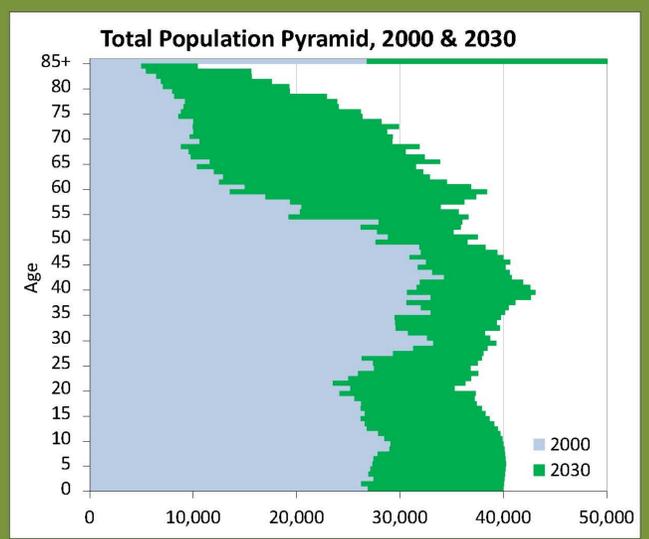


Economic and Land Use Forecasting

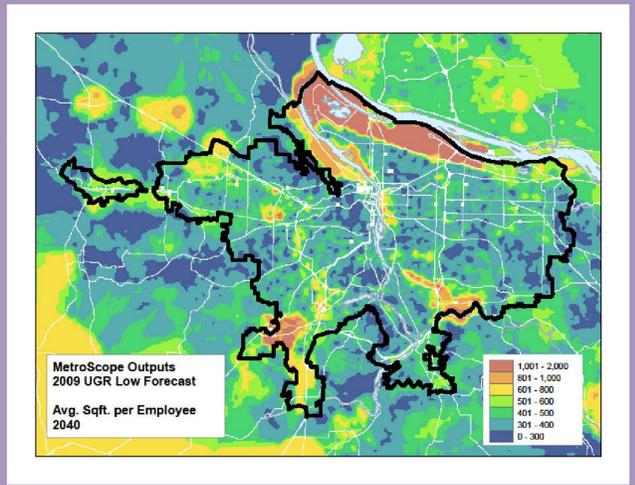
Urban Simulation Modeling – Metro’s Unique and Tested Tool Kit

Metro Regional Economic Model Forecast of Regional Control Totals

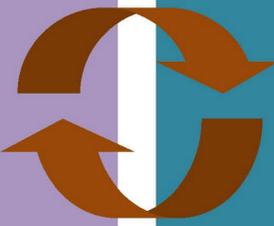


Economic Model sends regional jobs & household forecast to MetroScope

MetroScope Land Use Model Allocates Regional Forecast to TAZ

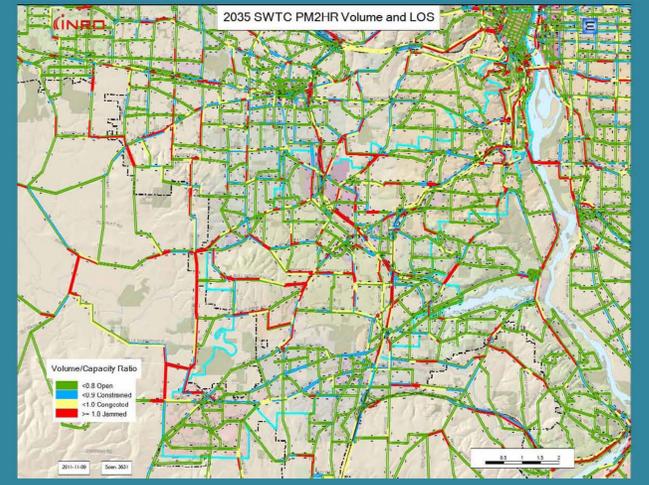


MetroScope sends TAZ-level HIA and NAICS jobs to TDM



Travel Demand Model sends travel times to MetroScope

Travel Demand Model Estimates Multi-modal Travel Flows



Socio-Economic Input Variables

- Census Population & Households
- BLS Employment & Wage Data
- BEA Income & Wage Data
- Oregon MSA Vital Statistics
- Global Insight National Forecast Drivers

Forecast Results & Outputs

- Employment by NAICS industry
- Income, Wages
- Population by Age
- Households by Size, Age of Head, and Income

For more information:

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 Sonny.Conder@oregonmetro.gov
 503-797-1700

Initial Conditions in Base Year

- Census Tract Demographics and Housing Characteristics
- Employment Data (ES202) by Employment Zones

Statistical Relationships in Model

- Relationship between house price, travel time to work, neighborhood quality and household income, size and age
- Business sensitivity to real estate prices, access, type of space and production requirements.

Policy Choices in Model

- Land capacity to accommodate jobs and households
- Transportation capacity to accommodate traffic
- Assumptions about levels of government intervention for affordable housing, urban renewal and capacity expansion in Urban Reserves

Key Determinates of Travel

- Spatial allocation of population and employment
- Demographic characteristics (household size, income, and “stage in life”)
- Employment characteristics (NAICS classifications)
- Accessibility (travel times and route attractiveness by mode given infrastructure assumptions)
- Travel costs (auto operating costs per mile, parking, transit fares, pricing/tolls)
- Urban form (mixed use, density)

Results and Outputs

- Trips (from places, to places, between places – by mode)
- Network flows (autos, trucks, transit riders, bicyclists)
- Measures of effectiveness (e.g., accessibility, travel times/speeds, congestion/delay, VMT, VHT, route usage)