

C. Helpful Information:

I. Federal Aid Network

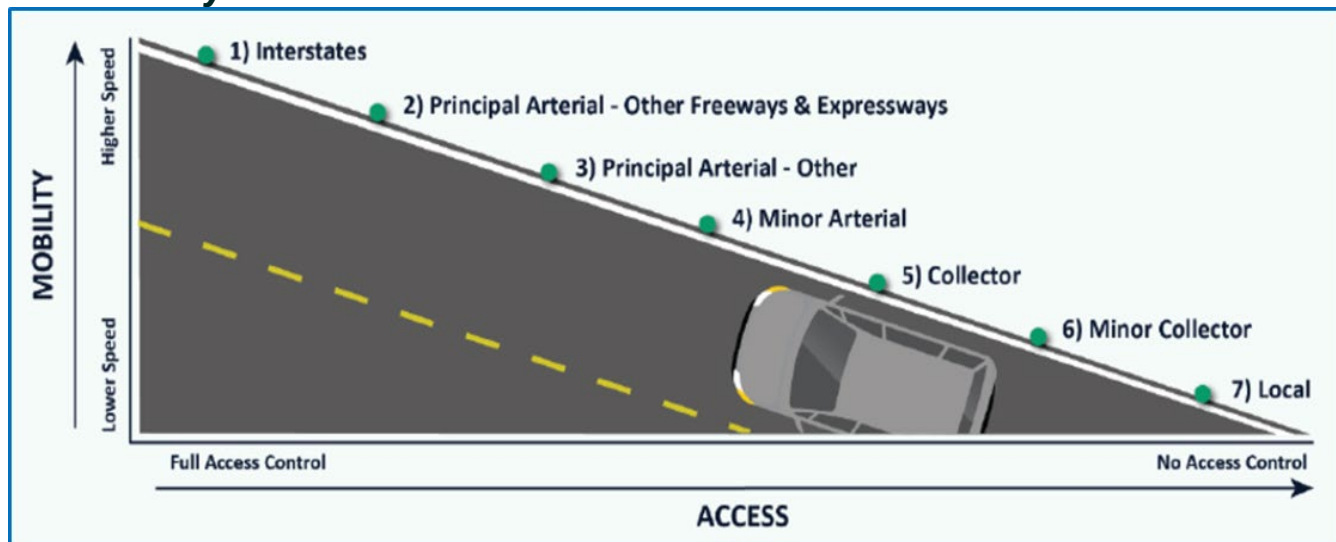
The Federal Aid Network includes the roads where federal funding is available. Funding varies depending on the road's functional class and whether it is located in an urban or rural area. In urban areas, federal aid is available for roads that are functionally classified as *urban minor collectors* or higher (FFC 1-6). In rural areas, federal aid is available for roads functionally classified as *rural major collectors* and higher (FFC 1-5). While there are rare exceptions, rural minor collectors and local roads **are not** eligible for federal funding.

To learn more about the federal aid network, refer to the following [webpage](#).

<https://www.fhwa.dot.gov/federal-aidessentials/federalaid.cfm>

II. Consideration When Classifying a Road

II-1. Mobility vs Access



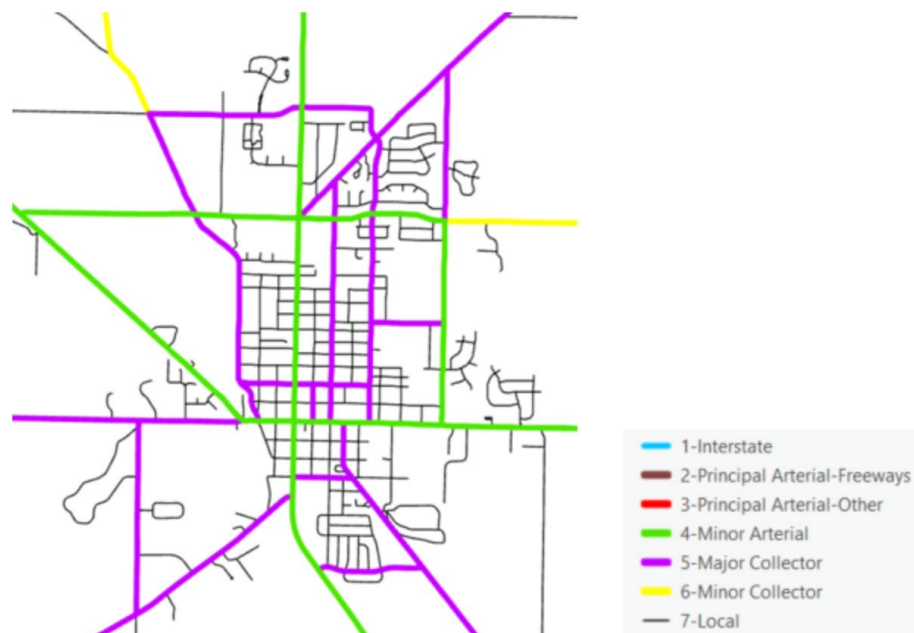
The most significant factor considered when classifying a road is mobility versus accessibility.

- **Mobility** refers to roads with few opportunities to enter or exit. With limited road access, traffic is able to flow with little friction (i.e. slow down). Interstates and freeways, which have ramps controlling access to the roads, are the most mobile of the functional classes.
- **Accessibility** refers to roads that have many opportunities to enter or exit the road. Accessible roads make it easier to navigate around neighborhoods or business districts. However, with more traffic controls (e.g. traffic lights, stop or yield signs) and more

motorists able to enter or exit the road, traffic friction increases, which increases the chances of traffic jams. Local roads, which allow homeowners to enter roads directly from their driveways, are the most accessible functional class.

While most roadways offer both “access to property” and “travel mobility” services, it is the roadway’s primary purpose that defines the classification category to which a given roadway belongs.

II-2. Other Important Considerations



- **Connectivity:** With rare exceptions, any road classified above local must start and stop with a road that is the same or higher functional class. For example, a minor arterial must terminate with another minor arterial or a principal arterial but not end with a major collector.
- **Annual Average Daily Traffic (AADT):** Measures the traffic volume of a road over the course of a year. This value is typically calculated using traffic measurement devices, like pneumatic road tubes or piezoelectric sensors.
 - ❖ *If a road is on-the-fence between two functional classes, AADT can be useful to decide which functional class is best.*
- **Major Community Development Changes:** Changes due to recent construction of major activity centers (e.g. malls, universities, sport venues, hospitals, amusement parks, military bases, other) that would create more traffic in an area.

- **Urban Area:** Whether a road is located in an urban or rural area may influence its functional classification. See the section below "How the Census Influences Functional Classification."

II-3. FHWA Guidelines

The FHWA has created guidelines to help in determining the functional classification of a roadway. The [FHWA Highway Functional Classification Concepts, Criteria, and Procedures - 2023 Edition](#) offers a helpful tool that can make the classification process of classifying "borderline" roadways a bit easier. Following table from the guidelines illustrates the range of lane width, shoulder width, AADTs, divided/undivided status, access control and access points per mile by functional classification categories:

Typical Characteristics	Arterials				Collectors		Local
	Interstates	Freeways and Expressways	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	
Lane Width (ft)	12	11 - 12	11 - 12	10 - 12	10 - 12	10 - 11	8 - 10
Inside Shoulder Width (ft)	4 - 12	0 - 6	0	0	0	0	0
Outside Shoulder Width (ft)	10 - 12	8 - 12	8 - 12	4 - 8	1 - 6	1 - 4	0 - 2
AADT (Rural)	12,000 - 34,000	4,000 - 18,500	2,000 - 8,500	1,500 - 6,000	300 - 2,600	150 - 1,100	15 - 400
AADT (Urban)	35,000 - 129,000	13,000 - 55,000	7,000 - 27,000	3,000 - 14,000	1,100 - 6,300	1,100 - 6,300	80 - 700
Divided/Undivided	Divided	Either	Either	Undivided	Undivided	Undivided	Undivided
Access	Fully Controlled	Partially/ Fully Controlled	Partially/ Uncontrolled	Uncontrolled	Uncontrolled	Uncontrolled	Uncontrolled
Mileage/VMT Extent							
Rural System							
Mileage Extent (%)	1 - 2	0 - 2	2 - 5	3 - 7	10 - 17	5 - 13	66 - 74
VMT Extent (%)	18 - 34	0 - 8	12 - 29	12 - 19	12 - 24	3 - 10	7 - 20
Urban System							
Mileage Extent (%)	1 - 2	0 - 2	4 - 5	7 - 12	7 - 13	7 - 13	67 - 76
VMT Extent (%)	17 - 30	3 - 18	17 - 29	15 - 22	7 - 13	7 - 13	6 - 24

II-4. Brief Overview

Interstates	Freeways and Expressways	Principal/Major Arterial	Minor Arterial
<ul style="list-style-type: none"> • Only can be designated by FHWA • Access controlled by ramps • No stoplights 	<ul style="list-style-type: none"> • Access controlled by ramps • No stoplights • Traffic traveling in opposite directions separated by physical barriers • AADT <ul style="list-style-type: none"> • Rural: 4,000 – 18,500 • Urban: 13,000 – 55,000 	<ul style="list-style-type: none"> • Access available by means other than ramps • May have stoplights • May or may not have a barrier between opposing traffic lanes • AADT <ul style="list-style-type: none"> • Rural: 2,000 – 8,500 • Urban: 7,000 – 27,000 	<ul style="list-style-type: none"> • Traffic volumes lower than principal arterials <ul style="list-style-type: none"> • AADT Rural: 1,500 – 6,000 • AADT Urban: 3,000 – 14,000 • Spaced closer together than principal arterials, around 1/8 to 3 miles apart • Access available by means other than ramps • May have stoplights • Typically does not have a barrier between opposing traffic lanes
Major Collector	Minor Collector	Local Road	
<ul style="list-style-type: none"> • Lower traffic volumes than arterials <ul style="list-style-type: none"> • AADT Rural: 300 – 2,600 • AADT Urban: 1,100 – 6,300 • Can penetrate neighborhoods • Typically not long enough to travel lengthy distances, such as across multiple counties 	<ul style="list-style-type: none"> • Lower speed limits and traffic volumes than major collectors <ul style="list-style-type: none"> • AADT Rural: 150 – 1,110 • AADT Urban: 1,100 – 6,300 • Typically shorter than 3/4 of a mile in urban areas • Usually no more than a single lane road with a painted centerline • Rural minor collectors are not eligible for federal funding 	<ul style="list-style-type: none"> • Low traffic volumes <ul style="list-style-type: none"> • AADT Rural: 15 – 400 • AADT Urban: 80 – 700 • Shorter than collectors • Do not typically allow through traffic • Provide direct access to adjacent land, such as homes • May have house driveways directly connect to them • Are not eligible for federal funding 	