

## Area Source Baseline and Projection Inventories

This section of the Technical Support Documentation (TSD) gives information describing how the Area Baseline and Projection Inventories are developed.

The **base-year inventory** is the primary inventory from which other inventories are derived. Thus, all inventories are consistent with data provided in the base-year inventory. The Clean Air Act requires state agencies to ensure that the base-year inventory is comprehensive, accurate, and current for all actual emissions. The inventory includes emissions estimates from stationary point and area sources, on-road mobile sources, and non-road mobile sources.

Every three years, state agencies are required to develop periodic inventories called the **triennial cycle inventories** based on actual emissions. State and local agencies have the option to report smaller point sources every three years. This option is not available for reporting emissions for a designated base-year inventory.

The year 2011 was selected as the base-year for this SIP. The 2011 base-year harmonizes dates for the reporting requirements of the National Emissions Inventory that requires agencies to submit emission inventories for all criteria pollutants and their precursors every three years, on a schedule that includes the emission year 2011.

Adjustments were made to the 2011 Consolidated Emissions Reporting Rule (CERR) required inventory by adjusting the point source data that was subtracted out of the area source inventory to prevent double counting. The VMTs and temperature data were adjusted to simulate a normal year.

See section 2.c.iv.B of the TSD for an explanation of which area source categories were affected by the changes to the 2011 baseline inventory.

The **projection-year inventories** project future air pollution emissions. The goal in developing emission projections is to attempt to account for as many of the important variables that affect future year emissions as possible. Emission projections provide a basis for developing control strategies and conducting attainment analyses for this SIP and tracking progress towards meeting air quality standards.

Emission projections are a function of change in activity (growth or decline) combined with changes in the emission rate or controls applicable to the source. To a large extent, projection inventories are based on forecasts of industrial growth, population growth, changes in land use patterns, and transportation growth. Sources for the rates of growth used include the State of Utah Governor's Office of Planning and Budget, U.S. Census Bureau, and Bureau of Economic Analysis, among others. Interpolation was used where projected annual population data or employment data were not available for each future year.

Sources for activity data projection are listed in Section 3.c.iv.B of the TSD.