MID-ATLANTIC ELECTRIC VEHICLE CHARGING INFRASTRUCTURE SUMMIT
Delaware Valley Regional Planning Commission
Tuesday, April 30, 2019
Agenda

9:30 Coffee and Networking
10:15 Program Starts
   Welcome—Barry Seymour, Executive Director, Delaware Valley Regional Planning Commission
   Overview of Day—Robert Graff, Manager, Office of Energy & Climate Change Initiatives (OECCI), DVRPC
   Research Update—Gil Tal, Ph.D., Director, PH&EV Research Center, University of California, Davis
   Discussion/Q&A
11:00 Local Charging—L1/L2 home, workplace, away from home/work, local DCFC—Gil Tal, moderator
   Factors Driving Community-Based EV Infrastructure Requirements: Lessons from Modeling Efforts—Matt Moniot, Research Engineer, NREL
   Evaluating Local Demand for Public EV Charging—Stacy Noblet, Senior Director, Transportation, ICF.
   UC Davis/DVRPC Electric Vehicle Planning Toolkit—Adam Beam, Research Analyst, OECCI, DVRPC
11:45 Discussion/Q&A—PANEL: Gil Tal, Adam Beam, Matt Moniot, Stacy Noblet, Jeff Perlman (NJTPA)
12:30 Networking Lunch

AFTERNOON SESSION

1:15 Charging For Long Distance Travel—Demand, Location, Costs, Logistics, Data Needs
   UC Davis/DVRPC Electric Vehicle Planning Toolkit Long Distance Module—Gil Tal
   Discussion/Q&A—PANEL: Luke Hellgren, Gil Tal, Nancy Ryan, Alan Jenn
2:15 EVSE Deployment/Grid Integration and Electric Distribution Companies’ Roles—Nancy Ryan, Partner, Energy + Environmental Economics (E3)
   Discussion/Q&A—PANEL: Nancy Ryan, Haley Book (PA PUC), Tom Bonner (PECO)

BREAK

3:15 Futureproofing—Alan Jenn, Research Director, PH&EV Research Center, UC Davis
   Charging behavior and infrastructure needs of EVs used in ride-hailing services (Lyft/Uber)
   Electric grid issues: local distribution grid requirements, impacts of extreme fast charging (300+ kW)
   Automated Vehicles—Gil Tal
   Discussion/Q&A—Alan Jenn, Gil Tal, Matt Moniot
4:00 Discussion/Q&A—Role of the Public Sector/Who Should Pay?
4:45 Next steps/follow up
5:00 Event Ends

Participants are encouraged to take a short walk to the Independence Beer Garden to continue the conversation
SPONSORS

The National Center for Sustainable Transportation (NCST) provides national leadership in advancing environmentally sustainable transportation through cutting-edge research, direct policy engagement, and education of future leaders. The NCST serves as one of five U.S. DOT national centers and is addressing the U.S. DOT’s Research Priority Area of Preserving the Environment.

Zero Emission Market Acceleration Partnerships (MAP) is an initiative to make available UC Davis’ 25 years of interdisciplinary expertise and research in vehicles, fuels and market response to cities and states to help them meet their sustainable transportation goals. It brings together local and state governmental, nongovernmental and research institutions from around the nation to integrate best practices and tackle challenges.

The Plug-in Hybrid & Electric Vehicle (PH&EV) Research Center launched in early 2007, with the support of the California Energy Commission’s allocation of Public Interest Energy Research (PIER) funds for transportation research. The Center collaborates closely with California utilities, automakers, regulators, and other research institutions on research aimed at developing a sustainable market for plug-in vehicles. The Center began with three initial research projects, and with the development of a PH&EV Research Roadmap, identified high-priority research areas for future research, including consumer perspectives and vehicle use, charging infrastructure, fleet market development, battery studies, and the impact of human-machine interfaces on behavior. Moving forward our research is focused on measuring, monitoring and understanding multiple aspects of the quickly evolving market for plug-in vehicles internationally.

The Delaware Valley Regional Planning Commission is the federally designated Metropolitan Planning Organization for a diverse nine-county region in two states: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey.

DVRPC’s vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient, and sustainable region that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all.

DVRPC’s mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. We are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices.
ABOUT THE SPEAKERS AND PANELISTS

Barry Seymour
Executive Director, Delaware Valley Regional Planning Commission

Barry Seymour serves as Executive Director of the Delaware Valley Regional Planning Commission (DVRPC), the regional planning forum for the Greater Philadelphia region, with a focus on transportation, land use, the environment and economic growth. As both staff director and liaison to the DVRPC Board, Mr. Seymour has the primary responsibility to craft a regional agenda and an annual work program. DVRPC’s long-range plan and short-term Transportation Improvement Program allocates over $1 billion annually for transportation improvements across the region. In his time at DVRPC, Mr. Seymour instituted the first municipal grant program for revitalization of urban neighborhoods and older suburban communities, spearheaded the Pennsylvania and New Jersey Smart Transportation initiative, oversaw a regional food system plan, and is now directing efforts to improve energy efficiency in the region. He is a recipient of the 2008 Pennsylvania Governor’s Award for Local Government Excellence.

Mr. Seymour is active on a wide variety of public and civic endeavors in the Philadelphia region and nationally, including the Delaware Valley Smart Growth Alliance, the Executive Committee of the Urban Land Institute Philadelphia Chapter, Friends of Independence National Historical Park, and the Montgomery County Greenhouse Gas Reduction Task Force. He currently serves on the Board and the Executive Directors Council of the National Association of Regional Councils, and on several national committees for the Transportation Research Board of the National Academies of Science. He previously served on the Board of the Pennsylvania Planning Association, and on the Narberth Borough Planning Commission, where he resides with his family.

Prior to relocating to Philadelphia, Mr. Seymour was Director of Waterfront and Open Space Planning for the New York City Department of City Planning, and an Environmental Planner with the Long Island Regional Planning Board. He has a Bachelor of Science degree from Tufts University and a Master of Regional Planning degree from the University of North Carolina at Chapel Hill.

Robert Graff
Manager, Office of Energy and Climate Change Initiatives, DVRPC

Robert Graff manages the Office of Energy and Climate Change Initiatives for the Delaware Valley Regional Planning Commission (DVRPC). Rob develops and guides initiatives to reduce energy use and greenhouse gas emissions, and to prepare the region for the long-term impacts of a changing climate. He represents DVRPC’s regional perspective on numerous efforts related to energy and climate change issues, including the Transportation Research Board’s Special Task Force on Climate. He serves by gubernatorial appointment as a member the Commonwealth of Pennsylvania’s Climate Change Advisory Committee.

Prior to joining DVRPC in 2007, Mr. Graff was an Associate Scientist at Tellus Institute in Boston, where he helped create the Global Reporting Initiative, now the global standard for corporate sustainability reporting. Mr. Graff earned a Master of Public Affairs and Urban & Regional Planning degree from the Woodrow Wilson School at Princeton University.

Gil Tal, Ph.D.
Director, The Plug-in Hybrid & Electric Vehicle (PH&EV) Research Center, Institute of Transportation Studies, University of California, Davis

Dr. Tal is one of the world’s leading researchers in the field of electric transportation. Dr. Tal’s new work is also looking at the impact of shared automated and electrified mobility on the vehicle market and the demand for transportation related energy. He is currently working on projects for the California Air Resources Board, the California Energy Commission, the Department of Energy, as well as car companies and utility companies. As part of this research, Dr. Tal has produced methodological innovations in on-line travel surveys and EV charging location modeling that include GIS-based mapping that have been published. In total, Dr. Tal has published more than forty articles and peer-reviewed conference proceedings, and presented his work to policy makers decision makers in the US, China and Europe.
Matt Moniot  
*Research Engineer, National Renewable Energy Laboratory, Golden, CO.*

Matt Moniot is a research engineer studying transportation topics within the Mobility, Behavior, and Advanced Powertrains (MBAP) group at the National Renewable Energy Laboratory. His research primarily focuses on electric vehicle infrastructure planning and powertrain modeling. Matt’s research interests involve studying the intersection of infrastructure developments, vehicle technologies, and emerging transportation trends (vehicle sharing, Mobility as a Service, connected and autonomous vehicles, etc.). Prior to joining NREL, Matt received his BS and MS degrees in Mechanical Engineering at Virginia Tech.

Adam Beam  
*Research Analyst, Office of Energy and Climate Change Initiatives, DVRPC*

Adam Beam is a Research Analyst in the Office of Energy and Climate Change Initiatives at the Delaware Valley Regional Planning Commission in Philadelphia. Adam has provided support to several projects at DVRPC related to the impacts of electric vehicles on energy use and climate change. He has led the development of a regional electric vehicle analysis tool, providing the user with an estimate of greenhouse gas emissions avoided per electric mile based on a region’s climate and electric grid mix. Adam has also been working closely with UC Davis’s Plug-In Hybrid & Electric Vehicle Research Center in calibrating their EV planning toolkit to the Greater Philadelphia region. Adam has used the knowledge and insights gained from this work to help inform EV policy at the local level by working with the City of Philadelphia’s Electric Vehicle Policy Task Force. Adam received his Master of City Planning degree from the University of Pennsylvania and has a Bachelor of Science in Environmental Science from the University of North Carolina – Chapel Hill.

Stacy Noblet  
*Senior Director, Transportation, ICF, Washington, DC.*

Stacy Noblet is Senior Director, Transportation, at ICF. For 15 years, she has provided technical and management support to government agencies and utilities to design and implement projects and programs that aim to increase the use of clean fuels and technologies in the transportation sector. She leads the team responsible for maintaining the Alternative Fuels Data Center’s Station Locator and Laws & Incentives tools. Stacy’s current focus is electrification; her projects include readiness planning, utility program design and implementation, ENERGY STAR EV charger marketing, and charging station installation in national parks. Stacy holds a master’s degree from Johns Hopkins University and bachelor’s degrees from Western Michigan University.

Jeffrey Perlman, PP, AICP  
*Director, Environmental and Sustainability Planning, NJTPA*

Jeffery Perlman is a principal planner at the North Jersey Transportation Planning Authority (NJTPA), managing the agency’s climate change research activities, notably the regional greenhouse gas inventory and forecast project.

He has worked as a planning consultant for a number of New Jersey municipalities, where he conducted a variety of planning studies including master plans, redevelopment plans, and affordable housing plans.

He holds a Masters of City and Regional Planning from the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, and is a NJ licensed professional planner. Jeffrey also holds LEED-Accredited Professional status from the US Green Building Council.

Luke Hellgren  
*Policy Analyst, M.J. Bradley & Associates LLC, Concord, MA*

Luke Hellgren is a Policy Analyst for MJB&A. He develops and contributes to technical evaluations, data modeling tools, and GIS analyses that focus on trends in the electric, transportation, and other end-use sectors. Through MJB&A’s collaboration with Georgetown Climate Center, he helps develop and maintain interactive tools to support DCFC development planning in Transportation and Climate Initiative member states. Luke holds an MS in Energy, Civil Infrastructure, and Climate from the University of California, Berkeley and a BS in Environmental Systems Engineering from Pennsylvania State University.
**Nancy Ryan, Ph.D.**

*Partner, Energy + Environmental Economics (E3), San Francisco, CA*

Dr. Ryan is a partner at Energy and Environmental Economics (E3), where she leads the electric transportation practice area. She advises utilities, regulators, OEMs, fleet owners and technology companies on economics, strategy, and policy around transport electrification. An economist with over two decades of experience, Dr. Ryan previously held several high-level appointed positions at the California Public Utilities Commission, including serving as a commissioner from 2010-2011.

Dr, Ryan holds a Ph.D. in economics from the University of California, Berkeley and BA in economics from Yale University.

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**Alan Jenn, Ph.D.**

*Research Director, The Plug-in Hybrid & Electric Vehicle (PH&EV) Research Center, Institute of Transportation Studies, University of California, Davis.*

Alan Jenn is Research Director at the Plug-in Hybrid and Electric Vehicle (PH&EV) group of the Institute of Transportation Studies (ITS) at the University of California, Davis as well as an affiliate at Lawrence Berkeley National Laboratory. He graduated from Carnegie Mellon University with a PhD in the department of Engineering and Public Policy (EPP) and has undergraduate degrees in Molecular and Cell Biology, Music, and Energy and Resources from the University of California, Berkeley. Alan’s research is focused on plug-in electric vehicles (PEVs): integration with the electric grid, adoption of the technology, use in ride-hailing companies (such as Uber and Lyft), and its impact on transportation finance.

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**Hayley L. Book**

*Office of Commissioner Place, Pennsylvania Public Utility Commission*

Hayley Book is a Senior Policy Advisor to Vice Chairman Andrew Place at the Pennsylvania Public Utility Commission. In this role Hayley provides regulatory and policy advice regarding energy, water and consumer matters that come before the Commission. Additionally, she is entrenched in statewide initiatives such as renewable energy and electric vehicle infrastructure planning, utility low-income programming and the convergence of environmental and energy policy. Prior to joining the Commission she led the Pennsylvania Department of Environmental Protection’s efforts on renewable energy, and energy efficiency financing and policy.

Hayley also served as the Executive Director of the Pennsylvania Energy Development Authority, an independent public financing authority that finances clean, advanced energy projects in Pennsylvania. Hayley is a returned Peace Corps Volunteer, having served as an agricultural and environmental extension agent in Cameroon. She holds a Master’s of Public Administration in International Management from the Monterey Institute of International Studies and a Bachelor’s of Science degree in Environmental Policy Analysis and Planning from the University of California at Davis. She also serves on the Board of Directors for the Pennsylvania Envirothon and is an advocate for environmental and energy education.

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**Tom Bonner**

*Manager, State Government Affairs, PECO*

Tom Bonner serves as Manager, State Government Affairs for PECO, with primarily responsibility for analyzing the impact of federal, state and local policy challenges on the company and leading internal teams to develop its Advancing Smart Energy policy and business solutions.

During his time with PECO, Mr. Bonner has focused on both policies and programs advancing new technologies, including serving as the lead author of PECO’s successful $200 million Smart Grid Investment Grant application with the U.S. Department of Energy. Following the grant award, he organized the company’s grant compliance assessment and implementation planning project and functioned as Project Manager for PECO’s external Partnership programs.

Prior to coming to PECO in 2007, he served as Manager, Congressional Relations for MidAmerican Energy Holdings Company, and as Associate Director of the Commonwealth of Pennsylvania’s Washington, DC office. Tom holds a Master of Planning Degree from the University of Virginia and a B.A. from the University of Pennsylvania.