

Liisa Ecola

RAND Corporation

1200 South Hayes Street, Arlington, VA 22202

703-413-1100 x5433

lecola@rand.org

Professional Experience

RAND Corporation Arlington, VA
Senior Policy Analyst 2007 – Present

Main research areas: transportation finance and equity; infrastructure; traffic congestion; traffic safety; transportation and climate change; and long-term mobility demand. Significant projects include Puerto Rico long-range recovery plan; Road to Zero (a vision for eliminating traffic crash deaths), congressionally mandated airport funding study, two high-profile projects on mileage fees, an online benefit-cost tool for traffic safety (including multiple updates), relationship between economic growth and travel demand, and quality of life indicators for China.

ICF International Washington, DC
Associate/Senior Associate 2001 – 2007

Main research areas: commuter benefits, travel demand management, smart growth. Managed projects ranging from analyzing the effectiveness of regional commuter benefits organization to a state-level vehicle emissions and inspection program. For five years, managed EPA's National Award for Smart Growth Achievement program.

Pittman & Hames Associates San Francisco, CA
Project Planner 1999 – 2001

Projects included researching reservation systems at major tourist destinations; pedestrian, bicycle, and bus access for planned West Oakland Transit Village; multiple environmental impact reports/statements; and federal, state, and local capital funding sources for the Presidio Trust.

U.S. Department of State
Foreign Service Officer 1991 – 1997

Served two years each at the American Embassy in Warsaw and the American Institute in Taiwan, plus two years in Washington, DC. Duties included researching and writing a report on national health insurance in Taiwan, reporting on religious affairs in Poland, investigating visa and passport fraud, and coordinating office renovations and space planning.

Education

University of California, Berkeley
Master of City Planning 1999
Emphasis: Transportation Planning

Emory University
Master of Arts, Political Science 1991
Bachelor of Arts, International Relations 1991

National University of Singapore
One-year Chinese language program 1989-90

RAND Publications

Michelle E. Miro, Andrew Lauand, Rahim Ali, Edward W. Chan, Richard H. Donohue, Liisa Ecola, Timothy R. Gulden, Liam Regan, Karen M. Sudkamp, Tobias Sytsma, and et al., *Assessing Risk to the National Critical Functions as a Result of Climate Change*, Santa Monica, Calif.: RAND Corporation, RR-A1645-7, 2022.

https://www.rand.org/pubs/research_reports/RR1645-7.html

Ecola, Liisa, Aaron C. Davenport, Kenneth Kuhn, Alexander D. Rothenberg, Eric Cooper, Mark Barrett, Thomas F. Atkin, and Jeffrey Kendall, *Rebuilding Surface, Maritime, and Air Transportation in Puerto Rico After Hurricanes Irma and Maria: Supporting Documentation for the Puerto Rico Recovery Plan*, Santa Monica, Calif.: RAND Corporation, RR-2607-DHS, 2020.

Ecola, Liisa, Hui Lu, and Charlene Rohr, *How Is COVID-19 Changing Americans' Online Shopping Habits?*, RAND Corporation, RR-A308-6, July 7, 2020.

Ecola, Liisa, Hui Lu, and Charlene Rohr, *How Is COVID-19 Changing Americans' Online Shopping Habits? Five Months into the Pandemic*, RAND Corporation, RR-A308-9, November 9, 2020.

Miller, Benjamin M., Debra Knopman, Liisa Ecola, Brian Phillips, Moon Kim, Nathaniel Edenfield, Daniel Schwam, and Diogo Prosdocimi, *U.S. Airport Infrastructure Funding and Financing: Issues and Policy Options Pursuant to Section 122 of the 2018 Federal Aviation Administration Reauthorization Act*, Santa Monica, Calif.: RAND Corporation, RR-3175-FAA, 2020.

Ecola, Liisa, Steven W. Popper, Richard Silberglitt, and Laura Fraade-Blanar, *The Road to Zero: A Vision for Achieving Zero Roadway Deaths by 2050*, Santa Monica, Calif.: RAND Corporation, RR-2333-NSC, 2018.

Ecola, Liisa, Jeanne S. Ringel, Kathryn Connor, David Powell, Connor P. Jackson, Paul Ng, and Candice Miller, *Costs and Effectiveness of Interventions to Reduce Motor Vehicle-Related Injuries and Deaths: Supplement to Tool Documentation*, Santa Monica, Calif., TL-144/2-NTGA, 2018.

Willis, Henry H., Mary Tighe, Andrew Lauand, Liisa Ecola, Shoshana R. Shelton, Meagan L. Smith, John G. Rivers, Kristin J. Leuschner, Terry Marsh, and Daniel M. Gerstein, *Homeland Security National Risk Characterization: Risk Assessment Methodology*, Santa Monica, Calif.: RAND Corporation, RR-2140-DHS, 2018.

Rohr, Charlene, Liisa Ecola, Johanna Zmud, Fay Dunkerley, James Black, and Eleanor Baker, *Travel in Britain in 2035: Future scenarios and their implications for technology innovation*, Cambridge, UK: RAND Europe, RR-1377, 2016.

Ecola, Liisa, Benjamin Batorsky, and Jeanne Ringel, *Using Cost-effectiveness Analysis to Prioritize Spending on Traffic Safety*, Santa Monica, Calif.: RAND Corporation, RR-1224-RWJF, 2015.

Ringel, Jeanne, Johanna Zmud, Kathryn Connor, David Powell, Brian Chow, Liisa Ecola, Christina Panis, and Gregory Jones, *Costs and Effectiveness of Interventions to Reduce Motor Vehicle-Related Injuries and Deaths: Project Report and Online-Tool Documentation*, Santa Monica, Calif.: RAND Corporation, TL-144/1-CDCP, 2015.

RAND Health, *Resources and Capabilities of the Department of Veterans Affairs to Provide Timely and Accessible Care to Veterans*, Santa Monica, CA: RAND Corporation, 2015.

Knopman, Debra, Johanna Zmud, Liisa Ecola, Zhimin Mao, and Keith Crane, *Quality of Life Indicators and Policy Strategies to Advance Sustainability in the Pearl River Delta*, Santa Monica, Calif.: RAND Corporation, RR-871, 2015.

Ecola, Liisa, Johanna Zmud, Kun Gu, Peter Phleps, and Irene Feige, *The Future of Mobility: Scenarios for China in 2030*, Santa Monica, Calif.: RAND Corporation, RR-991-ifmo, 2015.

Chase, Michael S., Cortez A. Cooper, Keith Crane, Liisa Ecola, Scott Warren Harold, Timothy R. Heath, Bonny Lin, Lyle J. Morris, and Andrew Scobell, *China, Inside and Out: A Collection of Essays on Foreign and Domestic Policy in the Xi Jinping Era*, Santa Monica, Calif.: RAND Corporation, CP-797, 2015.

Ecola, Liisa, Charlene Rohr, Johanna Zmud, Tobias Kuhnimhof, and Peter Phleps, *The Future of Driving in Developing Countries*, Santa Monica, Calif.: RAND Corporation RR-636-ifmo, 2014.

Zmud, Johanna, Liisa Ecola, Peter Phleps, and Irene Feige, *The Future of Mobility: Scenarios for the United States in 2030*, Santa Monica, Calif.: RAND Corporation, RR-246, 2013.

Sorensen, Paul, Liisa Ecola, and Martin Wachs, *Mileage-Based User Fees for Transportation Funding: A Primer for State and Local Decisionmakers*, Santa Monica, Calif.: RAND Corporation, TL-104, 2012.

Schwartz, Heather L., Liisa Ecola, Kristin J. Leuschner, and Aaron Kofner, *Is Inclusionary Zoning Inclusionary? A Guide for Practitioners*, Santa Monica, Calif.: RAND Corporation, TR-1231, 2012.

Crane, Keith, Liisa Ecola, Scott Hassell, and Shanthi Nataraj, *Energy Services Analysis: An Alternative Approach for Identifying Opportunities to Reduce Emissions of Greenhouse Gases*, Santa Monica, CA: RAND Corporation, TR-1170-NREL, 2012.

Anton, Philip S., Liisa Ecola, James G. Kallimani, Thomas Light, Chad J. R. Ohlandt, Jan Osburg, Raj Raman, and Clifford A. Grammich, *Advancing Aeronautics: A Decision Framework for Selecting Research Agendas*, MG-997-NASA, 2011.

Sorensen, Paul, Martin Wachs, and Liisa Ecola, *System Trials to Demonstrate Mileage-Based Road Use Charges*, Washington, D.C.: Transportation Research Board, NCHRP Web-only Document 161, October, 2010. (RAND Reprint, RP-1423)

Ecola, Liisa, Rebecca Collins, and Elisa Eiseman, *Understanding and Reducing Off-Duty Vehicle Crashes among Military Personnel*, TR-820-DSOC, September, 2010.

Ecola, Liisa, *Transportation Challenges for the New Administration: Perspectives of Past DOT Secretaries*, CF-257-RC, 2009.

Sorensen, Paul, Liisa Ecola, Martin Wachs, Max Donath, Lee Munnich, and Betty Serian, *Implementable Strategies for Shifting to Direct Usage-Based Charges for Transportation Funding*, Washington, D.C.: Transportation Research Board, NCHRP Web-Only Document 143, June, 2009. (RAND Reprint, RP-1395)

Ecola, Liisa and Thomas Light, *Equity and Congestion Pricing: A Review of the Evidence*, TR-680-EDF, 2009.

Burger, Nicholas, Liisa Ecola, Thomas Light, and Michael Toman, *Evaluating Options for U.S. Greenhouse-Gas Mitigation Using Multiple Criteria*, OP-252-RC, 2009.

Ecola, Liisa, Scott Hassell, Michael Toman, and Martin Wachs, *Integrating U.S. Climate, Energy, and Transportation Policies: Proceedings of Three Workshops*, CF-256-MCCORF, 2009.

Ortiz, David S., Brian A. Weatherford, Michael D. Greenberg, and Liisa Ecola, *Improving the Safety and Security of Freight and Passenger Rail in Pennsylvania*, TR-615-PLBFC, 2009.

Hassell, Scott, Michael Toman, Liisa Ecola, Tewodaj Mengistu, Endy Y. Min, Aimee E. Curtright, Noreen Clancy, and Eileen Hlavka, *Strengthening U.S. International Energy Assistance to Reduce Greenhouse Gas Emissions and Improve Energy Security*, OP-251-RC, 2009.

Sorensen, Paul, Martin Wachs, Endy Y. Min, Aaron Kofner, Liisa Ecola, Mark Hanson, Allison Yoh, Thomas Light, and James Griffin, *Moving Los Angeles: Short-Term Policy Options for Improving Transportation*, MG-748-JAT/METRO/MCLA, 2008.

External Publications

Resetar, Susan A., Liisa Ecola, Rachel Liang, David M. Adamson, Christopher Forinash, Lilly Shoup, Brynn Leopold, and Zachary Zabel, *Guidebook for Multi-Agency Collaboration for Sustainability and Resilience*, NCHRP Project 08-36,

Task 142, National Cooperative Highway Research Program, February 2020.

Sorensen, Paul, Thomas Light, Constantine Samaras, Liisa Ecola, Endy M. Daehner, David Ortiz, Martin Wachs, Evan Enarson-Hering, and Steven Pickrell, *Preparing State Transportation Agencies for an Uncertain Energy Future*, Washington, D.C.: Transportation Research Board, NCHRP Report 750: Strategic Issues Facing Transportation, 2014.

Kuhnimhof, Tobias, Charlene Rohr, Liisa Ecola, and Johanna Zmud, "Automobility in Brazil, Russia, India, and China: Quo Vadis?," *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2451, 2014, pp. 10-19.

Sorensen, Paul, Liisa Ecola, and Martin Wachs, "Emerging Strategies in Mileage-Based User Fees: Reducing Costs and Increasing Public Acceptance " *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2345, 2013.

Kalra, Nidhi, Liisa Ecola, Ryan Keefe, Brian A. Weatherford, Martin Wachs, Peter Plumeau, Stephen Lawe, and Colin Smith, *Reference Sourcebook for Reducing Greenhouse Gas Emissions from Transportation Sources*, Washington, D.C.: Federal Highway Administration, February, 2012.

Ecola, Liisa, and Martin Wachs, *Exploring the Relationship Between Travel Demand and Economic Growth*, Federal Highway Administration, December, 2012.

Ecola, Liisa and Thomas Light, "Making Congestion Pricing Equitable," *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2187, January, 2011, pp. 53-59.

Burger, Nicholas, Liisa Ecola, Thomas Light, and Michael Toman, "In Search of Effective and Viable Policies to Reduce Greenhouse Gases," *Environment*, vol. 51, no. 3, May/June 2009.

Ortiz, David S., Liisa Ecola, and Henry H. Willis, *Adding Resilience To The Freight System In Statewide And Metropolitan Transportation Plans: Developing A Conceptual Approach*, Washington, D.C.: American Association of State and Highway Transportation Officials, Standing Committee on Planning, NCHRP Project 08-36, Task 73, 2009.

Ecola, Liisa and Michael Grant. "Impacts of Transit Benefits Programs on Transit Agency Ridership, Revenues, and Costs." *Journal of Public Transportation*, vol. 11, no. 2, 2008.

Venner, Marie and Liisa Ecola, "Financing Transit-Oriented Development: Understanding and Overcoming Obstacles." *Transportation Research Record*, vol. 1996, 2007.

Ecola, Liisa. "Tales of a Transit Junkie." *Planning*. American Planning Association, vol. 70, no. 9. October 2004.

Grant, Michael and Liisa Ecola. "Transit Benefit Programs: An Evaluation of Effects on Travel Behavior." *TDM Review*, Association for Commuter Transportation, issue 1, 2004.

Ecola, Liisa and Michael Grant. "Making Commuter Benefits Programs More Effective." *Passenger Transport*, vol. 60, no. 1, January 7, 2002.

Grant, Michael and Liisa Ecola. "Increasing the Effectiveness of Commuter Benefits Programs." *TDM Review*, Association for Commuter Transportation, vol. X, no. 1, 2002.

Op-eds/RAND Blog

"Micromobility: How Will We Know When It's Working?," RAND Blog, May 18, 2021 (with Laura Fraade-Blanar).

"Navigating speedbumps to a possible federal VMT," The Hill, March 25, 2021 (with Laura Patton).

"The Road Ahead: Rebuilding the Country's Infrastructure in the Trump Administration Era," RAND Blog, November 14, 2016

“A New Tool to Assess the Costs and Effectiveness of Traffic Crash Interventions,” *ITE Journal*, April 1, 2016 (with Jeanne Ringel).

“Pay as you go: Could the next great funding scheme ever really work?” *Politico*, July 22, 2015.

“How to improve Oregon's mileage-fee experiment (opinion),” *Oregonian*, July 7, 2015 (with Laura Patton).

“Does U.S. gas tax still make sense?” *Orange County Register*, August 21, 2013.

“Paying for Infrastructure, a Taxing Issue,” *RAND Blog*, May 16, 2013.

“Getting Over the Privacy Hurdle to Mileage-Based Road Fees,” *Streetsblog*, June 6, 2012.

Conference Presentations

Road to Zero

Presented at:

- 98th Annual Meeting of the Transportation Research Board, Washington, DC, January 2019 (hybrid poster session)
- RAND Board of Trustees, Pittsburgh, PA, April 2019
- RAND Health Board, Santa Monica, CA, June 2019

The Future of Mobility: Scenarios for China in 2030

Presented at:

- 95th Annual Meeting of the Transportation Research Board, Washington, DC, January 2016

The Future of Driving in Developing Countries

Presented at:

- Board meeting, RAND Center for Asia-Pacific Policy, Arlington, VA, June 2014
- 93rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2014

Reducing Motor Vehicle Deaths and Injuries Through Behavioral Interventions

- 94th Annual Meeting of the Transportation Research Board, Washington, DC, January 2015 (poster session)
Women's Transportation Seminar, Annual Conference, Chicago, IL, May 2015 (poster session)
- Safe States Alliance webinar, October, 2014 (with client Erin Sauber-Schatz)
- National Conference of State Legislatures, Fall Forum, Washington, DC, December 2014 (with client Erin Sauber-Schatz)
- Demonstration of online tool for Centers for Disease Control and Prevention staff, Atlanta, GA, February 2014

Exploring the Relationship Between Travel Demand and Economic Growth

Invited presentation at:

- Economics Committee meeting at the 92nd Annual Meeting of the Transportation Research Board, Washington, DC, January 2013

System Trials to Demonstrate Mileage-Based Road Use Charges

Invited presentations at:

- Transitioning to Plug-in Electric Vehicles: Challenges and Best Practices, 92nd Annual Meeting of the Transportation Research Board, Washington, DC, January 2013
- National Conference of State Legislatures, Legislative Summit, San Antonio, TX, August 2011
- Women's Transportation Seminar, Annual Conference, San Francisco, CA, May 2011

- RAND Congressional Briefing, Washington, DC, April 2011 and June 2014
- American Association of State Highway and Transportation Officials, Legislative Conference, Washington, DC, March 2011
- International Bridge, Tunnel, and Turnpike Association, Transportation Legislative Summit, Washington, DC, March 2011
- American Association of State Highway and Transportation Officials, National Meeting, Biloxi, MS, October 2010

Understanding and Reducing Off-Duty Vehicle Crashes among Military Personnel

Invited presentations at:

- Defense Safety Oversight Council Seminar, Arlington, VA, April 2011
- Briefing for Dr. Sam Kleinman, Deputy Undersecretary of Defense (Readiness) (OSD DUSD/R), Arlington, VA, February 2011
- Human Factors Safety Workshop on High-Risk Drivers, 90th Annual Meeting of the Transportation Research Board, Washington, DC, January 2011

Making Congestion Pricing Equitable

Presented at:

- 89th Annual Meeting of the Transportation Research Board, Washington, DC, January 2010
- International Bridge, Tunnel, and Turnpike Association, Transportation Policy and Finance Summit, Washington, DC, December 2009

Moving Los Angeles: Short-Term Policy Options for Improving Transportation

Invited presentation to:

- Committee for Sydney, via teleconference, August 2015

Honors/Awards

RAND Spotlight Award, June 2017
 RAND Silver Medal Award, June 2016
 RAND Impact Award, September 2010
 RAND Merit Bonus award (bronze), July 2010
 TCRP Report 107, *Analyzing the Effectiveness of Commuter Benefits Programs*, received the 2005 Transportation Demand Management Institute Research Excellence Award.
 University of California Transportation Center: Full-tuition scholarship
 Emory University College Scholar: Full-tuition scholarship
 Phi Beta Kappa graduate from Emory University

Professional Societies/ Activities

Women's Transportation Seminar, Washington DC chapter
 Member of national conference planning committee, 2010
 Scholarship Chair, 2011-2013; Scholarship committee member, 2014
 Mentor in mentoring program, 2014, 2019, 2020, 2022
 Women's Transportation Seminar Leadership Program, February 2011
 Participant, U.S.-Japan Leadership Network Program, March 2010
 Panelist at The Next Generation of Transportation, Pittsburgh, July 10, 2017
 Panelist at Inclusive Smart Cities, Washington, DC, September 12, 2017
 Transportation Research Board
 Research Coordinator, ABR-10, Critical Infrastructure Protection Committee, 2017-present
 Member, TCRP Synthesis Panel J-07/Topic SH-11: Pass Fare Arrangements for Public Employees, 2008-10
 Friend, Standing Committee on Congestion Pricing, 2014-present
 Friend, Standing Committee on Transportation Demand Management, 2014-present

Languages Polish, Chinese (Mandarin), French