Project: Metro Gold Line Eastside Extension

Agency: Los Angeles County Metropolitan Transportation Authority

Soteria’s Role: System Safety and Security Planning and Analysis

Completion: 2009

Project Overview

The Metro Gold Line Eastside Extension is an extension of the Metro Gold Line from Pasadena to Los Angeles. It begins at the southern limit of the Los Angeles Union Station, and extends from Alameda Street in Central Los Angeles east through the Boyle Heights community in the City of Los Angeles, and the City Terrace, Belvedere and East Los Angeles communities of unincorporated Los Angeles County, California.

Upon leaving Union Station the MGLEE double-track alignment will cross over the Hollywood Freeway and head south along Alameda Street. It will turn east onto 1st Street and cross over the LA River to a point just beyond Gless Street for a total distance of approximately 1.5 miles from Union Station. It will then enter a tunnel and continue in a south-easterly direction under 1st Street for approximately 1.7 miles before exiting the tunnel prior to reaching Lorena Street. The alignment will continue at-grade along 1st Street to Indiana Street, turn south onto Indiana Street and then turn east onto 3rd Street. Along 3rd Street the alignment will cross under the Pomona Freeway and over the Long Beach Freeway for approximately 2.6 miles.

The alignment will terminate on Pomona Boulevard immediately before its intersection with Atlantic Boulevard.
Soteria’s Contribution to This Project

The following Hazards Analyses were prepared for the Metro Gold Line Eastside Extension (MGLEE) to identify and systematically assess conditions that could potentially affect the safe operation of the MGLEE:

- A Preliminary Hazard Analysis was prepared to identify possible hazardous conditions; evaluate the effects of the hazards to personnel and equipment; and define designs and criteria to eliminate or control the identified hazards.
- An Operating Hazard Analysis was prepared to assess potential hazards that might be caused by human actions.
- A System Hazard Analysis was prepared to perform an in-depth safety review of the project systems and equipment. The failure modes for the equipment under review were employed to achieve a systematic and thorough analysis.
- The results from all three Hazard Analyses were collected into a Safety-Critical Items List (SCIL).
- Soteria also prepared a Safety Test and Verification Plan to identify the testing requirements and procedures in order to help ensure all critical safety functions were properly tested and verified.