4 Land Use Data

4.1 Land Use for SACSIM Introduction

For its transportation planning functions as a Metropolitan Planning Organization, SACOG's jurisdiction covers part of all of the six county Sacramento region. This area includes Sacramento, Sutter, Yolo and Yuba counties in their entirety, and the portions of Placer and El Dorado counties below the Sierra Nevada ridge line. The extreme eastern portion of Solano County falls in the Sacramento air basin for some emissions, but is within the jurisdiction of the Metropolitan Transportation Commission for federal transportation planning purposes; for this reason the Commission provides emissions estimates to SACOG for air quality regulatory purposes.

This chapter presents the process for assembling SACSIM parcel-point data files. This discussion focuses mostly on building the SACSIM file from land use datasets and other data sources. Land use dataset is the primary data source for households and jobs on each parcel. School employment and enrollments, street pattern, off-street parking supply and cost, and transit proximity come from various other data sources, described below. It is helpful to have clear definitions of some terms and processes:

4.1.1 Terminology

- *Parcels* are pieces of land with area, shape, and location defined by assessor's maps and records. In general, this definition applies to SACSIM, with a couple of caveats:
    - SACSIM parcellation was initially created on best assessors records available to SACOG . Every four years during the MTP/SCS, this parcel data is updated with most recent data from available sources.
    - Large parcels with significant growth from the base year to the planning horizon year (2040) were manually split down to "false" or "pseudo" parcels, which have no bearing to assessor's records.
- *A Parcel-point* is a dimensionless point located roughly at the geographic center of a parcel, and used to represent the location of that parcel for SACSIM. The points have unique identifiers which allow for parcel data (e.g. dwellings or jobs estimates from land use model) to be matched or aggregated to the parcel-points.
- *Base year inventories* are datasets of land use features which are not directly represented in land use model, and maintained as separate datasets. Generally, these are GIS point files, which are matched or aggregated to parcels (and later, parcel-points) based on their location.
- *Base-to-future changes* are land use or transportation system changes which are flagged by comparing a future year scenario file (typically, a land use parcel data file) with a comparable base year file. Changes are flagged based on change in use (place type), or a change in the intensity of development (dwellings and jobs), comparing the future year scenario to the base year data at parcel level.
- *Base-plus-future-change datasets* are assembled by using the base year data for parcels with little or no change, and a future year estimate of use if a change has been flagged. This basic