

MEMO

TO: Charlie Baker, Eleni Churchill; CCRPC
FROM: Jonathan Slason
DATE: February 8, 2017
SUBJECT: 2050 Projections

RSG has developed projections out to the year 2050 for the employment and population within Chittenden County municipalities based on the 2040 Forecast that was completed by Economic & Policy Resources (EPR), a sub-consultant on the Regional Travel Demand Model Update project.

The 2050 data was developed to align the final future years of study between the Travel Model Update and the Energy Plan work that is being conducted by VEIC.

Total Employment Approach

The Total Employment projection for 2045 and 2050 was generally developed by linear extrapolation of the prior 15-year trend, representing approximately a 0.75% per year annual growth rate. Total employment when compared to population within the county is forecast to be annually growing between 1.5 and nearly 5 times the population rate between 2015 and 2040. This aligns with current data points which indicate that Chittenden County continues to be a magnet for employment from the surrounding the counties. The final data point in 2050 is projecting that Total Employment is nearly matching county employment.

Municipal allocation for 2045 and 2050 was assigned based on the municipal share totals that were developed for the 2040 Forecast. The 2045 and 2050 share of county employment was fixed based on the 2040 value.

County Population

The Chittenden County population projection for 2050 was developed by reviewing a range of possible scenarios including growth rates, reviewing birth and death rates, and migration trends. The most recent macro economic forecast is the 2040 forecast developed by EPR as part of the Travel Demand project. This is relied upon as the strongest guide to inform future projections beyond 2040.

If a projection were to extrapolate out from 2040 using a slightly increasing annual growth rate it is reasonable to realize nearly 181,000 county residents by 2050. However, given the VEIC Energy Plan

work generated a projection for 2050 at nearly 187,000¹, RSG looked at supplementary data to obtain further insight.

The approach used in the ACCD was reviewed and used to inform a 2050 projection for the Model Update. Birth rates within Chittenden County were estimated and then assumed to decline in proportion with what has been generally experienced within the State as a whole. Chittenden County currently has a lower birth rate per 1,000 population than the general State population and that may continue to slightly trend downward. Death rates per age cohort (65 and Over and Under 65) were assessed within the State. The projection accounted for the fact that Chittenden County has a lower percentage of Over 65 population relative to the Statewide averages. Net migration has been estimated at 370 residents per year into Chittenden County per year and is a fixed amount for this estimate.

Using these data points, accounting for a general birth rate reduction, the baby boomer age cohort, and a general net migration increase, the population was projected off the 2040 data points developed by EPR. The annual average growth rates for the population growth between 2040 and 2050 at 0.387% also aligns with the long term annual growth rate between 2010 and 2050 at 0.388%.

The 2050 Model projection is a balanced derivation of population estimates based on detailed forecasts, macro trends and aligns with an anticipated long term growth rates. The 2045 estimate for county population is 178,900 and for 2050 at 183,100.

Municipal allocation for 2045 and 2050 was assigned based on the municipal share totals that were developed for the 2040 Forecast. The 2045 and 2050 share of county population was fixed based on the 2040 value.

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¹ The 2050 VEIC projection used the 2030 ACCD model as its base and did an extrapolation of that model

