Available Data for Model Development at NCDOT

North Carolina Model Users Group Meeting
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Model Data

- Roads
- Road Characteristics Arcs
- Linear Referencing System (LRS) Arcs
- Employment Data
- InfoUSA
- Dun & Bradstreet
Model Data (Cont.)

- Average Annual Daily Traffic (AADT)
  - AADT Stations
  - AADT Segments
- State Transportation Improvement Program (STIP)
- 2009 The National Household Travel Survey (NHTS) NC Add-on Data
- NAVTEQ Data
Model Data (Cont.)

- **Census Data**
  - Blocks, Block Groups and Tracts
  - 2009 The American Community Survey (ACS)

- **Other GIS Data**
  - County/Municipal/MPO/RPO boundaries
  - Water bodies, railroads, schools, colleges, and aerial photography
Roads – Road Characteristics Arcs

- From NCDOT GIS Unit
- Contains interstate, US, NC, secondary routes, ramps, and some non-state maintained and projected roads
- Updated quarterly
- Downloadable at:
  http://dotw-xfer01.dot.state.nc.us/gisdot/DistDOTData/Rd_CHAR_MLPST_SHP.zip
Roads – Road Characteristics Arcs (Cont.)

- View data field descriptions at:
  [http://dotw-xfer01.dot.state.nc.us/gisdot/DistDOTData/Road_Characteristics_Field_Descriptions.pdf](http://dotw-xfer01.dot.state.nc.us/gisdot/DistDOTData/Road_Characteristics_Field_Descriptions.pdf)

- Commonly used data fields:
  - Route Class (Interstate, US, NC, Secondary Route, etc.)
  - Route Number
  - Route Subcategory (Divided, Undivided, Centerline, etc.)
Roads - Road Characteristics Arcs (Cont.)

- Commonly used data fields (cont.):
  - Street (route) Name
  - Functional Classification
  - Median Type
  - Number of Lanes
  - Speed Limit
  - AADT
Roads - RoadCharacteristics Arcs (Cont.)

- Things to be aware of:
  - The data need to be verified
Roads - LRS Arcs

- From NCDOT GIS Unit
- Contains interstate, US, NC, secondary routes, ramps, and some non-state maintained and projected roads
- Updated quarterly
- Downloadable at:
  
  http://dotw-xfer01.dot.state.nc.us/gisdot/DistDOTData/LRS_ARCS_SHP.zip
Roads – Road Characteristics Arcs vs. LRS Arcs

- Road Characteristics Arcs
  - Used by model projects
  - Has more data

- LRS Arcs
  - Used for CTP maps, and as reference for model projects
  - Has longer segments
Employment Data - InfoUSA

- From InfoUSA
- Contains NC employment data
- Purchased Oct. 2010
- Limited access from NC DOT TPB
- Things to be aware of:
  - The data need to be verified
  - Some has wrong geo-coding
Employment Data - Dun & Bradstreet

- From NC Dept. Of Commerce
- Contains NC employment data
- Updated biannual, 2008-2012
- Limited access from NC DOT TPB

Things to be aware of:
- The data need to be verified
- Some has wrong geo-coding
Employment Data – InfoUSA vs. Dun & Bradstreet

- Depends on areas
Average Annual Daily Traffic – Stations

- From NCDOT Traffic Survey Group
- 2002 – 2011 AADT, point layer
- Updated annually
- Downloadable at: http://www.ncdot.gov/doh/preconstruct/tpb/traffic_survey/
- Data description document: http://www.ncdot.gov/doh/preconstruct/tpb/traffic_survey/
Average Annual Daily Traffic – Segment

From NCDOT Traffic Survey Group

2011 AADT, line layer

Updated annually

Downloadable at:

http://www.ncdot.gov/doh/preconstruct/tpb/traffic_survey/

Data description document:

http://www.ncdot.gov/doh/preconstruct/tpb/traffic_survey/
State Transportation Improvement Program (STIP)

- From NCDOT
- TIP roads and bridges
- TPB can provide the data
2009 NC NHTS Add-on Data

- From Federal Highway Administration
- NC add-on survey records
- Limited access
NAVTEQ Data

- From Caliper
- Including 6 layers: ntStreet, ntHighway, ntBuilding, ntRailroad, ntLandmarkArea, and ntLandmark
- Requires a NAVTEQ license
Census Data

- Census Blocks, BlockGroup and Tract
  - TransCAD layers from Caliper
- 2009 ACS
  - TransCAD layer from PB
Other GIS Data

- County/Municipal/MPO/RPO Boundaries
- Water Bodies, Railroads, Schools, Colleges, and Aerial Photography
  - Some are from NC One Map
  - Some are stored on TPB server
  - TPB can provide the data