

## California State University Transportation Consortium: Funded Projects

#	PI Institution	Title	Status
1	SDSU	<a href="#">A Micro-Scale Analysis of Cycling Demand, Safety and Network Quality</a>	Complete
2	CSU Long Beach	<a href="#">A Multi-Modal Approach for Monitoring Driving Behavior and Emotions</a>	Complete
3	CSU Fresno	<a href="#">A Multi-Objective Optimization Model to Minimize the Gap in Accessibility to Multi- Use Paths While Maximizing the Economic Efficiency of Active Transportation Investments for Fresno, California</a>	Complete
4	CSU Bakersfield	<a href="#">A New Materials and Design Approach for Roads, Bridges, Pavement and Concrete</a>	Complete
5	CSU Long Beach	<a href="#">A Study on Vehicle Tire Inflation and Fuel Consumption</a>	Complete
6	CSU Long Beach	<a href="#">A Supercapacitor-based Energy Storage System for Roadway Energy Harvesting Applications</a>	Complete
7	CSU Long Beach	<a href="#">Aging of Fiber Reinforced Elastomeric Bridge Bearings</a>	Complete
8	CSU Stanislaus	<a href="#">Altamont Pass Commuter Study: A Longitudinal Analysis of Perceptions and Behavior Change</a>	Complete
9	SDSU	<a href="#">An Eco-Driving System for Connected Automated Vehicles: Multi-Objective Trajectory Optimization</a>	Complete
10	CSU East Bay	<a href="#">Automated Measurement of Heavy Equipment Greenhouse Gas Emission: The Case of Road/Bridge Construction and Maintenance</a>	Complete
11	CSU Fresno	<a href="#">Bridge Monitoring Using a Digital Camera: Photogrammetry-Based Bridge Dynamic Deformation Monitoring</a>	Complete
12	CSU Fresno	<a href="#">Collaboratively Connecting: Public Polling as a Foundation for Integrated Transportation Decision-Making Networks</a>	Complete
13	MTI Research Associate	<a href="#">Considerations for Social Distancing on Public Transportation During the COVID-19 Recovery</a>	Complete
14	MTI Research Associate	<a href="#">COVID-19's Potential Impact on Cities: Five Trends and Indicators to Watch</a>	Complete
15	CSU Long Beach	<a href="#">Critical Issues in Trucking Workforce Development</a>	Complete
16	SDSU	<a href="#">Developing a Computer Vision-Based Decision Support System for Intersection Safety Monitoring and Assessment Of Vulnerable Road Users</a>	Complete
17	CSU Fresno	<a href="#">Developing a Fair Accessibility Framework Through Green (Non-Auto) Transportation Modes for Fresno, CA</a>	Complete
18	CSU LA	<a href="#">Developing Guidelines for Assessing the Effectiveness of Intelligent Compaction Technology</a>	Complete
19	CSU Fresno	<a href="#">Development of a Quality Control Method and Guidelines for Hot Mix Asphalt Using Recycled Concrete Aggregate</a>	Complete
20	CSU Fresno	<a href="#">Development of Reduced Chemical Kinetic Models for the Numerical Simulation of Combustion and Emissions Behavior of Representative Conventional and Bio-derived Transportation Fuels</a>	Complete
21	CSU Fresno	<a href="#">Effective Communication Message Strategy for Enhancing Traffic Safety in Fresno County: The Role of Time Horizon, Regulatory Focus, and Perceived Personal Control</a>	Complete
22	CSU Fresno	<a href="#">Effective Lesson Plans in Transportation</a>	Complete

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23	Cal Poly Pomona	<a href="#">Enhancement of Multimodal Traffic Safety in High Quality Transit Areas</a>	Complete
24	CSU Long Beach	<a href="#">Evaluating Crowdsourcing as a VMT Reduction Tool to Support Smart Cities Initiatives</a>	Complete
25	CSU Long Beach	<a href="#">Evaluating Financing Mechanisms and Economic Benefits to Fund Grade Separation Projects</a>	Complete
26	CSU Long Beach	<a href="#">Evaluating Innovative Financing Mechanisms for the California High-Speed Rail Project</a>	Complete
27	CSU Long Beach	<a href="#">Freight Demand Model for Southern California Freeways with Owner–Operator Truck Drivers</a>	Complete
28	CSU Long Beach	<a href="#">Geospatial Information Tools in the Service of Mobility and Transportation</a>	Complete
29	CSU Fresno	<a href="#">Green Strategies for Design and Construction of Non-Auto Transportation Infrastructure</a>	Complete
30	Cal Poly Pomona	<a href="#">Green Up Pavement Rehabilitation Decision Tool</a>	Complete
31	SJSU	<a href="#">Harmonizing Climate Change Mitigation and Adaptation in Transportation and Land-Use Planning in California Cities</a>	Complete
32	CSU Long Beach	<a href="#">Image-based Remote Measurement of Retro-Reflectivity of Roadway Assets in the Daytime</a>	Complete
33	SDSU	<a href="#">Impact of Regular and Narrow AV-Exclusive Lanes on Manual Driver Behavior</a>	Complete
34	CSU LA	<a href="#">Infrastructure Academy Transportation Program</a>	Complete
35	SJSU	<a href="#">Investing in California’s Future: Public Opinion on Critical Transportation Needs</a>	Complete
36	CSU Chico	<a href="#">Literature Review on Performance, Best Practice and Training Needs for Chip Seals, Slurry Surfacing, and Cape Seal</a>	Complete
37	SJSU	<a href="#">Local Government Policy and Planning for Unmanned Aerial Systems</a>	Complete
38	CSU Chico	<a href="#">Manual for Cape Seals</a>	Complete
39	CSU Chico	<a href="#">Manual for Chip Seals</a>	Complete
40	CSU Chico	<a href="#">Manual for Slurry Surfacing</a>	Complete
41	CSU Chico	<a href="#">Manual for Thin Asphalt Overlays</a>	Complete
42	Cal Poly SLO	<a href="#">Moving from Walkability? Evaluation Traditional and Merging Data Sources for Evaluating Changes in Campus-Generated Greenhouse Gas Emissions</a>	Complete
43	CSU Long Beach	<a href="#">Novel Method for Probabilistic Evaluation of the Post-Earthquake Functionality of a Bridge</a>	Complete
44	CSU Long Beach	<a href="#">Numerical Investigations of Air Flow Around a Freight Truck with a Rear Active Flow Control</a>	Complete
45	CSU Long Beach	<a href="#">Numerical Investigations of Transient Wind Shear from Passing a Vehicle near a Road Structure</a>	Complete
46	CSU Long Beach	<a href="#">Numerical Investigations of Virus Transport Aboard a Commuter Bus</a>	Complete
47	CSU Long Beach	<a href="#">Performance Testing of Hot Mix Asphalt Containing Biochar</a>	Complete
48	CSU Long Beach	<a href="#">Reducing NOx Emissions of Cargo Handling Equipment (CHE) with Humid Air Systems</a>	Complete
49	SJSU	<a href="#">Safe Routes to Schools Service-Learning Projects in San José Spark Longstanding Student Engagement in Community Planning</a>	Complete
50	Cal Poly SLO	<a href="#">Safety Considerations for All Road Users on Advisory Bike Lanes</a>	Complete
51	CSU Fresno	<a href="#">Securing the Emerging Autonomous and Connected Vehicles</a>	Complete
52	CSU Long Beach	<a href="#">Sensitivity Analysis on Semi-Circular Bending Tests Using the Plackett-Burman Matrix</a>	Complete
53	CSU Long Beach	<a href="#">Southern California Regional Transit Training Consortium: Skills Gap &amp; Needs Assessment</a>	Complete

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54	CSU Long Beach	<a href="#">Southern California Regional Workforce Development Needs Assessment for the Transportation and Supply Chain Industries</a>	Complete
55	CSU Long Beach	<a href="#">Stability of Fiber-reinforced Bridge Bearings Under Compression and Shear Loads</a>	Complete
56	CSU Long Beach	<a href="#">Structural Identification and Damage Detection in Bridges Using Wave Method and Uniform Shear Beam Models: A Feasibility Study</a>	Complete
57	Sonoma State	<a href="#">Survey on Travel Preferences and Cycling in Silicon Valley</a>	Complete
58	CSU Dominguez Hills	<a href="#">The "GO-Virtual Initiative" - Using flexible workplace practices to reduce traffic congestion, increase economic development, and provide more access to affordable housing choices in the South Bay Region of Los Angeles County</a>	Complete
59	CSU Fresno	<a href="#">The Fresno State Transportation Challenge (Year 2)</a>	Complete
60	MTI Research Associate	<a href="#">The Future of California Transportation Revenue</a>	Complete
61	CSU Fresno	<a href="#">The Geographic Disparities in Transportation-Related Physical Activity in the United States: An Analysis of the 2017 NHTS Data</a>	Complete
62	SJSU	<a href="#">The Impact of COVID-19 on California Transportation Revenue</a>	Complete
63	SJSU	<a href="#">The Impact of the COVID-19 Recovery on California Transportation Revenue: A Scenario Analysis through 2040</a>	Complete
64	MTI Research Associate	<a href="#">The Impact of ZEV Adoption on California Transportation Revenue (Perspective)</a>	Complete
65	CSU Long Beach	<a href="#">The People Behind The Wheel: Exploring The Policy Changes, Job Characteristics, And Social Stressors Driving Turnover Among California Truck Drivers</a>	Complete
66	CSU Long Beach	<a href="#">Underpinnings of User-channel Allocation in Non-orthogonal Multi-access for 5G</a>	Complete
67	CSU Fresno	<a href="#">Visible Light Communications Framework for Intelligent Transportation Systems</a>	Complete
68	CSU Fresno	<a href="#">Youth Design the Future of Transportation for Their Community</a>	Complete
69	CSU Fresno	A Multi-Objective Optimization Model to Minimize the Gap in Accessibility to Multi-use Paths will Maximizing the Economic Efficiency of Active Transportation Investments for Fresno, California	In Publication
70	SJSU	Deriving Commuting Data from Tweets	In Publication
71	UC Davis	City & County Pavement Center (CCPIC)	NA
72	CSU Fresno	A GIS-Based Network Analysis to Investigating the Vulnerability of Accessibility to emergency and lifesaving facilitates under the Threats of Natural Hazards	RiP
73	CSU Fresno	AI-based Pedestrian Detection and Avoidance at Night using IR Camera, Radar and Video Camera	RiP
74	CSU Fresno	An Extension of Spatio-Temporal Analysis of the Roadside Transportation-Related Air Quality (StarTraq 2021): A Characterization of Bike Trails and Highways in Fresno/Clovis Area	RiP
75	CSU Fresno	An Extension of Spatio-Temporal Analysis of the Roadside Transportation-Related Air Quality (StarTraq 2021): A Characterization of Bike Trails and Highways in Fresno/Clovis Area	RiP
76	SJSU	Analyzing the Use and Impacts of Oakland Slow Streets and Potential Scalability Beyond COVID-19	RiP
77	CSU Long Beach	Biological Hydrogen Gas Production from Food Waste as a Sustainable Fuel for Future Transportation	RiP
78	CSU Fresno	Central Valley Transportation Challenge	RiP

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79	Cal Poly Pomona	Comprehensive Performance Assessment of Passive Crowdsourcing for Counting Pedestrians and Bikes	RiP
80	CSU Long Beach	Connected Simulation for Work Zone Safety Application	RiP
81	CSU Fresno	Contracting Strategies: A Different Approach to Address Long Term Performance in Road Projects	RiP
82	CSU Fresno	Creating Safer Communities for Use of Active Transportation Modes in California: The Development of Effective Communication Message Strategy and Outreach for Vulnerable Road Users	RiP
83	CSU Fresno	Detecting Driver Drowsiness with Multi-Sensor Data Fusion combined with Machine Learning	RiP
84	CSU Chico	Determine the Life Extension and Economic Benefits of Pavement Preservation Strategies and Develop Training	RiP
85	CSU Chico	Determine the Pavement Performance Models for Slurry Seals and Develop Training Materials	RiP
86	CSU Fresno	Developing a Feasible Business Model for Expanding the EV Market to Lower Income Californians	RiP
87	CSU Long Beach	Development of Framework for Infrastructure Sustainability Rating System for California Highways	RiP
88	Cal Poly SLO	Development of Nanomaterials Additives to Improve Resistance to Moisture Damage in Hot Mix Asphalt (HMA)	RiP
89	CSU Long Beach	Evaluation of Polymer Binder TechniSoil G5® in Concrete Mixtures	RiP
90	SJSU	Exploring the Relationship Between Mandatory Helmet Use Regulations and Adult Cyclists' Behavior in California Using Hybrid Machine Learning Models	RiP
91	CSU Fresno	Fresno State Transportation Challenge	RiP
92	CSU Long Beach	How Do Environmental Factors Affect Driver's Gaze Direction and Head Movements?	RiP
93	CSU Long Beach	Implementing Industry-Supported and Demand-Driven Talent Pipelines for the trade and Transportation Sector	RiP
94	CSU Long Beach	Increased Durability and Reduced Maintenance Cost of Road Surfaces via Recyclable, Dual Use Fiber Reinforced Asphalt	RiP
95	CSU Long Beach	K12 Special Investigation Project: Mapping E-Commerce Locally and Beyond	RiP
96	CSU Long Beach	Large-Eddy Simulations and Experimental Verification of Wind-Shear from a Passing Vehicle Under a Freeway-Overpass	RiP
97	CSU Long Beach	Optimizing Multimodal Transportation Access to Support Commuting among Low-income Transit Riders with Social Distancing	RiP
98	SJSU	Oral History Project (partnership with CPR)	RiP
99	MTI Research Associate	Parking at TOD Sites in Silicon Valley	RiP
100	Cal Poly SLO	Planning for Left Shoulder Part Time Travel Lane (LSPTTL): Workforce training and Operational/Safety Considerations	RiP
101	CSU Long Beach	Post-Earthquake Rapid Structural Damage Detection and Damage Localization in Bridges Using Low-Density Sensor Arrays	RiP
102	SJSU	Promoting Interest in Transportation Careers Among Female Youth	RiP
103	CSU Fresno	Protecting our community from the hidden vulnerabilities of today's ITS	RiP
104	SJSU	Safeguarding Equity in Off-Site Vehicle Miles Traveled (VMT) Mitigation in California	RiP
105	SJSU	Solar Powered Automated Transportation Network for San José	RiP
106	CSU Long Beach	Solid Wastes-Derived Hydrogen Fuel for Green Transportation Fuel	RiP

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107	CSU Fresno	Spatio-Temporal Analysis of the Roadside Transportation Related Air Quality (STARTRAQ) and Neighborhood Characterization	RiP
108	MTI Research Associate	SPUR Parking Project	RiP
109	CSU Fresno	The Impact of the Source of the Message on Effective Communication Strategy to Enhance Traffic Safety in Fresno County: The Role of Credibility, Trust, Relevance, and Appeal	RiP
110	CSU Long Beach	Transient Wind Shear and Tail-pipe Emissions from Passing Vehicles under a Freeway overpass with and without Crosswind	RiP
111	CSU Long Beach	Trip Scheduling and the Cost of Congestion: Estimates Using Travel Diary Data and Big Data	RiP
112	SJSU	Utility Fee to Fund Transit in California	RiP
113	CSU Long Beach	Wastewater-derived Ammonia for a Green Transportation Fuel	RiP
114	SJSU	Fragmented or Aligned Climate Action: Assessing Linkages Between Regional and Local Planning Efforts to Meet Transportation Greenhouse Gas Emissions Reduction Targets	RiP (CARB)
115		"TELE-commuting" during the COVID-19 pandemic and beyond: Unveiling statewide patterns and trends of telecommuting in relation to Transportation, Employment, Land use, and Emissions in California	RiP (CTC)
116	CSU Dominguez Hills	Achieving Excellence for California's Freight System: Developing Competitiveness and Performance Metrics Incorporating Sustainability, Resilience and Workforce Development	RiP (CTC)
117	SJSU	Implementation Strategies and Rate Setting for Road User Charges in California	RiP (CTC)
118	SJSU	Preconstruction Support Cost Analysis	RiP (CTC)
119	SDSU	Public Health Performance Indicator & SB 1 Transportation Funding Programs	RiP (CTC)
120	CSU Fresno	COVID-19 Transit Bus Air Circulation and Virus Mitigation Study	Submitted Draft
121	CSU Fresno	Developing an Effective Targeted Mobile Application to Enhance Transportation Safety and Use of Active Transportation Modes in Fresno County: The Role of Application Design, Content, and Messaging	Submitted Draft
122	CSU Fresno	Do Californian Residents Save Money on Transportation Costs by Living in Transit-Oriented Developments?	Submitted Draft
123	CSU Long Beach	Enhancement of Asphalt Performance by Graphene-based Bitumen Nanocomposites	Submitted Draft
124	CSU Fresno	Examining the Effects of Precision Scheduled Railroading on Intercity Passenger and High Speed Rail Service	Submitted Draft
125	SJSU	Finding Future Transportation Funding for Cities and Counties - What Do California Experts Think?	Submitted Draft
126	CSU Long Beach	Investigation of the Use of Polymers to Enhance the Performance of Recycled Asphalt Pavement (RAP)	Submitted Draft
127	CSU Long Beach	Novel Eco-Friendly and Recycled Composites for Improved CA Road Surfaces	Submitted Draft
128	CSU Long Beach	Parking Automation Infrastructure	Submitted Draft
129	CSU Long Beach	Research and Development of Alternative Parking Technology in conjunction with Congestion Mitigation and Air Quality Control around Park & Rides	Submitted Draft
130	CSU Fresno	Taming the Data in the Internet of Vehicles for Greater Community Livability	Submitted Draft