

18.0 SAFETY AND SECURITY

This section identifies the legal requirements for federally funded rail transit projects, describes the current status of HRT's policy and position relative to safety and security issues, and documents some of the preliminary impacts and mitigation measures that may result from the operation of the Preferred Alternative.

18.1 Applicable Legal Authority

The Federal Transit Administration's (FTA) State Safety Oversight Rule (49 CFR Part 659) requires oversight for all rail transit agencies in revenue operation after January 1, 1997. States with "New Start" systems, funded through FTA's discretionary New Starts program, must address 49 CFR Part 659 requirements with the initiation of New Starts revenue service.

FTA's State Safety Oversight Program outlines *eight* distinct functions that must be performed for compliance:

- Oversight Agency Designation and Authority
- Oversight Agency Program Management
- System Safety/Security Program Standard Preparation and Adoption and rail fixed guideway systems (RFGS) System Safety/Security Program Plan Review and Approval Process
- Accident/Unacceptable Hazardous Conditions Investigations and Corrective Actions
- Three-year Safety Reviews
- Requiring and Reviewing RFGS Internal Safety Audit Process Reporting
- Oversight Agency Certification and Reporting to FTA

The FTA guidelines, *Compliance Guidelines for States with New Starts Project*, June 2000, provides a recommended process for addressing safety and security issues through the planning, design, construction, and post construction testing phases of the project. According to the guidelines, project sponsors should ensure that safety considerations are addressed during the Preliminary Engineering stage. During the end of final design and the initiation of construction, FTA recommends the state safety oversight process is completed.

18.2 Current Policies on Safety and Security

The state of Virginia has designated the Virginia Department of Rail and Public Transportation (VDRPT) as the State Safety Oversight Agency. The VDRPT has not established a formal System Safety/Security Program Standard plan.

Throughout the planning and design phases of the Norfolk LRT project, HRT has focused attention toward the development of an LRT system that is safe for the LRT riders as well as for pedestrians and motor vehicles that are affected by the project. During Preliminary Engineering and subsequent phases of design and construction, the Executive Safety and Security Committee, developed entirely of HRT staff, has the primary role of focussing attention on safety and security issues.

In addition, HRT has prepared the Norfolk Light Rail Transit project, *Preliminary Hazard Analysis, July 2003*, which identifies areas of potential safety conflicts with the LRT vehicles along the LRT alignment. During the Final Design stage, HRT, in coordination with the VDRPT, will develop and implement a safety and security plan. This plan will address, among other things, pedestrian safety, grade crossing safety, and LRT vehicle and station area security. The preliminary safety and security plans include the following:

Pedestrian Safety

The pedestrian safety program in and around the LRT stations will consist of highly visible and accessible pedestrian walkways, and sufficient lighting in each facility area to provide a safe and comfortable environment for all transit patrons.

A network of pedestrian paths will be constructed at each station area that interconnects the bus drop-off areas, the automobile drop-off and park-and-ride lots, bicycle parking areas, and the station platforms. All pedestrian paths will be accessible to individuals with temporary or permanent disabilities. Paths will be visible from on-site access drives, parking areas, and adjacent streets.

Whenever possible, pedestrian paths will be designed to avoid crossing or passing through LRT tracks, vehicular access drives, and parking areas. Where such crossings occur, they will be identified with standard pavement markings and signs. Sight distance at crosswalks, intersections, and LRT crossings will conform to AASHTO Guidelines.

Lighting will be provided at all outdoor plazas, pedestrian walkways, parking lots, entrance and exit roadways, and vehicular traffic areas within the station boundary lines. Special care will be taken to avoid “spill” light and objectionable glare that might affect adjacent properties and roadways.

Grade Crossing Safety

Grade crossings will be affected where LRT vehicles and highway vehicles meet. The principal traffic safety consideration at a grade crossing is to avoid collisions between trains and motor vehicles. Another consideration is limiting secondary accidents that may involve only the roadway vehicular mode as a result of train activity or activation of the grade crossing warning system. In addition to traffic safety, the safety and security plan will document methods of avoiding collisions between LRT vehicles and pedestrians crossing the tracks. A detailed discussion of grade crossing impacts associated with the Preferred Alternative is provided in Chapter 4.

LRT Vehicle and Station Area Security

HRT is exploring the use of video surveillance equipment inside the light rail vehicles. At a minimum, security of the passengers will be monitored by the LRT vehicle operator and roving fare inspectors.

Station area security measures will include lighting at outdoor plazas, pedestrian walkways, parking lots, entrance and exit roadways, and vehicular traffic areas within the station boundary lines. In addition, HRT will coordinate with the City of Norfolk Police Department to ensure that security personnel conducted regular station area walk-throughs for personal safety and property protection.

Pre-Implementation Education Programs

Prior to initiating LRT service, HRT will conduct a series of driver/pedestrian education programs and school programs to introduce members of the public to the LRT system and educate them of the safety considerations associated with pedestrian and traffic interaction with light rail vehicles.