

C. Land Use Data Development Process

As the primary regional planning agency for the Central Puget Sound area, the Puget Sound Regional Council (PSRC) is a traditional source for travel forecast modeling data by area jurisdictions including King County. For the King County Comprehensive Plan (Comp Plan) update, however, adopted 20-year growth targets from the Growth Management Planning Council (GMPC) were required to be used as the policy foundation for travel forecast model development. This appendix summarizes the reconciliation of those two sources.

Modeling begins with development of “base year” land use information. Land use data required for our model base year, 2000, included, households, and jobs by small subareas for King County. Initial work on Comp Plan land use focused on examining differences between the two sources, as part of ongoing coordination with the PSRC regarding consistency between the two datasets. This effort was complicated by the fact that the two datasets were derived using very different processes (Policy-based vs. econometric models), geographies (City boundaries vs. transportation analysis zones), time horizons (Y2020 vs. Y2001-2022 growth), and products (Household & Job forecasts by sector vs. HH & Job growth policy targets). PSRC and GMPC assumptions continue to move in the direction of greater consistency, however, as coordination efforts continue.

In order to translate GMPC data into a format suitable for travel model use, a methodology was developed to first create an equivalency between GMPC geography (Cities & unincorporated areas), and PSRC model zones (TAZs). Where equivalencies were difficult to determine (TAZs with multiple jurisdictions), a labor-intensive review at the King County model zone level was used to determine geographic allocations of GMPC growth data to TAZs. Once all equivalencies were determined, PSRC and GMPC data were compared at the city and unincorporated jurisdiction level for management review and reasonableness checking of growth assumptions. Reviewers were satisfied that the allocated data accurately reflected GMPC policy, even though the numbers did not precisely match due to the geographic differences.

Once GMPC growth data totals were translated into TAZ format, job growth totals were allocated to sectors using PSRC Y2020 proportions. All Households and Jobs were then translated from PSRC TAZs to King County Model zones (SAZs), using TAZ to SAZ relationships developed for the KC Y2000 travel model development process. (Refer to the King County Model SAZ Map.) Once this allocation was complete, adjustments were made to the growth data. KC Transportation Concurrency program approval information was included as a check on zonal growth information, with Concurrency approvals being compared to allocated GMPC growth data to ensure that “pipeline” growth was accounted for. Also included was a review with Concurrency staff of more specific, local data for the largest new developments in King County (Issaquah Highlands, Snoqualmie Ridge, Bear Creek UPDs). Using this growth information and additional management direction, land use growth data was finalized.

The resulting growth increment (Y2001-2022) was then added to KC travel model Y2000 land use data to derive the final KC (Y2022) Comprehensive Plan Update travel model land use. This data was then input into standard PSRC trip generation processes, resulting in a person trip end file of productions and attractions, by trip type, by KC model zone. This file was used as input for the remaining steps in the KC Travel model development process

The results of these procedures include (a) a detailed table of Y2000 and future Y2022 households and jobs forecasted for each SAZ in King County; (b) a table showing productions and attraction by trip purpose and total trip ends for each zone; and (c) maps of future traffic flows expected on State and King County roads. The 2022 forecast volumes shown in the flow maps are unadjusted planning level numbers based on regional assumptions for road improvements and growth assumptions. More detailed corridor analysis may produce results different from those presented in the report.

Countywide totals of Y2000 and future growth levels approximate current land use and targeted growth but do not match them precisely. Geographic allocation issues, and other discrepancies between our two sources, including methodology differences and additional growth adjustments prevented reaching a perfect correspondence. However, these discrepancies constitute a very small percentage of total household and job growth and are not expected to significantly affect traffic volumes and facility needs.