, Major Collector routes are longer in length; have lower connecting driveway densities; have higher speed limits; are spaced at greater intervals; have higher annual average traffic volumes; and may have more travel lanes than their

Minor Collector counterparts. Careful consideration should be given to these factors when assigning a Major or Minor Collector designation. In rural areas, AADT and spacing may be the most significant designation factors. Since Major Collectors offer more mobility and Minor Collectors offer more access, it is beneficial to reexamine these two fundamental concepts of functional classification. Overall, the total mileage of Major Collectors is typically lower than the total mileage of Minor Collectors, while the total Collector mileage is typically one-third of the Local roadway network (see **Table 3-3**).

Table 3-3: Characteristics of Major and Minor Collectors (Urban and Rural)

MAJOR COLLECTORS	
Urban	**Rural**
• Serve both land access and traffic circulation in higher density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often for significant distances • Distribute and channel trips between Local Roads and Arterials, usually over a distance of greater than three-quarters of a mile • Operating characteristics include higher speeds and more signalized intersections	• Provide service to any county seat not on an Arterial route, to the larger towns not directly served by the higher systems and to other traffic generators of equivalent intra-county importance such as consolidated schools, shipping points, county parks and important mining and agricultural areas • Link these places with nearby larger towns and cities or with Arterial routes • Serve the most important intra-county travel corridors
MINOR COLLECTORS	
Urban	**Rural**
• Serve both land access and traffic circulation in lower density residential and commercial/industrial areas • Penetrate residential neighborhoods, often only for a short distance • Distribute and channel trips between Local Roads and Arterials, usually over a distance of less than three-quarters of a mile • Operating characteristics include lower speeds and fewer signalized intersections	• Be spaced at intervals, consistent with population density, to collect traffic from Local Roads and bring all developed areas within reasonable distance of a Collector • Provide service to smaller communities not served by a higher class facility • Link locally important traffic generators with their rural hinterlands

3.1.6 Local Roads

Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long distance travel, except at the origin or destination end of the trip, due to their provision of direct access to abutting land. Bus routes generally do not run on Local Roads. They are often designed to discourage through traffic. As public roads, they should be accessible for public use throughout the year.

Local Roads are often classified by default. In other words, once all Arterial and Collector roadways have been identified, all remaining roadways are classified as Local Roads (see **Table 3-4**).

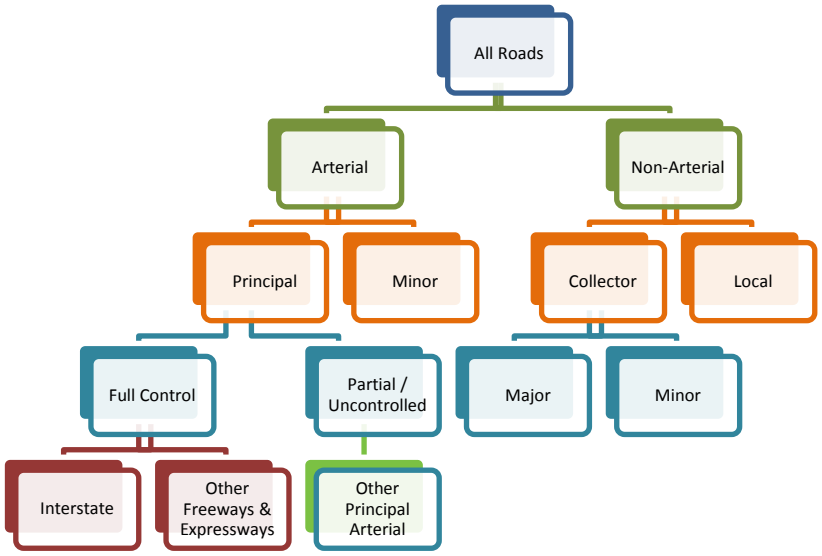
Table 3-4: Characteristics of Urban and Rural Local Roads

Urban	Rural
• Provide direct access to adjacent land • Provide access to higher systems • Carry no through traffic movement • Constitute the mileage not classified as part of the Arterial and Collector systems	• Serve primarily to provide access to adjacent land • Provide service to travel over short distances as compared to higher classification categories • Constitute the mileage not classified as part of the Arterial and Collector systems

3.2 Putting it all Together

The functional classification system groups roadways into a logical series of decisions based upon the character of travel service they provide. **Figure 3-4** presents this process, starting from assigning the function of an Arterial by its level of access (limited or full) or Non-Arterial (full access).

Figure 3-4: Federal Functional Classification Decision Tree



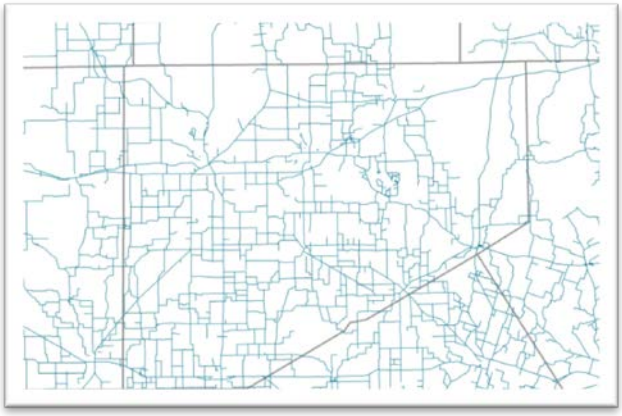
Source: FHWA and CDM Smith

While this document emphasizes the importance of function and service over the urban/rural distinction when classifying roads, the classification process is still influenced by the intensity and distribution of land development patterns. Classification of roadways in urban areas is typically guided by the local comprehensive planning and design process, or the fundamental principles of roadway functional classification. In comparison, rural development patterns are often more diverse, if not less orderly, thereby making the functional classification determination of some rural roadways more challenging (see **Figure 3-5** and **Figure 3-6**).

Figure 3-5: Map of an Urban Area's Roadway Network (Functional Classification more evident)

Source: CDM Smith

Figure 3-6: Map of a Rural Area's Roadway Network (Functional Classification less evident)



Source: CDM Smith

When comparing urban and rural areas, perhaps the most relevant characteristic is the density of the roadway network. Even with a cursory view of a map of an urban area's roadway network, the functional classification of many roadways can be discerned due the differences in roadway size. In contrast, the functional classification of the roadway network in many rural areas is less readily apparent, primarily due to the relatively inconsistent roadway spacing.

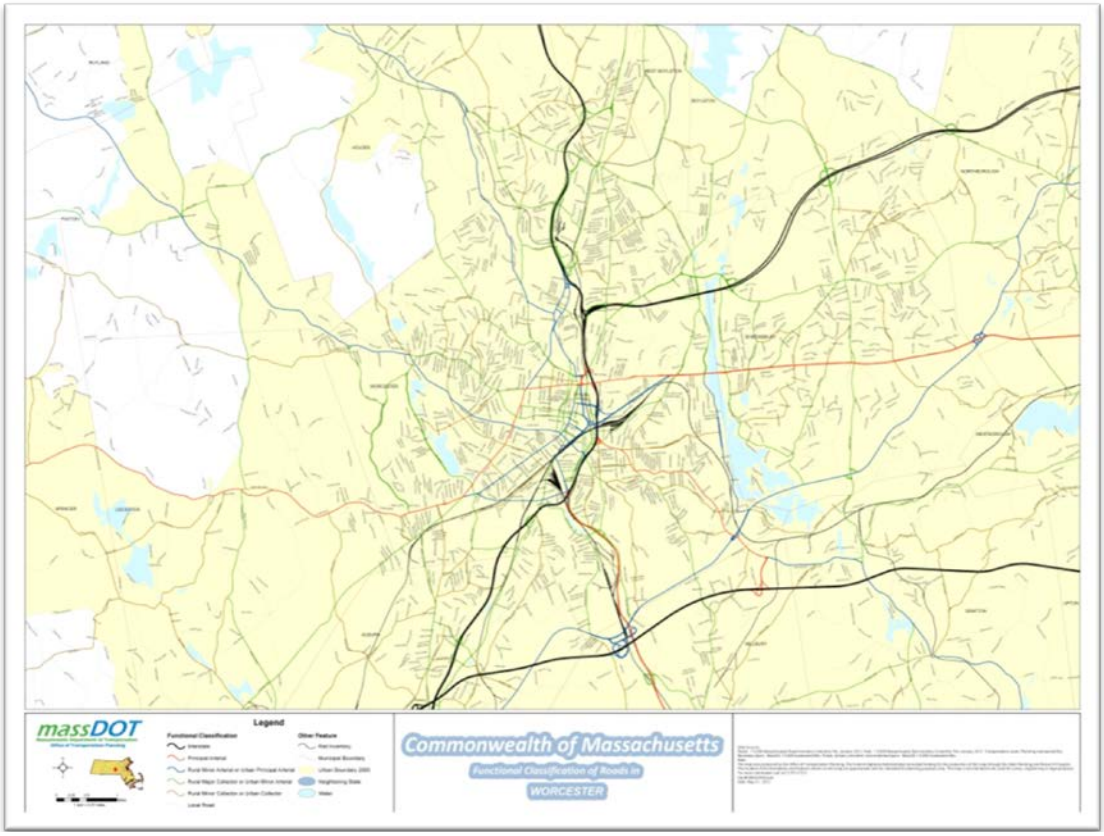
Nevertheless, functional classifications should be assigned based on actual functional criteria, rather than the location of the roadway within an urban or rural context.

3.3 A Real World Example

At this point, the concepts, criteria and definitions of all Federal functional classification categories have been presented. However, to strengthen the functional classification practitioner's understanding of these topics, the real world example of the city of Worcester, MA is presented below (**Figure 3-7**).

Figure 3-7: Worcester, MA Roadway System

Shaded area depicts the Urbanized Area



1. The city of Worcester is served by two interstate routes, Interstate 190 and Interstate 290 (shown in black). These Interstates provide high mobility service to residential communities to the north, northeast and south sides of the city.
2. A handful of Other Freeways & Expressways and Other Principal Arterials (shown in red and blue) radiate out from the central core of the city and provide direct service into, out of and through the city, offering connections to the surrounding areas not served by the Interstates.
3. An even larger number of Minor Arterials (shown in green) provide connectivity between the Interstate, Other Freeways & Expressways and Other Principal Arterials and are rather evenly spaced. Note that only a few of these Minor Arterial routes actually extend outside of the city border, as most of them terminate at Arterials within the city limits.
4. The Collector roadway system (shown in brown) consists of relatively shorter routes that mainly connect to Minor Arterials.
5. All other roadways (shown in gray) are Local Roads and comprise the vast majority of the mileage of the city's roadway network.

3.4 Final Considerations

In many instances, assigning a functional classification to a roadway is straightforward, especially for Interstates and Locals. However, there is flexibility when deciding between adjacent classifications. For example, deciding whether a given roadway acts as a Minor Arterial or Major Collector can be subject to debate. Deciding between a Major Collector and Minor Collector assignment can be even more challenging.

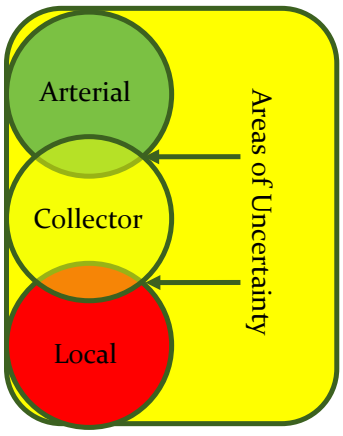
To assist transportation planners responsible for determining the functional classification of roadways, this guidebook offers a helpful tool that can make the classification process of classifying "borderline" roadways a bit easier. **Table 3-5** illustrates the range of lane width, shoulder width, AADTs, divided/undivided status, access control and access points per mile by functional classification categories.

Table 3-5 also presents guidelines for mileage and VMT ranges for Federal functional classifications of roads. These guidelines are based on an analysis of 2008 HPMS data and are adjusted to represent reasonable ranges. The table presents mileage and VMT extents for rural states, urban states and all states. For this purpose rural states are defined as having 75 percent or less of their population in urban areas. Research determined this was a natural breakpoint that approximated the geographic difference between the States.

As expected, Interstates account for the lowest portion of total system miles, but the greatest portion of travel. Conversely, Local Roads comprise the greatest portion of system mileage with Collectors carrying the lowest percentage of travel volume. Therefore, as a primary consideration in functional classification, planners and engineers can use mileage as a guideline. Where roadway systems significantly deviate from these ranges, State DOTs should consider adjusting their roadway assignments during the functional classification review process and at least every 10 years as part of the response to Census defined Urban Boundary changes. FHWA intends to review these guideline ranges for mileage and VMT periodically.

Lastly, as a result of variances within the functional classification system, the guidelines have overlapping ranges of values. This allows greater flexibility in determining functional classification (see **Figure 3-8**).

Figure 3-8: Classification Overlap



Source: FHWA

Table 3-5: VMT and Mileage Guidelines by Functional Classifications - Arterials

	Arterials			
	Interstate	**Other Freeways & Expressway**	**Other Principal Arterial**	**Minor Arterial**
Typical Characteristics				
Lane Width	12 feet	11 - 12 feet	11 - 12 feet	10 feet - 12 feet
Inside Shoulder Width	4 feet - 12 feet	0 feet - 6 feet	0 feet	0 feet
Outside Shoulder Width	10 feet - 12 feet	8 feet - 12 feet	8 feet - 12 feet	4 feet - 8 feet
AADT[1] (Rural)	12,000 - 34,000	4,000 - 18,500[2]	2,000 - 8,500[2]	1,500 - 6,000
AADT[1] (Urban)	35,000 - 129,000	13,000 - 55,000[2]	7,000 – 27,000[2]	3,000 - 14,000
Divided/Undivided	Divided	Undivided/Divided	Undivided/Divided	Undivided
Access	Fully Controlled	Partially/Fully Controlled	Partially/Uncontrolled	Uncontrolled
Mileage/VMT Extent (Percentage Ranges)[1]				
Rural System				
Mileage Extent for Washington State	1% - 2%	0% - 2%	2% - 5%	3% - 7%
Mileage Extent for All States	1% - 2%	0% - 2%	2% - 6%	3% - 7%
VMT Extent for Washington State	18% - 34%	0% - 8%	12% - 29%	12% - 19%
VMT Extent for All States	20% - 38%	0% - 8%	14% - 30%	11% - 20%
Urban System				
Mileage Extent for Washington State	1% - 2%	0% - 2%	4% - 5%	7% - 12%
Mileage Extent for All States	1% - 3%	0% - 2%	4% - 5%	7% - 114%
VMT Extent for Washington State	17% - 30%	3% - 18%	17% - 29%	15% - 22%
VMT Extent for All States	17% - 31%	0% - 17%	16% - 31%	14% - 25%
Qualitative Description (Urban)	• Serve major activity centers, highest traffic volume corridors, and longest trip demands • Carry high proportion of total urban travel on minimum of mileage • Interconnect and provide continuity for major rural corridors to accommodate trips entering and leaving urban area and movements through the urban area • Serve demand for intra-area travel between the central business district and outlying residential areas			• Interconnect with and augment the principal arterials • Serve trips of moderate length at a somewhat lower level of travel mobility than principal arterials • Distribute traffic to smaller geographic areas than those served by principal arterials • Provide more land access than principal arterials without penetrating identifiable neighborhoods • Provide urban connections for rural collectors
Qualitative Description (Rural)	• Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel • Serve all or nearly all urbanized areas and a large majority of urban clusters areas with 25,000 and over population • Provide an integrated network of continuous routes without stub connections (dead ends)			• Link cities and larger towns (and other major destinations such as resorts capable of attracting travel over long distances) and form an integrated network providing interstate and inter-county service • Spaced at intervals, consistent with population density, so that all developed areas within the State are within a reasonable distance of an arterial roadway Provide service to corridors with trip lengths and travel density greater than those served by rural collectors and local roads and with relatively high travel speeds and minimum interference to through movement

1- Ranges in this table are derived from 2011 HPMS data.

Table 3-6: VMT and Mileage Guidelines by Functional Classifications – Collectors and Locals

	Collectors		Local
	Major Collector[2]	Minor Collector[2]	
Typical Characteristics			
Lane Width	10 feet - 12 feet	10 - 11 feet	8 feet - 10 feet
Inside Shoulder Width	0 feet	0 feet	0 feet
Outside Shoulder Width	1 feet - 6 feet	1 feet - 4 feet	0 feet - 2 feet
AADT[1] (Rural)	300 - 2,600	150 - 1,110	15 - 400
AADT[1] (Urban)	1,100 - 6,300[2]		80 - 700
Divided/Undivided	Undivided	Undivided	Undivided
Access	Uncontrolled	Uncontrolled	Uncontrolled
Mileage/VMT Extent (Percentage Ranges)[1]			
Rural System			
Mileage Extent for Washington State	10% - 17%	5% - 13%	66% - 74%
Mileage Extent for All States	9% - 19%	4% - 15%	64% - 75%
VMT Extent for Washington State	12% - 24%	3% - 10%	7% - 20%
VMT Extent for All States	12% - 23%	2% - 9%	8% - 23%
Urban System			
Mileage Extent for Washington State	7% - 13%	7% - 13%[2]	67% - 76%
Mileage Extent for All States	7% - 15%	7% - 15%[2]	63% - 75%
VMT Extent for Washington State	7% - 13%	7% - 13%[2]	6% - 24%
VMT Extent for All States	5% - 13%	5% - 13%[2]	6% - 25%
Qualitative Description (Urban)	• Serve both land access and traffic circulation in higher density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often for significant distances • Distribute and channel trips between local streets and arterials, usually over a distance of greater than three-quarters of a mile	• Serve both land access and traffic circulation in lower density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often only for a short distance • Distribute and channel trips between local streets and arterials, usually over a distance of less than three-quarters of a mile	• Provide direct access to adjacent land • Provide access to higher systems • Carry no through traffic movement
Qualitative Description (Rural)	• Provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance such as consolidated schools, shipping points, county parks, important mining and agricultural areas • Link these places with nearby larger towns and cities or with arterial routes • Serve the most important intra-county travel corridors	• Be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within reasonable distance of a minor collector • Provide service to smaller communities not served by a higher class facility • Link locally important traffic generators with their rural hinterlands	• Serve primarily to provide access to adjacent land • Provide service to travel over short distances as compared to higher classification categories • Constitute the mileage not classified as part of the arterial and collectors systems

1- Ranges in this table are derived from 2011 HPMS data.

2- Information for Urban Major and Minor Collectors is approximate, based on a small number of States reporting.

State DOTs are required to collect, analyze and publish traffic data on the roadways within their borders. Specifically, through the Highway Performance Monitoring System, each roadway segment on the Federal-aid highway (e.g., urban roadways classified as Minor Collectors and above and rural roadways classified as Major Collectors and above) is required to have an AADT value that is based on an actual traffic count within the last3 years. Therefore, AADT is a readily available and objective metric that can be brought into the functional classification determination process.

Mileage and Daily Vehicle - Miles of Travel (DVMT) Ranges: While these guidelines should be considered general rules of thumb, FHWA encourages State DOTs to generate similar statistics for their roadway network and evaluate whether they fall within the normal ranges presented here. States should also apply the urban and rural guidelines as appropriate to their urban and rural areas.

Annual Average Daily Traffic: Roadway traffic volumes are typically expressed as annual average daily traffic (AADT) and represent one of the most objective characteristics of a roadway's usage, providing a standard, easy to understand and simple metric for comparing the relative importance of roadways. In general, the higher the traffic volume is, the higher the functional classification will be (relative to the norms in the surrounding area). Therefore, examining the AADT with other roadways in both the immediate vicinity (and in the region as a whole) is helpful when deciding a "borderline" roadway classification. If, for example, when trying to determine whether a given roadway with an AADT of 3,500 should be classified as a Minor Arterial or Major Collector, most of the Minor Arterials (in the immediate area and the region at large) fall within the 4,000 to 10,000 range, and the Major Collectors fall within the 2,000 to 4,000 range, the roadway should be classified as a Major Collector.

The Big Picture: If there still remains some ambiguity surrounding what classification should be applied to a given roadway, it is often helpful to examine the roadways in close proximity to it and to consider the spacing. For example, if trying to determine whether a roadway should be classified as a Minor Arterial or Major Collector, it is useful to take a "step back" and determine whether any functional classification is under- or over-represented. If the area has a significant number of Minor Arterials, then the roadway could very well be best classified as a Major Collector. Alternatively, if there is not another Minor Arterial within a few mile radius of the roadway (assuming an urban context), then the roadway may best be designated as a Minor Arterial.

Even after careful review of a given roadway's attributes, a small set of roadway segments that are difficult to classify can remain. For this reason, the set of mileage guidelines in Tables 3-5 and 3-6 can help provide high-level guidance regarding both the extent (mileage) and usage (daily vehicle miles of travel [DVMT]) of the roadway system that should fall into the different functional classification categories. While these guidelines have been developed for application at the State level, they can also be applied within regions.

WSDOT FFC Procedures (updated 2013)

1. Requests to revise Functional Classification are developed by the agency having jurisdiction over the route. For those routes extending into another jurisdiction, i.e., a route extending into another city or county, concurrence from the other agency is required.

   Functional classification revision (Supplement) requests should contain the following information:

   - A transmittal letter signed by the Mayor, Chairman of the Board, Public Works Director or other responsible official of the agency.
   - A written description of the route and its termini point descriptions.
   - The length of the requested route.
   - A vicinity map showing the proposed changes.
   - A brief statement explaining why the proposed change is requested and justification for the change.
   - Complete a Functional Classification Request Form for each route. For numerous routes a spreadsheet format is available from our office.

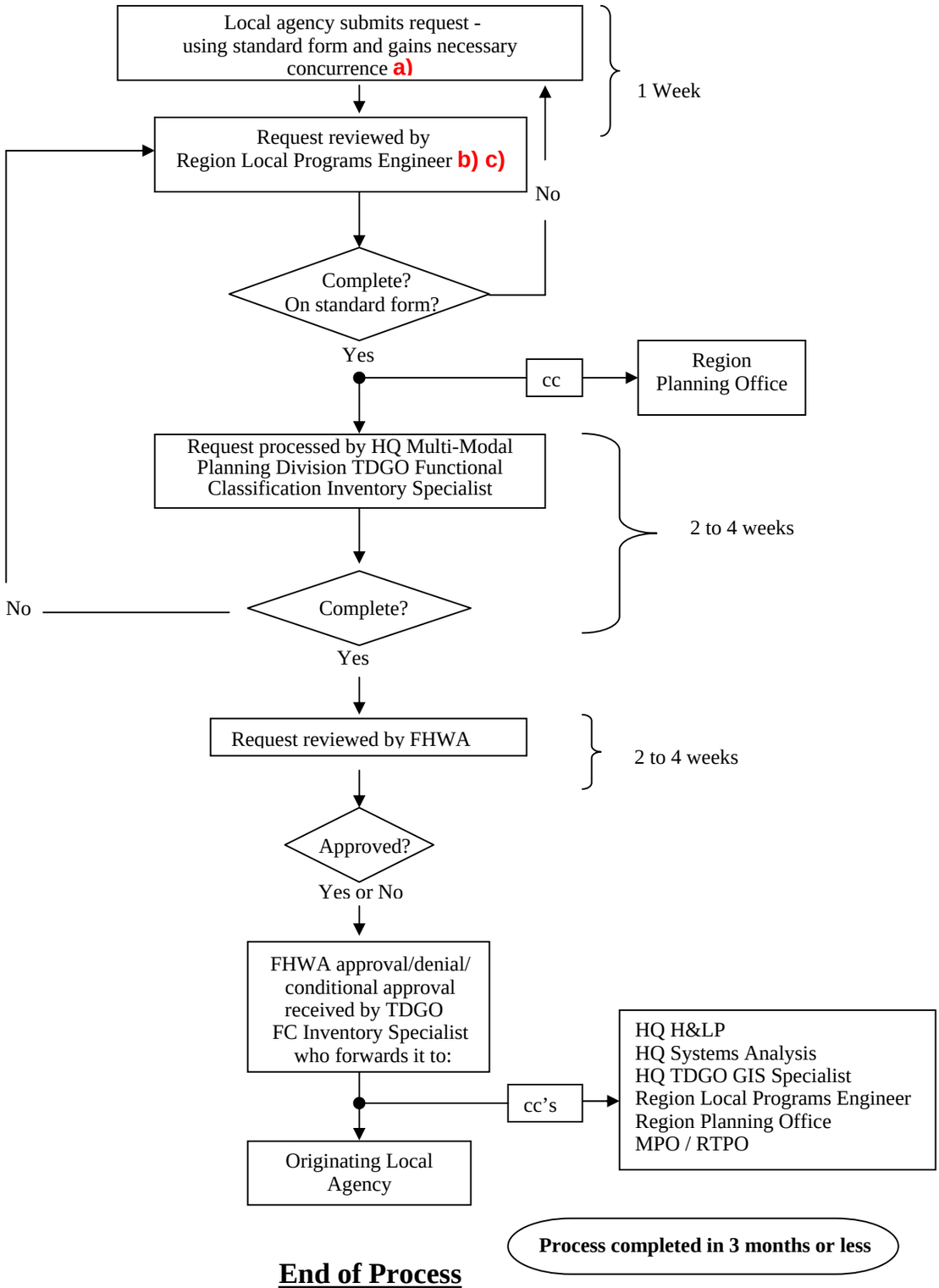
2. The request is submitted to the WSDOT Region Highways and Local Programs Engineer and MPO (if required) for review and comment. If the Region Highways and Local Programs Engineer concurs, he forwards the request and MPO concurrence to the HQ Multi-Modal Planning Division Functional Classification Manager or Inventory Specialist at the Transportation Data and GIS Office (TDGO) or, if he does not concur, he returns the request to the local agency to resolve any disagreements.

3. The Functional Classification Inventory Specialist reviews the request and forwards it to FHWA to obtain their concurrence or returns the request to the Region Highways and Local Programs Engineer if additional information or concurrences are needed before FHWA action can be requested.

4. FHWA's approval, or non-approval, is routed via an Agency Response Letter to the Requesting Local Agency, Region Highways and Local Programs Engineer, Region Planning Office, and MPO/RTPO by the Functional Classification Inventory Specialist.

WSDOT encourages all Local Agencies, and in the case of Urbanized Areas, the MPO's to periodically review their respective Functional Classification Networks to ensure that system continuity and access and/or mobility needs are being served based on the guidelines provided in this 2013 version of: "*Guidelines for Amending Functional Classification in Washington State.*"

Begin Functional Classification Request Process



End of Process

a) If requesting agency is within or partially within an Urbanized Area the MPO must give written concurrence of requested changes prior to submission to Region Local Programs Engineer. In addition, if the requesting agency is not within an Urbanized Area, they must inform the RTPO of the requested change.

b) **Region Local Programs Engineer** ensures that the submitting agency's request is complete with all necessary concurrences prior to submitting to HQ FC Inventory Specialist.

c) If State Route (instead of local agency route) functional classification is to be changed, the process begins with the Region Planning office sending the request to the HQ FC Inventory Specialist following any necessary communication with MPO's / RTPO's. The Region Planning office cc's the Region Local Programs Engineer.

Washington State Department of Transportation

FEDERAL FUNCTIONAL CLASSIFICATION REQUESTS

This form has been developed for use in all future requests for Federal Functional classification changes.
One form should be completed and submitted for each requested classification change. Functional classification changes require coordination with the MPO, if applicable.
Upon completion of the requested forms they should be submitted to the WSDOT Region Local Programs Engineer with a transmittal letter signed by the Mayor, Chairman of the Board or other responsible official of the Requesting Agency.

1. COUNTY or CITY NAME	COUNTY or CITY NO. *(Refer to Local Agency Guidelines)*
2. LOCAL AGENCY CONTACT PERSON AND EMAIL ADDRESS	TELEPHONE NUMBER.
3. LOCAL NAME OF ROUTE	ROUTE NUMBER. *(If State Route use SR No.)*

4. TERMINI OF ROUTE (*Description and milepost (if available)*)

FROM TO LENGTH: Miles

5. TYPE OF AREA *(Federal Aid Highway Urban Area)*: ☐ URBAN ☐ RURAL

6. EXISTING FUNCTIONAL CLASSIFICATION	REQUESTED FEDERAL FUNCTIONAL CLASSIFICATION

(Other Principal Arterial, Minor Arterial, Major Collector, Minor Collector, Local Access)
IF REQUESTED FFC IS PRINCIPAL ARTERIAL, CONSIDER ROUTE'S INCLUSION IN THE NATIONAL HIGHWAY SYSTEM (NHS) AT THIS TIME.

7. SPACING *(Distance to parallel Federal functionally classified route)* Miles:

8. DOES REQUESTED FC CHANGE EXTEND INTO ANOTHER JURISDICTION? ☐ YES ☐ NO
(If yes – concurrence from the other affected agency is required.)

9. EXISTING ROAD CHARACTERISTICS

Roadway Width (incl. shoulders): _____ ft.

Surfacing Type *(mark appropriate space)* ☐ Gravel ☐ ACP ☐ BST ☐ Earth ☐ Other:

10. TRAFFIC GENERATORS *(Generators that route serves – est. AADT)*

INDUSTRIAL: Employees _____ AADT _____

AIRPORTS: Annual Flights _____ AADT _____

MILITARY INSTALLATIONS: Type _____ AADT _____

SHOPPING CENTER: No. Stores _____ AADT _____

OTHER: Type _____ AADT _____

SHIPPING POINTS: Annual Tons _____

RECREATIONAL: Annual Visitors _____
(parks, ski resorts, lakes, beaches, etc.)

AGRICULTURE AREAS: _____

COLLEGE OR UNIVERSITY: Enrollment _____

GOV. INSTITUTION: AADT _____

11. Are there zoning ordinances which can restrict growth or encourage growth of any of the above generators? Please indicate below.

12. TRAFFIC (At significant volume change locations)

Location _____ Existing Traffic _____**AADT**

Future Traffic *(20 years)* _____ **AADT**

Location _____ Existing Traffic _____**AADT**

Future Traffic *(20 years)* _____ **AADT**

13. Written description of route *(General characteristics including alignment, speed limit and how it relates to the surrounding area in terms of importance.)*

14. A brief description why the proposed change is requested and justification for the change. Please include any links to your current Comprehensive Plan and T.I.P. referencing this route. Has NEPA documentation been completed? (Where necessary)

15. Additional remarks to more fully explain the situation.

16. Attach a vicinity map showing the **proposed changes**, and **existing Federal Functional Classifications**.

2013 Urban Areas

UrbanAreaNo	UrbanAreaName	URName	FedUrbanCode
	Urbanized Areas		
1	Seattle - Tacoma - Everett Urbanized Area	Large Urbanized Area	80389
2	Spokane - Spokane Valley Urbanized Area	Large Urbanized Area	83764
3	Vancouver - Camas - Battle Ground Urbanized Area	Large Urbanized Area	71317
4	Kennewick - Pasco - Richland Urbanized Area	Large Urbanized Area	44479
5	Yakima - Selah - Union Gap Urbanized Area	Urbanized Area	97507
6	Olympia - Lacey - Tumwater Urbanized Area	Urbanized Area	65242
7	Bremerton - Port Orchard - Bainbridge Urbanized Area	Urbanized Area	9946
8	Bellingham - Ferndale Urbanized Area	Urbanized Area	6652
9	Longview - Kelso Urbanized Area	Urbanized Area	51283
13	Wenatchee - East Wenatchee Urbanized Area	Urbanized Area	93862
22	Mt Vernon - Burlington - Sedro-Woolley Urbanized Area	Urbanized Area	60490
26	Lewiston - Clarkston Urbanized Area	Urbanized Area	49312
11	Walla Walla - Milton-Freewater Urbanized Area	Urbanized Area	91405
45	Marysville - Tulalip Urbanized Area (Spun off Seattle UA)	Urbanized Area	55333
	Urban Areas:		
10	Aberdeen - Hoquiam - Cosmopolis Urban Area	Small Urban Area	99998
12	Pullman Urban Area	Small Urban Area	99998
14	Port Angeles Urban Area	Small Urban Area	99998
15	Centralia - Chehalis Urban Area	Small Urban Area	99998
17	Ellensburg Urban Area	Small Urban Area	99998
18	Moses Lake Urban Area	Small Urban Area	99998
19	Oak Harbor Urban Area	Small Urban Area	99998
20	Shelton Urban Area	Small Urban Area	99998
21	Anacortes Urban Area	Small Urban Area	99998
23	Cheney Urban Area	Small Urban Area	99998
24	Sunnyside Urban Area	Small Urban Area	99998
25	Ephrata Urban Area	Small Urban Area	99998
27	Toppenish - Zillah Urban Area	Small Urban Area	99998
28	Port Townsend Urban Area	Small Urban Area	99998
31	Grandview - Prosser Urban Area	Small Urban Area	99998
34	Lynden Urban Area	Small Urban Area	99998
36	Othello Urban Area	Small Urban Area	99998
37	Quincy Urban Area	Small Urban Area	99998
38	Camano Island Urban Area	Small Urban Area	99998
41	Birch Bay - Blaine Urban Area	Small Urban Area	99998
	Urban Areas: (New)		
42	Chelan - Manson Urban Area	Small Urban Area	99998
43	Granite Falls Urban Area	Small Urban Area	99998
44	Indianola - Kingston Urban Area	Small Urban Area	99998
46	Montesano - Elma Urban Area	Small Urban Area	99998
47	Ocean Shores Urban Area	Small Urban Area	99998
55	Omak - Okanogan Urban Area	Small Urban Area	99998
48	Sequim Urban Area	Small Urban Area	99998
49	Snoqualmie - North Bend Urban Area	Small Urban Area	99998
50	Stanwood Urban Area	Small Urban Area	99998
51	Sultan - Gold Bar Urban Area	Small Urban Area	99998
52	Wapato Urban Area	Small Urban Area	99998
53	Woodland Urban Area	Small Urban Area	99998
54	Yelm - Roy Urban Area	Small Urban Area	99998
	Rural - No Longer Urban:		
39	Hockinson Urban Area	Was Small Urban Area	99999
~~40~~	Vashon Island Urban Area	Was Small Urban Area	99999

Helpful Weblinks:

WSDOT Functional Classification Website

WSDOT Functional Classification Map

MPO / RTPO / WSDOT Agency Contact Directory