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# California State Assembly

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### INFORMATIONAL HEARING

## Transportation Technology Research in California

Monday, March 14, 2016

Upon adjournment of the bill hearing ♦ State Capitol, Room 4202

### Hearing Participants' Biographies

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#### **Malcolm Dougherty, Director California Department of Transportation**

Malcolm Dougherty was appointed by Governor Edmund G. Brown Jr. to be the Director of the California Department of Transportation (Caltrans) in May 2012. He leads the \$11 billion organization and Caltrans 20,000 employees who build, maintain, and operate the 50,000 lane miles of California's world-class transportation system.

Director Dougherty has over 21 years of experience with Caltrans and before becoming Director served as the Chief Deputy, Chief Engineer, and District Director in the Fresno Area. He also has held management positions in Design, Project Management, Maintenance and Traffic Operations during his career at Caltrans. His focus throughout his career has been on safety, efficient project delivery, partnerships with all stakeholders, and leading a professional and ethical workforce to provide mobility for the people of California.

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#### **Alexandre M. Bayen, Director, Institute for Transportation Studies University of California, Berkeley**

Alexandre Bayen received the Engineering Degree in applied mathematics from the Ecole Polytechnique, France, in July 1998, the M.S. degree in aeronautics and astronautics from Stanford University in June 1999, and the Ph.D. in aeronautics and astronautics from Stanford University in December 2003. He was a Visiting Researcher at NASA Ames Research Center from 2000 to 2003. Between January 2004 and December 2004, he worked as the Research Director of the Autonomous Navigation Laboratory at the Laboratoire de Recherches Balistiques et Aerodynamiques, (Ministere de la Defense, Vernon, France), where he holds the rank of Major. He is currently an Associate Chancellor Professor, and has been the Director of the Institute for Transportation Studies (ITS) since 2014.

Bayen has authored two books and over 150 articles in peer reviewed journals and conferences. He is the recipient of the Ballhaus Award from Stanford University, 2004, of the CAREER award from the National Science Foundation, 2009 and he is a NASA Top 10 Innovators on Water Sustainability, 2010. His projects Mobile Century and Mobile Millennium received the 2008 Best of ITS Award for 'Best Innovative Practice', at the ITS World Congress and a TRANNY Award from the California Transportation Foundation, 2009. Mobile Millennium has been featured more than 200 times in the media, including TV channels and radio stations (CBS, NBC, ABC, CNET, NPR, KGO, the BBC), and in the popular press (Wall Street Journal, Washington Post, LA Times). Bayen is the recipient of the Presidential Early Career Award for Scientists and Engineers (PECASE) award from the White House, 2010. He is also the recipient of the Okawa Research Grant Award, the Ruberti Prize from the IEEE, and the Huber Prize from the ASCE.

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**Brian D. Taylor, Director, Institute of Transportation Studies  
University of California, Los Angeles Luskin School of Public Affairs**

Brian Taylor's research centers on transportation policy and planning – most of it conducted in close collaboration with his many exceptional students. His students have won dozens of local and national awards for their work, and today hold positions at the highest levels of planning analysis, teaching, and practice. More of his students have won awards from the Council of University Transportation Centers for the best capstone project, thesis, or dissertation in transportation policy and planning than have the students of any other faculty member in North America.

Professor Taylor explores how society pays for transportation systems and how these systems in turn serve the needs of people who – because of low income, disability, location, or age – have lower levels of mobility. Topically, his research examines travel behavior, transportation finance, and politics & planning.

His research on travel behavior has examined (1) the effect of travel experience on cognitive mapping, (2) how travel patterns vary by race/ethnicity, sex, age, and income, (3) the emerging travel patterns teens and young adults, (4) the gender division of labor in gay and straight household, (5) the social, economic, and spatial factors explaining public transit use, (6) the role of walking, waiting, and transferring on travel choices, (7) ways to cost-effectively increase public transit use, (7) the role of social media in new shared mobility systems, and (8) alternative ways to evaluate the effects of traffic congestion on people, firms, and regional economies.

A principal focus of his research is the politics of transportation finance, including (1) the history of freeway planning and finance, (2) emerging trends in pricing road use, (3) the equity of alternative forms of finance, (4) linking of subsidies to public transit performance, and (5) measuring equity in public transit finance. Related work has also examined the effect of political drivers on planning outcomes, such as how concerns over civil rights law, traffic congestion, terrorism, and climate change affect transportation policy and planning.

Prior to joining the UCLA faculty in 1994, Professor Taylor taught planning at the University of North Carolina at Chapel Hill, and before that he was a planner with Metropolitan Transportation Commission in the San Francisco Bay Area. The politics of planning practice informs both his research and teaching, which regularly includes Transportation and Land Use: Urban Form, Transportation Policy and Planning, and Transportation Economics, Finance, and Policy, and occasionally Transportation Geography, Travel Behavior Analysis, Comparative International Transportation Workshop, and courses in research design for planners.

Professor Taylor is currently Chair of a Transportation Research Board (of the National Academies) Special Report committee examining the public policy implications of new shared mobility systems in general, and transportation network companies in particular. He was recently selected to be a planning program reviewer for the Planning Accreditation Board, and a Fellow in the American Institute of Certified Planners.

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**Ross Chittenden, P.E., Deputy Executive Director, Projects  
Contra Costa Transportation Authority**

Ross is directly responsible for the successful delivery of the Authority's capital improvement program. Ross and his team lead the implementation of construction projects on the State Highway System and oversee the implementation of projects sponsored by proponent jurisdictions. He coordinates with many partner agencies to secure additional resources needed to complete the program of projects included in the Expenditure Plan passed by voters in 1988 (Measure C) and 2004 (Measure J). Ross joined the Authority in 2010. Previously, he served as Caltrans District 10 Director and had over 27 years of service to Caltrans before joining the Authority. Ross holds a Bachelor of Science degree from the University of Michigan and is certified as a Project Management Professional by the Project Management Institute.

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**Daniel E. Mitchell, Ph.D., Executive Officer - Project Delivery  
Los Angeles Department of Transportation**

Dan Mitchell is chief engineer for LADOT, where he has served the public for 20 years.

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**Tilly Chang, Executive Director  
San Francisco County Transportation Authority**

Tilly Chang serves as Executive Director of the San Francisco County Transportation Authority. The SFCTA plans, funds and delivers capital improvements for San Francisco's multimodal transportation system. As San Francisco's county congestion management agency, the SFCTA collaborates with SFMTA/Muni, BART, Caltrain, and other transportation agencies to improve transportation choices in San Francisco and the Bay Area region. The agency also administers San Francisco's voter-approved half cent transportation sales tax and vehicle registration fee programs.

Under Ms. Chang's leadership, the SFCTA is coordinating, funding and overseeing the delivery of the Presidio Parkway, Yerba Buena Ramps, Muni Central Subway project,

Transbay Transit Center, Caltrain Electrification and Van Ness and Geary Bus Rapid Transit, as well as updating the countywide long-range transportation plan known as the San Francisco Transportation Plan. Ms. Chang has 20 years of experience including 12 years with the Transportation Authority and previous posts at the World Bank, Metropolitan Transportation Commission and in the private sector. She serves on ABAG's Regional Planning Committee, is a board member of the California Transportation Foundation, and advises SPUR and the UC Transportation Centers. Ms. Chang holds degrees in Transportation from M.I.T. and in Economics and City Planning from UC Berkeley.