

**TPB/COG
Transportation
Analysis Zone
(TAZ)
Refinement:
Status report**



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TPB Travel Forecasting Subcommittee
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Project objectives

- Primary reason for this exercise: to replace the 2191 COG/TPB zone system in place since 1995
- Key objective- balance the needs of transportation (network/model) and planning (cooperative forecasting)
- Smaller zones around activity centers, transit, areas of increased or planned development
- Strive for uniformity in zone size throughout the TPB Modeled Region ,taking into account development patterns (present and future)
- Design a new zone structure that will be usable and meaningful until the next TAZ update (10-15 years historically)

A brief timeline of the project

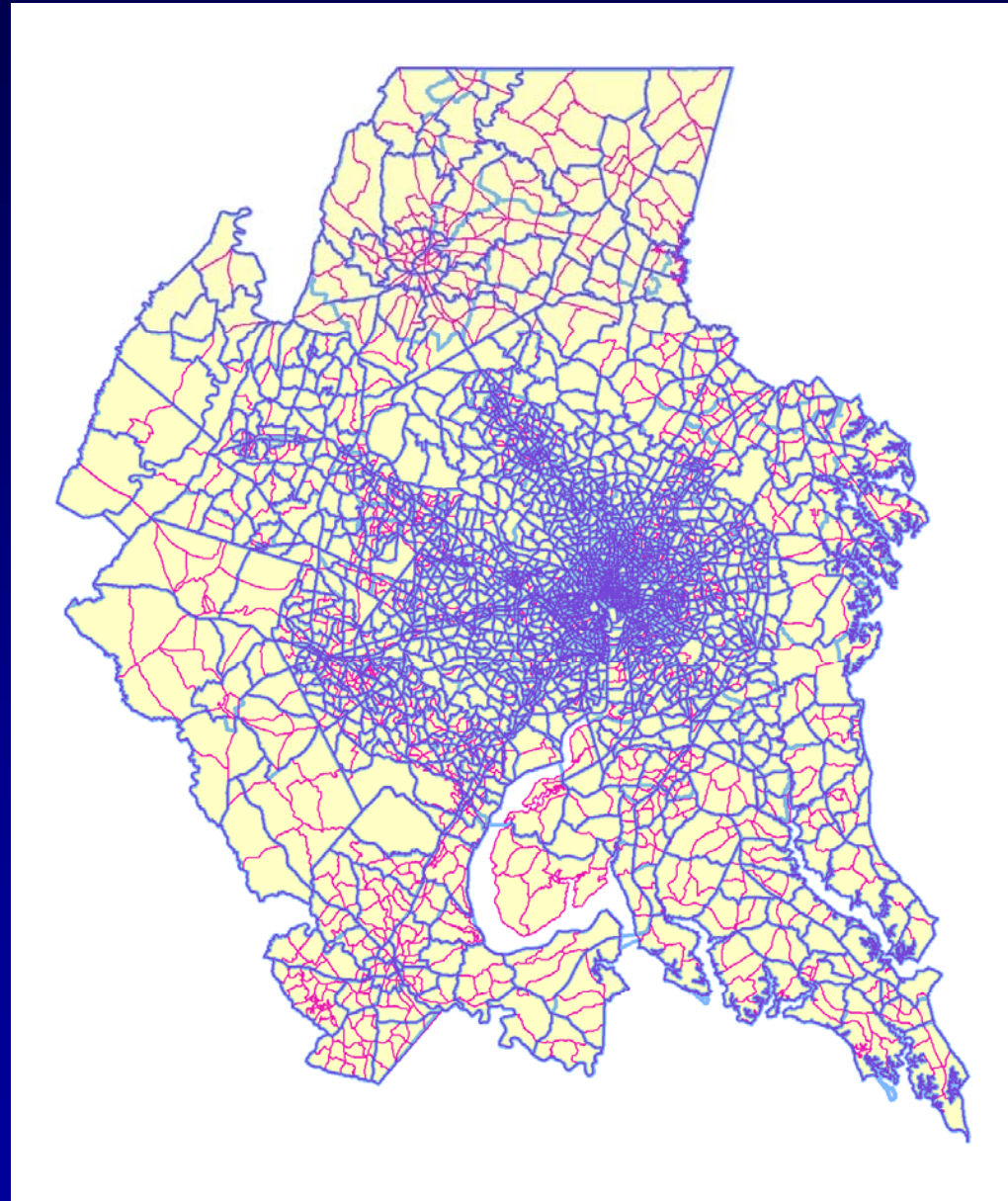
- June 2007- first rough-cut of new zone system
- June 2008- 'good final draft' of new zone system
- March 2009- 'final' finalization of new zone system
- April 2009 and beyond – utilize new zone system for events leading up to TPB 2010 Plan Update

A brief review of methodology

- Starting point- current zone structure of the local jurisdictions
 - Incorporate these local TAZ's as much as possible, but within a regional context
 - Create new COG/TPB TAZ's from these local zones
- Reference data:
 - TPB Master Network, including current and future transit locations (i.e. the master Station file)
 - Street centerline datasets
 - Regional Activity Centers

2191 vs. New TAZ system at a glance

- Zone refinement in areas that have experienced increased development since last TAZ system creation
- Additional detail for outer jurisdictions
- Realignment of TAZ boundaries common to both systems
- Common county boundary file



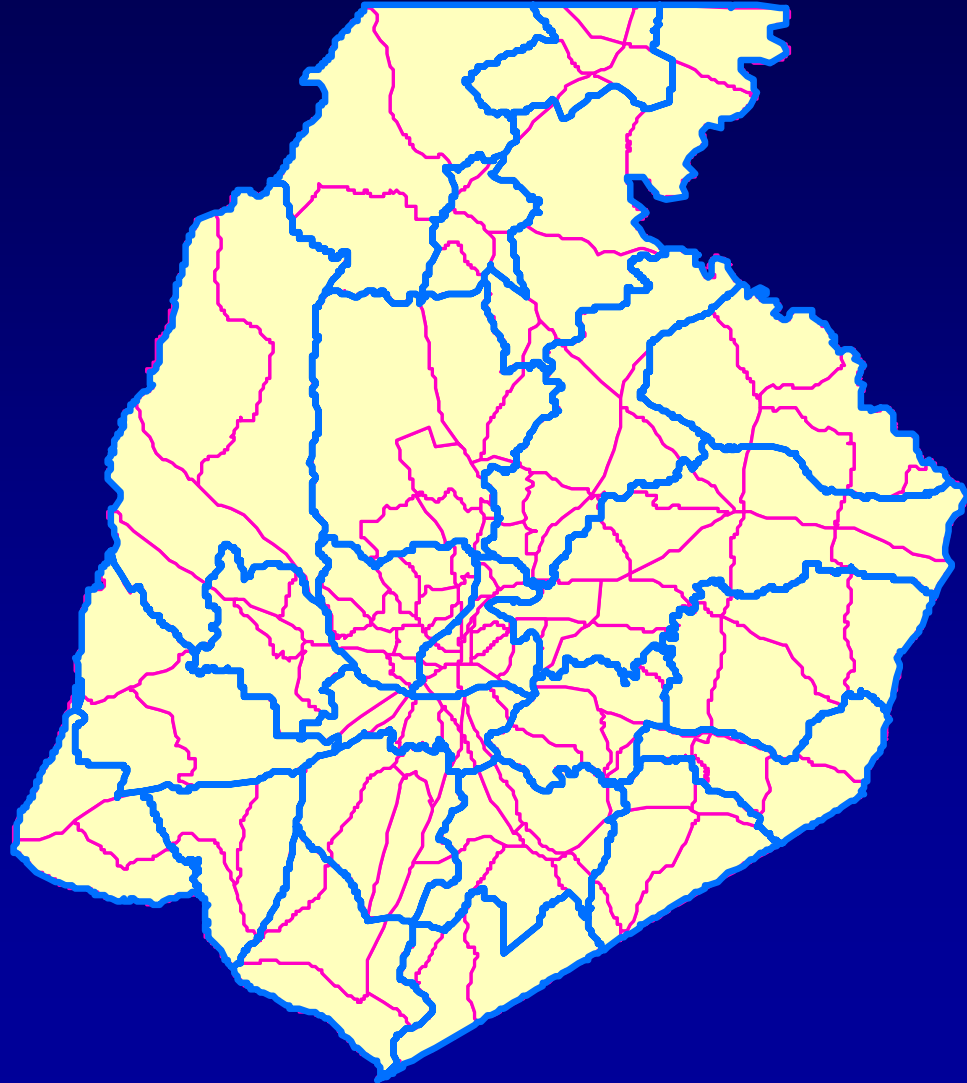
2191 vs. New TAZ system at a glance, Outer Jurisdictions of TPB Modeled Region



- Jurisdictions 17-23 (King George, Fredericksburg, Stafford, Spotsylvania, Fauquier, Clarke, Jefferson) currently have 48 TAZ total
- New zone system provides 266 zones for these outer jurisdictions
- Improved consistency for zone size throughout TPB Modeled Region

2191 vs. New TAZ system at a glance, Frederick County, MD

- The current TAZ system has 24 zones for Frederick County
- Draft of new COG/TPB zone system will increase number of zones to approximately 130
- Incorporation of County/City sub-zones as well as current & planned development



2191 vs. New TAZ system at a glance, comparison by jurisdiction

JURISDICTION	JUR code	2191 zone system number range	2191 system number of zones	2191 system average sq. mi.	NEW number of TPB zones	NEW average sq. mi. for zones
District of Columbia	0	1-319	319	0.192	393	0.17
Montgomery Co., Md.	1	320-627	308	1.6	371	1.37
Prince Georges Co., Md.	2	640-1020	381	1.28	635	0.79
Arlington Co., Va.	3	1230-1311	82	0.32	141	0.18
City of Alexandria, Va.	4	1330-1389	60	0.26	65	0.24
Fairfax Co., Va.	5	1400-1755	356	1.13	546	0.76
Loudoun Co., Va.	6	1780-1905	126	4.12	282	1.85
Prince William Co., Va.	7	1920-2061	142	2.47	378	0.95
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Frederick Co., Md.	9	1030-1053	24	27.6	129	5.18
Howard Co., Md.	10	1080-1099	20	12.61	67	3.78
Anne Arundel Co., Md.	11	1110-1142	33	12.6	98	4.24
Charles Co., Md.	12	1200-1223	24	19.21	113	4.08

2191 vs. New TAZ system at a glance, comparison by jurisdiction, continued

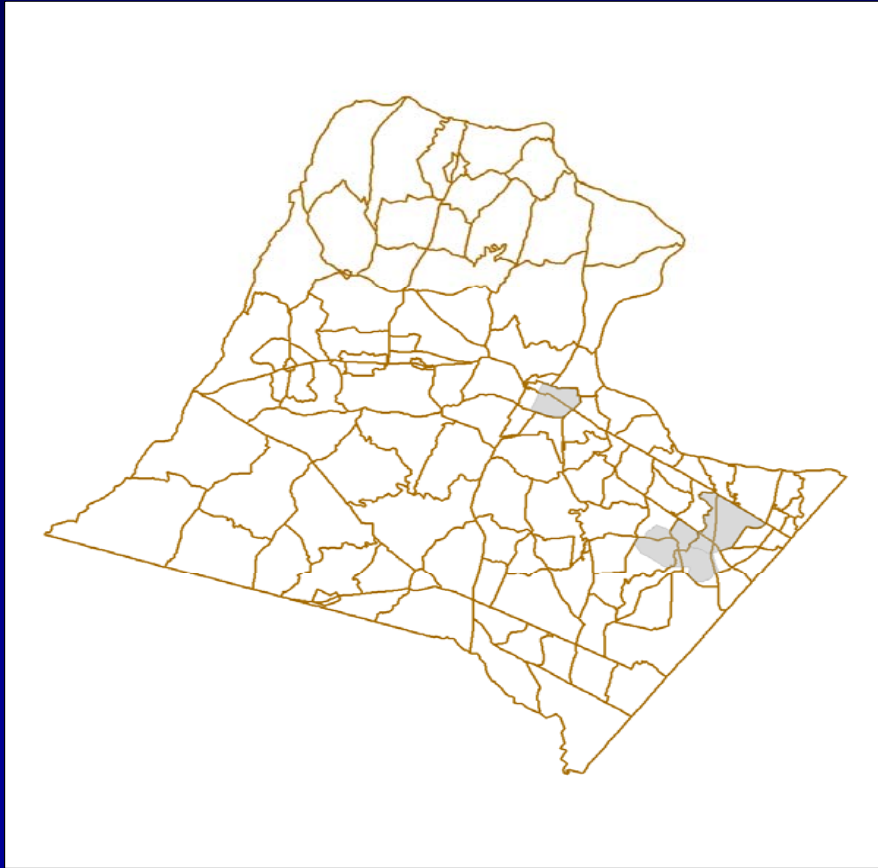
JURISDICTION	JUR code	2191 zone system number range	2191 system number of zones	average sq. mi. for OLD zones	NEW number of TPB zones	NEW average sq. mi. for zones
Carroll Co., Md.	14	1060-1073	14	32.1	53	8.53
Calvert Co., Md	15	1150-1163	14	15.37	47	4.61
St. Mary's Co., Md.	16	1170-1190	21	17.2	75	4.84
King George Co., Va.	17	2070-2074	5	36	25	7.41
City of Fredericksburg, Va.	18	2100-2101	2	5.26	14	0.75
Stafford Co., Va.	19	2080-2093	14	19.28	93	2.98
Spotsylvania Co., Va.	20	2105-2110	6	26.54	62	2.62
Fauquier Co., Va.	21	2115-2125	11	59.11	50	13.04
Clark Co., Va.	22	2130-2132	3	58.87	9	19.79
Jefferson Co., Wv.	23	2135-2141	7	29.93	13	16.28
TOTAL			1972	17.41	3659	4.75

Example: Loudoun County, VA

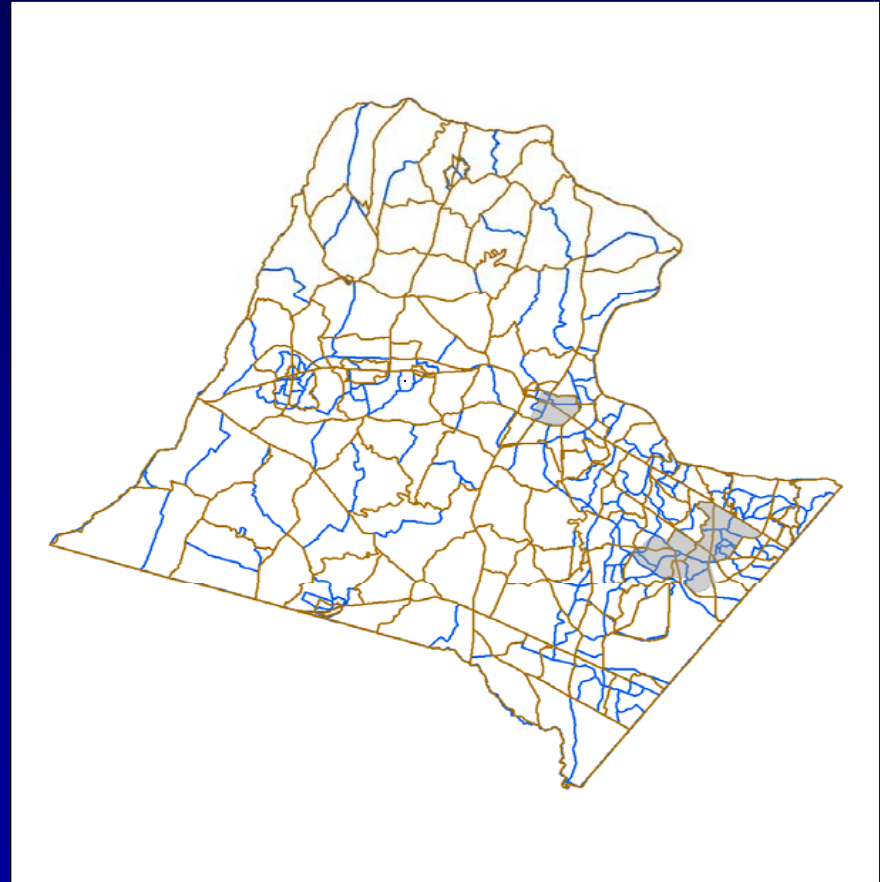
- The Current COG/TPB 2191 zone system has 126 zones in Loudoun County
- Loudoun County staff performed a thorough re-delineation of their zones as part of this exercise
- Final approved draft zones = 282

Loudoun County, VA, continued

126 current
COG/TPB in
Loudoun County



Incorporate new zones
prepared by County staff;
special emphasis placed on
the eastern portion of the
county; reviewed by TPB staff



Result: 282 New COG/TPB TAZ for Loudoun County.
This is an increase of 156 zones.

Remaining issues & next steps

- Final review of proposed COG/TPB TAZ structure by jurisdictions outstanding
- Correct spatial errors resulting from incorporating final edits from jurisdictions
- Assigning zone number ranges per jurisdiction
- Final approval from TPB & Planning staff
- Hand-off to networks & models group so they can 'do their thing' (zone centroids, 7.2 cooperative forecast allocation, model calibration files, etc.)