4.14 SECURITY AND SYSTEM SAFETY

4.14.1 INTRODUCTION

Security refers to the prevention of unlawful acts resulting in harm to persons or damage to property. In a broader sense, it also implies freedom from threats or uncertainty about the likelihood of threatening acts. Crime and antisocial behavior are potential problems in any public environment.

System Safety refers to the prevention of accidents to the riding public, employees, or others present at or near busways or BART facilities, which include aerial structures, stations, tracks, pedestrian walkways, parking lots, parking structures, the bus transfer center, trains, and the trackway. Such accidents may be caused by events such as fires, faulty equipment, faulty software, inadequate procedures or training, improper boarding and alighting of the rail and bus vehicles, or improper passenger drop-off and loading. Fire and life safety considerations involve preventive design criteria and those that provide protection for people and property in the event an emergency should occur.

Because security and safety issues in the SVRTC project area are not likely to be affected by implementation of the No-Action Alternative, the following discussion focuses on implementation of either the Baseline or BART Alternative, as well as the MOS Scenarios.

4.14.2 EXISTING CONDITIONS

4.14.2.1 VTA and Other Transit Facilities

Security and safety measures are already in place to serve current bus transit operations and related pedestrian activities near existing transit facilities and bus stops within the SVRTC. VTA's Protective Services provides security for VTA bus and light rail service and facilities in coordination with law enforcement activities of a Santa Clara County Sheriff unit and American Protective Services, a private security contractor, under contract to VTA.

4.14.2.2 BART Facilities

Security

The BART Police Department provides police services for all BART facilities, stations and trains and is sworn to uphold federal, state, and local laws and the ordinances of the BART District. Police personnel are responsible for safeguarding the lives and property of BART patrons and employees, and protecting district property. BART police officers have the same powers of arrest as city police officers and county sheriff's deputies. As of January 2003, the department has 269 police personnel who include: 188 sworn police officers, 31 community service assistants, 13 communications and 9-1-1 dispatchers, 17 revenue protection guards, and 9 office/clerical staff.

The BART Police Department investigates all reported crimes that occur on BART property including transit-related crimes, auto burglaries, auto thefts, robberies, purse snatches, assaults, homicides, and any other felonies, misdemeanors, or infractions that occur within the BART District. The most common serious crimes involve burglaries and auto thefts. Incidents that require BART police attention usually occur in stations, on platforms, and in parking lots. Fewer incidents occur on BART trains. The BART police have an average response time to emergencies of four minutes, and an average response time of 8.5 minutes to non-emergency calls. The BART Police Department is decentralized into geographical zones to increase patrol time and to improve community policing efforts. There are BART police facilities and field offices in Oakland, Concord, Walnut Creek, El Cerrito, Dublin/Pleasanton, Castro Valley, San Leandro, Hayward, San Francisco, Daly City, and Colma. With the extension to the San Francisco

International Airport completed in June 2003, the BART police have additional facilities at the SFO, Millbrae, South San Francisco, and San Bruno stations.

Qualifications and training for BART police officers exceed the guidelines of the state's Commission on Peace Officer Standards and Training (POST), which certifies all California peace officers. In addition to meeting POST requirements, every BART police officer applicant must have at least 30 college-semester units. The majority of officers are assigned to the Patrol Bureau and are eligible for specialized assignments, including: field training officer; canine handler; criminal investigations; bicycle patrol; field evidence technician; personnel and training; crime analysis; traffic; anti-vandalism and special-enforcement teams. To prepare for major emergencies, critical incidents, and tactical call-outs, the department is a signatory to the Bay Area's mutual-aid pacts. Select officers receive training in special weapons and tactics, emergency rescues, crowd management, and hostage/crisis negotiations. As part of BART's safety program, stations are patrolled by BART police (see discussion below) and attended by BART personnel, including maintenance staff responsible for keeping the stations and other facilities clean and free of graffiti, which further enhances safety and security.

Aside from stations and parking areas, public access to BART's facilities and ROW is strictly controlled. Non-public areas within the BART system, which include the electrified rail alignment, train yard, and maintenance facilities, are securely fenced or are located on aerial structures or in subways that are inaccessible to the public. Wherever the alignment is at grade, warning signs are posted on the security fences adjacent to the tracks to prevent trespassing and to warn of the dangers of entering the track area containing the electrified third rail.

The BART Police Department is also responsible for participating in design review of new facilities to ensure consistency with security and safety standards. For example, public areas and parking lots are well illuminated and designed to avoid dark or remote passageways and other areas that cannot be readily viewed or patrolled. BART recognizes that designs that promote public use and activity also minimize criminal activity and increase the likelihood that people will observe and report potential criminal activities.

System Safety

The BART System Safety Department is primarily responsible for ensuring that safety procedures are developed and implemented throughout the BART District. A key responsibility of the department is the implementation of BART's System Safety Program Plan, which states, "Safety is the major consideration in all [BART] operations including planning, design, construction, testing, and maintenance of the rail transit system." Implementation of the program includes the setting of safety goals and objectives, as well as hazard identification, reduction, and control throughout the system. The BART System Safety Department is also responsible for the monitoring of safety performance to identify any failures and deficiencies in the program, including accidents on BART property, and to implement corrective measures. Where it is determined that unsafe conditions exist, the manager of the Safety Department has the authority to interrupt or cease BART operations.

The BART System Safety Department is also responsible for implementation of BART's Emergency Plan, the authoritative procedure to be used in an emergency event. The plan establishes standard policies and procedures for the mobilization of BART and other public safety resources so that fast, controlled, and predictable responses can be made to various types of emergencies. Specific response procedures for a full range of foreseeable types of emergencies are addressed in the plan and include response procedures for train fires, derailments, injuries or deaths on the ROW, ROW intrusions, earthquakes (of varying intensities occurring at varying times), high winds, flooding, gas leaks and toxic spills, bomb threats, explosions, and hostage situations. In all cases, the Emergency Plan identifies the responsibilities of the involved persons and authorities (train operators, BART Central Control, BART police, the responding fire departments, etc.) and sets forth an operations plan for each type of

emergency. The various operations plans address the initial fact finding and reporting procedures, communication requirements, evacuation and rescue procedures, emergency scene boundaries and restrictions, public information, and related factors.

In accordance with BART emergency procedures, local fire departments are the primary responders in the event of a fire within the BART system. Under an agreement with all affected fire departments for the existing system, the local fire department would assume overall command of any fire emergency scene, in cooperation with BART Central Control. Information on local fire departments within the SVRTC is provided in Section 4.5.2.2, *Community Services and Facilities/Fire Protection and Emergency Response Service*.

4.14.3 IMPACT ASSESSMENT AND MITIGATION MEASURES

Private auto travel is inherently a more accident-prone mode of travel than public transit. By increasing public transit use to reduce the level of auto traffic in the SVRTC, either the Baseline or the BART Alternative would be expected to have an overall beneficial effect on motor vehicle accident rates and resulting injuries.

4.14.3.1 Impacts

No-Action Alternative

Projects planned under the No-Action Alternative would undergo separate environmental review to define impacts to security and system safety. (See Section 3.2.1.2 for a list of future projects under the No-Action Alternative.)

Baseline Alternative

Security and system safety concerns under this alternative are similar to those under the existing conditions. The present potential for security and safety incidents would extend to the expanded service, and VTA and other bus transit operators would extend their protective services to include the new bus services. In addition, VTA would prepare for safety and emergency response on the expanded express bus service through coordination with the City of Fremont's police and fire departments, and medical and other emergency response organizations. No adverse impact is anticipated.

BART Alternative

The BART Alternative and MOS Scenarios would carry with it the potential for security and safety incidents in the trains, along the rail alignment, and near and within the rail stations. Such incidents would potentially occur at rail subway stations and their station entrances, parking lots and structures, and amenities located at street level. Also of concern would be the safety of passengers who are onboard trains.

BART will follow and apply the provisions of its current System Safety Plan and Emergency Response Plan to the extended service. Fire sprinklers, stand pipes, smoke detectors, and alarm systems will be placed throughout the new stations in accordance with fire department jurisdiction requirements, standards set forth by the National Fire Protection Association, California Building and Fire Codes, and BART criteria. BART will coordinate and train its emergency response personnel with fire departments in Fremont, Milpitas, San Jose, and Santa Clara to assure response readiness in the event of an emergency. In addition, BART's police force and safety department staff will be expanded to cover the extension, with additional police facilities at the BART Maintenance Facility and selected stations.

Fencing will be installed along the at-grade and depressed BART alignments and at train portals. Fencing will separate the BART tracks from the UPRR tracks to prevent passengers from crossing tracks after disembarking from a train. The Plan also includes safety of train operations, including train control system, operating procedures, training of operating and maintenance personnel, and emergency responses.

BART stations and parking areas will be lighted and have designated walkways for pedestrians. Passengers disembarking and walking to their destinations will be clearly directed to use sidewalks and crosswalks. Station platforms, fare gates, and elevators will be monitored by closed-circuit television (CCTV). BART will ensure that there is adequate police presence, as well as surveillance cameras and emergency call boxes, at all BART stations and parking facilities.

In the City of Fremont (where BART has existing service and facilities and where the BART Alternative and MOS Scenarios begin), police from the City of Fremont Police Department on occasion respond first to calls reporting crimes in progress on BART property. Similarly, when BART police units are patrolling nearby they may respond first to calls outside their jurisdiction and stabilize the scene until units with jurisdiction arrive. Provision of these police services to the BART Alternative and MOS Scenarios will result in a safe environment. Information on police services in the SVRTC is provided in Section 4.5.2.1, *Community Services and Facilities/Police Services*.

Application of the design requirements identified in the next section and BART's System Safety Program Plan, including the Emergency Plan, will reduce risks.

4.14.3.2 Design Requirements and Best Management Practices

Baseline Alternative

As stated in Section 4.14.2.1 above, VTA's Protective Services provides security for VTA facilities in coordination with other law enforcement agencies and security contractors. These activities would be extended to the expanded bus service.

BART Alternative

Passenger safety and security are top priorities for both VTA and BART in the design of the BART Alternative and the MOS Scenarios. The extension will be designed to comply with applicable codes for tunnel and station ventilation, and train and station circulation and exiting. These codes include:

- National Fire Protection Association (NFPA) 130 Fixed Guideway Transit Systems
- US Department of Transportation Subway Environmental Design Handbook, Volume 1
- CCR, Title 8, Industrial Relations Subchapter 20, Tunnel Safety
- Orders 20
- California Building Code, Chapter 4A, Section 414A-Fixed Guideway Transit Systems
- California Public Utilities Commission (CPUC) General Order 164-C
- BART System Safety Program Plan
- BART Exiting and Emergency Ventilation Design Criteria

The provisions of BART's existing System Safety Program Plan also require active participation by the BART System Safety Department in the design of system extensions. A BART safety engineer, working with VTA and the local fire department personnel, will review contract drawings and specifications for

compliance with the previously mentioned codes and criteria. This includes provisions of the codes, requirements, and guidelines listed above along with local fire department requirements. This is particularly critical for the tunnel segment emergency ventilation structures and emergency egress and ingress. In these cases, there are established emergency station and tunnel egress criteria that will be applied to the BART Alternative. The System Safety Department will also monitor engineering testing and conduct safety technical audits of all new facilities and equipment to ensure that they meet applicable safety standards prior to passenger operation and that they continue to meet these standards while in operation.

As a part of the design review process, BART safety engineers will also review the security fencing design along the at-grade alignments, train storage areas, and alongside transitions from subways to at-grade or aerial alignments. A secure ROW is of critical importance to BART because of the electric third rail and the high frequency and speeds of trains. Similarly, BART safety engineers will review the design of station entrances, exits, platforms, and concourse areas for pedestrian safety. The design of parking lots and bus/auto loading zones will also be reviewed for pedestrian, as well as vehicular, safety and for accessibility by emergency response vehicles. For security purposes, BART facilities standards will also be implemented for the BART Alternative and MOS Scenarios, including CCTV in stations and along the trackway (at tunnel portals), intrusion detection devices at wayside facilities, access control devices, and other security procedures.

The BART Alternative and MOS Scenarios would operate on exclusive trackage alongside but separate from the UPRR freight service between Warm Springs and the UPRR Milpitas Yard north of Calaveras Boulevard. At this point, UPRR freight service switches to the former Southern Pacific Line. Currently, UPRR is operating fewer than four freight trains per day on the segment between Warm Springs and Calaveras Boulevard. In addition, in this segment, the BART tracks would run adjacent to the UPRR Milpitas Yard lead track (a siding track) rather than alongside the mainline. Nonetheless, operations of BART and freight trains in this common corridor pose hazards for either mode in the rare event of train accidents (e.g., derailments). VTA and BART will undertake a common corridor safety and cost study to determine the most appropriate and cost-effective design treatments where BART would operate in close proximity with freight operations.

In accordance with CPUC General Order 164-C and the BART System Safety Program Plan, BART will certify the safety and security of the BART Alternative and MOS Scenarios to ensure that the design, construction and installation of equipment are systematically reviewed for compliance with safety and security requirements and to verify safety operational readiness of the system prior to the commencement of revenue service.

4.14.3.3 Mitigation Measures

No-Action Alternative

Projects planned under the No-Action Alternative would undergo separate environmental review to define impacts to security and system safety and to determine appropriate mitigation measures.

Baseline Alternative

Security and safety measures already in place for existing bus facilities and operations will apply to the expanded operations under the Baseline Alternative. No mitigation measures are required.

BART Alternative

A safe and secure environment will be provided through implementation of national and state codes, regulations, and guidelines (see Section 4.14.3.2). In addition, the BART Police Department in

coordination with local jurisdictions will implement BART's System Safety Program Plan and Emergency Plan. No mitigation measures are required for the BART Alternative and MOS Scenarios.