

Transportation & utilities infrastructure: noise, vibration and EMI monitoring

Infrastructure projects can pose unique challenges, arising from the construction processes required to build and maintain them. Our infrastructure work addresses all aspects of noise, vibration, and EMI/RF impacts, from worker safety & comfort to legal documentation for CEQA/NEPA, to meet environmental and community requirements, to unique project mitigations for technically-demanding neighbors such as high-tech laboratory and research facilities. Below is some of our work addressing the environmental issues of transportation and utilities infrastructure projects.



California High Speed Rail Project:

Environmental characterizations of EMI/RF for multiple Section EIRs for the state-wide system. Some segments pass near high-tech and medical facilities that are susceptible to interference from magnetic fields. High-frequency (RF) data were collected for both the baseline environmental

studies as well as for the engineering teams' use in susceptibility evaluations. We authored the EIR chapter for one segment of the state-wide system and supported authors on two others.

Sound Transit / University of Washington: Deep technical reviews of EIS/EIR reports and independent calculations to support a \$1.6B regional light rail project in Seattle. Our original work in the late 1990s revealed that the preferred alignment would render core University research buildings unusable due to vibrations. Re-alignments co-developed by us successfully mitigated those impacts. We continue to consult the University, also serving as subconsultants on new facilities' design.



Peninsula Pipelines Seismic Upgrades, SFPUC: CEQA studies for construction noise and vibration at five upgrade sites in four Bay Area municipalities. The project was complicated by the presence of a total of five jurisdictions. This required alignment of analysis methodology in the face of five separate ordinances. We authored the EIR chapter on noise and vibration and successfully accommodated major scope expansion without allowing the budget to explode.