

Functional Classification Systems for Rural Areas

Rural roads consist of those facilities that are outside of small urban and urbanized areas, as previously defined. They are classified into four major systems: Principal arterials, minor arterial roads, major and minor collector roads, and local roads.

Rural principal arterial system

The rural principal arterial system consists of a connected rural network of continuous routes having the following characteristics:

- Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel.
- Serve all, or virtually all, urban areas of 50,000 and over population and a large majority of those with population of 25,000 and over.
- Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise (e.g., international boundary connections and connections to coastal cities).

In the more densely populated States, this system of highway may not include all heavily traveled routes which are multi-lane facilities. It is likely, however, that in the majority of States the principal arterial system will include all existing rural freeways.

The principal arterial system is stratified into the following two subsystems:

- Interstate System.--The Interstate System consists of all presently designated routes of the Interstate System.
- Other principal arterials.--This system consists of all nonInterstate principal arterials.

Rural minor arterial road system

The rural minor arterial road system should, in conjunction with the principal arterial system, form a rural network having the following characteristics:

- Link cities and larger towns³ (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and intercounty service.
- Be spaced at such intervals, consistent with population density, so that all developed areas of the State are within a reasonable distance of an arterial highway.
- Provide (because of the two characteristics defined immediately above) service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to-through movement.

Rural collector road system

The rural collector routes generally serve travel of primarily intracounty rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be typical, on the average.

In order to define more clearly the characteristics of rural collectors, this system should be subclassified according to the following criteria:

Major collector roads.--These routes should: (1) 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 intracounty importance, such as consolidated schools, shipping points, county parks, important mining and agricultural areas, etc. ; (2) link these places with nearby larger towns or cities, or with routes of higher classification; and (3) serve the more important intracounty travel corridors.

Minor collector roads.--These routes should: (1) Be 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; (2) provide service to the remaining smaller communities; and (3) link the locally important traffic generators with their rural hinterland.

Rural local road system

The rural local road system should have the following characteristics: (1) Serve primarily to provide access to adjacent land; and (2) provide service to travel over relatively short distances as compared to collectors or other higher systems. Local roads will, of course, constitute the rural mileage not classified as part of the principal arterial, minor arterial, or collector systems.

Extent of rural systems

The systems criteria above have been expressed primarily in qualitative, rather than quantitative terms. Because of varying geographic conditions (population density, spacing and size of cities, density and pattern of road network) it is not feasible to define uniform nationwide criteria on size of population centers, on trip length and traffic volume, or on spacing of routes, that would apply to all systems in all States. The results of classification studies conducted in many States throughout the country do, however, show considerable consistency in the relative extent of each system, expressed as a percentage of total rural road mileage.

Systems developed using the criteria herein are generally expected, in all States except Alaska and Hawaii, to fall within the percentage ranges shown in Table 11-2. The higher values in Table 11-2 would apply to States which have a less extensive total road network than is typical of States of similar population density. In States having a more extensive total network, the lower values would be expected to apply. The range of percentages for rural collectors is for the total mileage of both major and minor collector roads, and applies to the statewide rural mileage totals; the percentage in any particular county may vary considerably from the statewide average. Areas having an extensive grid pattern of roads will usually have a lesser percentage of collectors than areas wherein geographic conditions have imposed a restricted or less regular pattern of road development.