GeoDyn2 Advantages

- Easy integration with existing ATMS
- Use of existing detection infrastructure
- Capitalizes on deployment of more than 50 systems
- Multiple management strategies
- Unique traffic simulation modeling and test lab
- Flexible system configuration

Multiple Control Strategies for Active Traffic Management

The integration of Heusch Boesefeldt’s GeoDyn2® – Control into TransCore’s TransSuite® Traffic Management System expands the capability of the platform to address multiple operational needs. As the latest TransSuite module, GeoDyn2 – Control provides multiple control strategies that can be seamlessly incorporated into any agency’s traffic management program. The ultimate goal is improved traffic flow and road safety.

Through the use of GeoDyn2 – Control, transportation agencies can take advantage of a proven software platform to address unique operational issues. Currently in use in more than 50 systems, GeoDyn2 – Control is a customized, off-the-shelf software solution providing traffic engineers with several ATM strategies and a simple-to-use graphical interface, as well as the ability to measure, process and archive data, access and create online reports, and coordinate with incident responders.

GeoDyn2 Strategies

- Dynamic Speed Limits
- Dynamic Lane Assignment
- Dynamic Merge Control
- Hard Shoulder Running
- Hazardous Weather
- Queue Warning
- Wrong-Way Driver Warning & Notification
**ATM Strategies**

**Hard Shoulder Running**

Periodically, inside or outside shoulder lanes can be used as travel lanes to address capacity bottlenecks or construction. These lanes can be activated and managed during peak travel times, as well as during sustained congestion any time of day.

**Dynamic Speed Limits**

GeoDyn2 – Control automatically adjusts speed limits based on roadway, traffic or weather conditions.

**Queue Warning**

This strategy provides drivers with real-time information on congestion, accidents and slower speeds ahead, and works in conjunction with Dynamic Message Signs and other devices. This strategy has proven to significantly reduce rear-end collisions.

**Hazardous Weather Control**

Warning signs are automatically posted on road signage in the case of hazardous weather conditions, such as high winds or slippery road conditions.

**Dynamic Routing**

By utilizing dynamic or variable message signs, this strategy reroutes drivers to less congested lanes and roadways. It is often used to reroute non-local motorists around busy central business districts.

**Dynamic Merge Control**

Using this strategy, traffic managers can adjust lane and ramp access in direct response to changing traffic volumes.

**Emerging Technologies**

Currently, ATM systems typically gather and process data from many different sources, including traffic sensors, environmental sensors, incident alert messages and scheduled roadwork information. However, emerging technologies such as vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) information are now making their way into large-scale deployments. GeoDyn2 – Control eliminates the need for costly new processing requirements needed to access V2V and V2I data. Based on new approaches to system architecture, the software suite fuses information from many data sources and provides harmonized, real-time information to the individual vehicle via numerous communication channels. Location referencing for individual vehicle-based traffic data is performed using on-the-fly map matching to process each individual vehicle.
Innovative Test Lab Approach

GeoDyn2 – Control differs from other ATM systems in that it provides an innovative test lab environment, enabling traffic engineers to test various strategies and algorithms in a specific traffic modeling environment. This ATM Lab was developed in conjunction with Heusch Boesefeldt subsidiary Traffic Technology Solutions. Using the Vissim microscopic simulation tool, the ATM Lab allows users to interactively test various traffic and incident scenarios, observe its impact on the entire ATM network and determine the most effective strategies. The result is a new paradigm for planning, evaluation, optimization and operator staff training of ATM control systems.

The TransSuite Family of Products

GeoDyn2 – Control is the newest module within TransSuite’s family of transportation management software products, which includes Mobile Applications, Traffic Management and Adaptive Signal Operations.
For more information:

Call
770.246.6202

Fax
770.449.7268

Email
ITS@TransCore.com

Follow Us
linkedin.com/company/transcorelp

transcore.com