
Street Classifications

A. General

The classifying of streets and highways is necessary for communication among engineers, administrators, and the general public. Streets can be classified based upon major geometric features (e.g. freeways, streets, and highways), route numbering (e.g. U.S., State, and County), or Administrative classification (e.g. National Highway System or Non-National Highway System). However, functional classification, the grouping of streets and highways by the character of service they provide, was developed specifically for transportation planning purposes and is the predominant method of classifying streets for design purposes. For urban areas, the functional classification hierarchy consists of major arterials, minor arterials, collectors, and local streets.

The information contained in this section is based on AASHTO criteria. The Project Engineer should use the various AASHTO publications and particularly the current edition of AASHTO's "Green Book" to verify the application of values provided herein when complex design conditions or unusual situations occur.

B. Arterial Streets

- 1. Major (Principal) Arterial:** The major arterial (referred to as a principal arterial by AASHTO) serves the major center of activities of urbanized areas, the highest traffic volume corridors, the longest trip, and carries a high proportion of a total urban travel on a minimum of mileage. The system should be integrated both internally and between major rural connections.

The major arterial system carries most of the trips entering and leaving the area as well as most of the through movements bypassing the central city. In addition, significant intra-area travel such as between central business districts and outlining residential areas, between major inner-city communities, and between major suburban centers, is served by major arterials. Frequently, the major arterial carries important intra-urban as well as inter-city bus routes. Finally, in urbanized areas, this system provides continuity for all rural arterials that intercept the urban boundary.

Access to private property from the major arterial is specifically limited in order to provide maximum capacity and through movement mobility. Although, no firm spacing rule applies in all or even in most circumstances, the spacing between major arterials may vary from less than 1 mile in highly developed central areas to 5 miles or more in developed urban fringes.

- 2. Minor Arterial:** The minor arterial inter-connects with and augments the major arterial system. It accommodates trips of moderate length at a somewhat lower level of travel mobility than major arterials. This system places more emphasis on land access but still has specific limits on access points. A minor arterial may carry local bus routes and provide intra-community continuity but ideally does not penetrate identifiable neighborhoods. This system includes urban connections to rural collector roads where such connections have not been classified as urban major arterials.

The spacing of minor arterials may vary from 1/8 to 1/2 mile in highly developed areas to 2 to 3 miles in suburban fringes but is not normally more than 1 mile in fully developed areas.

C. Collector Streets

The collector street system provides both land access and traffic circulation within residential neighborhoods and commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to their ultimate destinations. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and in other areas of similar development and traffic density, the collector system may include the entire street grid.

- 1. Major Collector:** This type of street provides for movement of traffic between arterial routes and minor collectors and may collect traffic, at moderately lower speeds, from local streets and residential and commercial areas. A major collector has control of access to abutting properties with a majority of access at local street connections. Normally, a slightly higher emphasis is placed on through movements than direct land access.
- 2. Minor Collector:** This type of street provides movement of traffic between major collector routes and residential and commercial local streets as well as providing access to abutting property at moderate low speeds. Consideration for through movements and direct land access is normally equal.

D. Local Streets

Local streets allow direct access to abutting land and connections to the higher order street systems. They offer the lowest level of mobility and deliberately discourage major through traffic movements.

E. Private Streets

Certain Jurisdictions allow private streets in specific situations. Private streets are similar to the local streets but generally are located on dead-end roads less than 250 feet in length, short loop streets less than 600 feet in length, or frontage roads parallel to public streets. Design criteria for local private streets are not included in this manual. The Jurisdiction should be contacted to determine if they are allowed.