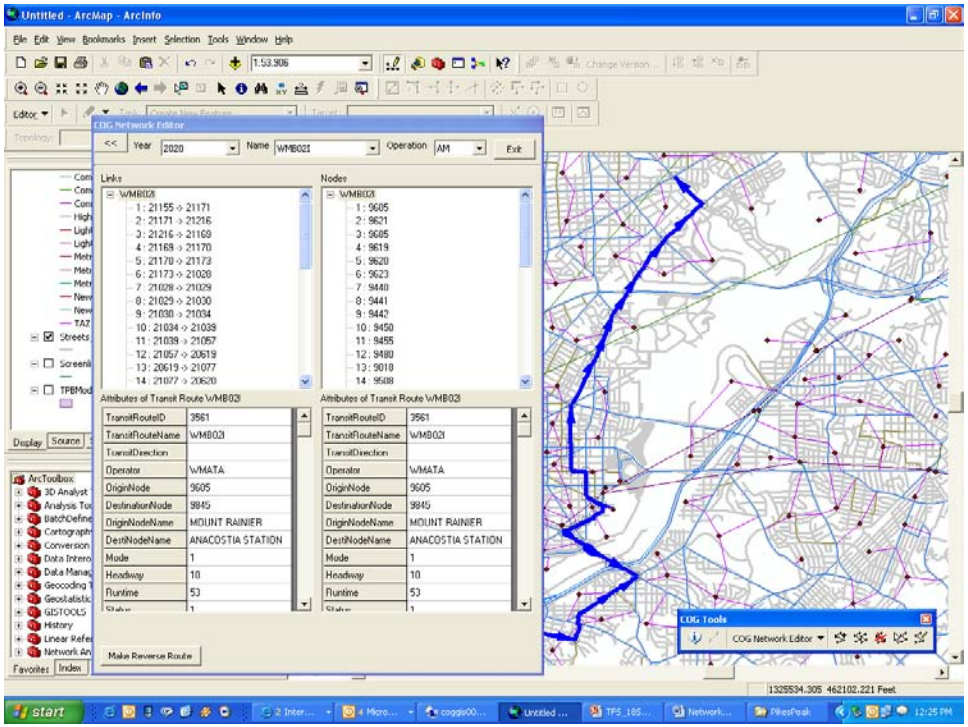
Network Development: Status report



Robert Snead, COG/TPB

Presentation to the TPB Travel Forecasting Subcommittee
19 March 2010

Overview of presentation

1. Status of effort to develop year-2007 highway and transit networks on the new zone system (3,722 TAZ) for use with the Version 2.3 travel model

2. Next steps

Status of Network Development Process:

Step	Status
Finalize 3,722 TAZ system	Complete
Add new road links, since more TAZ means a more detailed road network	Complete
Create new centroids for each TAZ	Complete
Add centroid connectors	Complete
Add network detail that was omitted in the past due to software limits	Complete
Export highway and transit networks from GDB into Cube format for review	In progress
Add network components representing transit infrastructure	In progress
Review transit route coding	In progress
Export highway and transit networks from GDB into Cube format for further review and modeling	Future work
QC/QA: Highway network (tree tracing, etc.)	Future work
QC/QA: Transit network (tree tracing, etc.)	Future work

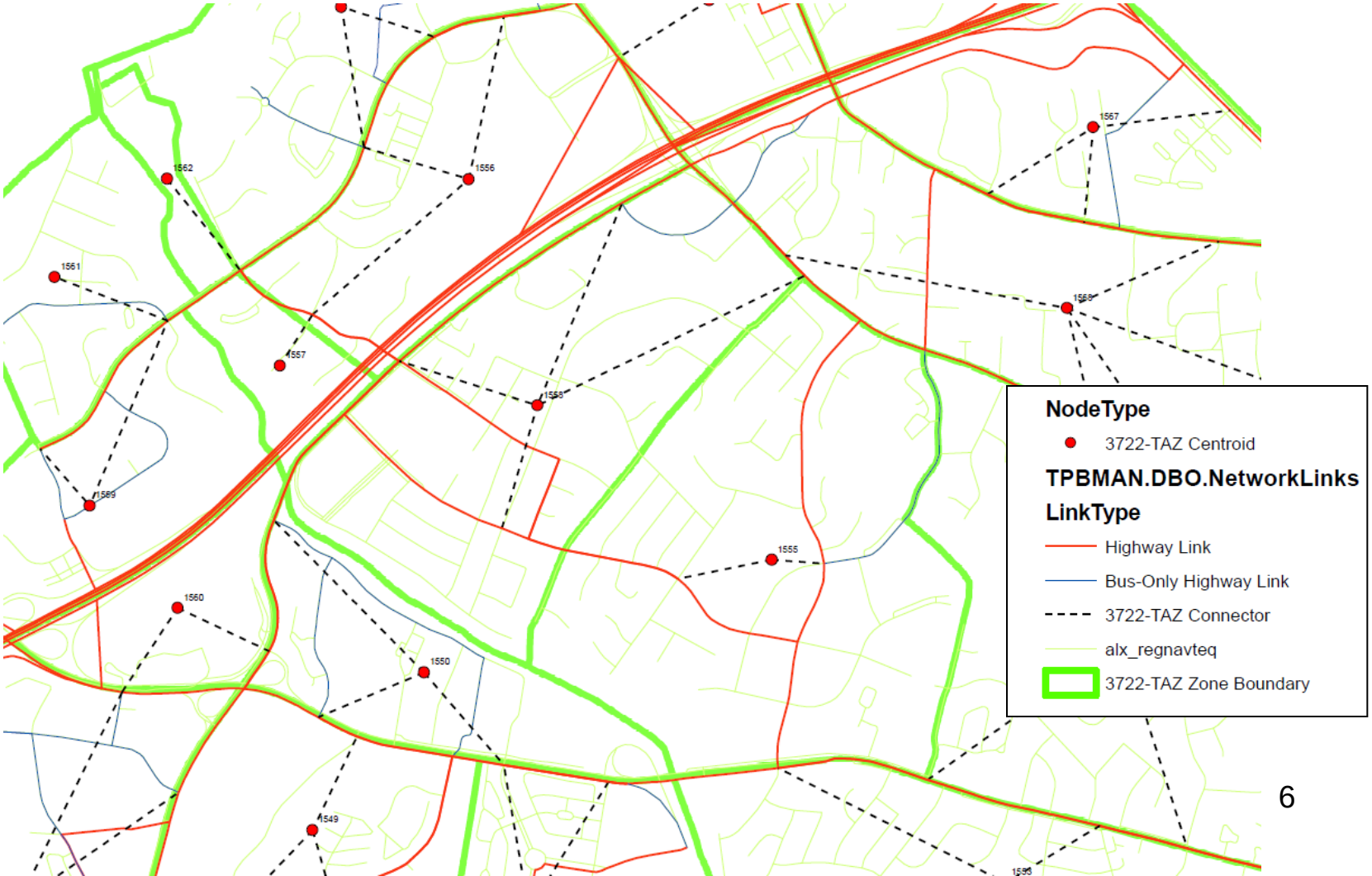
Developing Networks on New TAZ System

- Centroid connectors and supporting roadways annotated for jurisdictions in COG/TPB modeled area
- Google Earth images, NAVTEQ street base, and Functional Classification maps employed
- New zone centroid connectors added to road network to facilitate new 3722 area system
- Networks enhanced with additional facilities & correcting “short cuts” due to software limitations in the 80’s and 90’

TAZ / Node Numbering System for the 3,722 TAZ System (3,675 Internal TAZs & 47 External Stations)

Node Type	Jurisdiction	TAZ / Node Count	Beginning TAZ / Node	Ending TAZ / Node
TAZs	District of Columbia	393	1	393
	Montgomery Co., Md.	376	394	769
	Prince George's Co., Md.	635	770	1404
	Arlington Co., Va.	141	1405	1545
	City of Alexandria, Va.	65	1546	1610
	Fairfax Co.. Va.	549	1611	2159
	Loudoun Co., Va.	282	2160	2441
	Prince William Co., Va.	378	2442	2819
	Frederick Co., Md.	130	2820	2949
	Howard Co., Md.	68	2950	3017
	Anne Arundel Co., Md.	99	3018	3116
	Charles Co., Md.	113	3117	3229
	Carroll Co., Md.	58	3230	3287
	Calvert Co., Md	47	3288	3334
	St. Mary's Co., Md.	75	3335	3409
	King George Co., Va.	25	3410	3434
	City of Fredericksburg, Va.	14	3435	3448
	Stafford Co., Va.	93	3449	3541
	Spotsylvania Co., Va.	62	3542	3603
	Fauquier Co., Va.	50	3604	3653
	Clarke Co., Va.	9	3654	3662
	Jefferson Co., WVa.	13	3663	3675
	External Stations:	47	3676	3722
	Reserved TAZ numbers	1,278	3723	5000
Station Centroids	Metrorail PNR Centroids:	1,000	5001	5999
	Commuter Rail PNR Centroids:	1,000	6000	6999
	Light Rail/BRT PNR Centroids:	1,000	7000	7999
Station Nodes	Metrorail Station Node:	1,000	8000	8999
	Commuter Rail Station Node:	1,000	9000	9999
	Bus/Light Rail Station Node:	1,000	10000	10999
PNR Lot Nodes	Metrorail PNR Lot Node:	1,000	11000	11999
	Commuter PNR Lot Node:	1,000	12000	12999
	Bus/Light PNR Lot Node:	1,000	13000	13999
	Reserved Transit Nodes	6,000	14000	19999

Excerpt from one of the maps to be reviewed (portion of Alexandria)



Recent Events

- In January, TPB posted highway network plots on the Web for local review. A limited number of jurisdiction maps were made available at that time
- Today a full set of jurisdiction-based highway network plots (PDF files) that show centroids and centroid connectors, and two shape files that represent the TPBMAN-based highway network and 3,722 TAZ boundaries are available on the TFS web page: (http://www.mwcog.org/transportation/committee/committee/default.asp?COMMITTEE_ID=43)

  Instructions for accessing the data will be provided
- As of today highway network attributes and transit network line information are not ready for TFS review

What we ask of the TFS

- Review jurisdictional PDF plots of highway network and/or the regional shape file
- Focus on centroid connections – Are they reasonable?
- Please send feedback to Bob Snead at rsnead@mwcog.org
- Comments are requested within thirty days

Next Steps

- Review comments submitted by local and state agencies
- Incorporate comments and continue network updates resulting from reviews of highway network attributes and transit network lines and support files
- Complete the development of base year (2007) highway and transit networks and files on the new zone system
- Complete development of highway and transit networks and files for forecast years 2010, 2020, 2030, and 2040