Transportation Management Systems

Centracs®
DCMS

What, exactly, is Centracs DCMS?

Built upon the same platform as Centracs ATMS, Centracs DCMS provides real-time monitoring of traffic and travel conditions throughout a traffic management network. Centracs DCMS turns detection sensors into automated virtual count stations that gather traffic data without interruption.

Why do agencies use Centracs DCMS?

With Centracs DCMS, transportation agencies and DOTs can obtain the up-to-date data they need to make informed decisions to optimize traffic signal timing, freeway applications, and satisfy the federal and state data reporting requirements for additional funding.

How does DCMS benefit the driving public?

Centracs DCMS provides transportation agencies the ability to assess the effectiveness of timing plan changes and optimization using dynamic traffic data. Centracs DCMS helps engineers to be more agile in making traffic management decisions for safer and more efficient roadway operations.
The Challenge

Great demands are being placed on all levels of traffic management to show measured improvement and results from investments in ITS technologies. One of the key areas of the National Traffic Signal Report Card is Traffic Monitoring and Data Collection, which received an “F” grade in 2012. Real-time and historic traffic data is not just valuable for making timing plan adjustments, but it also serves to validate traffic models and to provide planning departments with key information they need to make good zoning and construction decisions.

Most traffic studies consist of placing tube counters on the roadway, collecting data for a few days. Then, analysis of the data leads changes to the timing plans or creation of reports based on the resulting information. Data collected in this fashion is a mere snapshot that may not reflect every day traffic flow or changes in flow over time. It is no wonder that traffic studies along with timing plan adjustments are infrequently done.

Benefits

• Reduces costs associated with doing traffic studies and collecting traffic counts
• Leverages an agency’s investment in Autoscope video detection and RTMS microwave sensor technologies
• Instant access to valuable traffic study information for traffic engineers and planners

Capabilities

With Centracs DCMS, engineers have the ability to assess the effectiveness of timing plan changes using historic data and a variety of informative reports, tools and monitors.

Planners and engineers can easily perform before and after studies on construction projects, light rail, Transit Signal Priority, Traffic Adaptive, and other programs without initiating expensive engineering services to perform multiple traffic studies. In addition, Centracs DCMS provides data to supplement Traffic Monitoring Guide (TMG) reports used by the Federal Highway Administration (FHWA) to allocate roadway improvement funding.

System Requirements

- The collection and management count data may require considerable data storage and processing capacity on the Centracs DCMS application server. The following are requirements for running Centracs DCMS:
  - Centracs 1.7.0 or newer
  - Autoscope video detection (ENCORE, Duo, Solo Terra, Solo Pro, 2020™, RackVision™, RackVision Terra) and RTMS G4 microwave sensors
  - Server-Class Application Server
  - Microsoft Windows Server
  - SQL Server 2008 R2 as a minimum
  - Specific computing hardware requirements will vary based on customer needs and selected options

Centracs DCMS helps engineers to be more agile in making traffic management decisions based on accurate and reliable traffic data that is collected, stored, displayed and reported with minimal effort. By itself, Centracs DCMS offers a full range of traffic data reports and tools. But, Centracs DCMS is also available as an expansion to the Centracs ATMS providing even greater value to increase an agency’s traffic management system capabilities.