

SHRP 2: Project L38C Pilot Testing of SHRP 2 Reliability Data and Analytical Products: Florida / Miami-Dade Pilot Site

Overview

SHRP 2 initiated the L38 project to pilot test products from five of the program's completed projects. The products support reliability estimation and use based on data analyses, analytical techniques, and decision-making framework. The L38 project has two main objectives: (1) to assist agencies in using travel time reliability as a measure in their business practices and (2) to receive feedback from the project research teams on the applicability and usefulness of the products tested, along with their suggested possible refinements. SHRP 2 selected four teams from California, Minnesota, Florida, and Washington. Project L38C tested elements from Projects L02, L05, L07, and L08. Project L02 identified methods to collect, archive, and integrate required data for reliability estimation and methods for analyzing and visualizing the causes of unreliability based on the collected data. Projects L07 and L08 produced analytical techniques and tools for estimating reliability based on developed models and allowing the estimation of reliability and the impacts on reliability of alternative mitigating strategies. Project L05 provided guidance regarding how to use reliability assessments to support the business processes of transportation agencies.

The Florida / Miami-Dade site used the reliability guide from Project L02, analysis tools for forecasting reliability and estimating impacts from Project L07, Project L08, as well as the guide on reliability performance measures from the Project L05 product. The Florida / Miami-Dade site focused on the Florida DOT Transportation System Management and Operations (TSM&O) program activities and traffic management center operations in Miami-Dade County and on the I-95 corridor general purpose lanes. In addition, the express lanes in the northbound and southbound directions and the SR7/US441 corridor, which is a parallel arterial facility to the I-95 corridor. The pilot testing demonstrated that the reliability analysis tools have the potential for modeling reliability impacts and recommended to their stakeholders that functional areas of trend analyses, predictive analyses, transportation management strategies, decision support systems, and integrated corridor management begin to include a Florida DOT-based modified version of the SHRP 2 reliability analysis tools in the day-to-day processes, standard operating guidelines, and performance reporting systems.

Project L38C was intended to evaluate a suite of projects to determine their readiness for implementation. Those projects had a logical structure consisting of data collection, analysis, and project prioritization.

Data Sets

- **L08 STREETVAL: 3 Year SR7 Crashes:** This file contains 3 years of crash data along SR7. This file was used in the L38C project as part of L08 STREETVAL dataset.
- **FREEVAL D6 TSS 05122010 5S:** This file was used in the L38C, as part of the L08 FREEVAL dataset.

- **Project L38C I-95 NB 2012 Incident Data:** These data were used in the evaluation of Project L07 by the Project L38C team. It contains incident information for the entire I-95 NB corridor.
- **Regimes I-95 NB EL 2012:** This file was used in the L38C project as part of the L02 data set.
- **Regimes I-95 NB TVT DMS 22 TO CGI 2012:** This file was used in the L38C project as part of the L02 data set.
- **Regimes I-95 SB EL 2012:** This file was used in the L38C project as part of the L02 data set.
- **Regimes I-95 SB TVT DMS 3 TO I395 2012:** This file was used in the L38C project as part of the L02 data set.
- **STREETEVAL SR7 Processed Data NB:** These data were used by the Project L38C team to evaluate the STREETEVAL software produced as part of SHRP2-L08.
- **STREETEVAL SR7 Processed Data SB:** Caltrans District 12 data for I-5 Northbound through Orange County on weekdays.
- **Project L38C Miami 2012 Precipitation:** These weather data from the Miami Opa Locka Airport were used in the evaluation of Project L08 as part of Project L38C.
- **FREEVAL I 95 NB Normal Day Volume:** This file was used in the L38C project, as part of the FREEVAL L08 dataset.
- **FREEVAL PTMS Counts I95 2pm 7pm:** This file was used in project L38C, as part of the L08 FREEVAL dataset.
- **FREEVAL I-95 NB PM Off Ramp Volume:** This file was used in the L38C project as part of the L08 FREEVAL data set.