

Evaluation of Roadside Emergency Call Back Technology

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Problem

The research seeks to determine the level of effectiveness and cost associated with various types of emergency roadside call boxes. The Louisiana Department of Transportation and Development (DOTD) currently uses a simple push-button call box and is concerned with the effectiveness of these in facilitating the assistance of motorists in need. The proposed research includes determining the types of call boxes available and in use (including cell phone call boxes), the relative level of effectiveness of each type of call box, and the cost to

install and maintain each type of call box. A recommendation will be made as to which call box technology, if any, is best suited to meet the needs of motorists in distress in Louisiana.

Objectives

The main objective of the research is to determine the level of effectiveness and installation and maintenance costs for the various types of roadside emergency call boxes available and to determine if any one type is appropriate for use in Louisiana.



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Louisiana Transportation
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The Louisiana Department of Transportation and Development currently uses a simple push-button call box.

The specific objectives of this study are to:

- (i) determine the types of call boxes in use and available,
- (ii) determine the relative level of effectiveness of each type of call box,
- (iii) determine the cost to install and maintain each type of call box,
- (iv) determine the effectiveness of personal cell phones as a substitute for call boxes, and
- (v) make a recommendation that will best meet the needs of Louisiana.

Description

The bulk of the work will involve contacting those involved in the manufacture and use of roadside emergency call boxes to determine the types available, their effectiveness, and their cost. The task of obtaining this information will be broken down into the following tasks:

- (i) meet with the project review committee to discuss current call box system (extent of the system, the manufacturer and the installation cost, service and maintenance costs and personnel required, and measures of the effectiveness of the system), future needs, alternative systems under consideration, and expectation for a new system,

- (ii) conduct a phone survey of other state highway agencies to determine what roadside emergency call box system they use (if any), the manufacturer of the system, installation and any service contract costs, any measures of effectiveness on the system they use, alternative systems considered for use, and the reasons for using their current system,
- (iii) conduct discussions with state and parish police to obtain more detailed information on the effectiveness of call box technologies in use,
- (iv) conduct a literature search to identify and define available technologies and advantages and disadvantages of each type, and
- (v) contact call box manufacturers to determine installation cost and service and maintenance requirements and costs.

Implementation Potential

Following evaluation of effectiveness and cost of the call box systems available, this study will make a specific recommendation to DOTD as to what call box technology is best suited to their circumstances.

This work is being conducted in response to a request from the Louisiana Legislature.