

**Figure D-1: Functional Classification System Criteria for Principal Arterials**

Criterion	Freeway Principal Arterial		Other Principal Arterial	
	Urban	Rural	Urban	Rural
Place Connections	Interconnect the metro centers and regional business concentrations, important transportation terminals and large institutional facilities within the MUSA.	Connect the MUSA with urban areas and major cities in Minnesota and other states.	Interconnect the metro centers and regional business concentrations, important transportation terminals and large institutional facilities within the MUSA.	Connect the MUSA with major cities in Minnesota and other states.
Spacing	Developed Planning Area: 2-3 miles Developing Planning Area: Spacing should vary in relation to density of travelshed development, 2-6 miles.	Rural Planning Area: 6-12 miles. Closer spacing may be required to connect portions of Urban Planning Areas to each other or to Rural Centers.	Developed Planning Area: 2-3 miles. Developing Planning Area: Spacing should vary in relation to density of development, 2-6 miles.	Rural Planning Areas: 6-12 miles. Closer spacing may be required to connect portions of Rural Planning Areas to each other or to Rural Centers.
Management	Maintain at least 40-mph average speed during peak-traffic periods.	Retain ability to meet urban speed objective if and when area urbanizes.	Maintain at least 40-mph average speed during peak- traffic periods.	Retain ability to meet urban speed objective if and when area urbanizes.
System Connections and Access Spacing*	To other Interstate freeways, other principal arterials and selected "A" minor arterials. Connections between principal arterials should be of a design type that does not require vehicles to stop. Access at distances of 1-2 miles.	To other Interstate freeways, principal arterials, and selected "A" minor arterials. Access at distances of 2-6 miles.	To Interstate freeways, other principal arterials, and selected "A" minor arterials. Connections between principal arterials should be of a design type that does not require vehicles to stop. Intersections should be limited to 1-2 miles.	To Interstate freeways, other principal arterials, and selected "A" minor arterials. Intersections should be limited to 2 miles or more.
Trip-Making Service	Trips greater than 8 miles with at least 5 continuous miles on principal arterials. Express transit trips.		Trips greater than 8 miles with at least 5 continuous miles on principal arterials. Express transit trips.	
Mobility vs. Land Access*	Emphasis is placed on mobility rather than land access. No direct land access should be allowed.	Emphasis is placed on mobility rather than land access. No direct land access should be allowed.	Greater emphasis is placed on mobility than on land access. Little or no direct land access within the urban area.	Greater emphasis is placed on mobility than on land access. Little or no direct land access.

\*The key objective is stated under "Management" heading in this table.

**Table D-2: Functional Classification System Characteristics for Principal Arterials**

Characteristics	Freeway Principal Arterial		Other Principal Arterial	
	Urban	Rural	Urban	Rural
System Mileage	Suggested limits for Interstate and other principal arterials at 5-10% of system.	Suggested limits for Interstate and other principal arterials at 2-4% of system.	See "Freeway."	See "Freeway."
Percent of Vehicle Miles Traveled	Suggested limits for Interstate and other principal arterials at 40-65% of system.	Suggested limits for Interstate and other principal arterials at 30-55% of system.	See "Freeway."	See "Freeway."
Intersections	Grade separated.	Grade separated.	Grade separated desirable. At a minimum, high-capacity controlled at-grade intersections.	High-capacity controlled at-grade intersections.
Parking	None.	None.	None.	None.
Large Trucks	No restrictions.	No restrictions.	No restrictions.	No restrictions.
Management Tools	Ramp metering, preferential treatment for transit, interchange spacing.	Interchange spacing.	Ramp metering, preferential treatment for transit, access control, median barriers, traffic signal progression, staging of reconstruction, intersection spacing.	Access control, intersection spacing.
Vehicles Carried	25,000-200,000	5,000-50,000	15,000-100,000	2,500 - 25,000
Posted Speed Limit	45-55 mph	55-65 mph	40-50 mph	Legal limit
Right-of-Way	300 feet	300 feet	100 - 300 feet	100 - 300 Feet
Transit Accommodations	Priority access and movement for transit in peak periods where needed.	None.	Priority access and movement for transit in peak periods where possible and needed.	None.