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Longhorns in the Wichita Mountains Wildlife Refuge

Implications of the U.S. Census on Urban Area Boundaries and Functional Classification

Kirk D. Fauver
FHWA Texas Division
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U.S. Department of Transportation
Federal Highway Administration

Urban Area Boundaries

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- As a result of the decennial census, the U.S. Census Bureau issues urban area boundary maps.
- Transportation agencies should review these census boundaries and either accept them as is or adjust them for transportation planning purposes.





Census Urban Boundaries

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- Previous 2010 Census Schedule
 - Release of data from Census
 - Federal Register Notice March 27, 2012
 - New TMAs Identified by USDOT
 - Released after 2012 in Federal Register Notice
 - New MPO designations (> 50,000 pop.)
- Follow-up Process
 - **New MPO development**
 - **Expanded MPA boundary**
 - **Smoothing of the Urbanized Area Boundary**
 - **Functional Classification**



Adjusting Urban Area Boundaries (UAB)

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- Census Releases Urban Area Boundary
- Cooperative effort by States and locals
- State DOT submits to FHWA for approval
 - In previous 2010 Census, if nothing submitted by June 2014 FHWA HQ's assumed just using 2010 Census boundaries
- Update Functional Classifications
 - Submit to FHWA Division office
 - NHS Network Changes Approved by FHWA HQ



Adjusting Urban Area Boundaries (UAB)

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- For the purposes of the boundary adjustment process, the term “adjusted urban area boundaries” refers to the FHWA boundary adjustment process in all areas of **5,000 population and above**.

Table 6 2: FHWA Urban Area Types Defined by Population Range

FHWA Area Definition	Population Range	Allowed Urban Area Boundary Adjustments
Urban Area	5,000+	Yes
Small Urban Area (From Clusters)	5,000-49,999	Yes
Urbanized Area	50,000+	Yes



Key Milestones for Adjusted UABs

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Table 6-2: Key Milestones for Development and Submittal of Adjusted Urban Area Boundaries

Event	Months Following Decennial Census Data Release (CDR)
Census releases urban area boundaries and FHWA issues transmittal letter	Month 24
Begin adjusted urban area boundary update process	Month 24
DOT works with planning partners to define adjusted urban area boundaries	Month 27-Month 33
Provide draft final data and/or maps to FHWA Division Office for review	Month 34
DOT incorporates updates	Month 35
DOT submits adjusted urban area boundaries via annual HPMS submittal	Month 36

Source:

https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/



Adjusting Urban Area Boundaries (UAB)

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- Reasons for adjusting urban area boundaries for transportation planning purposes often relate to a need for consistency or geographic continuity.
- For example, it may be logical to include, as part of an urban area, a roadway that is used by urban residents but is located just outside the official Census Bureau urban area boundary.
- Or, it may make sense to designate as urban a rural pocket in the middle of an urban area (or to address alternating patterns of rural and urban designated areas). Additionally, large, low density land uses on the urban fringe that serve the urban population such as **airports, industrial parks, regional shopping centers** and other urban attractions may also be included in an urban area.



Adjusted UAB Process

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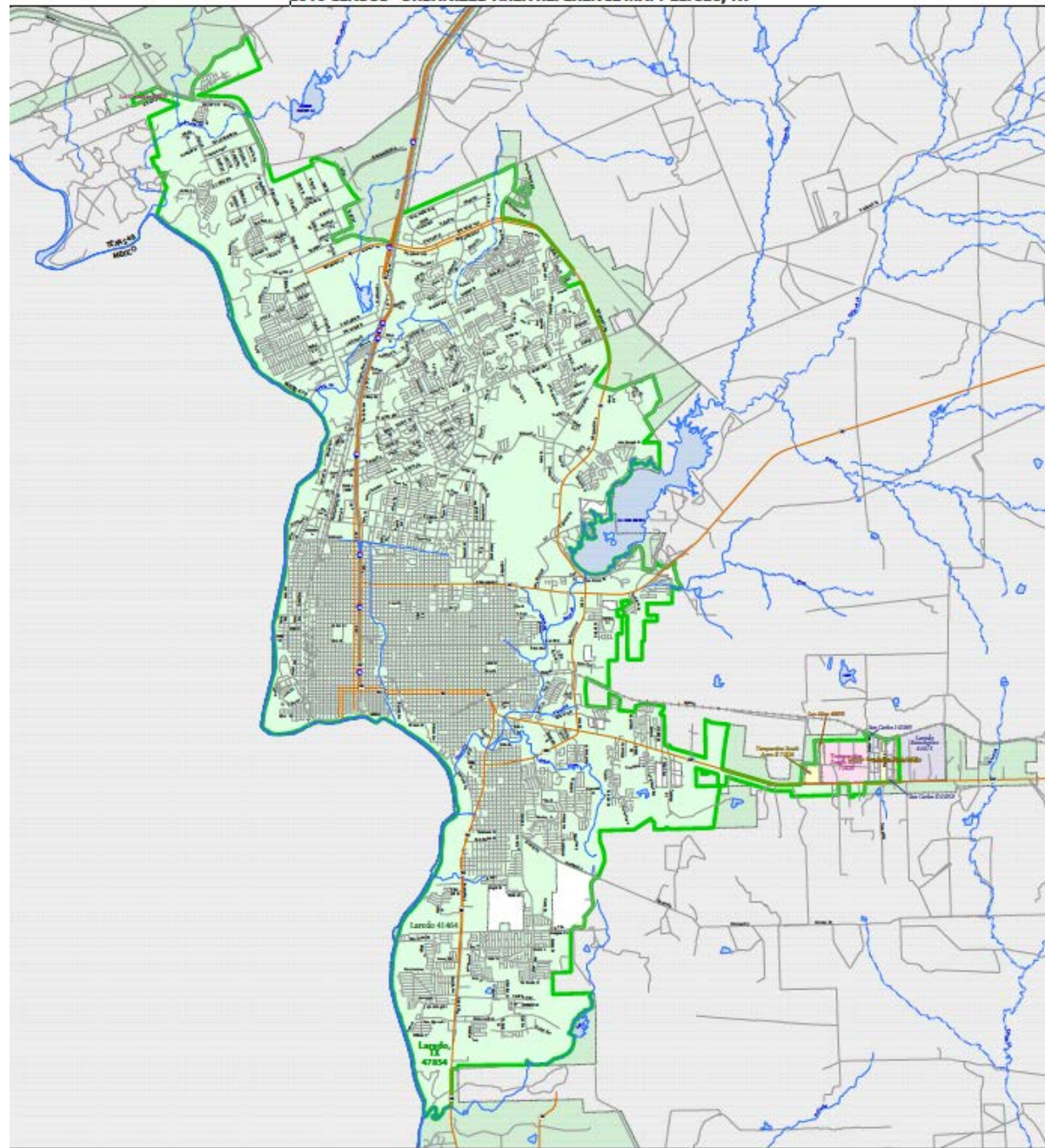
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- Once the State DOT has successfully reviewed and concurred with all recommend adjusted urban area boundaries, the State DOT should submit the draft final adjusted urban area boundaries to its FHWA Division Office for final approval.
- The specific format of data delivery should be worked out between the State DOT and their FHWA Division Office. Various geospatial formats will be acceptable, and as developed, FHWA systems such as HPMS or HEPGIS may be used.
- As a final resort, hard copy maps at a scale sufficient to identify the adjusted urban area boundaries can be submitted.
- Source:
https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/



2010 Urbanized Area Map (Laredo, Texas)

- Source: U.S. Census 2010
- Web-link:
https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua47854_laredo_tx/DC10UA47854.pdf
- Date: March 28, 2012



Urban Clusters and Urbanized Areas Listed by U.S. Census

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- The 2010 Census released a list of both urban clusters and urbanized areas as part of the decennial census. Rural areas encompass areas not included within an urban area.
- Two types of Census defined urban areas include:
 - Urban clusters (pop.= 2,500-49,999)
 - Urbanized areas (pop.= \geq 50,000)
- The list of both urbanized areas and urban clusters are shown in the web-link below.

https://www2.census.gov/geo/pdfs/maps-data/maps/reference/2010UAUC_List.pdf



Previous Schedule of Activities

Schedule of Activities

Date	Activity
August 24, 2011	U.S. Census Bureau published the final criteria for the defining of urbanized areas (UZAs) and urban clusters (UCs) in the <i>Federal Register</i> .
March 27, 2012	The Census Bureau published the new list of UZAs and UCs based on the 2010 Census in the <i>Federal Register</i> (PDF or TXT) and released TIGER/Line geographic Shapefiles for the 2010 UZAs and UCs on the 2010 Census TIGER/Line Shapefiles website.
April 24, 2012	HEPGIS (beta) includes UZA and UC boundaries, including the ability to download shapefiles
July 18, 2012	USDOT (FHWA/FTA) published the new list of Transportation Management Areas (TMAs) in the Federal Register .
Before Oct 2012	States should revisit their intra-State formulas for metropolitan planning (PL) funds allocations to MPOs to ensure that the new Census 2010 population figures are being used and that any new MPOs are part of the calculation.
Before next regularly-scheduled MTP update, after October 1st, 2012, or within 4 years of the designation of the new UZA boundary, whichever occurs first	Existing MPOs must expand their Metropolitan Planning Areas (MPAs) to include all territory in Census 2010 UZAs (if necessary).
March 27, 2013	New MPOs must be designated by Governor(s) to represent all new UZAs.
January 18, 2014	New TMAs must have a Congestion Management Process (CMP)
June 1, 2014	Any adjustments to UZA boundaries must be approved by the Governor(s) and FHWA Division Office(s). FHWA will consider all boundaries final as of this date and will use the original 2010 Census UZA boundaries for all UZAs that have not been adjusted. The 2014 HPMS data submission must conform to the approved boundary as of June 1, 2014.
March 27, 2016 (4 years after list of UAs is published)	New MPOs must have a formally adopted Long-Range Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP)

FHWA Census FAQs

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- Everything you want to know is covered on the FHWA Census Issues website
 - http://www.fhwa.dot.gov/planning/census/issues/urbanized_areas_and_mpo_tma/
- FHWA will use that site to also keep the schedule updated for the next Census.





New TMAs (2010 Census)

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- 200,000 population= Transportation Management Areas (TMA)
- US DOT Identifies in Federal Register
 - 180 TMAs
 - 27 New TMAs (2010 Census)
- STP-Urban Funds (Category 7-UTP) designated to the region
- Congestion Management Process (CMP) Required
 - 18 months after designation as TMA
- First Certification Review
 - four years upon designation as TMA





New MPOs

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- 50,000 population= Metropolitan Planning Organization
- 12 Month Gestation Period
 - Develop New Governance & Bylaws
 - Membership
 - Metropolitan Planning Area
- Once established
 - Develop UPWP
 - Work with State on TIP
- Meet All Planning Requirements of
 - 23 CFR 450





Expanded Metropolitan Planning Area (MPA) Boundaries

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- Expanded MPO coverage area
- Many Case by Case Issue
 - Governance
 - Long Range Plans and TIPs
 - Urban Area Boundary (UAB) Adjustments
 - Local decisions and determinations



Expanded MPA Boundary Requirements

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- Must be determined by agreement between the MPO and the Governor (through TxDOT)- 23 CFR 450.312(a)
- At a minimum, the MPA must encompass the entire existing urbanized area (as defined by the Census). (23 CFR 450.312(a)(1))
- The MPO (in cooperation with the State DOT and public transit operator) shall review the MPA boundaries after each Census to determine if existing MPA boundaries meet the minimum statutory requirements and update them as necessary. (23 CFR 450.312(i))



Previous 2010 Census Planning Timelines

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- March 27, 2012
 - Census FR Notice
- Followed By:
 - TMA identification by USDOT
- October 2012
 - STP-U funds distributed to TMAs
 - Census 2010 population Federal Aid
 - States review PL funding allocation





Previous 2010 Census Planning Timelines - (cont.)



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- ▶ March 2013
 - New MPOs designated by Governor(s)
- ▶ Fall 2013
 - New TMAs should have CMP
- ▶ June 2014
 - If no Adjusted UZA FHWA considers Census boundary official
- ▶ Spring 2016
 - New MPOs have LRTP and TIP adopted
- ▶ Fall 2016 or sooner
 - Existing MPOs expand their MPA





Functional Classification How?



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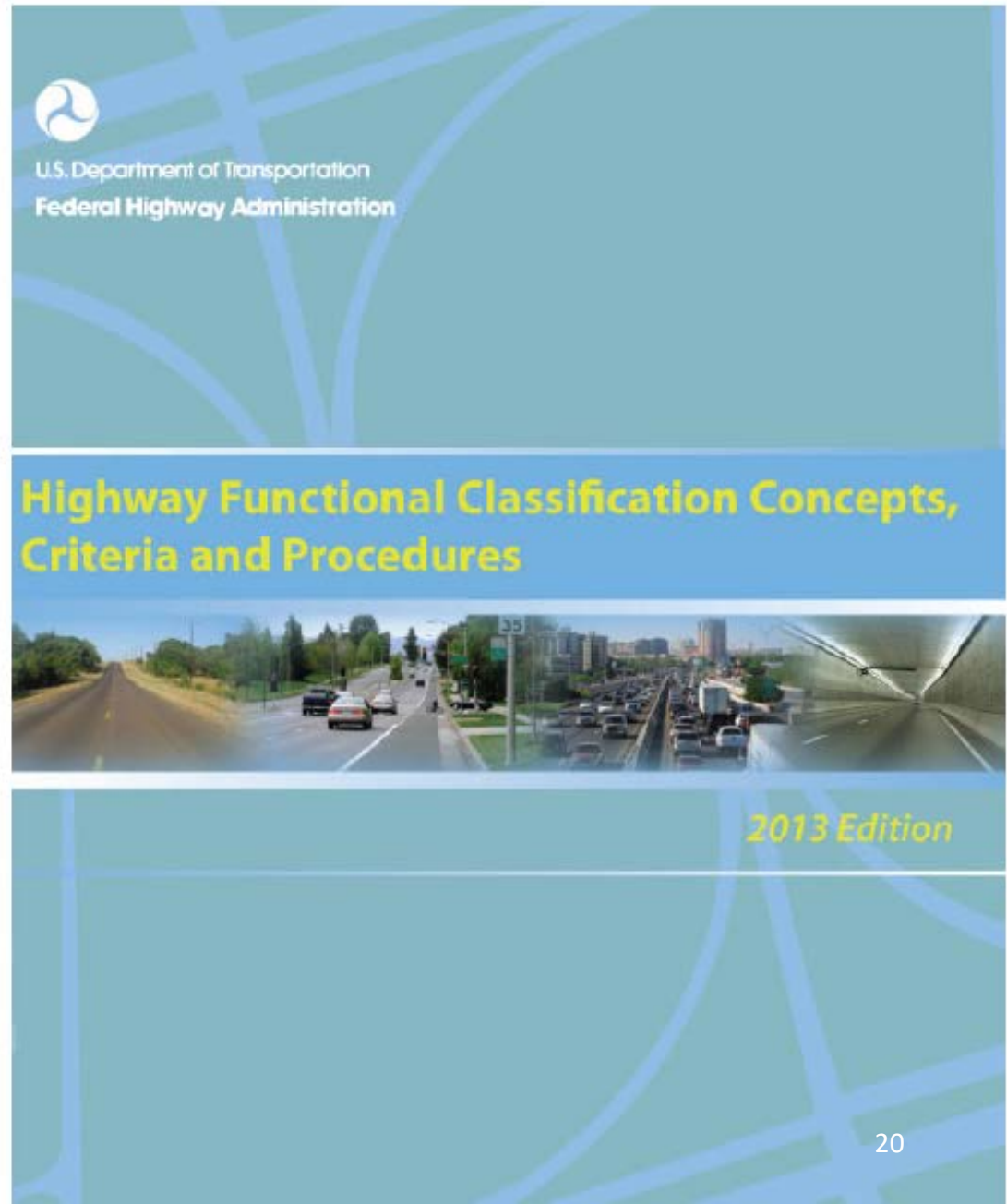
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- Updates can be done at any time, however State DOTs should consider adjusting FC **at least every 10 years**, as part of each decennial Census and Urban Boundary changes.
- Group population centers and major travel generators
- Identify neighboring centers
- Connect the largest directly
- Connect the next group to the major centers



Current FHWA Functional Classification Guidance

- 2013 Edition of the FHWA “Highway Functional Classification Concepts, Criteria, and Procedures” located at:
https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf

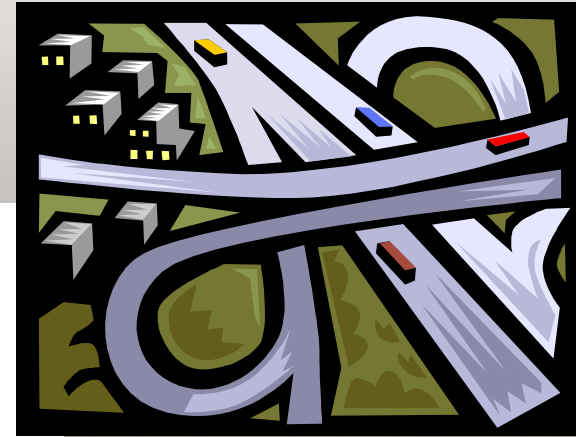


What is the function of a road?

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- ▶ Provides mobility (arterials)
- ▶ Provides access (locals)
- ▶ Provides both (collectors)

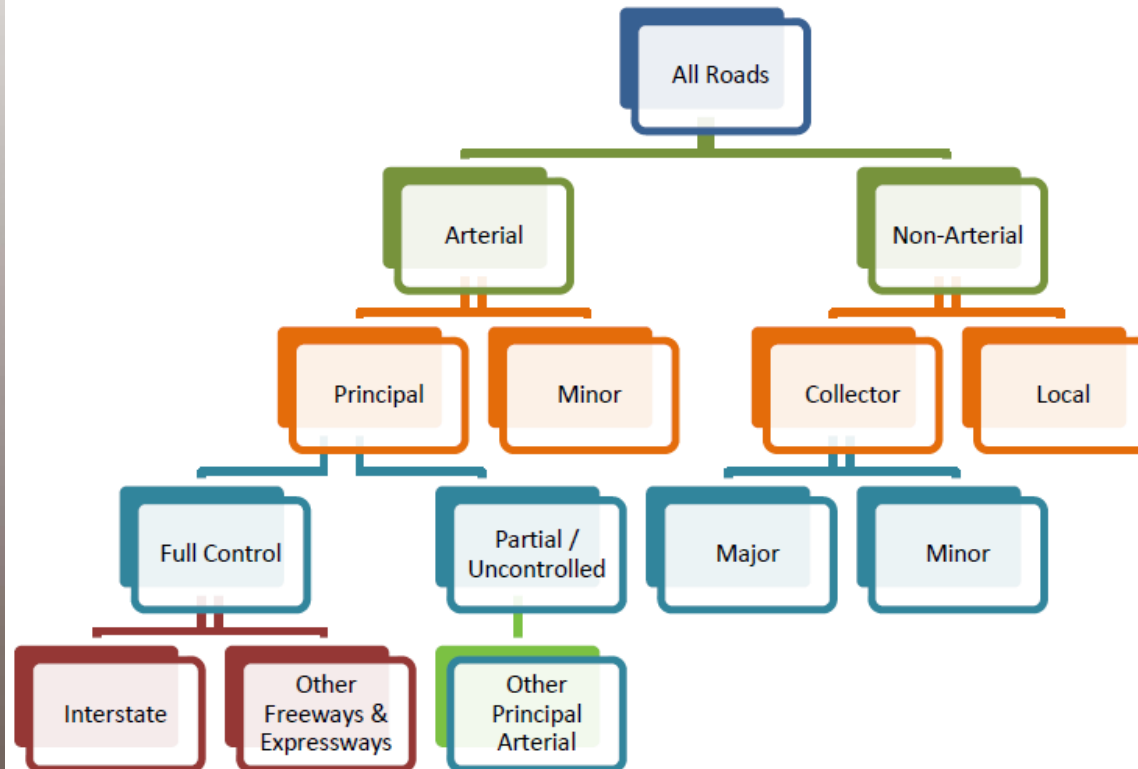


Federal Functional Classification

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Figure 3-4: Federal Functional Classification Decision Tree



Source: FHWA and CDM Smith



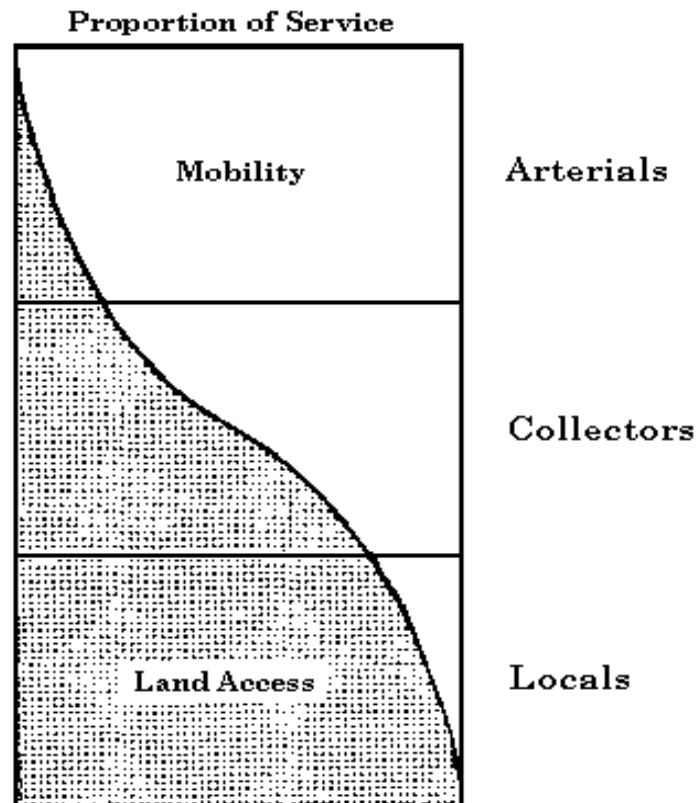
Relationship to service

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Figure II-4

Relationship of functionally Classified Systems
in Serving Traffic Mobility and Land Access

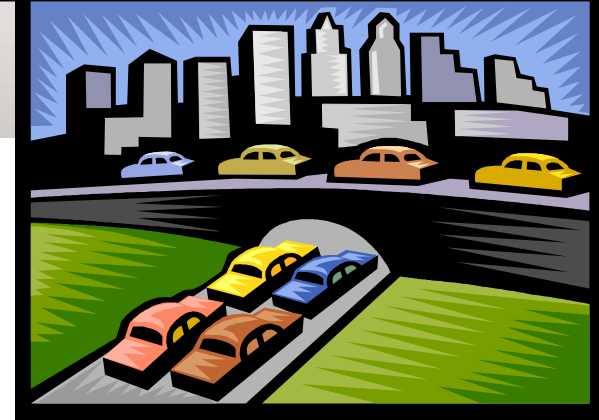


Functional Classification result of UZA adjustment

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- Considerations:
 - Arterials integrated network
 - Spacing
 - Changes at urban boundaries
 - Trip length



Highway Functional Classification Concepts, Criteria and Procedures (2013) Update

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- It is just a **guide** updated in 2013
- Varies in practice by state
- Functional Class Urban begins at 5,000 population
- Some states develop supplemental criteria
- https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/



Thank you!

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Texas Division Office

Kirk D. Fauver

FHWA Texas Division (HPP-TX)

300 E. 8th Street, Room 826

Austin, Texas 78701

E-mail: kirk.fauver@dot.gov

PH: 512-536-5952

