Urban Area Boundaries
Urban/Rural Definition
Urban Area Boundary

- Urban and rural demarcation defined by function not urban area boundary
- Roads that define a boundary should be consistently urban or rural
- Area must encompass Census Bureau urban area, at a minimum
- Should be one contiguous area

Example of Roadway Coinciding with Adjusted Urban Area
Urban Area Boundaries – Reasons to Expand

- Include entire municipality
- Include areas with urban characteristics
- Include large/significant generators, e.g., airports, industrial areas
- Should be one contiguous area
Urban Area Boundaries – Considerations

- Boundaries can consider transportation terminals, transit routes
- Boundary should follow municipal limits or physical features
- Boundary should be easy to discern
- Boundaries should be simple, without irregularities
- Boundaries should not split roadways or ramps

Example Boundary Adjusted to Align with Major East-West Roadway to the South
## Urban Area Boundaries

### Urban/Rural Definition

#### Census Bureau Area Definition

<table>
<thead>
<tr>
<th>Area Definition</th>
<th>Population Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Area</td>
<td>2,500+</td>
</tr>
<tr>
<td>Urban clusters</td>
<td>2,500-49,999</td>
</tr>
<tr>
<td>Urbanized Area</td>
<td>50,000+</td>
</tr>
</tbody>
</table>

#### FHWA Area Definition

<table>
<thead>
<tr>
<th>Area Definition</th>
<th>Population Range</th>
<th>Allowed Urban Area Boundary Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Area</td>
<td>5,000+</td>
<td>Yes</td>
</tr>
<tr>
<td>Small Urban Area</td>
<td>5,000-49,999</td>
<td>Yes</td>
</tr>
<tr>
<td>Urbanized Area</td>
<td>50,000+</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Urban Area Boundary Adjustment
Good Practice Steps/Schedule

- Recommended 12 month schedule following Census data release

- At a minimum – confirm Census boundaries are adequate, also...
  - Build/share understanding of game plan
  - Generate maps and share electronically – use GIS if at all possible
  - Encourage/work towards timely delivery of UAB revisions

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

- Adjusted Urban Area Boundaries (AUAB’s) were approved by the FHWA Division Office during the Calendar Year 2014.

- States submitted their AUAB’s in the HPMS software by June 15, 2015

- HPMS will update the Urban Area Codes in its data tables utilizing spatial technology, by intersecting the 2010 Census Urban Area Boundary Polygons with a given State’s LRS if the State did not adjust their UAB’s during CY 2014

- Utilizing automated techniques may result in unusual data trends that the State isn’t expecting.

- Discussion
The HPMS is a national level highway information system that includes data on the extent, condition, performance, use and operating characteristics of the nation's highways. The HPMS contains administrative and extent of system information on all public roads, while information on other characteristics is represented in HPMS as a mix of universe and sample data for arterial and collector functional systems. Limited information on travel and paved miles is included in summary form for the lowest functional systems.

HPMS was developed in 1978 as a continuing database, replacing the special biennial condition studies that had been conducted since 1965. The HPMS has been modified several times since its inception. Changes have been made to reflect changes in the highway systems, legislation, and national priorities, to reflect new technology, and to consolidate or streamline reporting requirements.

More on HPMS

ARNOLD FAQ
Frequently Asked Questions
HPMS Community Practice
HPMS Reappraisal
Purpose of HPMS
State HPMS Websites

HPMS and Related Publications

Quick Find Mileage Data (tables on Road miles from Highway Statistics)
HPMS Field Manual
HPMS Primer (Overview of the HPMS for FHWA)
FHWA Review Guidelines

HPMS Archive Item Descriptions (Data item descriptions)
- 1982-1987 Archive
- 1988-1992 Archive
- 1993-1998 Archive
- Urbanized Area Codes 1991-2001

Use of Census Boundaries for HPMS Data Reporting

FAQ: Applying 2000 Census Data to Urbanized and Urban Areas
Urban Area Boundaries

Highway Functional Classification Guidelines

Highway Functional Classification: Concepts, Criteria and Procedures

HPMS Travel Data Reporting

State Practices Used to Report Local Area Travel
Traffic Data for High Volume Routes: Best Practices and Guidelines
Improving HPMS Data Quality

A Continuous Process Improvement Model for the HPMS
Seven Deadly Misconceptions About Information Quality

Data Quality

HPMS Sample Management

Other Publications

Non-Federal Applications of HPMS
State geospatial networks in the National Transportation Atlas Database (NTAD)
Summary of the extent, usage, and condition of the U.S. Interstate System By State and Interstate Route Number
HPMS Public Release of Geospatial Data in Shapefile Format
Our nation's roadway system is a vast network that connects places and people within and across national borders. Planners and engineers have developed elements of this network with particular travel objectives in mind. These objectives range from serving long-distance passenger and freight needs to serving neighborhood travel from residential developments to nearby shopping centers. The functional classification of roadways defines the role each element of the roadway network plays in serving these travel needs. Ultimately, the coordinated and systematic maintenance of an accurate roadway functional classification system ensures that Federal Aid funds are allocated where they are most needed, to enable people and goods move fluidly through our modern transportation system.


Why develop new guidance?

- **The Federal Aid system is mature.** Modern functional classification processes typically involve reclassification of existing roads rather than the development of new networks in need of classification.
- **Classification of roadways is more comprehensive than before.** Where vehicular mobility was the driver of historical classification needs, today's classification process involves context, multimodal accommodation, and cross-disciplinary consensus building between engineers, planners and communities.
- **Technology has changed.** New methods for cataloging and tracking roadways such as Geographic Information Systems (GIS) enable precise spatial location of roadways as well as detailed mapping of highway systems.
- **Functional classification coding at the Federal level has been simplified.** All functional classification categories will now exist in both urban and rural areas.
- **Urban Boundary delineation correlates with changes to urban area designation by the US Census Bureau.** Guidance to coincide with the latest Census and FHWA requirements for urban areas was needed.

What is included in the updated guidance document?

- Definitions and criteria for each highway classification category
- Guidance, best practices and procedural tasks for functional classification maintenance
- Discussion of the applications for Functional Classification including performance and design
- Description of emerging and future classification trends
- Definitions of urban area designations
- Delimitation of the technical tasks and considerations of adjusting urban area boundaries
- Data transmission requirements for urban area boundary adjustments
Contacts

• Joseph Hausman
• 202-366-5047
• Joseph.hausman@dot.gov

• FC and AUAB URL:
• http://www.fhwa.dot.gov/policyinformation/hpms/hfcccp.cfm

• Comments/Questions