

TRANSPORTATION ACHIEVEMENT AWARD – TSMO

STC TRAFFIC FOR THE SAN DIEGO PORT TENANTS ASSOCIATION – FREIGHT SIGNAL PRIORITY PROJECT



STC Traffic has received a 2022 Transportation Achievement Award in the Transportation Systems Management & Operations (TSMO) Category for their San Diego Port Tenants Association Freight Signal Priority Project. The Transportation Achievement Awards recognize excellence in the advancement of transportation to meet human needs, by entities concerned with transportation, such as governmental agencies, legislative bodies, consulting firms, industry partners, and other organizations. Awards are presented in five categories: Complete Streets, TSMO, Safety, Planning, and Traffic Engineering.

The San Diego Port Tenants Association (SDPTA) Freight Signal Priority (FSP) Project implements an Intelligent Transportation System (ITS) to promote advancement for both the efficiency and economy of transportation. Medium- and heavy-duty trucks and equipment close to the Port of San Diego and nearby industrial areas served as major contributors of pollution and harmful emissions, especially with the truck market predominantly powered by diesel fuel.

Project goals included enhancing market acceptance and deployment of a range of advanced technologies to reduce Green House Gas (GHG) emissions, reduce petroleum use, and benefit disadvantaged communities. Multiple stakeholders took part in the effort to establish communication technology to reduce GHG emissions of freight vehicles.

STC helped achieve these goals by planning, designing, and constructing an ITS along a critical freight route. Implementing FSP established communication between freight trucks and incoming traffic signals to provide priority and a green light for trucks traveling along the freight route. The aim was to reduce emissions from trucks both idling at red lights and accelerating from traffic signal stops. Other project outcomes included improving travel time reliability and traffic safety and reducing road maintenance needs.

The average travel time decreased by 9.5% saving truck drivers an average of 1 minute and 4 seconds along the four-mile segment. Average stops decreased by 21.7%, average speed increased by 13.9%, average moving emissions were reduced by at least 15% per run, and average idle emissions were reduced by 27% per run.

Congratulations to team members Jason Stack, P.E., PTOE; Christian J. Lambarth, PE, TE; Brandon Schlueter, EIT; Ivan Gonzalez; Adam Lemberg, IMSA III; and Alain Hungerford, IMSA I. Read [more](#).