



Appendix J
Safety and Security Technical Memo



This page is intentionally left blank.

MEMO



To: Project File
From: Joshua Matthews
Date: May 26, 2015
Re: Tempe Streetcar Safety and Security Technical Memo

1.0 INTRODUCTION

The purpose of this technical memo is to describe the measures to be taken to enhance the safety and security of the streetcar system and its riders, as well as residents and businesses within the project corridor. Many of these features were first implemented when operations of the LRT Starter Line began and would continue to be employed for the planned Tempe Streetcar project.

2.0 SAFETY AND SECURITY MEASURES

The design criteria for Valley Metro projects require the streetcar stops to be designed in accordance with Crime Prevention Through Environmental Design (CPTED) guidelines. Both the streetcar vehicles and stops would be designed in accordance with the Americans with Disabilities Act (ADA).

The streetcar stops would function as a local bus stop and thus would not be equipped with closed circuit television (CCTV) or emergency call boxes. The Department of Homeland Security (DHS) also requires all such facilities to install DHS-compliant trash cans for either resistance to explosives or use of an open metal frame and clear bag.

The streetcar vehicles would include passenger emergency reporting devices that allow passengers to communicate with the train operator. The streetcar interior and exterior would also be equipped with CCTV. The train operator can report problems directly to the Valley Metro Operations Control Center who can then contact security or local police. Streetcars would include bells, horns, and flashing headlights to provide both audible and visual warnings as needed to alert drivers and pedestrians of an approaching train. In addition, the streetcars would be designed with energy-absorbing bumpers to lessen potential impacts in the event of a collision; the streetcar would also have low-ground clearance, which will reduce the likelihood of a pedestrian sliding underneath the train in the event of a collision.

Measures would be taken to discourage pedestrians from illegally crossing the tracks and to enhance safety at permitted crossing locations. Pedestrian signals and well-marked crosswalks, where existing crossings do not occur, would be provided at

crossing locations and the stop platforms would be marked with “Do Not Cross Tracks”. Additional measures may be taken at some locations if warranted.

Security personnel would patrol the streetcar stops and trains. Security services for the streetcar project would be provided through a contract between Valley Metro and a private security services firm similar to the contract Valley Metro has for the current light rail service. Fare inspections would be conducted by security personnel. The train operators and security personnel would be trained to spot potentially suspicious activities and to take appropriate action. The City of Tempe Police Department would respond to criminal incidents, auto or pedestrian accidents with the streetcar, etc., and the City’s Fire Department would respond to fire and rescue emergencies.

Valley Metro would work with the Downtown Tempe Community and Arizona State University, among other groups, to educate riders, automobile drivers, bicyclists and pedestrians about safety and security along the streetcar corridor. This would include advertising, social media, and other outreach efforts to explain how the streetcar interacts with automobile traffic, bicycle lanes and pedestrian activities. This program would commence during the initial testing phase of streetcar operations and would work hand-in-hand with other safety and security outreach efforts for the regional transit system.

Valley Metro has established a set of comprehensive security activities emphasizing the importance of security in all aspects of the LRT Starter Line system and associated extensions. These activities are documented in the following plans and will be updated to include the streetcar system:

- System Security Program Plan (Revision 11, 2015) – Documents and assists in the implementation and monitoring of the System Security Program, describes the responsibilities of all staff, ensures secure design, sets security goals and objectives, establishes relationships with emergency management personnel, and complies with Federal Transit Administration (FTA) 49 Code of Federal Regulations (CFR), Part 659, and Arizona Department of Transportation (ADOT) guidelines.
- System Safety Program Plan (Revision 11, 2015) – Establishes requirements for the identification, evaluation, and minimization of safety risks throughout all Valley Metro systems, and complies with FTA 49 CFR, Part 659 and ADOT guidelines.
- Emergency Management Plan (Revision 9, 2015) – Assists in identifying, planning for, responding to, and resolving emergency situations in an efficient, controlled, and coordinated manner.
- Accident/Incident Investigation Plan (Revision 8, 2015) – Establishes the requirements, responsibilities and procedures for the investigation and documentation of all accidents or incidents involving Valley Metro patrons,

employees, facilities, vehicles and/or persons or equipment who may come in contact with the system.

Valley Metro's office of Safety and Security will be continually evaluating safety and security elements for the Tempe Streetcar project, including, but not limited to the following:

- Threats and hazards associated with the Tempe Streetcar project
- Design and architectural details to enhance safety
- Use of CCTV cameras and lighting as specific design measures
- Security patrols of transit property and vehicles
- Ongoing train safety awareness education

In summary, implementation of the project is not expected to result in an adverse effect to safety and security.

