

Functional System Characteristics

The Hierarchy of Functional Classifications

RURAL AREAS	URBANIZED AREAS	SMALL URBAN AREAS
Principal arterials Minor arterial roads Collector roads Local roads	Principal arterials Minor arterial streets Collector streets Local streets	Principal arterials Minor arterial streets Collector streets Local streets

Roadway design practices are inextricably linked to the purpose of the road as defined by the functional classification system as follows:

CLASSIFICATION	LOCATION	CHARACTERISTICS
Principal Arterial	Rural	Trip lengths for statewide or interstate travel. Integrated movement generally without stub connections. Accommodates movement between (virtually) all areas with pop. 50,000. Two design types: freeways and other principal arterials.
	Urban	Serves major centers of activity with the highest traffic volumes and longest trip lengths. Integrated internally and between major rural connections. Service to abutting lands is subordinate to travel service to major traffic movements. Design types are interstate, other freeways and other principal arterials.
Minor Arterial	Rural	Links cities, large towns and other traffic generators attracting traffic over long distances. Intercounty service. Designs should be expected to provide for relatively high speeds and minimum interference to through movements.
	Urban	Trips of moderate length at a lower level of mobility than principal arterials. Some emphasis on land access. May carry local bus routes and provide intracommunity continuity but does not penetrate neighborhoods.
Collector	Rural	Serve intracounty travel with travel distances shorter than on arterial system. More moderate speeds. Divided into major and minor system.
	Urban	Provides both land access and traffic circulation within all areas. Penetrates neighborhoods and communities collecting and distributing traffic between neighborhoods and the arterial streets.
Local	Rural	Local roads primarily provide access to adjacent land and the collector network. Travel is over short distances.
	Urban	Primarily permits direct land access and connections to other streets. Lowest level of mobility. Long distance through traffic is usually discouraged.

FIGURE 1-2 FUNCTIONAL SYSTEM CHARACTERISTICS

Source: Transportation Research Board (TRB) Circular E-C019, Dated December, 2000