

Transportation Analysis for Town of Hilton Head Island, SC

MCV conducted this study for the City of Hilton Head Island. The objective of this effort was to convert and enhance the current TRANPLAN model for Hilton Head so that peak conversions of traffic demand can be developed and the inputs prepared for use by the TMODEL2 software system. The TMODEL2 was calibrated to daily traffic volumes provided by SCDOT. The model was then re-calibrated using 1995 daily and PM peak hour traffic volumes. The buildout land use and updated roadway networks were utilized to project future PM peak hour volumes. The results were utilized to analyze volume to capacity deficiencies, develop turning movement counts for use in TRANSYT-7F analysis and identify intersection improvements to achieve levels of service criteria. The calibrated model was also used to forecast traffic on the Cross Island Expressway that was opening soon. The forecasted traffic was compared to the actual traffic after the toll road was open. The model results were within 5 percent of the actual volumes.

