LCS Project Overview

The TOPS Laboratory Wisconsin LCS Project covers the development of an online Lane Closure Planning System (LCS) as a component of the Traffic Operations and Safety (TOPS) Laboratory *WisTransPortal Data Hub*. The WisTransPortal, located at the University of Wisconsin-Madison, is being developed in coordination with WisDOT Bureau of Highway Operations to support a variety of traffic operations and safety data clearinghouse and analysis applications. The LCS will provide a web-based facility for different types of authenticated users to enter and track closures and restrictions on Wisconsin state highways. Specifically, this project has the following objectives:

- Provide a common interface for lane closure operations, closure tracking, and data retrieval for WisDOT regional offices statewide.
- Facilitate data sharing with WisDOT applications that require lane closure data such as 511 Traveler Information, the STOC Incident Management System, Inconvenience Map production, and Oversize/Overweight (OSOW) permitting.
- Improve the completeness, reliability, and timeliness of lane closure data on state highways.
- Archive LCS data in the WisTransPortal system for future analysis and integration with other WisDOT / TOPS Lab traffic engineering applications and research.
- Integrate historical V-SPOC and TRADAS traffic flow data and capacity information to calculate available closure thresholds.

The TOPS project plan for Wisconsin LCS is to customize and merge capabilities from two existing LCS systems:

- CalTrans Lane Closure System: Online lane closure approval system used statewide in California. CalTrans has provided entire source code and database model to TOPS.
- ODOT Permitted Lane Closure System: Ohio DOT online system for determining work-zone windows based on historical ADT and other factors. ODOT has also agreed to provide source code to TOPS.

The CalTrans source code is expected to provide the main framework for development. Additional planned customization and enhancements include special events tracking, capabilities to manage email distribution lists, and integration with WisDOT STN highway data.

LCS Project Timeline

- CalTrans LCS Prototype 12/15/2006
- Requirements Gathering and Design 04/15/2007
- Pilot LCS System 12/15/2007
- Training / Production LCS System 04/15/2008
- Extended Maintenance Period 07/15/2008

LCS Project Contact Information

TOPS Laboratory:

Steven T. Parker, PhD
IT Program Manager
Traffic Operations and Safety Laboratory
University of Wisconsin-Madison
1415 Engineering Drive
Madison, WI 53706

Phone: 608-265-4921
Fax: 608-262-5199
Email: sparker@engr.wisc.edu

WisDOT:

Doug Dembowski, PE
Freeway Operations
Statewide Traffic Operations Center
Wisconsin Department of Transportation
Suite 1200
633 W. Wisconsin Ave.
Milwaukee, WI 53203

Phone: 414-227-2149
Fax: 414-227-2164
E-mail: douglas.dembowski@dot.state.wi.us