

California Transportation Commission

Senate Bill 671 Workgroup

Friday, July 22, 2022

10:00 am – 11:00 am

Via GoToWebinar

<https://attendee.gotowebinar.com/register/3768143317622821903>

Agenda

Topic	Details
Welcome and Introductions	<ul style="list-style-type: none">• Welcome• Webinar Logistics
Key Focus Areas for Discussion	<ul style="list-style-type: none">• Caltrans California Freight Advisory Committee Overview• Reference Material for Zero-Emission Funding Programs• Maps of Clean Freight Corridor Regions based on working group proposals and top 5 freight corridors based on truck volume
Closing and Next Steps	<ul style="list-style-type: none">• Next Meeting on August 26, 2022

CALIFORNIA TRANSPORTATION COMMISSION STAFF CONTACTS:

Hannah Walter, Associate Deputy Director- Hannah.Walter@catc.ca.gov

More information about the California Transportation Commission may be found on our [website](#).

Get the latest updates from the Commission on [Twitter](#) and [Facebook](#).



WORKGROUP

SENATE BILL 671



Meeting Agenda

- Brief Caltrans California Freight Advisory Committee Overview
- Existing Zero-Emission funding programs
- Draft Maps for SB 671 Assessment

Next Meeting is on Friday, August 26, 2022

EXISTING ZEV FUNDING PROGRAMS

Trade
Corridor
Enhancement
Program

AB 617
Community Air
Protection
Incentives

Carl
Moyer
Program

CORE

HVIP

LCFS

EnerGIIZE

Clean
Transportation

TRADE CORRIDOR ENHANCEMENT PROGRAM

- As proposed in Cycle 3 Draft Guidelines: The objective of the Trade Corridor Enhancement Program is to fund freight infrastructure improvements on freight corridors, including Senate Bill 671 Corridors.
- In addition to the established program evaluation criteria, changes to the criteria this cycle are proposed to include: “Actions that support the transition to zero-emission freight infrastructure include, but may not be limited to, the following”:
 - Building zero-emission infrastructure that supports freight.
 - Improving access to freight charging or hydrogen fueling infrastructure to refuel battery electric and fuel cell powered trucks.
 - As a part of a larger port freight infrastructure project, buying zero-emission or near zero-emission human-operated equipment.
- Approximately \$1 billion available in Cycle 3. 30% local match required
- Cycle 3 project nominations are due November 18, 2022.

CARB PROGRAMS HVIP AND CORE



- Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)
 - Eligible Entities: Business, nonprofit organization, California Native American Tribe, or public entity
 - Purchase of eligible zero-emission truck, bus or electric power-take off equipment found in the HVIP eligible vehicle catalog.
- Clean Off-Road Equipment Voucher Incentive Project
 - Manufacturers can become a CORE-eligible manufacturer, dealers can become an approved CORE dealer, equipment users receive a voucher for discounts at time of purchase
 - Purchase of eligible equipment technology found in the CORE equipment catalog.

CARB PROGRAMS (CONTINUED)

LCFS

- Low Carbon Fuel Standard (LCFS)
 - LCFS credits can be generated for dispensed fuel for light-, medium-, and heavy-duty ZEVs (electricity and hydrogen), as well as for ZE forklifts, cargo handling equipment, transportation refrigeration units, along with the potential applications for other ZEV.
 - Entities who own hydrogen refueling infrastructure and DC fast charging infrastructure can generate additional credits based upon the unused capacity of the stations

CARB PROGRAMS (CONTINUED)

CARL MOYER AND AB 617 COMMUNITY AIR PROTECTION INCENTIVES



- Carl Moyer Program
 - Both Carl Moyer Voucher Incentive and Community Air Protection Incentive programs are administered by local air districts, applicants can be any entity within the district.
 - Repower, retrofit, fleet modernization, and equipment replacement of vehicles and engines. Carl Moyer projects are eligible for CAP Incentives.
 - The 2017 Carl Moyer Guidelines Chapter 10 Infrastructure - Senate Bill 513 (Beall, Chapter 610, Statutes of 2015) gave Moyer the ability to incorporate infrastructure projects. As of today, all Moyer eligible infrastructure projects can receive up to the maximum 50% of eligible costs. Details to what type of chargers and applicants' requirements can be found in our guidelines.
- AB 617 Community Air Protection Incentives
 - Eligible applicants for Community Air Protection Incentives also include vehicle owners, school districts, and communities most impacted by air pollution.
 - Mobile source projects, zero-emission charging infrastructure, stationary source projects, and community projects in communities identified through AB 617.

CEC PROGRAMS – CLEAN TRANSPORTATION

■ ELIGIBILITY REQUIREMENTS

- Solicitation-specific. Examples include commercial, private entrepreneurs to support entrepreneurial work or “public and private entities” for infrastructure-type grant. Recent MD/HD grant funding opportunities included design and implementation of ZEV blueprint planning and block grant projects, conversion of transit bus fleets to ZEV, drayage truck and infrastructure pilot projects, innovative charging solutions, and fuel cell demonstrations at rail and ports.
- Funding Areas:
 - Zero-Emission Vehicles and Infrastructure
 - Hydrogen Fueling Infrastructure
 - Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure
 - Zero- and Near Zero-Carbon Fuel Production and Supply
 - ZEV Manufacturing
 - Workforce Training and Development

■ \$100 MILLION ANNUALLY, THROUGH JANUARY 1, 2024.

■ FUNDING DEADLINES VARY PER GRANT PROGRAM. SOLICITATIONS ARE FOUND AT [HTTPS://WWW.ENERGY.CA.GOV/FUNDING-OPPORTUNITIES/SOLICITATIONS](https://www.energy.ca.gov/funding-opportunities/solicitations)

CEC PROGRAMS - ENERGIIZE

- Provides incentives for MD/HD zero-emission vehicle (ZEV) infrastructure projects.
 - EV Fast Track: Provides incentives of up to \$500K per project for electric vehicle charger purchases. Applicants must own or have proof of purchase of MD/HD commercial vehicles.
 - EV Jump Start (Equity) Lane: Provides incentives of up to \$750K per project for electric vehicle charger purchases. Applicants can be transit agencies, school districts, or MD/HD ZEV commercial fleets owned by nonprofits.
 - EV Public Charging Lane: Provides incentives of up to \$500K per project to public charging station developers. Level 2 chargers are not eligible.
 - Hydrogen Lane: Provides incentives of up to \$3 million per project for deployment of hydrogen refueling infrastructure equipment for MD/HD vehicles.

CEC PROGRAMS - ENERGIIZE

■ Eligibility:

- Eligible Applicants: Fleet owners, vendors, charging station owners/developers
- Minimum Criteria (Solicitation-specific): Must be new equipment installed for the first time, include the ability to provide recharging or refueling to a MD/HD ZEV, must have at least a one-year warranty that begins the date final commissioning is complete, and must be compliant with NIST Handbook 130¹² and NIST handbook 44¹³, where applicable.
- EV Chargers: Level 2 EVSEs, DC Fast-Charge EVSEs, switchgears, panel upgrades, transformers and utility service upgrades, stub-outs, wiring and conduit, demand management equipment or software, and meters.
- Hydrogen Fueling Stations: Compressors, liquid and gaseous pumps, piping and pipelines, high pressure (350 bar or 700 bar) dispensers with hose and nozzles, high-pressure storage, on-site production, chillers, high pressure storage, meters and transformers.

■ \$50 million available, has authority for up to \$276 million

- EV Fast Track: \$16 million -- fully subscribed
- EV Jumpstart (Equity) Lane: \$14 million
- EV Public Charging Lane: \$8.1 million
- Hydrogen Lane: \$17 million

¹² For more information, please see <https://nvlpubs.nist.gov/nistpubs/hb/2018/NIST.HB.130-2018.pdf>

¹³ For more information, please see https://www.nist.gov/system/files/documents/2021/05/05/00-20-hb44-web-final_0.pdf

EXISTING ZEV FUNDING PROGRAMS

ELIGIBLE ENTITIES

Program (Agency)	Eligible Entities
Trade Corridor Enhancement Program (CTC)	Local, regional, and public agencies such as cities, counties, Metropolitan Planning Organizations, Regional Transportation Planning Agencies, port authorities, public construction authorities, Caltrans, and private entities who have a public sponsor.
AB 617 Community Air Protection Incentives (CARB)	<p>Eligible applicants include owners of heavy-duty trucks and buses, school buses, transit fleet vehicles, drayage trucks, solid waste vehicles, public agency/utility emergency vehicles, off-road construction, industrial equipment, agricultural equipment, locomotives, marine vessels, and lawn and garden equipment. Opportunities are available for infrastructure that enables advanced and cleaner technologies. Additionally, schools may apply for air filtration projects, and owners of chrome plating operations may apply for projects to modernize their operations. Future projects may include additional stationary sources not subject to the Cap-and-Trade Program and sources identified in applicable Community Emissions Reduction Programs.</p> <p>The Community Air Protection Program's focus is to reduce exposure in communities most impacted by air pollution. Funding is intended to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in those communities most heavily burdened by air pollution.</p> <p>Applicants apply through their local air pollution control district.</p>
Carl Moyer Program (CARB)	<p>Eligible applicants include owners of heavy-duty trucks and buses, school buses, transit fleet vehicles, drayage trucks, solid waste vehicles, public agency/utility emergency vehicles, off-road construction, industrial equipment, agricultural equipment, locomotives, marine vessels, and lawn and garden equipment. Opportunities are available for infrastructure that enables advanced and cleaner technologies.</p> <p>Individuals or businesses apply through their local air pollution control district.</p>
CORE (CARB)	Manufacturers can become a CORE-eligible manufacturer, dealers can become an approved CORE dealer, equipment users receive a voucher for discounts at time of purchase.
HVIP (CARB)	Business, nonprofit organization, California Native American Tribe, or public entity.
LCFS (CARB)	Entities can generate LCFS credits for dispensed fuel for uses in on or off-road applications. Entities who own hydrogen refueling infrastructure and DC fast charging infrastructure for light-duty vehicles can generate additional credits calculated based upon the unused capacity of the stations.

EXISTING ZEV FUNDING PROGRAMS

ELIGIBLE ENTITIES (CONTINUED)

Program (Agency)	Eligible Entities
EnergIIZE Commercial Vehicles: Medium and heavy-duty ZEV charging and refueling infrastructure incentives (CEC)	<p>EV Fast Track: Owners of commercial fleets that contain MD/HD electric vehicles.</p> <p>EV Jump Start (Equity) Lane: Commercial fleet users that are small businesses, Certified Minority Business Enterprise, Woman-Owned Small Business, Veteran-Owned Small Business, or LGBT-Owned Small Business, transit agencies or school districts (located in a designated Disadvantaged Community) low-income community, CA Tribal Organizations or non-government organizations serving Tribal entities, or non-profit organizations.</p> <p>EV Public Charging Lane: Commercial fleet users or station owners with a need to support MD/HD zero-emission vehicles. Intended for public charging station developers. Recipients must install DCFC of 150 kW or greater. Encouraged to provide infrastructure for at least one 350kW stub-out and prepare for 1 MW charging rates.</p> <p>Hydrogen Lane: Commercial fleet users or station owners who want to deploy hydrogen refueling equipment for MD/HD vehicles. Refueling station must be capable of dispensing 350 or 700 bar and certified to ASME, ASTM, and NFPA standards.</p>
Clean Transportation Program (CEC)	Solicitation-specific. Examples include commercial, private entrepreneurs to support entrepreneurial work or “public and private entities” for infrastructure-type grant. Recent MD/HD grant funding opportunities included design and implementation of ZEV blueprint planning and block grant projects, conversion of transit bus fleets to ZEV, drayage truck and infrastructure pilot projects, innovative charging solutions, and fuel cell demonstrations at rail and ports.

EXISTING ZEV FUNDING PROGRAMS

ELIGIBLE PROJECT TYPES

Program	Eligible Project Types
Trade Corridor Enhancement Program (TCEP)	Zero-emission freight infrastructure, and other freight infrastructure such as highway, port, and rail projects.
AB 617 Community Air Protection Incentives (CARB)	<p>Project types include those mobile source categories eligible in the Carl Moyer Program (replacement, repower and retrofit of on road trucks, off-road equipment, locomotives, marine vessels) and zero-emission charging infrastructure and cleaner advanced technologies.</p> <p>In addition, stationary source projects are eligible, such as stationary diesel back-up engines, residential woodburning devices, and community identified projects consistent with strategies in applicable Community Emission Reduction Programs. Future projects may include additional stationary sources not subject to Cap-and-Trade Program and sources identified in applicable community emissions reduction programs.</p>
Carl Moyer Program (CARB)	<p>Typical projects include replacement, repower, and retrofit of vehicles and engines, and include infrastructure to support deployment of cleaner advanced technologies. Projects must be cost-effective and achieve emission reductions beyond what is required by federal, state, and local regulations.</p> <p>Air districts focus funding on specific project types based on local needs and priorities.</p>
Clean Off-Road Equipment Voucher Incentive Project (CORE) (CARB)	Purchase of eligible equipment technology found in the CORE equipment catalog.
HVIP (CARB)	Purchase of eligible zero-emission truck, bus or electric power-take off equipment found in the HVIP eligible vehicle catalog.
LCFS (CARB)	Light-duty ZEV infrastructure for capacity-based crediting.

EXISTING ZEV FUNDING PROGRAMS

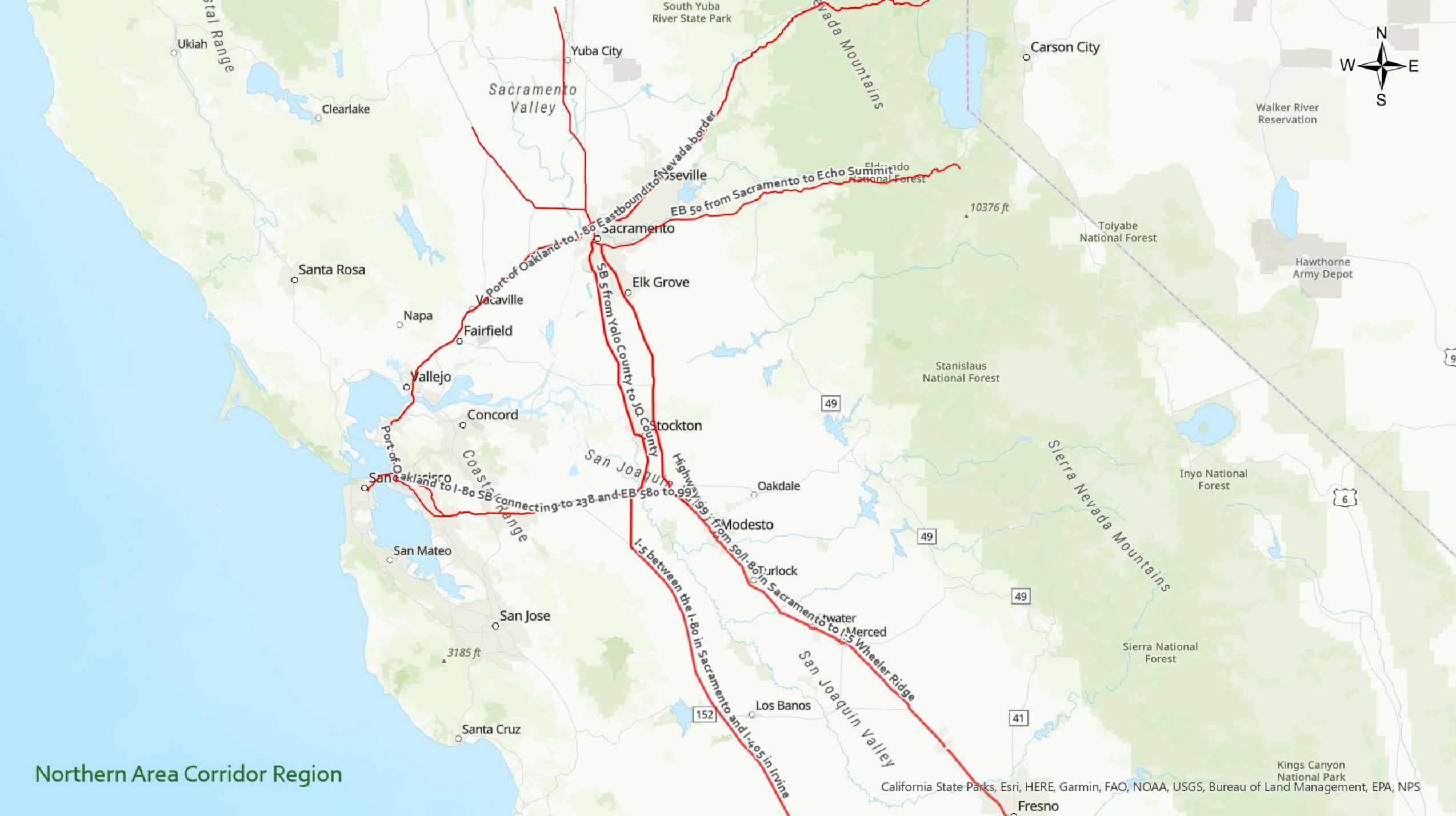
ELIGIBLE PROJECT TYPES (CONTINUED)

Program	Eligible Project Types
EnergIZE: Medium and heavy-duty ZEV refueling infrastructure incentives (CEC)	<p>EV Fast Track: Level 2 EVSEs, DC Fast-Charge EVSEs, switchgears, panel upgrades, wiring and conduit, and meters.</p> <p>EV Jumpstart (Equity) Lane: Level 2 EVSEs, DC Fast-Charge EVSEs, charge management software, switchgears, electrical panel upgrades, wiring and conduit, meters.</p> <p>EV Public Charging Lane: DC Fast-Chargers, transformers (non-IOU territory), meter mains and circuit breaker panels, demand management equipment, switchgears, electrical panel upgrades, wiring and conduit, meters.</p> <p>Hydrogen Lane: Compressors, liquid and gaseous pumps, piping and pipelines, dispenser hose and nozzles, high-pressure storage, on-site production, chillers, switchgears, electrical panel upgrades, wiring and conduit, meters</p>
Clean Transportation Program (CEC)	<p>Solicitation-specific. Funding areas are:</p> <ul style="list-style-type: none"> • Biofuels • Electric Vehicles & Charging Infrastructure • Hydrogen Vehicles & Refueling Infrastructure • MD and HD Vehicles • Natural Gas Vehicles & Refueling Infrastructure • Workforce Development

Draft Maps for SB 671 Assessment

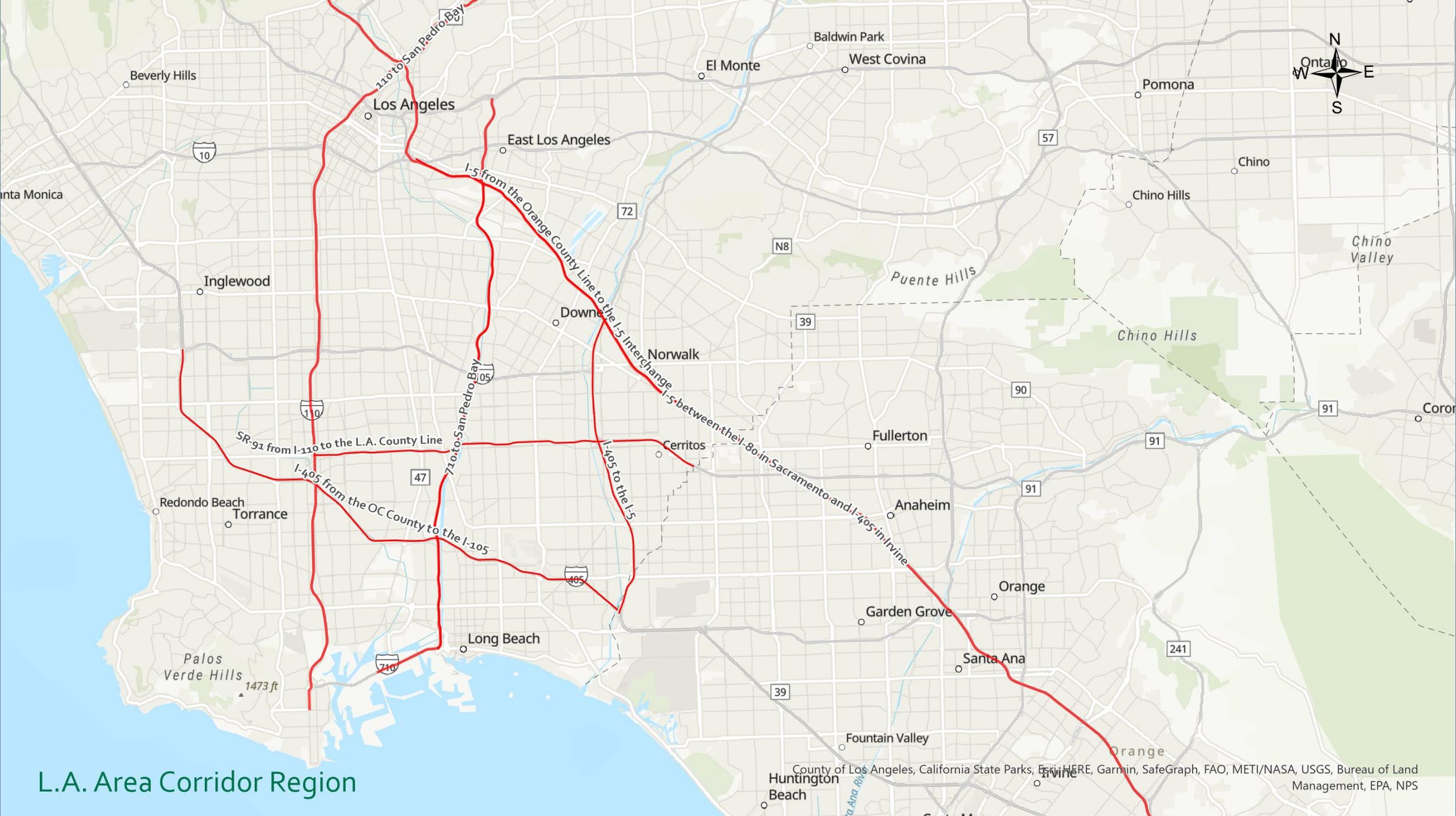
MAPS OF CLEAN FREIGHT CORRIDOR REGIONS

- The next three slides show a draft compilation of clean freight corridors and regions based on the workgroup's proposals, as reflected in maps developed by Commission staff.
- The first map reflects the greater Bay Area and Sacramento-Stockton Area region, the second map reflects the greater Los Angeles area around the San Pedro Bay Ports, and the third map reflects the San Diego border region and Imperial County.
- These freight corridors and regions (and some not depicted) have been determined to be optimal corridors for clean freight infrastructure and are still under consideration for the Clean Freight Corridor Efficiency Assessment.



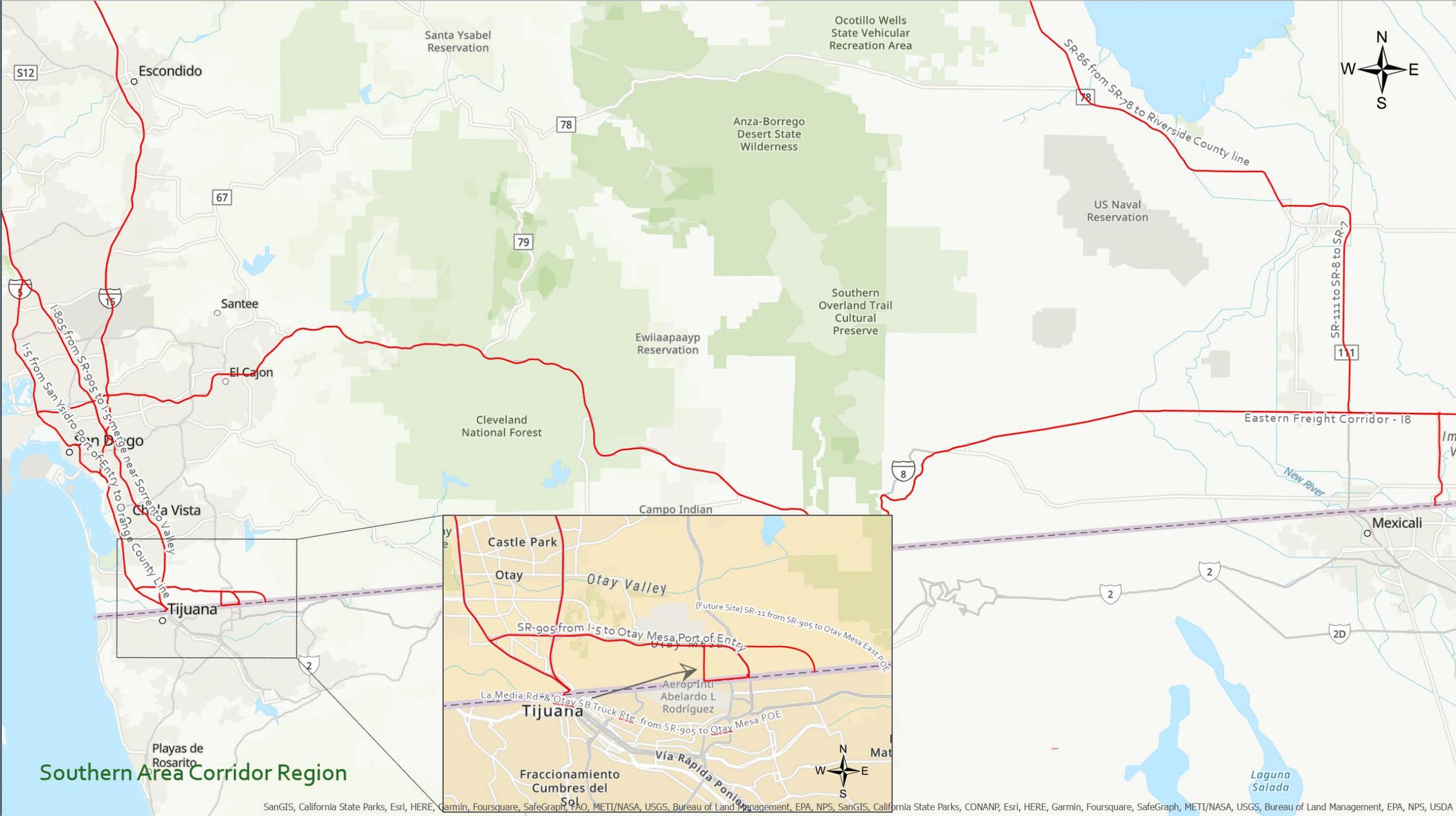
Northern Area Corridor Region

California State Parks, Esri, HERE, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS



L.A. Area Corridor Region

County of Los Angeles, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS



Southern Area Corridor Region

TOP 5 FREIGHT CORRIDORS BY TRUCK VOLUME

- The next two maps reflect the top five freight corridors in the state based on truck volume.
- The top five corridors by freight volume (average trucks per day) are:
 - Interstate 5 from Oregon Border to Los Angeles region
 - State Route 99 from Sacramento to Bakersfield
 - Interstate 15 from Riverside to Nevada border,
 - Interstate 10 from Los Angeles to Arizona Border
 - Interstate 40 from Bakersfield to Arizona Border.

Thank You

For questions please contact:
Hannah.Walter@catc.ca.gov