

Agenda
STEPS+ Spring Symposium

May 15-16, 2019

UC Davis ARC Conference Center, 760 Orchard Road, Davis, CA

Wednesday, May 15, 2019

8:30 a.m. Registration and Light Breakfast

8:45 a.m. Welcome and Introductory Remarks
Lew Fulton, Director, STEPS+ Program

9:00 a.m. **Keynote: “3 for 3 for 3”**
Can 3Rs deliver in the next 3 decades, deep de-carbonization and cleaner air for all? Thoughts on 3 additional policy interventions based on regional experience
Alberto Ayala, Air Pollution Control Officer/Executive Director, Sacramento Metropolitan Air Quality Management District
Adjunct Professor, Mechanical and Aerospace Engineering, West Virginia University
Former Deputy Executive Officer, California Air Resources Board

10:00 a.m. **Session 1: Energy Futures Program**

- Lew Fulton: Update on transition scenarios
- Julie Witcover: LCFS trends across jurisdictions
- Behdad Kiani: California Message Grid modeling work

Discussant: Elizabeth Scheehle, California Air Resources Board

11:00 a.m. Coffee Break

11:20 a.m. **Session 2: The 3 Revolutions and the Future of Mobility**

- Giovanni Circella: Update on 3RFM behavioral studies
- Farzad Alemi: Insights from California Mobility Panel Study
- Dillon Fitch: Micromobility and dockless bikesharing in the Sacramento region

Discussant: Andrea Broaddus, Ford Motor Company

12:30 p.m. Lunch and Poster Session
STEPS students and researchers present in poster format

2:00 p.m. **Session 3: Sustainable Freight Research Center**

- Tony Brasil, California Air Resources Board (ARB): Update on ARB Advanced Clean Trucks regulation
- Marshall Miller: Transitions and challenges related to ARB regulation

Discussant: Tom Cackette

3:10 p.m. Coffee Break

3:30 p.m. **Session 4: China Center for Energy and Transportation**

- Fei Meng: Ride Sharing Development in China
- Yan Xing: Optimal Electric range for PHEVs and BEVs in Beijing and Shanghai
- Xiuli Zhang: Phasing out ICEVs in China

Discussant: Zhenhong Lin, Oak Ridge National Lab

4:30 p.m. Presentation of STEPS+ Project Overviews
Lew Fulton

5:00 p.m. *Adjourn*

5:30 p.m. Reception and Dinner, City Hall Tavern-Bistro 33 (226 F Street, Davis, CA)

Thursday, May 16, 2019

8:30 a.m. Light Breakfast

9:00 a.m. **Session 5: Plug-In Hybrid & Electric Vehicle Research Center**

- Gil Tal: Utility Factor and Charging Preferences of PHEVs
 - Debapriya Chakraborty: Cost-based analysis of charging demand
 - Ken Kurani: California Consumers and PEVs: A 2019 Update
- Discussant: TBD
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10:15 a.m. *Coffee Break*

10:30 a.m. **Session 6: Research Needs for Policy Priorities**

- Colin Murphy, Policy Institute for Energy, Environment, and the Economy: a roundup of current legislative initiatives

Moderator: Dan Sperling, Professor, Founding Director ITS-Davis

Panelists:

- Annalisa Schilla, California Air Resources Board
 - Ted Link-Oberstar, California Senate Office of Research
 - Matt Coldwell, California Energy Commission
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11:45 a.m. Day 2 Wrap Up and Closing Remarks
Lew Fulton

12:00 p.m. *Adjourn and Boxed Lunch*

Breakout Sessions (for center sponsors only)

1:00 p.m. Start “Deep-Dive” breakout sessions

4:30 p.m. Conclude breakout sessions

Posters

N	Center	Title	Author(s)
1	3Rev	Factors Affecting Adoption of Partnerships with Ride-hailing Companies	Susan Pike, Sara Kazemian
2	3Rev	Parking Crisis at the Davis Amtrak Station: Can shared mobility help?	Ali Kothawala, Susie Pike
3	3Rev, Energy Futures	How Bad is Time Uncertainty for Shared Ride-Sourcing? An Investigation	Junia Compostella, Ali Kothawala, David Bunch, Lew Fulton
4	3Rev	Attitudinal and Lifestyle Factors and the Propensity to Adopt Automated Vehicles	Grant Matson, Giovanni Circella, Farzad Alemi
5	3Rev	Adoption and frequency of using ride-hailing services in developing countries	Jai Malik
6	3Rev	Impact Assessment of Automated Vehicles	Elham Pourrahmani, Miguel Jaller, and Caroline Rodier, Neil Maizlish
7	China Center	Impacts of Gasoline Price Changes on US and China Automobile Preference	Tongxin Xu, Erich Muehlegger, Alan Jenn, Daniel Sperling
8	Energy Futures	Lifecycle GHG analysis of BEVs to capture upcoming changes in vehicle design, cleaning grid, and shared-AV future	Sada Wachche, Mark T. Lozano, Hanji Ambrose, Alissa Kendall, Lew Fulton
9	Energy Futures	Electric Vehicles and the Energy System: The Next Chapter in Sustainable Intercity Transportation	Alex Sheldon, Behdad Kiani, Joan Ogden
10	Energy Futures	Importance of Travel Time Variations In The Context of a Congestion Pricing Scheme	Junia Compostella, Lew Fulton, Austin L. Brown,
11	Energy Futures, 3 Rev	Monetary and “Hedonic” Costs of Travel: The Case of Beijing, China	Junia Compostella, Jai Malik, Anish Sinha, Lew Fulton, Giovanni Circella, Farzad Alemi, Jyot Chadra, Adam Davidson
12	PH&EV	Spatial & Temporal Dynamics in the PEV market of California	David Bunch, Debapriya Chakraborty, Bingzheng Xu, Gil Tal
13	PH&EV	Gender Difference in PEV Ownership and Use	Noam Baharav, Debapriya Chakraborty, Gil Tal
14	PH&EV	Optimizing Access to Public & Workplace Charging through Good Charging Etiquette	Katrina Sutton, Scott Hardman, Gil Tal
15	PH&EV	Energy Implications of Driving a Chevrolet Volt Under Various Power Management Modes	Vaishnavi Karanam, Claire Sugihara, Katrina Sutton, Gil Tal
16	PH&EV	Spatial-temporal Modeling of Electric Vehicles Charging Infrastructure and Management for a Sustainable Energy System	Xinwei Li, Alan Jenn, Joan Ogden
17	PH&EV	Analyzing JUMP Bikeshare Bleet and Trip Characteristics Across Cities Using Open Source Data	Jake Highleyman
18	PH&EV	Emerging Concerns for Battery Electric Buses	Peter Benoliel, Gil Tal
19	Policy Institute	Evaluating the Oregon's Clean Fuels Program after its First 3 Years	Julie Witcover, Colin Murphy
20	Policy Institute	More Wisdom Than Data: Reviewing the Literature on Science-Policy Interaction	Valentin Nony, Colin Murphy
21	Sustainable Freight	Cargo Routing and Disadvantaged Communities	Miguel Jaller, Anmol Pahwa
22	Sustainable Freight	Passenger Rail Fuel Alternatives for the 2020's and Beyond	Raphael Isaac, Lew Fulton
23	Sustainable Freight	Exploring collaboration between companies as a strategy to leverage the acquisition of electric trucks	Miguel Jaller and Carlos Otero
24	Sustainable Freight	Comparisons of the useable power characteristics of lithium batteries and supercapacitors for vehicle applications	Andrew Burke, Anish Kumar
25	Sustainable Freight	Electrification of Buses and Trucks: Battery and fuel cell powertrains	Andrew Burke, Marshall Miller

List of Registrants

First Name	Last Name	Title	Organization
Robert	Bienenfeld	Assistant Vice President	American Honda Motor Co., Inc.
Marc	Deutsch	Sales and Marketing	American Honda Motor Co., Inc.
Jamie	Davies	Sr. Analyst	American Honda Motor Co., Inc.
Lang	Sui	Research Scientist	Aramco Services Company
Spencer	Reeder	Director, Government Affairs	Audi
Xiang	Zhang	Professor	Beijing Institute of Technology
Xiaoyi	Li	Student	Beijing Institute of Technology
Michelle	Bogen	Manager, Advanced Powertrain	BMW of North America, LLC
Edmond	Xue	Sustainability/Mobility Intern	BMW of North America, LLC
Mark	Wenzel	Climate Change Adviser	CalEPA
Anil	Baral	SAPS	California Air Resources Board
Leslie	Baroody	Air Pollution Specialist	California Air Resources Board
Tony	Brasil	Branch Chief, Heavy Duty Diesel Implementation	California Air Resources Board
Sonya	Collier	Air Resources Engineer	California Air Resources Board
Cody	Howard	Air Resources Supervisor	California Air Resources Board
Kathy	Jaw	Air Resource Supervisor I	California Air Resources Board
Elise	Keddie	ZEV Implementation Manager	California Air Resources Board
Jeff	Kessler	LCFS Policy Researcher, Analyst	California Air Resources Board
Sarah	Pittiglio	Research coordinator	California Air Resources Board
Anil	Prabhu	Manager, Fuels Evaluation Section	California Air Resources Board
William	Robertson	Vehicle Program Specialist	California Air Resources Board
Elizabeth	Scheehle	Chief, Research Division	California Air Resources Board
Annalisa	Schilla	Manager, Climate Action & Research Planning Section	California Air Resources Board
Chi-Chung	Tsao	Air Resources Engineer	California Air Resources Board
Seungju	Yoon	Manager	California Air Resources Board
Aria	Berliner	Air Resources Engineer	California Energy Commission
Alexander	Wan	Associate Energy Specialist	California Energy Commission
Jim	McKinney	Senior Policy Analyst	California Energy Commission
Matt	Coldwell	Manager, Demand Analysis Office	California Energy Commission
Bill	Elrick	Executive Director	California Fuel Cell Partnership
Ted	Link-Oberstar	Consultant	California Senate Office of Research
Russell	Carter	Environmental Scientist	CalRecycle/CalEPA
Jasna	Tomic	Vice President	CALSTART
Michael	Wilson	Economist	Caltrans
Chad	Riding	Senior Transportation Planner	Caltrans
Eric	Fredericks	Chief, Sustainable Freight Branch	Caltrans
Deborah	McKee	District Freight Coordinator	Caltrans
Joanne	McDermott	Senior Transportation Planner	Caltrans
Amber	Moran	Transportation Planner	Caltrans

Angela	Shepard	Associate Transportation Planner	Caltrans
Ellen	Greenberg	Deputy Director, Sustainability	Caltrans
Shannon	Roberts	Associate Transportation Planner	Caltrans
John	Shears	Research Coordinator	CEERT
Brett	Williams	Senior Principal Advisor, EV Programs	Center for Sustainable Energy
Philip	Heirigs	Sr. Fuels Regulatory Advisor	Chevron
Matt	Franklin	Engineer	Chevron
Tim	Frazier	Executive Director of Advanced Engineering	Cummins
Guillaume	Péronnet	VP Strategy	Faurecia
Steve	Mazure	Manager - Intl. Reg. Development & GHG off-cycle	FCA US LLC
Andrea	Broaddus	Senior Research Scientist	Ford Motor Company
Reva	Butensky	Sustainability & Vehicle Environmental Matters	Ford Motor Company
Jamie	Hall	Manager, Advanced Vehicle & Infrastructure Policy	General Motors
Ian	Sutherland	Staff Researcher	General Motors
Xuping	Li	Senior Analyst, Energy Systems and Technologies	Hitachi Zosen Inova
Farzad	Alemi	Postdoctoral Researcher	ITS-Davis
Karen	Block	Sr. Director of Development and External Relations	ITS-Davis
Beth	Bourne	Program Coordinator, STEPS+	ITS-Davis
Andy	Burke	Research Engineer	ITS-Davis
Alex	Campbell	Graduate Student Researcher	ITS-Davis
Debapriya	Chakraborty	Postdoctoral Researcher	ITS-Davis
Mollie Cohen	D'Agostino	Policy Director, 3 Revolutions Future Mobility Program	ITS-Davis
Rosa	Dominguez-Faus	Program Manager	ITS-Davis
Lew	Fulton	Director, STEPS+	ITS-Davis
Jake	Highleyman	GSR	ITS-Davis
Alan	Jenn	Research Director	ITS-Davis
Sara	Kazemian	Student	ITS-Davis
Behdad	Kiani	Project Scientist	ITS-Davis
Ali Murtaza	Kothawala	Graduate Student Researcher	ITS-Davis
Ken	Kurani	Researcher	ITS-Davis
Xinwei	Li	PhD student	ITS-Davis
Thomas	Mackey	Director of Development and External Relations	ITS-Davis
Marshall	Miller	Senior Development Engineer	ITS-Davis
Fei	Ming	Program Manager	ITS-Davis
Sesha	Raghavan	Graduate Student Researcher	ITS-Davis
Angela	Sanguinetti	Research Environmental Psychologist	ITS-Davis
Alex	Sheldon	Graduate Student Researcher	ITS-Davis
Jeffery	Song	Postdoctoral Researcher	ITS-Davis
Katrina	Sutton	Graduate Student Researcher	ITS-Davis
Sada	Wachche	Graduate researcher	ITS-Davis
Yan	Xing	Postdoctoral Fellow	ITS-Davis
Niloufar	Yousefi	Researcher	ITS-Davis
Xiuli	Zhang	Graduate Student Researcher	ITS-Davis
Srishti	Kapur	Policy Research Analyst	Lyft

Mike	Xing	Policy Research Specialist	Lyft
Amy	Lilly	State Regulatory Affairs Principal	Mercedes Benz Research & Development North America
Brian	Johnston	Principal Engineer	Nissan North America, Inc.
Lance	Atkins	Sr. Principal Engineer	Nissan North America, Inc.
Zhenhong	Lin	Senior R&D Staff	Oak Ridge National Lab
Hong	Wang	Lab Fellow and Sr Distinguished Research Scientist	Oak Ridge National Lab
Roy	Kuga	VP	Pacific Gas and Electric Company (PG&E)
David	Sawaya	Principal	Pacific Gas and Electric Company (PG&E)
Alberto	Ayala	Air Pollution Control Officer/Executive Director	Sacramento Metropolitan AQMD
Steven	Wiradinata	Senior Technical Staff	Sandia National Labs
Natasha	Contreras	EV Customer Engagement Manager	SDG&E
Walter	Rosenkranz	Sr. Business Development Mgr.	SHARE NOW
Tamara	Nameroff	General Manager	Shell
Chen	Zheng	Senior Engineer	SINOPEC
Michael	Lee	Technology Development Project Manager	SoCalGas
Lisa	Mirisola	Program Supervisor	South Coast Air Quality Management District
Tom	Cackette	Consultant	Tom Cackette Consulting
Ning	Wang	Professor	Tongji University
Michael	Lord	Executive Engineer	Toyota Motor North America
Glenn	Choe	Product Regulatory Affairs	Toyota Motor North America
Patrick	Roth	West Coast Regional Manager	TSI Inc
Itai	Trilnick	Graduate Student	UC Berkeley
Ryan	Barr	Graduate Student	UC Davis
David	Bunch	Professor	UC Davis
Giovanni	Circella	Director, 3 Revolutions Future Mobility Program	UC Davis
Sean	Donohoe	Postdoctoral Scholar	UC Davis
Beth	Ferguson	Assistant Professor	UC Davis
Dillon	Fitch	Graduate Student Researcher	UC Davis
Dahlia	Garas	Program Manager	UC Davis
Scott	Hardman	Postdoc	UC Davis
Raphael	Isaac	Graduate Student Researcher	UC Davis
Joan	Ogden	Professor Emeritus	UC Davis
Carlos	Otero	Ph.D. Student	UC Davis
Elham	Pourrahmani	Graduate Student Researcher	UC Davis
Jin Wook	Ro	Graduate Student Researcher	UC Davis
Alireza	Shams	Postdoc	UC Davis
Anish	Sinha	Graduate Student Researcher	UC Davis
Daniel	Sperling	Professor	UC Davis
Claire	Sugihara	Graduate Student Researcher	UC Davis
Julie	Witcover	Assistant Project Scientist	UC Davis
Tongxin	Xu	PhD student	UC Davis
Colin	Murphy	Deputy Director	UC Davis Policy Institute
Austin	Brown	Executive Director	UC Davis Policy Institute
Kelly	Fleming	Rapid Response Analyst	UC Davis Policy Institute
Sopitsuda	Tongsopit	Energy Policy Analyst	UC Davis Policy Institute
Valentin	Nony	Intern	UC Davis Policy Institute

Sarah	Howerter	Graduate Research Assistant	University of Vermont
John	Mikulin	Specialist, Technology & Partnerships	US EPA
Michelle	Graff	Physical Scientist	US EPA
Robin	Moran	Senior Policy Advisor	US EPA
Aaron	Sobel	Environmental Scientist	US EPA
Dana	Mayfield	Scientist	US EPA
Nick	Tamborra	Regulatory Affairs Manager	Volkswagon Group of America, Inc.
Vedad	Cajic	Manager Future Mobility	Volvo Cars
Michael	Coates	California Representative	Volvo Group
Aravind	Kailas	Research & Innovation Manager	Volvo Group North America

Driving Directions to the ARC Conference Center, Parking Instructions and EV Charging

Directions to ARC Conference Center, 760 Orchard Road, Davis, CA 95616

From San Francisco

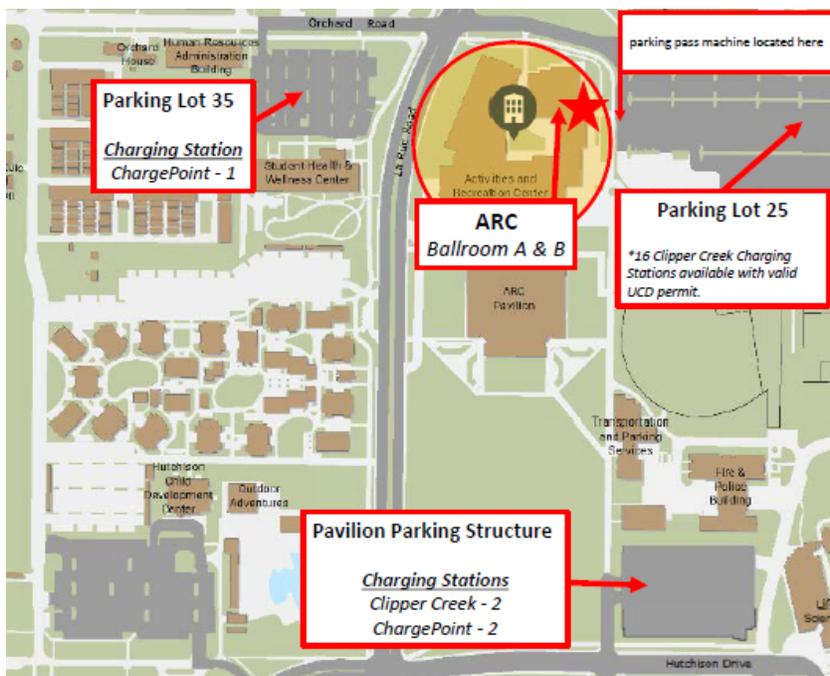
- Take US-101 S via the ramp to Oakland/I-80/San Jose
- Take the exit onto I-80 E toward Oakland (Partial toll road)
- Slight right at CA-113 N (signs for CA-113/Woodland)
- Take the Russell Blvd exit toward Davis
- Turn right at Russell Blvd
- Turn Right at La Rue Rd
- Turn Left at Orchard Park Road

From Sacramento

- Take I-80 W
- Take exit 70 to merge onto CA-113 N toward Woodland
- Take the Russell Blvd exit toward Davis
- Turn right at Russell Blvd
- Turn Right at La Rue Rd
- Turn Left at Orchard Park Road

Parking on campus:

The parking lot nearest the ARC Conference Center is Parking Lot 25. **Day permits are \$9** and can be purchased from machines as you enter the lot. Cash or credit cards accepted.



Electric Vehicle Charging Station Information

- 4 hour limit on all charging stations
- Posted parking restrictions apply in EV charging locations
- ChargePoint chargers are compatible with both 110 volt vehicles
- Units may be activated with a ChargePoint card or bank issued credit card (Visa, Mastercard, Discover)
- Clipper Creek chargers are equipped with SAE J-1772

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