



Sequential Transportation Modeling Process

- Basic Modeling Steps: “4-Step Process”:
 - 0. Land Use. Transportation facilities & current travel inventory
 - 1. Trip Generation
 - 2. Trip Distribution
 - 3. Mode Split
 - 4. Travel Assignment
- Input: Socio-economic data (Land-use, demographic, historic travel behavior)
 - Data structures
 - Geographic organization
 - Traffic Assignment Zones
 - » Homogeneous Land Uses: [Survey-based trip generators](#), Travel Demand Model for: [NC](#), [Puget Sound](#), [NYC](#) , [NYC 2040 Plan](#), [Best Practice Model \(BPM\) \(Florida\)](#) , [Urban Goods Movement Model](#)
 - » Geographic Data Structures: [Quad Tree Demo](#), [More Demos](#),
 - » CoPilot Network Editor
 - Data Sources:
 - Housing Data: [US Census](#)
 - Employment Stats: [State Employment Bureaucracies](#)
 - Census Data for Transportation Planning: <http://www.trbcensus.com/>
 - Journey-to-Work [US Census Travel Demand Survey](#) ; List of Data [Sources](#)
 - Household Travel [Survey](#)
 - Using GPS to Survey Travel: [Stopher 3](#)
 - Bureau of Economic [Analysis](#)



- Land Use Models Notes from last week
- Trip Generation Models: Notes (Page 6)
 - TCRP B-15 Characteristics of Urban Travel, Travel Model Improvement Program (TIMP), commercial trip generation software (Microtrans, demo), TransCAD
 - An example LincolnTravelDemandModel
- Trip Distribution Models Notes
 - Gravity model (Inverse Square)
 - Lincoln, NE Trip Distribution Model (Gamma Function)
- Mode split