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I-710 Corridor Project EIR/EIS

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Geotechnical Study Process Overview

presented to the

Corridor Advisory Committee

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Geotechnical Study - Purpose

- Identification of geology, soils, and seismic conditions related to project design and public safety

Geotechnical Study Assessment Process

- Gather geotechnical data from existing sources:
 - Caltrans
 - County and cities
 - Ports
 - California Division of Oil, Gas and Geothermal Resources
 - California Geological Survey
 - US Geological Survey
 - US Army COE

Geotechnical Study Assessment Process

- Summarize Regional and Local Geologic Conditions
 - Surface and sub-surface soil
 - Groundwater
 - Seismicity
 - Oil and gas resources
- Assess Geologic and Seismic Hazards
 - Subsidence
 - Expansive and collapsible soils
 - Fault rupture, ground shaking, liquefaction
 - Slope instability

Geotechnical Study Assessment Process

- Geotechnical information has been used in preliminary engineering design of the structural elements of the I-710 alternatives
 - Bridges
 - Viaducts
 - Overcrossings
 - Soundwalls
 - Retaining walls
- Preliminary engineering design follows latest Caltrans seismic standards

Geotechnical Study Assessment Process

- Geotechnical information will also be summarized in the Draft EIR/EIS