



Chapter Three

Socio-Economic Data





Socio-Economic Data

The travel forecast model (discussed in [Chapter 4](#)), is dependent on various socio-economic inputs. In the Bay City area, these inputs include population, occupied dwelling units, autos/dwelling unit, retail employment, service employment, other employment and total employment. The 2009 base data was determined by beginning with the 2000 Census Data which was grown to 2009 based on projections from REMI (Regional Econometric, Inc.) and local knowledge of development. Using local information such as building and demolition permits, the growth areas were pinpointed to determine the population changes and shifts.

Employment data was obtained from the combination of the Michigan Employment Security Commission (MESC) and two proprietary company's, *Claritas and Hoovers*, Business Point Data, both of which was reviewed locally. The employment data for 2020, 2030 and 2040 were grown based on the REMI (Regional Econometric, Inc.) projections as well as local knowledge of expected development. REMI is discussed in the next paragraph.

The basic national, state and county source for the REMI EDFS Model is the Bureau of Economic Analysis (BEA) employment, wage, and personal income series. It is an internally consistent data set covering the years from 1969 to the present (updated in the fall/winter for states, spring/summer for counties). The BEA data is available for states at the two-digit level (53 + industries), and available for counties at the one-digit level (14 + industries).

In the table below are the BCATS 2009, 2020, 2030 and 2040 totals for socio-economic data as they are approved by the Policy Committee for use in the base year calibration and future year trip generation of the travel forecast model. The 2010 population and occupied household data are from the 2010 census blocks. Model development started before this data was available but it was used as a base for population and households for the future year forecasts. See [chapter 4](#) for more information on the use of the population and employment data.

BCATS Study Area Socio-Economic Data

| Year | Population | Occupied Households | Total Employment | Retail Employment | Service Employment | Other Employment |
|------|------------|---------------------|------------------|-------------------|--------------------|------------------|
| 2009 | 84,613 | 38,561 | 33,882 | 5,758 | 16,884 | 11,240 |
| 2010 | 88,862 | 37,193 | n/a | n/a | n/a | n/a |
| 2020 | 88,048 | 37,541 | 36,205 | 5,824 | 18,735 | 11,646 |
| 2030 | 88,945 | 38,351 | 38,228 | 5,877 | 20,557 | 11,794 |
| 2040 | 89,516 | 38,953 | 39,618 | 5,799 | 21,968 | 11,851 |

The Traffic Analysis Zones (TAZs) were created from the 2000 census blocks and constrained by the network and Minor Civil Division (MCD) boundaries. Values for population and occupied households



were aggregated from the 2000 census blocks to arrive at TAZ totals for 2000. BCATS staff used methods outlined in chapter 3 to develop the TAZ values for the base year of 2009, 2020, 2030 and 2040 forecast years.

Auto ownership was calculated from 2000 census data. The average autos per household in each census block group were determined. This value was then assigned to each census block in that block group. The average autos per household was then aggregated up to the TAZ level using a weighted average by number of occupied households in each block. This average was held constant for future years.

It is important to remember that socio-economic forecasting is essentially a matter of judgment. Judgment is required in selecting the type of forecast to be implemented; in determining the procedures for making the forecast; and the process used in reviewing the effects of the factors that induce changes in population and employment. The establishment of a large new industry or the loss of a similar size industry can lead to considerable impact on an area's development.

Therefore, although socio-economic projections are a useful and required tool in the planning of an area's future growth and development, it is important to note that the projections are not infallible and should be modified as time progresses to better reflect development impacts occurring in the BCATS planning area.



