



Functional Classification Map

MESILLA VALLEY METROPOLITAN PLANNING ORGANIZATION
 ORGANIZACIÓN DE PLANIFICACIÓN METROPOLITANA DEL VALLE DE MESILLA



FEDERAL FUNCTIONAL CLASSIFICATION

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they provide. There are three functional classification categories that are common to rural and urban roads: Principal Arterial, Minor Arterial, Major Collector, Minor Collector and Local.

Functional Classification Determination

There is a detailed process for how functional classification is established. First, the urbanized area and the MPO Boundary Area are determined. Next, the function of the streets are determined by looking at factors such as the location of activity centers, trip lengths, and system continuity. Below is a short list of some of the factors looked at to determine functional classification. Federal Guidelines require a certain percentage of each type of roadway (see graph below)

Road Type	Miles
Total GIS Geocoded Roadway	861
Total Interstate Roadway	26
Total US 70 Limited Access Roadway	9
Total Roadways = Geocode + Interstate and US 70	896
Total Local Roads = Geocoded minus Thoroughfares Below	
Total Collector Roadway	72
Total Minor Arterial Roadway	102
Total Principal Arterial Roadway	71
Road Type	Percent
Local Roads	69%
Collector Roads	8%
Minor Arterial Roads	11%
Principal Arterial Roads	8%
Interstates + US 70 Limited Access	4%
Functional Classification Range Guidelines	
Locals = 65 to 80 percent	
Collectors = 5 to 10 percent	
Minor Arterials = 15 to 25 percent (Minor + Principal Arterials)	
Principal Arterials = 5 to 10 percent	

Efficiency of Travel

Trip makers will typically seek out roadways that allow them to travel to their destinations with as little delay as possible and by the shortest travel time. Arterial roadways provide this kind of service, often in the form of fully or partially controlled access highways, with no or very few intersecting roadways to hinder traffic flow. Therefore, a high percentage of the length of a long-distance trip will be made on Arterials. In contrast, travelers making shorter trips tend to use Local and/or Collector roadways for a much higher proportion of the trip length than Arterial roads.

Access Points

Arterials primarily serve long-distance travel and are typically designed as either access controlled or partially access controlled facilities with limited locations at which vehicles can enter or exit the roadway (typically via on or off-ramps). In instances where limited or partial access control is not provided, signalized intersections are used to control traffic flow, with the Arterial given the majority of the green time. In growing urban areas, Arterial roadways often experience an ever-increasing number of driveway access points. This high degree of accessibility decreases mobility. To address this issue and restore the carrying capacity of through traffic on these roadways, transportation agencies apply access management principles, such as driveway consolidation and median installations. In contrast, roadways classified as "Local" provide direct access to multiple properties.

Speed Limit

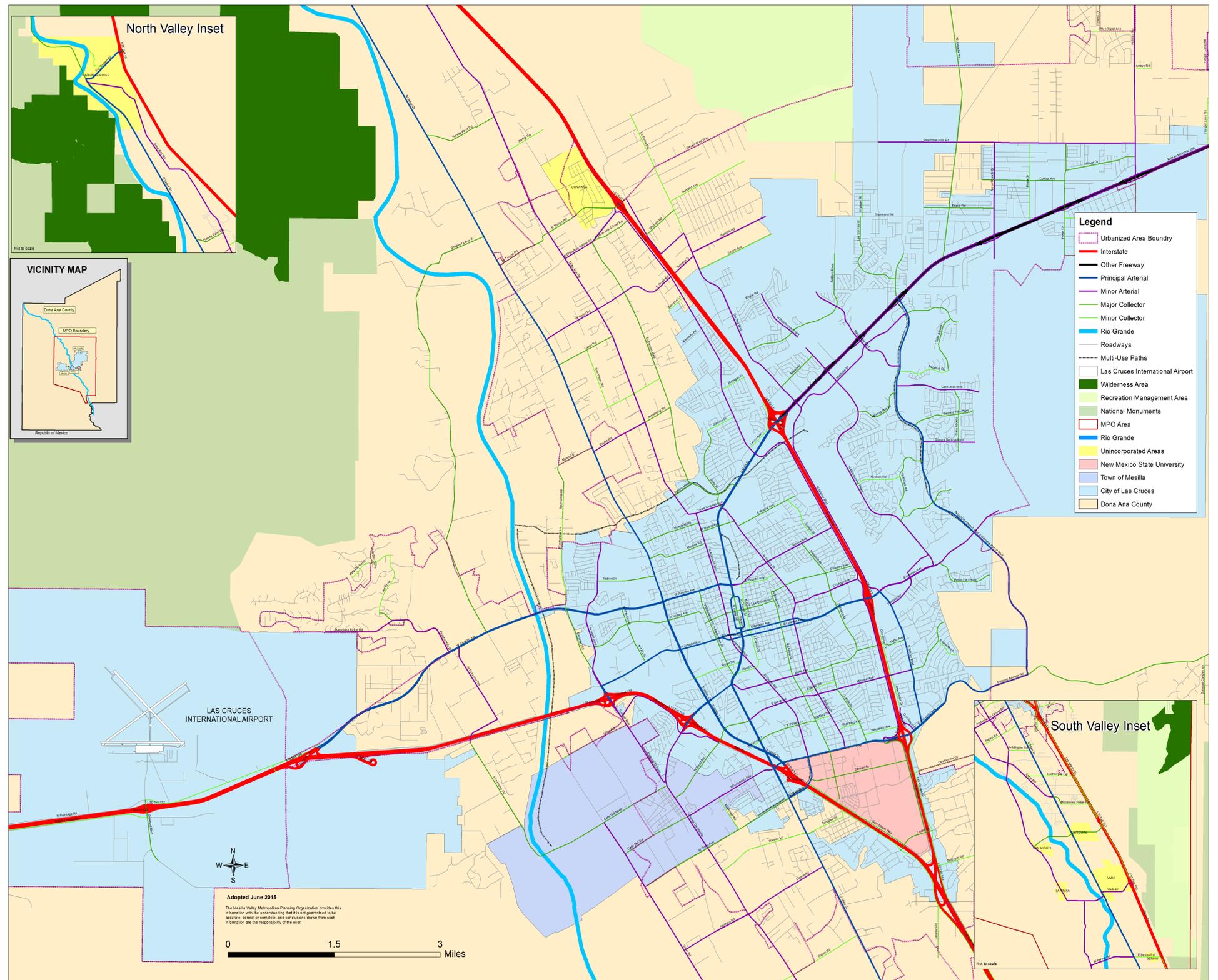
In general, there is a relationship between posted speed limits and functional classification. Arterials typically have higher posted speed limits as vehicles encounter few or no at-grade intersections. The absence of cross-traffic and driveways allows for higher rates of speed, which provides mobility, especially for long-distance travel. In contrast, because their primary role is to provide access. Locals are lined with intersecting access points in the form of driveways, intersecting roadways, cross walks and transfer points for buses and other modes. Due to the frequency of traffic turns, speed limits are kept low to promote safe traffic operations.

Route Spacing

Directly related to the concept of channelization of traffic throughout a network is the concept of distance (or spacing) between routes. For a variety of reasons, it is not feasible to provide Arterial facilities to accommodate every possible trip in the most direct manner possible or in the shortest amount of time. Ideally, regular and logical spacing between routes of different classifications exists. Arterials are typically spaced at greater intervals than Collectors, which are spaced at much greater intervals than Locals. This spacing varies considerably for different areas; in densely populated urban areas, spacing of all routes types is smaller and generally more consistent than the spacing in sparsely developed rural areas. Geographic barriers greatly influence the layout and spacing of roadways.

Usage (Annual Average Daily Traffic [AADT] Volumes and Vehicle Miles of Travel [VMT])

Arterials serve a high share of longer distance trips and daily vehicle miles of travel. While there is a general relationship between the functional classification of a roadway and its annual average daily traffic volume, two roads that carry the same traffic volume may actually serve very different purposes and therefore have different functional classifications. Traffic volumes, however, can come into play when determining the proper functional classification of a roadway "on the border" of a functional classification group. AADT can often be used as a "tie-breaker" when trying to determine which of two (or more) similar and roughly parallel roadways should be classified with a higher (or lower) classification than the other.



Transport 2040

Regional Transportation Planning for the Mesilla Valley
 Planificación de Transportación Regional para el Valle de Mesilla