

# **DEVELOPMENT OF IMPROVED PROCEDURES FOR BUSINESS ACCOMMODATIONS ON TRANSPORTATION CONSTRUCTION PROJECTS**

## **PROBLEM STATEMENT**

The Florida Department of Transportation's mission is *to provide a safe, interconnected statewide transportation system for Florida's citizens and visitors that ensures the mobility of people and goods, while enhancing economic prosperity and sustaining the quality of our environment.*

Support for this mission requires an aggressive engineering and construction program to maintain and upgrade the state's transportation infrastructure system. Construction is necessary; however, construction operations can adversely impact motorists and adjacent businesses. Motorists are concerned about congestion, travel delays, and their safety while traveling through and adjacent to construction areas. In recent years, much attention has been given to minimizing these types of impacts to motorists. Maintenance of Traffic (MOT) plans are now specifically designed to provide for efficient and safe passage of motorists through and around construction work zones.

Adjacent businesses are also affected by highway construction operations. Current FDOT designs and construction procedures attempt to address business concerns. Access to businesses is recognized as a critical need. However, business accommodation with regard to highway construction operations is relatively new. It is likely that different types of businesses have different concerns with regard to the impact of adjacent highway construction operations. Business accommodation is a complex subject. All business problems may not be solved by simply providing motorists access from the through traffic lanes in the work zone. Much more information is needed concerning the specific needs of different types of businesses with regard to adjacent highway construction operations.

## **OBJECTIVES**

The goal of this study was to gather information on issues pertinent to the state-of-the-practice and for the development of business accommodation with regard to highway construction projects. Specifically, researchers will address the following questions:

- What business accommodation activities are other DOTs currently undertaking?
- What are the current FDOT practices with regard to business accommodation?
- What are the business accommodation needs of the different businesses adjacent to FDOT highway construction projects?
- Develop Business Accommodation Survey and Specifications to implement in construction projects.

## **FINDINGS AND CONCLUSIONS**

Researchers conducted surveys and interviews to determine the current state of the practice with regard to the use of customer satisfaction surveys and business accommodation activities. Public Information Officers (PIOs) of all states were surveyed, as were AASHTO committee members. In addition, researchers performed four case studies. Two-person teams went door-to-door conducting structured interviews with all of the businesses located in the work zone for each of the four case study projects. With approval from

interviewees, the conversations were recorded and later transcribed. In addition to the interviews, business managers were asked to complete a written survey document. All of the businesses in each of the case study work zones were invited to attend focus group meetings held at each of the project sites. In most cases the FDOT PIO and project personnel attended the meeting in addition to the research team. The research team made numerous visits to each of the four project sites and attended project progress meetings, when possible. Business access and signage situations on each project were observed, and copies of project plans, specifications, and MOT plans were reviewed.

Researchers reviewed and used the information obtained from the business surveys and site visits to create a prioritized list of business accommodation needs. It should be noted, however, that not all businesses have or experience the same needs. For example, a pizza delivery shop has different access needs than a bank. It is likely that the bank is closed in the evening and would prefer nighttime operations while the pizza business might experience heavy demand for access at night.

The following business concerns were identified:

1. Customer Access and Parking, and Delivery Access
2. Business Visibility and Signage Issues
3. Utility Outages and Disruptions
4. Congestion and Traffic Pattern Changes
5. Construction Information
  - a. Final Project Configuration
  - b. Construction Schedule and Events

The following strategies are proposed to improve business accommodation during highway construction:

- Develop a traffic control plan (TCP) for an impending major construction project on an urban arterial, predicated upon a comprehensive traffic study of the affected area.
- Determine whether the arterial serves primarily through traffic, business traffic, or both, to inform the development of the construction traffic control plan.
- Determine the level of pedestrian, bicycle, and/or bus activity along the construction corridor, and modify the TCP appropriately.
- Consider business access needs when designing the traffic control plan.
- Conduct a level of service (LOS) analysis for the entire corridor (as a standard procedure).
- Provide an incentive, based upon a business satisfaction Survey and Specifications, for the contractor to improve business accommodation.

## **BENEFITS**

While road construction is necessary for maintaining an optimal transportation system, it can negatively affect businesses adjacent to the construction activities. One of FDOT's goals is to enhance Florida's economic prosperity through its commitment to providing a quality transportation system. This means that customers may be impacted while maintenance of or improvements to the transportation infrastructure are being carried out. The investigation and implementation of business accommodation best practices and innovative contracting practices will assist FDOT in its efforts to mitigate the impact of construction on businesses while delivering an improved transportation system.

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