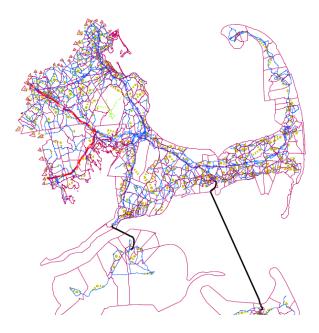
Cape Cod Canal Crossing Study Cape Cod, Massachusetts Massachusetts Department of Transportation

Duration: 2015 - 2019 Project Fee: \$1,500,000 Firm Fee: \$140,000 Role: Sub-Consultant



TrafInfo Communications, Inc. (TrafInfo) worked as a sub-consultant on the Cape Cod Canal Crossing Study for the Massachusetts Department of Transportation. TrafInfo's role was the development, calibration and application of the regional travel demand model using the TransCAD software system.

TrafInfo coordinated with the Central Transportation Planning Staff (CTPS) in the development of the regional model which comprised of the entire Cape Cod as well as areas in Plymouth County. TrafInfo reviewed the highway network and the zone structure and modified it as necessary to meet the requirement of the study. A major responsibility of the model development process was calibration. The model was calibrated to not only traffic volumes but also travel time data and route usage extracted from a Bluetooth Origin-Destination study. Four different models were developed for a Summer Weekday, Summer Weekend, Fall Weekday and Fall Weekend. Each of these models comprised of four time period adding up to a 24-hour period: morning, midday, evening and nighttime. A critical component of the model was the disaggregation of the total vehicle trip table into visitor trips and non-visitor trips. Each trip table was assigned independently using a multi-class traffic assignment procedure allowing for use of different Value of Time (VOT) for visitors and non-visitors. Regional OD data collected by AirSage was analyzed to confirm the split between visitors and non-visitors. Several different highway improvement alternatives were tested and future year peak hour turning movements generated for each alternatives/study locations for further traffic analysis.

