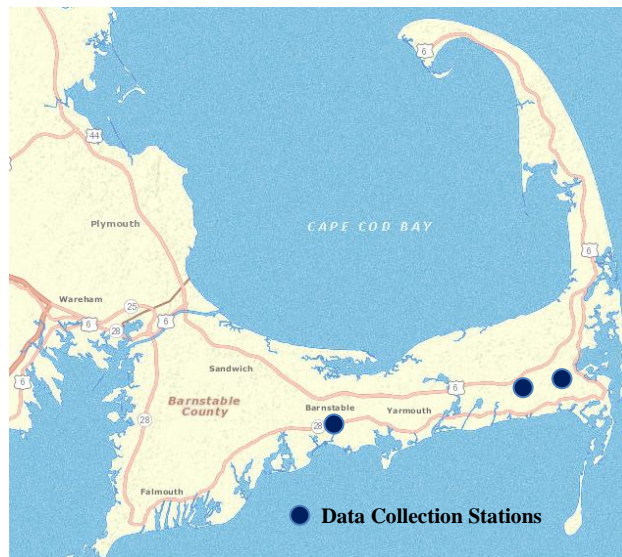

Traffic Data Collection at Signalized Intersections Cape Cod Commission

Duration: 2011-On-going
Project Cost: \$15,000
Firm Fee: \$15,000
Role: System Provider



TraInfo Communications, Inc. (TraInfo) was contracted by the Cape Cod Commission to provide installation, operations and maintenance of three permanent count stations.

The count stations were established in a cost-effective manner by utilizing the existing inductive loop-based detection system. The stop-bar presence detection loops were connected to “count-capable” loop detectors/amplifiers. TraInfo installed their Trafmate wireless transceiver to automatically configure the loop detector/amplifiers and extract traffic counts from them on a continuous and on-going basis.

A key task was the calibration of the loop detector/amplifiers. TraInfo collected detailed loop information including inductance, resistance and typical change in inductance when a vehicle traveled over the loops. In addition, TraInfo collected detailed inductance waveforms to study the operations of the loop detector/amplifiers under various vehicle types. Based upon this information, parameters were determined to calibrate the equipment.

Finally, in partnership with the Cape Cod Commission, TraInfo compared the counts extracted from the existing loop detection system with manual counts conducted at the intersection. Further calibration of the loop detector/amplifiers were performed to achieve acceptable traffic count accuracy.