ARC TAZ DELINEATION STRATEGIC PLAN

Methodology

Each county is examined separately and modifications are proposed for review.

GIS layers and information being reviewed includes:

- Census tract boundaries
- Census block group boundaries
- County transportation plans TAZs or modifications to ARC TAZs (as available)
- NAVTEQ conflated network & street centerline file
- Network representation of the transit system, stations and access links
- Lakes, rivers and streams
- Railroad tracks
- County boundaries
- City limits
- Digital aerial photography
- Generalized existing land use to look at zonal homogeneity
- Low income TAZs based on estimated 2005 HH income
- Other studies and corridor studies for TAZ

Census tract geography is paramount in that census tracts are always treated as TAZ boundaries and all TAZs aggregate to tracts. In addition all roads that are in the NAVTEQ network are treated as TAZ boundaries.

Process

The general process is step down starting with the county census tracts and working to progressively finer levels of detail, adding TAZ splits at each step.

1. Starting with 2010 census tracts we overlay NAVTEQ network functional class layers in sequence:
    - Freeways and Expressways
    - Principal Arterials
    - Minor Arterials
    - Collectors

As each layer is added, new TAZ boundaries are defined where functionally classified roads are not identical to census tract boundaries, such that all network road segments become TAZ boundaries. Exceptions to this include ramps and collector/distributor or access roads, immediately adjacent to higher level roads, which are omitted as TAZ boundaries because they generally do not support separate land uses.

2. After accounting for the NAVTEQ network, other physical barriers to travel are examined as TAZ boundaries, including:
    - Lakes, rivers and streams

- Railroad tracks
- Utility corridors

These physical features are considered barriers to travel if there are no or few available crossings by the street system including local streets.

3. After accounting for the NAVTEQ network and other physical barriers to travel, in some instances local roads are used as TAZ boundaries to split zones where other features are not available.

4. TAZ splits from County Comprehensive Transportation Plans, and other transportation studies, are reviewed to determine if additional TAZ splits need to be made for consistency with these plans and studies.

5. As the TAZs are split, Aerial photos are reviewed to determine appropriateness of the splits and to look for newer features – such as streets or subdivisions that are not yet captured in the ARC street centerline file and the NAVTEQ network

6. LandPro 2007 generalized land use is reviewed as a check on catching significant land use variation within zones and to determine if additional TAZ splits are warranted to improve zonal homogeneity.

7. Concept 3 Transit stations are reviewed to determine if additional TAZ splits need to be made to better reflect potential transit access.

8. Existing transit routes are reviewed to determine if additional TAZ splits need to be made to better reflect transit access.

9. Census block group boundaries are then reviewed to see if additional TAZ splits are suggested.

All TAZ splits are done in ARCGIS with the Completed County Census Tracts as a base using the Editor's split polygon tool to maintain polygon boundary consistency.

Checks

- Check for TAZs below size threshold and remove/consolidate sliver zones or micro-zones

- Redistribute existing forecast SE data to new TAZs to check densities

- Assign surveyed transit trip table to revised TAZ structure