Florida Department of Transportation Research

Guidelines for Bus Transit Stops in Highway Construction Work Zones
BDV29-977-06

Fixed route bus systems are a valuable transportation service — essential for many citizens. Bus ridership continues to increase and is an integral part of Florida's growing multimodal transportation system, so maintaining transit service and access becomes increasingly important. Yet there is little standard guidance for maintaining access to bus stops when they are affected by construction projects. In this project, Florida International University researchers sought to develop guidelines, recommendations, and cost estimates for managing transit stops affected by construction projects. Customer access and safety were the researchers' top considerations.

The researchers began with a review of current federal and state regulations regarding work zone safety. Generally, these regulations consider driver and pedestrian issues but do not include transit stop safety and accessibility. For example, the Florida Department of Transportation (FDOT) Plans Preparation Manual mentions that transit facilities should remain operational during construction and that provisions should be made to guarantee that passengers have the ability to board and depart from transit vehicles safely, but specific guidance is limited to pedestrian safety in work zones.

As a foundation for developing transit stops under exceptional conditions, design standards for transit stops under normal conditions were reviewed. All relevant bus stop elements were presented, including stop placement, signage, benches, lighting, boarding and alighting areas, and others.

The project then addressed considerations in planning, design, and management aspects of bus stops affected by construction, including pedestrian access, agency coordination, input and involvement, and ITS technologies. The typical means of communicating transit needs during construction is through a temporary traffic control (TTC) plan. Use of this plan was suggested as the key to ensuring that the needs of transit

Road construction can disrupt bus routes and safe access to bus stops.

riders are considered throughout the planning, design, and construction processes. As part of this section, the researchers provided cost estimates based on the pay items that are normally used in the maintenance of traffic (MOT) portion of any project.

In order to gain guidance from the experience of practitioners, the research team identified and surveyed transportation professionals in Florida who had knowledge and experience with the Maintenance of Traffic (MOT) process and had dealt with transit stops in construction zones. The focus of the survey was to identify engineering and management challenges, customer services and safety issues, and best practice solutions. The research team also visited construction sites with operating bus routes to determine how transit services and riders were accommodated during the construction process.

The report concludes with recommendations and treatments to improve FDOT processes in addressing bus stops affected by construction and ensure safe access to riders to assist in maintaining safe and efficient transit service for many Florida citizens.

Project Manager: Diane Quigley, FDOT Public Transportation Office
Principal Investigator: Fabian Cevallos, Florida International University
For more information, visit http://www.dot.state.fl.us/research-center