

Transportation Projects at a Glance

RECENTLY COMPLETED

[Workforce Impacts of Decarbonizing California's Transportation System](#)

Funder: California Environmental Protection Agency

We contributed to the first report to comprehensively evaluate a path to a carbon neutral transportation system for California by 2045. Leading the study's workforce analysis, we found that achieving carbon neutrality in California's transportation sector could create over 7.3 million job-years of employment over the next 25 years.

[Setting an Agenda for Equity-Centered Clean Transportation](#)

Funder: Los Angeles Business Council

This study, led by our researchers and aided by a working group of community advocates, business leaders, and policymakers, links equity to the effectiveness of California's ambitious clean transportation goals. Key recommendations include targeting clean vehicles incentives towards moderate- and low-income drivers and ensuring public and private zero-emission fleets are first deployed to disadvantaged communities.

[Evaluating the Use of Fast-Charging Stations to Support Electric Vehicle Drivers in Multi-Unit Dwellings \(MUDs\)](#)

Funder: EVgo Services LLC

We evaluated a MUD-focused fast charging pilot program developed by EVgo, a charging network company. The study found that MUD-residents plug in their cars at fast chargers more frequently and closer to home than their non-MUD resident counterparts. This suggests that fast charging stations are an important component for encouraging electric vehicle adoption among MUD residents.

[Advancing Zero-Emission Drayage Trucks for the San Pedro Bay Ports](#)

Funders: Strategic Growth Council and Earthjustice

We examined the barriers and opportunities involved in moving toward zero-emission drayage trucking, with a focus on the nation's first and second largest ports, the adjacent Ports of Los Angeles and Long Beach. The report proposes a set of short-and-medium-term policies and strategies that address main barriers and opportunities to make significant progress in the 2020s toward a full transition to zero-emission drayage trucks.

[Designing Clean Vehicle Incentive Programs for Low-income Households](#)

Funders: California Air Resources Board, the Strategic Growth Council and CalTrans

Our recent studies have helped California improve clean transportation access for disadvantaged communities. Researchers surveyed low- and moderate-income households about their vehicle history and travel preferences and assessed how existing state incentive programs are helping lower-income households replace their polluting vehicle. The findings of these provide a roadmap for programs that can most effectively and equitably support transitions to clean transportation for lower income households.

Evaluating the Largest Smog Repair Program for Low-income Households

Funder: UCLA Institute of Transportation Studies

In a series of studies, we analyzed data from the San Joaquin Valley's smog test and vehicle repair program, known as Tune In & Tune Up. We evaluated the cost-effectiveness and health benefits of the program, and found that other regions could use this program model to efficiently reduce emissions from light-duty vehicles while addressing the mobility needs of low-income households.

Designing Vehicle Rebates for All

Funder: California Air Resources Board and Luskin Center for Innovation's foundation

More Californians can now afford clean vehicles, in part thanks to our research. We assessed the performance of alternative rebate designs for plug-in electric vehicles and compared these alternatives in terms of cost effectiveness and equity. Based in part on the findings, the State of California adopted a progressive rebate system in which low- and moderate-income drivers receive extra financial incentives to purchase a clean vehicle. There is now also a cap on rebates based on income.

CURRENT RESEARCH

Forecasting Performance of Policy Interventions to Transition to Low-Carbon Medium and Heavy-Duty Vehicles

Funder: California Air Resources Board (CARB)

In partnership with lead-institution UC Irvine, we are participating in a CARB-funded study on how California can accelerate the transition to low-carbon medium/heavy-duty vehicles and off-road equipment between 2020 and 2050. We are specifically focused on modeling fleet turnover scenarios and forecasting the impact that current and proposed policy interventions will have on fleet composition over the study time period.

Low Exposure Truck Routing in San Bernardino

Funder: Strategic Growth Council

The San Bernardino International Airport was recently approved to undergo a major expansion as an Amazon regional air cargo hub. Local residents, communities, and organizations have concerns about the environmental and public health impacts from the increases in heavy-duty truck traffic associated with the cargo hub. In collaboration with the Center for Environmental Research and Technology (CE-CERT) and the Center for Social Innovation (CSI) at UC Riverside, we identified alternative trucking routes to and from the airport that minimize human exposure to diesel pollutants.

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