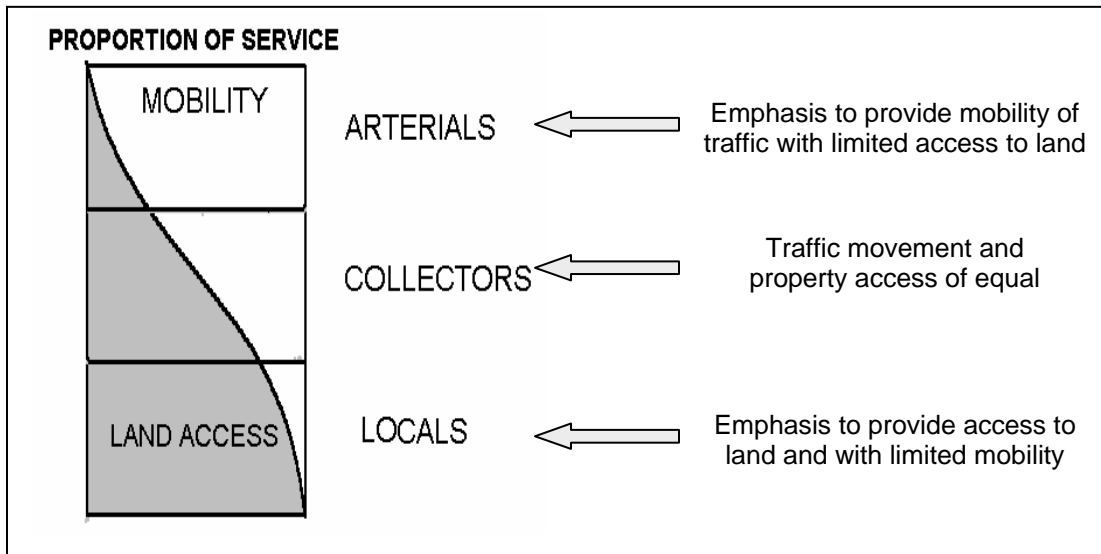




FUNCTIONAL STREET CLASSIFICATION



Rather than “reinventing the wheel”, Roanoke County utilizes the Virginia Department of Transportation’s (VDOT) functional street classifications. VDOT’s Transportation and Mobility Planning Division determines the functional classification of the road by the type of trips, traffic volume, what system the roadway connects, and whether the proposed functional classification falls within the percentage guidelines established by FHWA. Concurrently, VDOT’s functional classifications are also based on mobility and accessibility. The streets and highways are grouped into classes according to the character of service they are intended to provide (*see figure below*).



Transportation road networks provide two divergent objectives, as observed above. One objective is to provide efficient mobility from one location to another, usually accomplished at the sacrifice of limiting access to adjacent land (e.g., limited access highway/freeway). The other objective is to provide access to each parcel of land, usually at the sacrifice of rapid, efficient movement from location to location (e.g., local or subdivision road). In between these two extremes of the transportation network spectrum, you will find many of the roadways that are located in Roanoke County.

The two major categories of roadways are *Rural* and *Urban Functional Classification Systems*. The distinction between Rural and Urban is based on population figures reported by the Bureau of Census. An Urbanized area is defined as one having a population exceeding 50,000 people. A Small Urban area is designated by the Bureau of Census having a population between 5,000 and 50,000. Rural areas are all areas not designated Urbanized or Small Urban (i.e., less than 5,000 people).

Under the heading of ***Rural Functional Classification System***, the classifications and their subsequent criteria and characteristics are as follows:

Rural Principal Arterial (e.g., US 220, between Franklin County line and Blue Ridge Parkway)

- Serves corridor movements of substantial statewide or interstate travel;
- serves all urban areas of 50,000 and over population and a majority of those over 25,000 people;
- provide an integrated network without stub connections;
- Primary function is the movement of traffic, access for individual properties is a secondary consideration.

Rural Minor Arterial (e.g., VA 221, between Floyd County line and Rte. 688 Cotton Hill Rd)

- Link cities and large towns;
- Provide service to corridors with trip lengths and travel density greater than those served by rural collectors or local systems;
- Design should be expected to provide for relatively high overall speeds with minimum interference to through movement;
- Direct access to individual property owners is discouraged.

Rural Major Collector (e.g., VA 311 Catawba Valley Drive, from ¼ mile North of Rte 419 to Craig County line)

- Provide service to larger towns not directly served by higher systems;
- Link the larger towns to nearby larger towns or routes of higher classification;
- Serve the more important intra-county travel corridors;
- Entrance controls (such as turn lanes, signals, signs, combined access points, etc.) should be utilized.

Rural Minor Collector (e.g., VA 711 Tinsley Road, near Bent Mountain Elementary School)

- Spaced at intervals consistent with population density;
- To collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road
- Provide service to the remaining smaller communities.

Rural Local (e.g., VA 617 Pitzer Road, from Blue Ridge Parkway to Franklin County line)

- Serves primarily to provide direct access to adjacent land;
- Provide service to travel over relatively short distances as compared to collectors or other higher systems;
- Includes all facilities not on one of the higher systems.

The **Urban Functional Classification System** includes the following classes and criteria:

Urban Principal Arterial (e.g., Rte. 11 Williamson Road, between Roanoke City and Botetourt County lines.)

- Serves the major center of activity of a metropolitan area;
- Highest traffic volume corridors;
- Roads serving the longest trip desires;
- Carry a high proportion of the total urban area travel on a minimum of mileage
- Limited access highway, direct access to individual properties is controlled.

Urban Minor Arterial (e.g., VA 720 Colonial Avenue, from Roanoke City line to Rte 221 Brambleton Ave.)

- Should interconnect with and augment the urban principal arterial system and provide service to trip of moderate length at a lower level of travel mobility than principal arterials;
- Includes all arterials not classified as a principal and contains facilities that place more emphasis on land access and offer a lower level of traffic mobility.

Urban Collector (e.g., VA 630 Kessler Mill Road, from the City of Salem line to Rte 311)

- Provides land access and traffic circulation within residential neighborhoods, commercial, and industrial areas;
- Distributes trips from the arterials through these areas to their ultimate destination;
- Collects traffic from local streets and channels it to the arterial system.

Urban Local (e.g., VA 1658 Cresthill Drive, from Rte 682 Garst Mill Rd to Rte 1647 McVitty Rd)

- All facilities not on one of the higher systems;
- Serves primarily as direct access to abutting land;
- Serves as access to the higher order systems;
- Through traffic movement is deliberately discouraged.

VDOT uses Functional Street Classifications for the following:

- ❖ Funding;
- ❖ Design;
- ❖ Determining urban network to identify the thoroughfare system;
- ❖ Determining statewide network for the State Highway Needs Assessment Study;
- ❖ Establishing construction priorities.

Roanoke County also uses Functional Street Classifications for a variety of reasons. This includes the following:

- ❖ Maintaining inventory of infrastructure;
 - ❖ Determining design standards and specifications for small road improvement projects;
 - ❖ Prioritizing road sections for allocation of highway improvement funds;
 - ❖ Balancing land use objectives with street functional capabilities;
 - ❖ among other things.
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For additional information, please contact:

County of Roanoke
Department of Community Development
5204 Bernard Drive
P.O. Box 29800
Roanoke, Virginia 24018-0798

phone: (540) 772-2080

email: engineering@roanokecountyva.gov