FUNCTIONAL CLASSIFICATION REVIEW

Jon Heider, MORPC

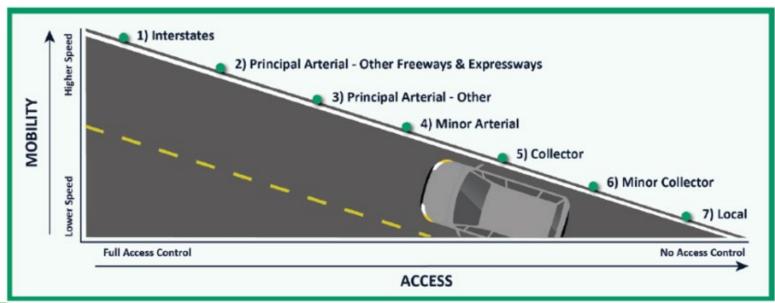


MID-OHIO REGIONAL MORPC PLANNING COMMISSION

FUNCTIONAL CLASSIFICATION



- Functional Classification: defines the role that a roadway segment plays in serving the flow of traffic, ranging from high-volume freeways to local neighborhood streets
 - Used by FHWA, ODOT, and local governments as a formal designation of the roadway's purpose in the system
 - Each of the 7 functional class categories have different design criteria, levels of access, and speed
 - Functional class is reviewed for all roads every 10 years (out-of-cycle changes allowed in certain circumstances).



EXAMPLES BY CLASSIFICATION – ARTERIALS



1 – Interstate

- e.g. I-670 in Columbus
- Limited access
- High speed
- High volume
- Part of Interstate Highway System



3 – Principal Arterial

- e.g. Summit St in Columbus
- Moderate speeds
- Highest non-freeway volume
- Some access points/driveways



2 – Freeway/ Expressway

- e.g. SR-315 in Worthington
- Limited access
- High speed
- High volume
- All freeways except Interstates



- e.g. Post Rd in Dublin
- Moderate speeds
- Moderate volume
- Includes access points/driveways



EXAMPLES BY CLASSIFICATION – Collector/Local



5 – Major Collector

e.g. Washington St. in Canal Winchester

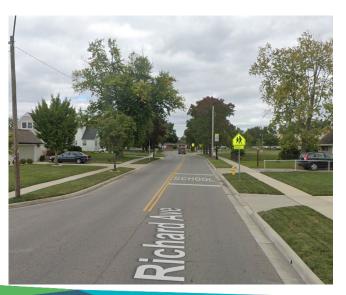
- Low speeds
- Access points
- "Collects" and "distributes" traffic from local streets
- Higher volume than "minor" collectors

6 – Minor Collector

e.g. Richard Ave in Grove City

- Low speeds
- Access points
- "Collects" traffic from local streets
- Lower volume than "major" collectors





7 – Local

- e.g. Dresden St. in Columbus
- Low speeds
- Provides access to residences/businesses



IMPORTANCE OF FUNCTIONAL CLASS

- Roadway engineering design manuals include different requirements depending on the classification, including:
 - Lane widths
 - Shoulder types/widths
 - Intersection design
- Functional class can impact federal aid eligibility
 - In Urbanized Areas, all roadways
 except local streets are eligible
 - In Rural Areas, all except minor collectors and local roads are eligible

Federal Aid Eligibility

	Classification		Function	Federal- aid Eligible?	
	1	Interstate	Mobility	Yes	
	2	Other Freeways	Mobility	Yes	
	3	Other Principal Arterial	Mobility	Yes	
-	4	Minor Arterial	Mobility/Access	Yes	
	5	Major Collector	Access/Mobility	Yes	
	6	Minor Collector	Access	In urban area only	
	7	Local	Access	No	



REVIEW METHODOLOGY



- Federal Guidelines:
 - Continuity (Functionally classified roads must connect to other functionally classified roads of equal or higher class, to form connected network)
 - Proportion of transportation network (mileage)
 - Volume ranges
 - Roadway design elements
- MORPC will collect data for each roadway segment and propose revisions to the existing classifications
- Proposed changes will be brought to the appropriate city/county for review and feedback

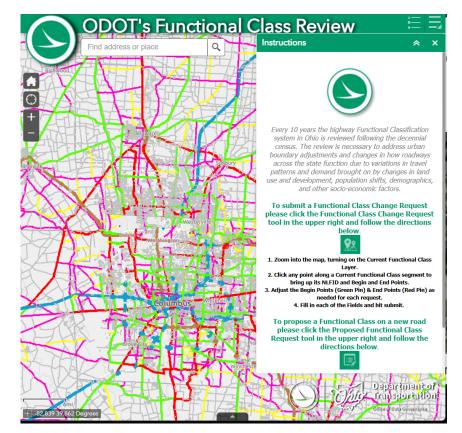
Table 3-5: VMT and Mileage Guidelines by Functional Classifications - Arterials

Arterials:	Interstate	Other Freeways & Expressway	Other Principal Arterial	Minor Arterial				
Typical Characteristics								
Lane Width	12 feet	11 - 12 feet	11 - 12 feet	10 feet - 12 feet				
Inside Shoulder Width	4 feet - 12 feet	0 feet - 6 feet	0 feet	0 feet				
Outside Shoulder Width	10 feet - 12 feet	8 feet - 12 feet	8 feet - 12 feet	4 feet - 8 feet				
AADT ¹ (Rural)	12,000 - 34,000	4,000 - 18,500 ²	2,000 - 8,500 ²	1,500 - 6,000				
AADT ¹ (Urban)	35,000 - 129,000	13,000 - 55,000 ²	7,000 - 27,000 ²	3,000 - 14,000				
Divided/Undivided	Divided	Undivided/Divided	Undivided/Divided	Undivided				
Access	Fully Controlled	Partially/Fully Controlled	Partially/Uncontrolled	Uncontrolled				
Mileage/VMT Extent (Percentage Ranges) ¹		•						
Rural System								
Mileage Extent for Rural States ²	1% - 3%	0% - 2%	2% - 6%	2% - 6%				
Mileage Extent for Urban States	1% - 2%	0% - 2%	2% - 5%	3% - 7%				
Mileage Extent for All States	1% - 2%	0% - 2%	2% - 6%	3% - 7%				
VMT Extent for Rural States ²	18% - 38%	0% - 7%	15% - 31%	9% - 20%				
VMT Extent for Urban States	18% - 34%	0% - 8%	12% - 29%	12% - 19%				
VMT Extent for All States	20% - 38%	0% - 8%	14% - 30%	11% - 20%				
Urban System								
Mileage Extent for Rural States ²	1% - 3%	0% - 2%	4% - 9%	7% - 14%				
Mileage Extent for Urban States	1% - 2%	0% - 2%	4% - 5%	7% - 12%				
Mileage Extent for All States	1% - 3%	0% - 2%	4% - 5%	7% - 114%				
VMT Extent for Rural States ²	17% - 31%	0% - 12%	16% - 33%	14% - 27%				
VMT Extent for Urban States	17% - 30%	3% - 18%	17% - 29%	15% - 22%				
VMT Extent for All States	17% - 31%	0% - 17%	16% - 31%	14% - 25%				
Qualitative Description (Urban): Serve major activity centers, highest traffic volume corridors, and longest trip demands Carry high proportion of total urban travel on minimum of mileage Interconnect and provide continuity for major rural corridors to accommodate trips entering and leaving urban area and movements through the urban area Serve demand for intra-area travel between the central business district and outlying residential areas Interconnect with and augment the principal arterials Interconnect with and augment the principal arterials Serve trips of moderate length at a somewhat lower level of travel mobility than principal arterials Distribute traffic to smaller geographic areas than those served by principal arterials Provide more land access than principal arterials without penetrating identifiable neighborhoods Provide urban connections for rural collectors 								
chi • Sei arc • Pro	rve corridor movements having trip len aracteristics indicative of substantial sta rve all or nearly all urbanized areas and as with 25,000 and over population ovide an integrated network of continu- nections (dead ends)	tewide or interstate travel ca a large majority of urban ne 5 pous routes without stub Pr th	 Link cities and larger towns (and other major destinations such as resorts capable of attracting travel over long distances) and form an integrated network providing interstate and inter-county service Spaced at intervals, consistent with population density, so that all developed areas within the State are within a reasonable distance of an arterial roadway Provide service to corridors with trip lengths and travel density greater than those served by rural collectors and local roads and with relatively high travel speeds and minimum interference to through movement 					

FUNCTIONAL CLASS REVIEW SCHEDULE



- 11/1/24: Stakeholder Input Starts
- 8/31/25: Stakeholder Input Ends
- 9/1/25: FHWA Evaluates Changes
- 12/31/25: Functional Class Changes Adopted



*After coordination with stakeholders, MORPC will submit changes to ODOT via web map application (must be submitted before 8/31)

JONATHAN HEIDER, AICP

Senior Planner Mid-Ohio Regional Planning Commission

T: 614.233.4168 jheider@morpc.org 111 Liberty Street, Suite 100 Columbus, OH 43215

