

# FUNCTIONAL CLASSIFICATION

## (Part 1)

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Following this paper in the proceedings is an outline entitled "Functional Classification." The four major topics in the outline are: (1) concept of functional classification; (2) development of the functional classification systems; (3) revisions to functional classification systems; and (4) information about specific functional classification systems. The following report briefly and simply explains not only the concept of functional classification, but also the system now in use in Indiana.

### CONCEPT AND SCOPE

The basic concept of functional classification is that roads and streets are grouped together according to the type of service they provide. Along with this idea is the fact that an individual road does not significantly serve travel independently; instead, most travel consists of movement through a network of roads. It is the purpose of functional classification to specify the role which each road or street plays in the overall transportation network.

We are all aware that there are substantial differences between rural and urban areas, and consequently the rural and urban functional classification systems are somewhat different in the specified names of the various classifications. However, the fundamental concepts are quite similar—whether talking about a rural or an urban area.

Two primary functions to be considered while developing a functional classification system, are to provide travel mobility and to provide access to property. On one end of the classification categories are roads referred to as arterials, which emphasize the mobility function. Arterial streets and roads predominantly carry traffic of relatively long origin-destination length—such as travel from Lafayette to Louisville or South Bend or Evansville, or from the east side of a city to the west side. A street which serves the other function—that of access to property—would typically be the street in front of your house. Most of the traffic on this type of street is using the street to get to land

adjacent to the street. This kind of street is functionally classified as a local road.

If we take a look at the relationship between the various functional classifications and these functions (mobility and land access—see Figure 1), it can be seen that the arterial facilities have a high degree of mobility, but not much access to adjacent land. Local streets and roads, on the other hand, exhibit a relatively small amount of the mobility function, but have considerable access to property. Streets and roads functionally classified as collectors serve both the mobility and land access functions.

Figure 2 shows those highways in Indiana which serve the state-wide and interstate function of mobility. The double lines designate Indiana's interstate system; the heavy single lines show those routes functionally classified as principal arterials; the minor arterials are shown as thinner single lines.

While developing a functional classification system, there are a few things to remember. The classifications are established for a specific year or time span and should be based on population, land use, and travel projections. Streets and roads anticipated to be in service by the designated year or time span are to be classified. The functional classification systems are developed cooperatively by the Indiana State Highway Commission's Division of Planning and appropriate local officials and then reviewed by the FHWA.

## ESTABLISHING A SYSTEM

The first step in the development of the functional classification system is to separate the urban areas from the rural areas. This is done by allowing for reasonable anticipated growth and choosing an urban area boundary (labeled on figures 3 and 4) so that inside the boundary the area will exhibit urban characteristics and outside this boundary the area will be rural in nature. Inside the urban area boundary an urban functional classification system will be established, and outside the urban area boundary a rural functional classification system will be set up.

In the process of functionally classifying streets and roads, we work from the top down. Figure 3 shows a map of a rural functional classification system. While working on the rural functional classification system, the interstates, rural principal arterials and rural minor arterials are first selected; then the rural major collectors and rural minor collectors are determined. The remainder of the roads make up the rural local roads. The same basic procedure is followed while establish-

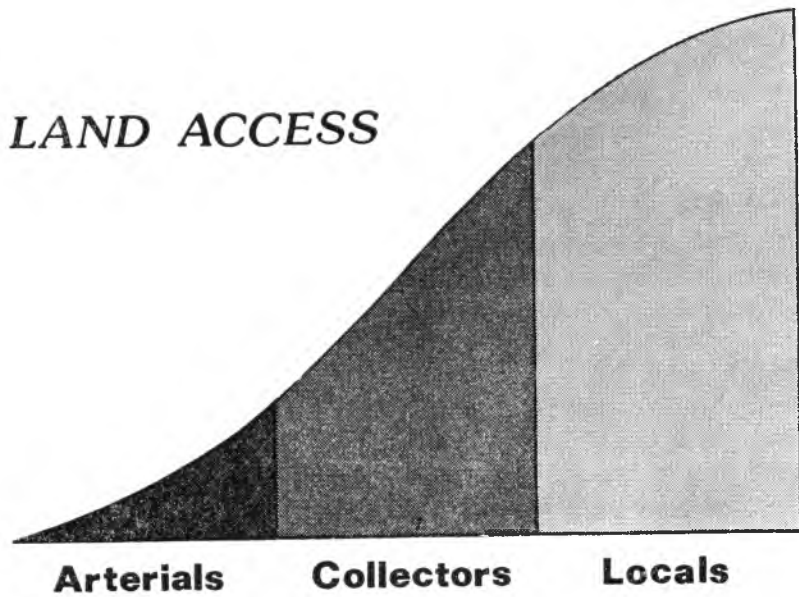
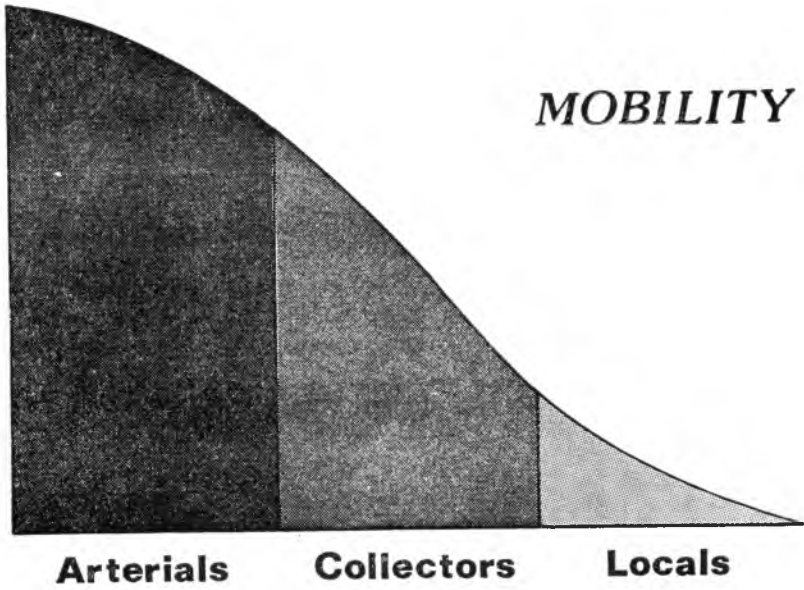


Figure 1.

1985  
FUNCTIONAL CLASSIFICATION  
SYSTEMS MAP



MAP EXPLANATION

POPULATION SYMBOLS (BASED ON 1980 CENSUS)



FUNCTIONAL CLASSIFICATION SYSTEMS



INDIANA

Figure 2.

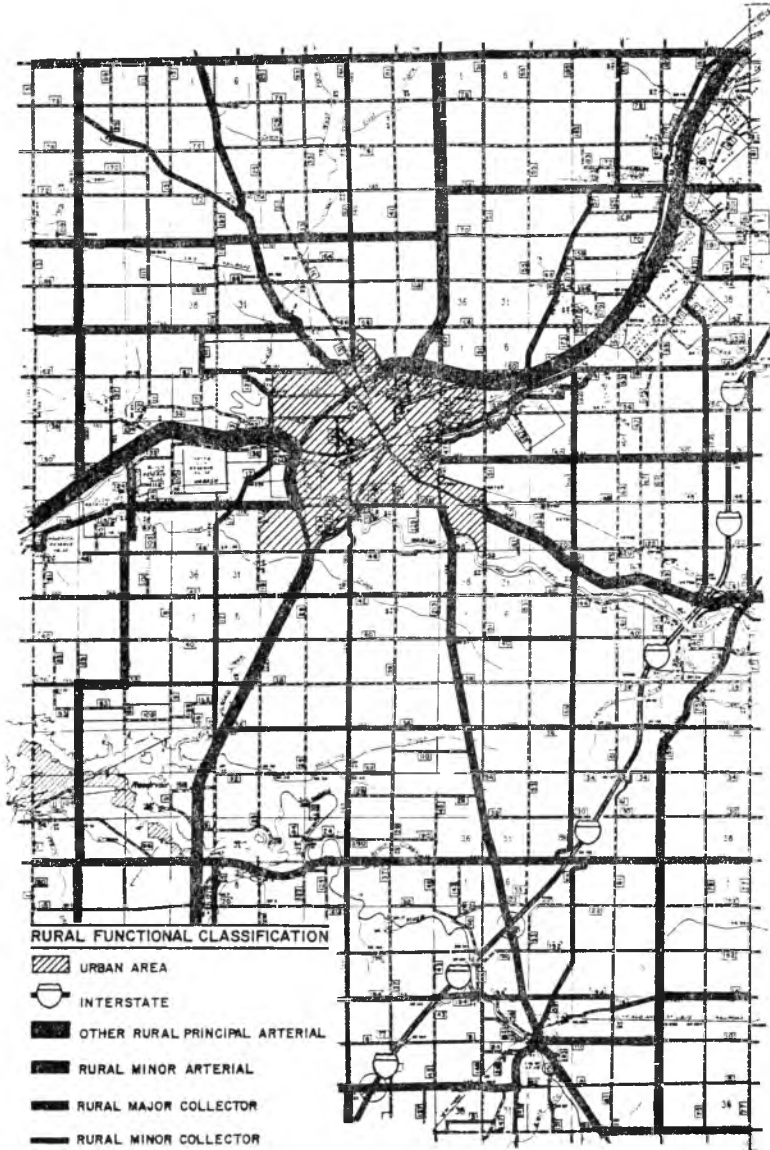


Figure 3.

ing the urban functional classification system—see Figure 4. The urban and rural functional classification systems must be developed in conjunction with each other in order to maintain continuity for traffic flow from one area to the other.



You may be wondering what practical use there is of having roads functionally classified. What difference does it make whether we classify a road a minor arterial or a major collector? When the first functional classification system was developed (that was the 1968 functional classification system), it was merely one part of a special study required by the United States Congress and there were no funds tied to the system.

The next functional classification system was the one for 1990, and the purpose of it was to show the anticipated use of roads and streets in 1990. Shortly after this system was completed, the Indiana legislature created the Arterial Road and Street Board, charged with the responsibility of distributing to local agencies some of the tax money collected from the sale of gas. It was decided that this money should be spent on upgrading and constructing roads which would be used by a relatively large portion of the taxpayers of the city or county, rather than on streets which would only serve predominantly local traffic.

It was quite logical that the Arterial Road and Street Board adopt the 1990 functional classification system for determining those roads eligible to receive road and street funds. In January of 1977, the Road and Street Board adopted the 1985 functional classification system to determine what roads were eligible for road and street funding purposes.

Currently, the 1985 functional classification system, which was approved by the Federal Highway Administration in 1976, is used as the basis not only for road and street funding, but also for the designation of the federal-aid systems.