INTRODUCTION

PURPOSE OF DOCUMENT
The intent of this document is to provide a comprehensive guide to Virginia Department of Transportation (VDOT) staff, local government staff /officials, and the public on how the Commonwealth of Virginia manages functional classification. The document is presented in four sections. The first section is a general overview of what functional classification is, how VDOT uses functional class, and who maintains the functional classification. The second section presents FHWA guidelines such as the functional classification definitions and other important information needed to decide the functional classification of a roadway. The third section presents the process for requesting a change to the functional classification system for existing roadways as well as requesting a functional classification for future roads. The final section of the document lists resources available for functional classification in the Commonwealth. After completing this document, the reader should have a basic knowledge of functional classification and its role in the Commonwealth of Virginia’s transportation system.

FUNCTIONAL CLASS BASICS

WHAT IS FUNCTIONAL CLASSIFICATION?
Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Functional classification outlines how travel can be channelized within the network in a logical and efficient manner by defining the part that any particular road or street should play in serving the flow of trips through a highway network.

The bases of the functional usage of a roadway are mobility and accessibility. Travel can be logically related to the roadway's ability to access land and the mobility through an area. Figure 1 shows the relationship between traffic mobility and land access. Different roadway classifications offer different levels of mobility and accessibility. For example, local facilities emphasize the land-access function. Arterials emphasize a high level of mobility for through movement, while, collectors offer a compromise between access and mobility.

Mobility is measured in respect to ability of traffic to pass through a defined area in a reasonable amount of time. Common elements of mobility include:

- Operating speed
- Level of service
- Riding comfort

Figure 1: Proportion of Service
Accessibility is measured in terms of the road system’s capability to provide access to and between land use activities within a defined area.

**WHY DO WE HAVE IT?**
Functional classification began with the passage of the Federal Aid Act of 1921. The Act established a federal aid primary system. More importantly, the Act commissioned the construction of a national roadway network. This network is the foundation of the system of a national defense highway, later known as the national interstate system.

The absence of uniformity among states hindered federal efforts to determine national needs. In order to address this issue, Congress passed the Federal Aid Highway Act of 1973, which mandated the realignment of federal aid roads based in a standardized functional classification system. This process remains in effect today. As part of the process established by the Federal Highway Act of 1973, the Act also requires states to classify roadways eligible for federal aid into standardized functional classifications. In the Commonwealth of Virginia, VDOT’s Mobility Planning Division (TMPD) is responsible for functional classification.

FDWA provides funding to states, territories, and other entities for roadway construction and improvement projects through various programs and related adjustment accounts. Total miles of each functional classification should fall within established percentage ranges defined by the Federal Highway Administration (FHWA). Interstates, urban freeways and expressways, and principal arterials generally received the highest levels of funding. Minor roads—minor arterials, major collectors and minor collectors—typically received the lowest levels of funding. In addition to tracking funding for highway construction and improvement projects, FHWA also collects data on highway characteristics and usage, including information on the length of the nation’s highways.

**HOW does VDOT use functional classification?**
VDOT uses functional classification for the purposes of, funding, design, determining the urban network to identify the thoroughfare system, determining statewide network for the State Highway Needs Assessment Study, and to help establish construction priorities. Functional class affects several factors in VDOT operation:

- **Design Horizon Year**
  Functional classification plays a role in determining a project road improvement’s design horizon year date. This affects the time span over which the facility must be minimally adequate. Secondary roads have an eleven-year design horizon after advertisement, while other systems and selected urban secondary roads require 22-year design horizons after advertisement.

- **Geometric Design Standards**
  Functional classification is used to determine appropriate design standards for roadways. The AASHTO Green Book includes functional classification as a factor in selecting appropriate design controls of a facility. Design controls affected by functional class include design speed and the acceptable degree of congestion during peak hours. Additionally, the VDOT Roadway Design Manual uses functional classification to
determine which applicable geometric design standards apply to a particular road. Lastly, VDOT district engineers assess roadways for local and/or subdivisions by the proposed functional classification, as specified by the VDOT Subdivision Street Requirements.

- **Allocation of Transportation Funding within the Commonwealth**
  Functional class plays a key role in the allocations of transportation funds from the Commonwealth to the VDOT Districts. Virginia code outlines roadways eligible for funding based on federal functional classification and allocates transportation funding differently based on functional class. This is the case for state primary roads (arterials) and lower functional classifications. For example, the Commonwealth Transportation Board allocates funding for arterials and interstates among the nine VDOT construction districts. However, in regards to lower functional classifications, VDOT allocates money to jurisdictions based on the number of moving-lane-miles available to peak-hour traffic and functional class.

- **Maintenance Payments**
  Maintenance payment amounts that a locality will receive, if the locality has responsibility or assumes responsibility for road maintenance care (dollars per moving lane mile {open at peak-periods}). The functional classification defines the amount of funding as well as the type of maintenance funding available for roadways. For example, maintenance payments to jurisdictions are based on federal functional classification. Two different categories defined by functional class, principal and minor arterial roads and collector roads and local streets divide funding allocation. In addition to funding sources, functional class plays a role in the frequency of VDOT maintenance inspections as well as prohibitions on vehicle parking on certain roads to reserve through lanes for peak period use.

- **Development and Maintenance of Local Roads**
  According to federal law, development and/or maintenance of local roads are ineligible for federal funding (per 23 USC 101(a)(5)). Responsibilities for this class of roads are private, local and/or state government concerns. It is the responsibility of the Commonwealth to fund maintenance and construction of any roads classified as local by the functional classification. VDOT maintains local roads for most jurisdictions or provides funding for jurisdictions that maintain their own roads.

- **Access Management**
  Functional class is an important part of design criteria for access management features (spacing-frequency and/or type of access) such as interchanges, intersections, and roadside entrance, exit and/or driveway points. For example, roads classified as principal arterial with a speed limit between 35 and 40 mph are required to have a to have 1,320 feet between intersections. However, a collector with the same speed limit is required to have 660 feet between intersections.

- **Traffic Calming**
  Functional class is one of the factors of eligibility for traffic calming measures. According to VDOT, only roads classified as collector roads and local roads are eligible
for traffic calming measures. Examples of physical traffic calming measures include speed humps, chokers, and raised crosswalks. Any roads classified as higher than collectors are ineligible for such traffic calming measures.

- **Data Recording, Reporting and Documentation**
  Data-record group types, such as mileage table records for selected road classes, such as for highway performance monitoring system (HPMS). For example, urban summaries reported to HPMS require information about travel, land area and population for roadways classified as local. However, the urban summary report does not require data from any other functional classification.

**PROGRAMS OR PLANS AFFECTED BY FUNCTIONAL CLASS**

Functional class most often affects the Long Range Transportation Plan (LRTP) and Transportation Improvement Plans (TIP). For example the Hampton Roads Transportation Planning Organization only includes “regionally significant” roadways in its long range transportation plan. These include selected collector roadways and roadways being defined as minor arterials and above. Functional class also has an influence on the priority of candidate projects in the LRTP.

Functional class also effects congestion management planning. This type of planning, among other things, looks at existing and future roadway congestion levels throughout the region. These congestion levels are determined using Highway Capacity Manual methods and many characteristics for each roadway, including functional class.

Other plans and programs that are affected by functional class mentioned:

- Corridor Studies
- Long Range Bicycle and Pedestrian Plan
- Model Networks
- Travel Demand Forecasting
- Land Use Forecasting
- MPO travel demand model updates and maintenance
- Rural Work Program, determines what roads can be included in projects
- The Transportation segment of the County Comprehensive Plans and City Master Plans

**WHO MAINTAINS THE RECORD SYSTEM OF FUNCTIONALLY CLASSIFIED ROADS?**

The Transportation and Mobility Planning Division (TMPD) has the sole responsibility to maintain the Federal Functional Classification System for the Commonwealth of Virginia. The TMPD has the responsibility of maintaining the State Functional Classification inventory and maps. In order to assign functional class, the TMPD determines the functional classification of the road by type of trips, volume, what system the roadway connects, and whether the proposed functional classification falls within the percentage guidelines established by FHWA.
HOW TO IDENTIFY FUNCTIONAL CLASSIFICATION

The FHWA sets functional classification guidelines to preserve consistency between states. FHWA sets the functional classifications, which changed since the last update in 2005. This document covers the basic concepts needed to identify the functional classification of a roadway in two different sections. The first section covers the definitions and features of FHWA’s functional classifications. The second section explains other concepts related to the functional classification of roadways.

ROADWAY CLASSIFICATIONS

FHWA has seven functional classifications, interstate, other freeways and expressways, other principal arterial, minor arterial, major collector, minor collector and local. Each classification is based on the roadway’s function within the roadway system. FHWA sets requirements for the functional classifications. FHWA provides descriptions of typical features of each functional classification. For more detailed descriptions of the FHWA functional classifications, please refer to FHWA’s Highway Functional Classification Concepts, Criteria and Procedures, 2013 Edition.

Since the last update to the Commonwealth’s functional classification occurred in 2005, there have been major changes in the functional classifications. New guidelines from FHWA (Memorandum dated October 14, 2008 – Updated Guidelines for Functional Classification of Highways) changed the way roadways are classified. The new guideline bases functional class primarily on the function of the road, not the road’s location in regards to the urban and rural boundary. Urban and rural boundaries are a secondary category, based on the decennial census. Table 1 outlines the differences between the old and new functional classifications.

Table 1: New Functional Classifications

<table>
<thead>
<tr>
<th>New Functional Classifications</th>
<th>Old Urban Functional Classifications</th>
<th>Old Rural Functional Classifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>Urban Interstate</td>
<td>Rural Interstate</td>
</tr>
<tr>
<td>Other Freeways and Expressways</td>
<td>Urban Other Freeways and Expressways</td>
<td></td>
</tr>
<tr>
<td>Other Principal Arterial</td>
<td>Urban Other Principal Arterials</td>
<td>Rural Other Principal Arterials</td>
</tr>
<tr>
<td>Minor Arterial</td>
<td>Urban Minor Arterial</td>
<td>Rural Minor Arterial</td>
</tr>
<tr>
<td>Major Collector</td>
<td>Urban Collector</td>
<td>Rural Major Collector</td>
</tr>
<tr>
<td>Minor Collector</td>
<td></td>
<td>Rural Minor Collector</td>
</tr>
<tr>
<td>Local</td>
<td>Urban Local</td>
<td>Rural Local</td>
</tr>
</tbody>
</table>
**Interstate**

Interstates are the highest classification and designed with mobility and long-distance travel in mind. This classification is for highways designated as part of the Eisenhower Interstate System. Roadways classified as interstates are limited access, divided highways with the highest level of mobility. There is also no ambiguity in the functional classification, as only the Secretary of Transportation can designate a roadway as an interstate.

**Other Freeways and Expressways**

This classification is for highways that are generally divided with partial or full control-of-access. They primarily serve through traffic and major circulation movements within or around Urban Areas. These routes provide connecting links between interstates, principal arterials and minor arterials.

**Change from Previous Guidance:** Previously, rural roadways could not be designated as Other Freeways and Expressways. All arterials in rural areas were designated as Other Principal Arterials. With the new guidance, rural roadways that meet the criteria can be designated as Other Freeways or Expressways.

**Other Principal Arterials**

The classification of Other Principal Arterials differs based on whether the facility is located in an urban or rural area. In rural areas, Other Principal Arterials serve corridor movements of substantial statewide or interstate travel and provides an integrated network without stub connections (dead ends). This network connects all or nearly all Urbanized Areas and a large majority of Urban Clusters with populations of 25,000 and over.

Other principal arterials in urban areas serve the major activity centers of a metropolitan area and the highest traffic volume corridors. These facilities carry a high proportion of total urban travel on the minimum amount of mileage and provide continuity for major rural corridors to accommodate trips entering and leaving an urban area. Lastly, Other Principal Arterials carry a significant amount of intra-area travel, and serve demand between the central business district and outlying residential areas of a metropolitan area.

**Minor Arterials**

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. Classification is based on whether the facility is in an urban or rural area.

In rural areas, Minor Arterials link cities and large towns, along with other major traffic generators, and form an integrated network providing interstate and inter-county service. The design in rural areas typically provides for relatively high overall speeds, with minimum interference to the through movement. Minor Arterials are spaced at intervals, consistent with population density, so that all developed areas within the state are within a reasonable distance of...
an arterial roadway. They also provide service to corridors with trip lengths and travel density greater than those served by rural collectors or local systems.

In urban areas, Minor Arterials interconnect with principal arterials, augment the urban principal arterial system, and provide service to trips of moderate length at a lower level of travel mobility than principal arterials. Minor Arterials include all arterials not classified as principal arterials and contain facilities that place more emphasis on land access. These facilities provide more land access than Principal Arterials without penetrating identifiable neighborhoods. Minor Arterials serve trips of moderate length at a somewhat lower level of travel mobility than Principal Arterials and distribute traffic to smaller geographic areas than those served by higher-level Arterials.

**Major Collector**

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 minor collectors may. In rural areas, Major Collectors provide service to any county seat not on an arterial system, to larger towns not directly served by higher systems. Major Collectors also link these places to nearby larger towns and cities or with arterial routes and serve the most important intra-county travel corridor.

Major Collectors in Urban Areas provide land access and traffic circulation within residential neighborhoods, commercial, and industrial areas. These collectors distribute trips from the arterials through the aforementioned areas to their ultimate destination, collect traffic from local streets, and channel it to the arterial system.

**Change from Previous Guidance:** The most recent functional class guidelines differentiate between major collectors and minor collectors in both the urban and rural environments. Previous guidance only considered this division in rural environments, and all collectors in urban areas were classified as Urban Collectors. However, FHWA guidance allows urban collectors to be classified as either minor or major collectors with minor collectors in urban areas still eligible for federal funding. For more information on the classification of Major Collectors, please refer to FHWA’s Highway Functional Classification Concepts, Criteria and Procedures, 2013 Edition.

**Minor Collector**

In rural areas, minor collectors are spaced at intervals, consistent with population density. Minor Collectors collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road. Minor Collector facilities provide service to the remaining smaller communities and link local traffic generators with their rural hinterland.

In urban areas, Minor Collectors serve both land access and traffic circulation in lower density residential and commercial/industrial areas. Typical operating characteristics of Minor Collectors include lower speeds and fewer signalized intersections. Minor Collectors penetrate residential neighborhoods, but only for a short distance.
Local

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.

In rural areas, local roads serve primarily to provide direct access to adjacent land. Local Roads provide service to travel over relatively short distance as compared to collectors or other higher systems. All facilities not classified on one of the higher systems in rural areas are classified as Local Roads.

In urban areas, Local Roads serve primarily as direct access to abutting land. Local Roads provide access to higher order systems and all facilities not on one of the higher systems. Through traffic movement is deliberately discouraged for Local Roads in urban areas.

Other functional classification information

The FHWA includes other guidelines to follow in the classification of roadways. This includes the National Highway Systems (NHS), Principal Arterial requirements, the urban/rural boundary, crossings, route spacing, and the state functional classification system. These guidelines help with the functional classification of roadways beyond FHWA’s definitions.

National Highway Systems (NHS)

The National Highway System (NHS) is a system of roadways of significant importance to the economy, defense and mobility of the United States. It is not limited to interstates, and includes many different types of roadways. During the functional classification update, roadways are assessed for eligibility of the national highway system. There are five classifications for the NHS:

- **The Interstate System:** Consists of facilities designated as part of the Eisenhower Interstate System of Highways by FHWA.
- **Other Principal Arterials:** These are highways in rural and urban areas, which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal facility. With the passage MAP-21, all principal arterials are automatically added to the National Highway System.
- **Strategic Highway Network (STRAHNET):** The STRAHNET is a network of highways that are important to the United States' strategic defense policy. This highway network provides defense access, continuity and emergency capabilities for defense purposes. STRAHNET includes highway connectors to major military installations and ports. Not all routes leading to military installations and ports are included in STRAHNET, only the route that is most direct and has the highest functional class.
- **Major Strategic Highway Network Connectors:** These highways provide access between major military installations and highways that are part of the Strategic Highway Network.
• **Intermodal Connectors:** These highways provide access between major intermodal facilities and the other four subsystems making up the National Highway System. The primary criteria are based on annual passenger volumes, annual freight volumes, or daily vehicular traffic on one or more principal routes that serve the intermodal facility. The secondary criteria include factors that underscore the importance of an intermodal facility within a specific state.

The NHS helps identify high priority corridors of national importance, and direct funding where it is most needed. When assessing the functional classification of a roadway, it is important to also decide if the roadway meets the qualifications of one of the NHS classification to maximize the funding available for a roadway. For more on the NHS, visit FHWA’s website on NHS.

**Principal Arterial Requirements**

The new functional classification system also addresses route continuity to ensure Principal Arterial maintain route continuity in a “closed loop” system. As shown in Figure 2, a principal arterial may not end at a road with a lower functional classification. When classifying roadways, care must be taken to ensure that this rule is followed, and that all Principal Arterials maintain the “closed loop” system. For more information on Principal Arterial requirements, refer to FHWA’s *Highway Functional Classification Concepts, Criteria and Procedures, 2013 Edition*.

**Figure 2: Correct and Incorrect Functional Classification**

![Correct and Incorrect Functional Classification](image)

**Urban/Rural Boundary**

The urban/rural boundary is applied to the roadway system after the completion of the functional classification. The urban/rural boundary used is the decennial Census boundary. FHWA allows that the boundary may be smoothed to allow areas that are urban in nature, but lack population, to be included as urban areas.
Changes from Previous Guidance: The role of the urban and rural boundary in functional class has changed with the new FHWA guidelines. Historically, a roadway’s functional classification would change at an urbanized area boundary going from rural to urban areas with the route being classified one category higher in the urban area. With new guidelines, the urban /rural boundary does not play a role in the functional classifications and the road should be classified as how it functions.

Crossings
Extra care should be taken when classifying routes that cross either rivers or freeways and expressways. Though some of these crossing may carry low volumes, they may also be the only crossing for a significant distance. Therefore, the roadway functions more as a collector rather than a local roadway. Those classifying these crossings should take the number of crossings within a reasonable distance into consideration.

Route Spacing
Distance between routes is another major part of assigning functional classification. Typically, roadways of higher classification are at a greater distance from each other than lower functional classifications. For example, arterial streets are typically spaced at greater intervals than collector streets, which are spaced at much greater intervals than local streets. The spacing between the same functional classifications can vary 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 can also greatly influence the layout and spacing of roadways.

For example, the spacing of arterials in urban areas is closely related to the density characteristics of activity centers in urban areas. The spacing (in larger urban areas) may vary from less than one mile in highly developed central business areas to five miles or more in the sparsely developed suburban areas. Conversely, in rural settings, Minor Arterials are spaced at intervals consistent with population density, so that all developed areas are within a reasonable distance of a higher level arterial. The spacing of Minor Arterial streets may typically vary from 1/8- to 1/2-mile in the central business district (CBD) and two to three miles in the suburban fringes.

Federal versus State Functional Classification System
VDOT uses Federal Functional Classification Guidelines to classify Virginia roadways. Virginia currently uses other classifications for State administrative-funding classifications that refer to the State Primary, Secondary and Urban systems. Virginia has applications that use the federal system in mixture with the state administrative systems. One example of this is distributing maintenance funds for urban and urbanized area localities who undertake maintenance responsibility in their jurisdiction. Table 2 below from the VDOT 2007 Urban Manual, maintenance payments (as either arterial or non-arterial payments) are mapped between the federal and state systems.

<table>
<thead>
<tr>
<th>Federal Area Class</th>
<th>Federal Classification</th>
<th>State Classification for Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Principal Arterial</strong></td>
<td>Arterial (Principal)</td>
</tr>
<tr>
<td>Urbanized (Pop &gt; 50,000)</td>
<td><strong>Minor Arterial</strong></td>
<td>Arterial (Minor)</td>
</tr>
<tr>
<td></td>
<td><strong>Collector</strong></td>
<td>Collector</td>
</tr>
<tr>
<td></td>
<td><strong>Local</strong></td>
<td>Local</td>
</tr>
<tr>
<td>Urban (Pop 5,000 – 50,000)</td>
<td><strong>Principal Arterial</strong></td>
<td>Arterial (Principal)</td>
</tr>
<tr>
<td></td>
<td><strong>Minor Arterial</strong></td>
<td>Arterial (Minor)</td>
</tr>
<tr>
<td></td>
<td><strong>Collector</strong></td>
<td>Collector</td>
</tr>
<tr>
<td></td>
<td><strong>Local</strong></td>
<td>Local</td>
</tr>
<tr>
<td>Rural (Town 3,500 - &lt;5,000, or if under 3,500 maintains its own streets)</td>
<td><strong>Principal Arterial</strong></td>
<td>Arterial (Principal)</td>
</tr>
<tr>
<td></td>
<td><strong>Minor Arterial</strong></td>
<td>Arterial (Minor)</td>
</tr>
<tr>
<td></td>
<td><strong>Major Collector</strong></td>
<td>Arterial (Minor)*</td>
</tr>
<tr>
<td></td>
<td><strong>Minor Collector</strong></td>
<td>Collector</td>
</tr>
<tr>
<td></td>
<td><strong>Local</strong></td>
<td>Local</td>
</tr>
</tbody>
</table>

* Those facilities that qualify as major collector in the federal system in areas of under 5,000 population will be functionally classified in the state system as an Arterial (per Policy, item e.).
REQUESTING CHANGES TO AN EXISTING ROAD’S FUNCTIONAL CLASSIFICATION

VDOT assigns all public roads within the Commonwealth of Virginia a functional classification based on the criteria and guidance provided by FHWA. The functional classification assigned to a particular roadway is based on its function. Over time, the function of a particular road may change and thus requires that its functional classification should also change. Some examples or reasons of why a road’s function could change include:

- A new parallel facility is built that better serves through (region) traffic while the old facility now predominately serves local traffic resulting in the needed to lower the functional classification on the old road;
- Over time, a road is widened and traffic volumes significantly increase on the road. The regional significance of the roadway increases resulting in a need to increase the functional classification on the road;
- Regional activity centers are developed along a particular road increasing the importance of the road for regional mobility resulting in a need to increase the functional classification on the road;
- A road is extended and connected to a higher functional classification road requiring the existing road to be upgraded to the higher functional classification, and
- A road is disconnected by development from higher functional classification roads requiring the existing road to be downgraded to a lower functional classification.

Over the years, VDOT received many requests to change the functional classification of many roads. The basis of some requests was not on the road’s function, but for other reasons. The following are NOT reasons to change a road’s functional classification:

- Upgrading a road’s functional classification to be available for additional funding sources such as federal aid funds or maintenance funds;
- Upgrading a road’s functional classification to increase its priority in receiving improvements;
- Downgrading a road’s functional classification to relax design standards or access management standards, and
- Downgrading a road so it is eligible for traffic calming measures.

The channels to request a functional classification change differ based on the nature of the request and the person or entity making the request. When a road’s function has changed or will change based on other infrastructure improvements, VDOT’s Transportation & Mobility Division receives the request to change the road’s functional classification. Request for changes generally begin with local governments whether a City, Town or County or with a Metropolitan Planning Organization (MPO). Requests from local governments within MPO areas should go through the MPO. Citizens or developers that want a change must work through their local government’s technical staff and elected officials to request a change. VDOT staff can also initiate a functional class change. Other governmental agencies requesting a change, such as a transit agency, should work through VDOT, a MPO or a local government.
The next three sections discuss the process for making functional classification changes on existing roads for requests from 1) Local Governments in MPO Regions; 2) Local Governments outside MPO Regions; 3) VDOT or other governmental/quasi-governmental agency. Each request case includes a flowchart diagramming the process. The flowchart and accompanying text is expected to help local governments, MPOs and VDOT to navigate smoothly through the functional classification change process.

CASE 1: REQUESTS FROM LOCAL GOVERNMENTS IN MPO REGIONS

Local governments initiate many of the changes to the Commonwealth’s Functional Classification. For local governments in MPO regions, the MPO should approve the functional classification change prior to submittal to VDOT. The flowchart in Figure 3 and the following six steps outline the process for requesting a change.

STEP 1:
A Town, City, or County must formally request a change by filling out the VDOT Functional Class Request Form. Maps depicting the facility and a resolution signed by the Town Council, City Council, County Board of Supervisors, or any other responsible governing body must accompany the request form. The local government sends the request to the MPO or PDC for review.

STEP 2:
After the local government submits the request to the MPO committee or PDC director for approval, the MPO or PDC gives a recommendation for approval. The MPO or PDC either forwards the request to VDOT District Planner or denies the request.

STEP 3:
The VDOT District Planner is responsible for ensuring that all the information needed for the request to be approved is provided and sufficient for change approval. If more information is required, the District Planner sends the form back with instructions on the missing information. If the form is complete and sufficient for change approval, the request for change is forwarded to TMPD Central Office.

STEP 4:
TMPD performs a review of the request’s classification and consistency with Federal guidelines. A three-person committee reviews the proposed changes and makes recommendations. If the committee finds the request valid, a recommendation for approval is sent to FHWA. If denied, TMPD notifies all parties involved of the committee’s decision.

STEP 5:
The FHWA makes the final decision on approval or denial of a functional class change. FHWA returns the final decision to the TMPD.

STEP 6:
The TMPD notifies all parties involved of the approval or denial of the request made by FHWA.
Figure 3: Case 1-Requests from Local Government in MPO Regions

Step 1: TOWN, CITY, or COUNTY request change to classification

Step 2: MPO/PDC

Step 3: VDOT District Planner

Step 4: VDOT TMPD Functional Classification Committee

Step 5: TMPD Approval and Recommend to FHWA

Step 6: FHWA Review

Add any missing information

Notification of Approval or Denial to VDOT

Notification of Denial to All Parties
CASE 2: REQUESTS FROM LOCAL GOVERNMENTS OUTSIDE MPO REGIONS

Case 2 outlines the process of a request to change functional classification of a roadway. In this example, the local government initiates the change, but since the government is outside an MPO region, the process is different from Case 1. A flow chart outlining the process is in Figure 4.

STEP 1:
A Town, City, or County must formally request a change by filling out the VDOT Functional Class Request Form and have a resolution signed by the Town Council, City Council, County Board of Supervisors, or any other responsible governing body to accompany the request form. The local government then forwards the request to the VDOT District Planner.

STEP 2:
The VDOT District Planner is responsible for ensuring that all the information needed for the request to be approved is provided and sufficient for change approval. If more information is required, the District Planner sends the form back with instructions on the missing information. If the form is complete and sufficient for change approval, the request for change is forwarded to TMPD Central Office.

STEP 3:
TMPD performs a review of the request’s classification and consistency with Federal guidelines. A three-person committee reviews the proposed changes and makes recommendations. If the committee finds the request valid, a recommendation for approval is sent to FHWA. If denied, TMPD notifies all parties involved of the committee’s decision.

STEP 4:
The FHWA makes the final decision on approval or denial of a functional class change. FHWA returns the final decision to the TMPD.

STEP 5:
The TMPD notifies all parties involved of the approval or denial of the request made by FHWA.
Figure 4: Case 2 - Request from Local Government outside MPO Regions

Step 1

TOWN, CITY, or COUNTY request change to classification

VDOT District Planner

Recommend for Approval

VDOT TMPD Functional Classification Committee

TMPD Approval and Recommend to FHWA

 FHWA Review

Notification of Approval or Denial to VDOT

Add any missing information
**CASE 3: REQUESTS INITIATED BY VDOT OR OTHER AGENCY**

Case 3 outlines a functional classification change initiated by VDOT, FHWA, or another agency. Instead of a bottom up classification process as in Case 1 and Case 2 in which a local government initiates a change, Case 3 shows a top down process. While VDOT or other agencies initiate the requests, local governments and MPOs are involved in decision processes.

**STEP 1:**
If VDOT directly request a functional change, then the VDOT District Planner will notify and coordinate with the affected MPO to gain a resolution for the change. The MPO will then notify the local government of the change request from VDOT. If an MPO is nonexistent, the VDOT District Planner will notify the local governing body of the functional change request before processing the request. This process insures direct communication amongst all involved parties.

**STEP 2:**
The VDOT District Planner is responsible for ensuring that all the information needed for the request to be approved is provided and sufficient for change approval. If more information is required, the District Planner sends the form back with instructions on the missing information. If the form is complete and sufficient for change approval, the request for change is forwarded to TMPD Central Office.

**STEP 3:**
TMPD performs a review of the request’s classification and consistency with Federal guidelines. A three-person committee reviews the proposed changes and makes recommendations. If the committee finds the request valid, a recommendation for approval is sent to FHWA. If denied, TMPD notifies all parties involved of the committee’s decision.

**STEP 4:**
The FHWA makes the final decision on approval or denial of a functional class change. FHWA returns the final decision to the TMPD.

**STEP 5:**
The TMPD notifies all parties involved of the approval or denial of the request made by FHWA.
Figure 5: Case 3: Requests Initiated by VDOT or Other Agency

Step 1

VDOT or Other Agency request change to classification

Step 2

Coordination with TOWN, CITY, COUNTY, and MPO/PDC

VDOT District Planner

Recommend for Approval

Step 3

VDOT TMPD Functional Classification Committee

TMPD Approval and Recommend to FHWA

Step 4

FHWA Review

Notification of Approval or Denial to VDOT

Step 5

TMPD Notification of Denial to all parties.
FUTURE ROADWAYS

While functional classification is based on the current roadway use, it is important to classify future roadways early in the planning process. Functional classification helps determine eligibility for funding from many federal funding sources and maximizes the potential for future funding. Recent guidelines have further outlined the inclusion of future roadways to the existing functional classification. In 2008, FHWA reinforced the four-year limit for including future roads in existing functional class. The 2008 Memorandum dated October 14, 2008, “As of this interim guidance, the timeframe in which the "future route" is expected to be under construction should generally be consistent with the STIP timeframe of 4 years or less.” This guidance allows VDOT to assign a functional classification for roads that are scheduled for construction within four years. For this reason, it is recommended that VDOT include new roadways that are included in the Six-Year Statewide Transportation Improvement Program (STIP) for construction.

PROCESS FOR ESTABLISHING FUNCTIONAL CLASSIFICATION OF FUTURE ROADWAYS

The process for establishing the functional classification for a future roadway is different than changing the functional classification of an existing roadway. Future (new location) roadways are traditionally identified in a locality, MPO or other long-range plan and then incorporated into the STIP. The locality, MPO, VDOT district or other entity behind development of the project should submit a Functional Classification Request Form to TMPD to recommend a functional classification for the future road whenever the roadway is included in the STIP. The applicant should complete the form with the anticipated statistics of the future roadway, such as volume. However, since the road does not yet exist, certain fields will not be applicable when filling out a request. The applicant should fill in N/A for these fields. Along with the application, the applicant should provide a GIS shapefile or similar mapping to show the roadway centerline so that it can be properly integrated into VDOT’s GIS systems.

FUNCTIONAL CLASS FORM

The current Functional Classification Request Form that VDOT uses is extremely basic and does not allow for a description of the change. A new form derived from one used in Washington State has been adopted to be used for all future functional class change request.

To ensure that a thorough request for functional classification change is made, the new proposed VDOT form allows those filing a request to provide detailed information on the location and the surrounding influences such as land use, traffic generators, and the attachment of data or maps that provide justification for the change request. The new recommended request form is provided on the following page.
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 MPC, if applicable. Upon completion of the requested forms they should be submitted to the VDOT District Planner with a transmittal letter signed by the Town Council, City Council, County Board of Supervisors or other responsible official.

<table>
<thead>
<tr>
<th>1. COUNTY or CITY NAME</th>
<th>COUNTY or CITY NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Refer to Local/Agency Guidelines)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. LOCAL AGENCY CONTACT PERSON</th>
<th>TELEPHONE NO.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3. LOCAL NAME OF ROUTE</th>
<th>ROUTE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(State Route use SR No.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. TERMINI OF ROUTE</th>
<th>TYPE OF AREA</th>
<th>EXISTING FUNCTIONAL CLASSIFICATION</th>
<th>PROPOSED FEDERAL FUNCTIONAL CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Freeway/Expressway, Principal Arterial, Minor Arterial, Collector, Minor Collector, Local Access)</td>
<td>(Freeway/Expressway, Principal Arterial, Minor Arterial, Collector, Minor Collector, Local Access)</td>
</tr>
<tr>
<td>FROM</td>
<td>URBAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TO</td>
<td>RURAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LENGTH: Miles</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. TYPE OF AREA</th>
<th>EXISTING FUNCTIONAL CLASSIFICATION</th>
<th>PROPOSED FEDERAL FUNCTIONAL CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>(Freeway/Expressway, Principal Arterial, Minor Arterial, Collector, Minor Collector, Local Access)</td>
<td>(Freeway/Expressway, Principal Arterial, Minor Arterial, Collector, Minor Collector, Local Access)</td>
</tr>
<tr>
<td>RURAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. EXISTING FUNCTIONAL CLASSIFICATION</th>
<th>PROPOSED FEDERAL FUNCTIONAL CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Freeway/Expressway, Principal Arterial, Minor Arterial, Collector, Minor Collector, Local Access)</td>
<td>(Freeway/Expressway, Principal Arterial, Minor Arterial, Collector, Minor Collector, Local Access)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. SPACING</th>
<th>SPACING</th>
<th>SPACING</th>
<th>SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to closest parallel route with same classification</td>
<td>Miles:</td>
<td>Classification:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. DOES REQUESTED FC CHANGE EXTEND INTO ANOTHER JURISDICTION?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>(If yes - concurrence from the other affected agency is required.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. EXISTING ROAD CHARACTERISTICS</th>
<th>EXISTING ROAD CHARACTERISTICS</th>
<th>EXISTING ROAD CHARACTERISTICS</th>
<th>EXISTING ROAD CHARACTERISTICS</th>
<th>EXISTING ROAD CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway Width (incl. shoulders):</td>
<td>1000 ft.</td>
<td>Posted Speed Limit:</td>
<td>60 MPH</td>
<td>Number of Lanes:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. TRAFFIC</th>
<th>TRAFFIC</th>
<th>TRAFFIC</th>
<th>TRAFFIC</th>
<th>TRAFFIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Existing Traffic:</td>
<td>VPD:</td>
<td>Location:</td>
<td>Existing Traffic:</td>
</tr>
<tr>
<td>Future Traffic (10 years):</td>
<td>5000 VPD</td>
<td>Location:</td>
<td>Existing Traffic:</td>
<td>VPD:</td>
</tr>
<tr>
<td>Future Traffic (10 years):</td>
<td>5000 VPD</td>
<td></td>
<td>Future Traffic (10 years):</td>
<td>5000 VPD</td>
</tr>
</tbody>
</table>
11. Is the route on the National Highway System?

12. If applicable please list major traffic Generators (Generators that route serves – est. VPD):

<table>
<thead>
<tr>
<th>Category</th>
<th>VPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHOPPING CENTER: Total SQFT</td>
<td></td>
</tr>
<tr>
<td>INDUSTRIAL: Employees</td>
<td></td>
</tr>
<tr>
<td>GOV. INSTITUTION: Employees</td>
<td></td>
</tr>
<tr>
<td>AIRPORTS: Annual Flights</td>
<td></td>
</tr>
<tr>
<td>MILITARY INSTALLATIONS: Type</td>
<td>VPD</td>
</tr>
<tr>
<td>SHIPPING POINTS: Annual Tons</td>
<td>VPD</td>
</tr>
<tr>
<td>MAJOR TOURIST SITES: Annual Visitors</td>
<td>VPD</td>
</tr>
<tr>
<td>COLLEGE OR UNIVERSITY: Enrollment</td>
<td>VPD</td>
</tr>
<tr>
<td>OTHER: Type</td>
<td></td>
</tr>
</tbody>
</table>

13. A brief description why the proposed change is requested and justification for the change.

14. Additional remarks to more fully explain the situation.

15. Attach a vicinity map showing the proposed changes, and existing Federal Functional Classifications.
FUNCTIONAL CLASSIFICATION MAPS AND DATABASES

DATABASES AVAILABLE FROM TMPD
VDOT is making various GIS layers and databases available via its ArcGIS Online account. Citizens and users can access the most recent quarterly release of the VDOT Linear Referencing System centerlines and various other GIS data from ArcGIS Online by searching for “VDOT” content (http://www.arcgis.com/home/search.html?q=vdot&t=content).

REPORTING ERRORS OR CORRECTIONS TO THE VDOT FUNCTIONAL CLASSIFICATION SYSTEM
Any user of the VDOT’s functional classification data, databases or maps that finds any errors or corrections that should be made to the data are requested to contact VDOT’s Transportation & Mobility Planning Division representatives as noted below.

These errors could include but not limited to mislabeled functional classification on individual roadway links, incorrect geometry of roads or incorrect roadway characteristics for a link. If possible, please provide a screen shot of the data error or the correct roadway geometry alignment (in GIS format).

VDOT CONTACT FOR QUESTIONS OR CLARIFICATION

VDOT Transportation & Mobility Planning Division
Mr. Lewis Parsley
Senior Transportation Planner
JL.Parsley@VDOT.Virginia.gov, (804) 786-4063

Mr. Chris Detmer
Long Range Planning Section Manager
Chris.Detmer@vdot.virginia.gov, (804) 786-3599