



RESEARCH PROJECT CAPSULE [13-4SS]

June 2013

TECHNOLOGY TRANSFER PROGRAM

Highway for Life Demonstration Project: LA 511 (70th Street)

JUST THE FACTS:

Start Date:

January 15, 2013

Duration:

30 months

End Date:

June 14, 2015

Funding:

SPR: TT-Fed/TT-Reg

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Sponsored jointly by the Louisiana
Department of Transportation and
Development and Louisiana State
University

POINTS OF INTEREST:

Problem Addressed / Objective of
Research / Methodology Used
Implementation Potential

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PROBLEM

The Louisiana Department of Transportation and Development (LADOTD), has been awarded a Highways for Life (HfL) grant to be used on the LA 511 widening project in Caddo Parish. The LA 511 corridor is one of the busiest in the Shreveport, Louisiana metropolitan area with a high crash incident rate. This project will provide needed relief for congestion and improved user safety. The HfL program will allow further enhancement of user satisfaction for speed of construction, tire/pavement noise levels, reduced congestion and increase wet weather visibility. Grant monies are used to provide additional funds to enhance implementation of innovative technologies that advance HfL goals with special emphasis on highway safety and congestion reduction.

Areas under innovative features include: open graded friction course (OGFC) to improve safety through increased visibility during wet weather conditions and enhance community satisfaction with pavement noise reduction; roller compacted concrete (RCC) alternate pavement for lane widening to enhance speed of construction; asphalt treated base (ATB) course for enhanced speed of construction and application of recycled materials; precast gravity retaining walls for reduced right-of-way requirements and speed of construction; and contractor incentives for smoothness and construction time.

OBJECTIVE

The objective of this study is to document the innovations and performance of the LADOTD HfL demonstration project. The study will present project details relevant to the HfL program, including innovations employed in the construction proposal, before and after performance analysis, technology transfer activities, and customer satisfaction of the overall project. All pre- and post- construction project data shall be provided by the Louisiana Transportation Research Center and LADOTD. The researchers will collect and analyze the user satisfaction survey data.

METHODOLOGY

The researchers will:

- Examine and review the project details including the HfL program, HfL proposal, project construction proposal, project cost estimates, bid

- alternates, project safety, traffic, and pavement condition history;
- Determine user satisfaction with the existing facility and will work with the local homeowners associations and businesses along the project to survey those most affected by the improvements to LA 511;
- Visit the construction site periodically to document progress of implementation of Hfl innovations; and
- Analyze pre- and post- construction data for safety, congestion, smoothness, noise, speed of construction and user satisfaction.

IMPLEMENTATION POTENTIAL

The proposed innovations will highlight the impact of HfL funding to promote the use of new and innovative technology. The project will demonstrate the potential for these innovations to become standard practice.



Pre-construction photo