Project: Gold Line Foothill Extension Project

Agency: Metro Gold Line Foothill Extension Construction Authority

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

Completion: Estimated 2028

Project Overview

The Gold Line Foothill Extension will extend the Los Angeles Metro Gold Line light rail corridor by 12.3 miles. The corridor formerly terminated in Pasadena; the project extends it east through Los Angeles County’s “Foothill Cities” into San Bernardino County. When completed, the line will be 23.9 miles. Phase 2A of the project completed in 2016. Phase 2B is projected to complete in 2026.

Soteria’s Contribution to This Project

Soteria developed a Preliminary Hazard Analysis and a Threat and Vulnerability Assessment in support of the safe operation of Project 2B. For the Glendora to Montclair segment, Soteria developed the Preliminary Hazard Analysis (PHA) to identify and systematically assess conditions that could potentially affect the safe operation of the transit system. The PHA identified hazardous conditions, documented the safety concepts and mitigating
measures, provided a checklist for guiding the design, and provided a basis for requiring more detailed safety analyses and testing for specific system elements and subsystems.

Soteria developed the project’s Threat and Vulnerability Assessment (TVA) to craft an effective set of risk-reducing security mitigations to be integrated into the Gold Line Foothill Extension Project 2B design, construction, startup and operations. The assessment process allowed for mitigations to be chosen for optimal safety and be tailored for the identified risks to project assets for transit agency patrons and employees. The TVA also provided a framework to quantify and then rank the potential risks for the occurrence of various detrimental security events. The proposed protective countermeasures, when implemented correctly, serve to minimize risk across a wide range of security events, making possible an overall safer and more secure transit system.