

Salem River Crossing EIS: Population Impacts on Design and Traffic Performance

PREPARED FOR: Salem River Crossing Project
Management Team

PREPARED BY: David Simmons, P.E.

DATE: October 19, 2016

The purpose of this memorandum is to address comments suggesting that the population projections for the Salem River Crossing Project are not accurate. Following the suggested methodology would result in a 5% difference in the projected population from the 2035 forecast developed for this project. Population forecasts serve as the basis for the travel demand models. In this case, the key question is what influence a 5% difference in population may have on the design and traffic performance of a build alternative.

Fundamentally, a 5% difference in the population forecast will not have a substantive influence on the design of the transportation system, nor the resulting traffic performance. It should be noted that a forecasted difference in population will impact the traffic forecast in a non-uniform fashion, depending on the location(s) of population growth in relation to the transportation system and how drivers alter their travel patterns as congestion levels change in the system.

For simplicity, we could assume that 5% difference in population has a corresponding 5% impact on the traffic within the project area, which would in most cases be an overstatement of the impact. A 5% change in traffic volume would not have an appreciable influence on design of the street or highway to address the capacity needs and such a difference falls within the level of accuracy of travel forecasting models.