

Network Development: Status of Calibration-Year (2007) Networks

Presentation
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Networks Developed for use with:

3,722-TAZ area system

Version 2.3 model specifications

- AM, PM, Off-Peak Highway Networks
- AM and Off-Peak Transit Networks by Submode
 - Metrorail only
 - Commuter rail
 - Metrorail and Bus
 - All Bus

GIS aided application being used for network development and management

Terms

- “TPBMAN” a geographic database containing highway links and nodes, and transit links and nodes for multiple years. (A set of relational tables)
- “COGTOOLS” a customized ArcGIS-based application (toolbar icon) designed to enable editing of elements in the TPBMAN and to allow for highway and transit network exports. (Cube Voyager format)

NavTech Street base has been used as the geographic base.

Objectives of TPBMAN/COGTools

- Greater consistency of networks over time
- Improved accuracy of links and nodes
- Enhanced efficiency of updating networks with respect to TIP and CLRP
- Highway editing integration with transit lines
- Multi-user network editing capability

Enhancements of TPBMAN/COGTools

- Networks conflated to the NAVTEQ Street Base
- New node numbering scheme
- Significant increase in the number of centroid connectors And highway links
- Reconfigured street segments to provide a better match with traffic count locations
- “True Shape” geometry information
- Revisions to area type definitions
- New highway link attributes now include EDGEID, LINKID, and Shape_Length

FY-2010 Network Development Activities

- TPB provided maps to local and state agencies and consultants for review and comment.
- Added additional connectors & removed connectors based on local knowledge of how/where TAZ loads to street network
- Network features affected were altered as necessary to accommodate these changes (relocated nodes, split links, etc.)
- Network updates continued resulting from reviews of highway network attributes and transit network lines and support files

Next Steps

- Continued highway path building and verification, to check the connectivity of the network
- Development of year 2040 highway and transit networks and files for use in Version 2.3 calibration
- Continued testing and optimizing of TPBMAN and COGTools is warranted
- When and how TPBMAN will be phased into the network production process is to be determined